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DEFAULT MEANINGS
AND THE SEMANTICS / PRAGMATICS
DISTINCTION

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Lisa: Are you saying the end justifies the means?

Coleman: That's a very glib interpretation.

Bart: Hey, don't talk to my sister that way!

Lisa: No, Bart, he's right; I *did* over simplify.

Homer: Perhaps, but let's not get bogged down in semantics.

—THE SIMPSONS, *Grift of the Magi*

Well, it is complicated a bit; but life and truth and things do tend to be complicated.

—AUSTIN (1961): 252

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INTRODUCTION

'What is meaning?'. This has been the central question in Twentieth-century Philosophy of language. The extraordinary development of formal semantics for natural languages has gone hand in hand with the outstanding advances in formal logic reached during the first half of the past century. The development of Model-theoretic semantics and of Montagovian Grammar have given a hardly overestimated contribution to our knowledge of natural languages.

However, after Wittgenstein (1953) it has become customary to approach the question about meaning from the point of view of its 'use' in everyday conversational exchanges. Between 1940s and 1960s, Oxford philosophical school of so-called Ordinary Language Philosophy, in reaction to the increasingly formalistic attitude in philosophy of language, tried to seriously take into account Wittgenstein's slogan that meaning is its use and to put it into test of thorough philosophical analysis.

The results of such pioneering philosophical effort, mainly due to John Austin, Gilbert Ryle, Peter Strawson and Paul Grice, is a series of papers, books and talks containing a number of intuitions and insights which have been extraordinarily influential in the following development of philosophy of language and linguistics. Austin's theory of speech acts and performativeness (notoriously further developed by John Searle) is just one example of the quality of the work of this Oxonian philosophical tradition, which is nowadays regarded as a milestone in the contemporary philosophy of language.

The present work is in the area of Pragmatics of language and communication. Such field of linguistics and philosophy of language is also known as Post-Gricean Pragmatics, after the celebrated works of one of the Oxford philosophers, Paul Grice. Starting from its seminal paper

Grice (1957), the core idea of Grice's theory of meaning is an attempt to take into account and develop in a consistent philosophical theory Wittgenstein's suggestion that the concept of Meaning has to be analyzed in the specific contexts of utterance.

Reacting to the formalistic orientation in Philosophy of Language, Grice argues that - also with respect to the correct understanding of philosophical arguments and fallacies - word and sentence meaning has to be regarded not as an isolated, formal notion, determined once and for all by the meaning assigned to the lexicon by the dictionary and the Fregean principle of compositionality.

Such an approach is eventually unable to give reason of the pervasive ambiguities which 'infest' natural language. According to Grice, the formalistic account of the intrinsic deficiency of natural language and of the need for its logical regimentation to avoid such kind of confusions is widely unsatisfactory, as it largely clashes with people's everyday insights concerning the felicitous working of natural languages.

Grice's central idea is that meaning is a intention-based notion, i.e. besides the conventional meaning that a particular word bears whenever uttered in a specific sentence, a realistic theory of meaning, one which is able to match speaker's intuition about the content of an utterance, should allow for the recognition of the intentions lying behind a speaker's using a certain linguistic expression.

According to Grice, a quite conservative conception of semantics can be maintained, once we acknowledge conversational exchanges to be governed by rules of rationality and cooperativeness which go far beyond the mere decoding of linguistic messages, and which - once made explicit - make it possible to explain the significant amount of information which is standardly inferred from sentence meaning.

The theoretical development of such intuitions is given in Grice's hugely influential theory of conversational maxims and conversational implicatures. Roughly speaking, a conversational implicature is a proposition which, though being in a non-logical relation with the content of a ut-

tered sentence, is inferred starting from such utterance, often by resorting to specific contextual clues making such inference perfectly available and manifest to speakers and hearers presumingly conforming themselves to the principle of cooperativeness and the conversational maxims.

Such an approach makes it possible to maintain a traditional view about semantic theory and at the same time to support an elegantly parsimonious and unitary explanation of the pragmatic, contextual, non-conventional effects on speaker's meaning.

After the full-fledged development of Grice's theory of meaning and communication, a widespread debate arose, mainly focusing on the so-called Semantics/Pragmatics distinction. If it is true that all the implicit meaning is a matter of conversational implicature and can be hence explained in terms of conversational maxims, how should we account for such phenomena of linguistic ambiguity, non-specificity and also implicitness which seems to affect the very semantic and conventional content of sentences in conversation?

Is it really possible to maintain a rigid borderline between the two branches of linguistics, even in light of the contrasting evidences to the effect that, in many circumstances, pragmatics seems to actually *intrude* into semantics?

Starting from the 1970s a number of different paradigm have been developed to account for such phenomenon, customarily labeled as 'semantic underdeterminacy' (or underdetermination, underspecificity, sense-generality, etc...), either aiming to preserve the structure of Grice's picture and revising the theory as to account for such issues, or with the goal of rejecting Grice's view and developing a different theory, maybe a semantically less committed but psychologically more realistic one, as it was the case for 1986 [Sperber & Wilson's](#) Relevance Theory.

In such approaches, a prominent role has been played by Gricean notion of Generalized Conversational Implicature. Roughly, this corresponds to a kind of default, standard, preferred and plausibly non-inferential pragmatic effect on speaker's meaning. Generalized implicatures, in Grice's

view, are in fact those which arise in every situation of utterance, almost irrespectively of specific contextual clues.

In the debate concerning the semantics/pragmatics interface, it has been increasingly observed the importance of the notion of default meanings and inferences, regarded as shortcuts to the best interpretation as a way to explain the incredible rapidity and efficiency of human communication and language understanding.

However, it has been noticed, by contrast, that a suitable modelling of such notion seems to be very hard and that a theory of meaning which resorts to the notion of preferred interpretation can hardly be supported, as it would obviously lack some basic requirements of standard semantic theories, such as a suitable formal apparatus, the condition of compositionality of meaning, the capacity of matching speaker's intuitions concerning linguistic content along the lines of a Gricean, intention-based, conception of meaning.

However, the intuitive appealing of the notion of default interpretations together with cognitive evidences supporting the hypothesis of inferential shortcuts have led to the formulation of various attempts to provide a theory of preferred meanings.

In the present work, I take into account one of the most recent and well-constructed theories of default interpretations, the paradigm of Default Semantics due to the philosopher of language and linguist Katarzyna Jaszczolt.

Such an approach on language understanding starts from the acknowledgment of so-called merger representations as the basic units of compositional meaning of acts of communication. Merger representations are illustrated by (DRT-Style) diagrams, with the proviso that each component of the single-level semantic representation can stem from different sources (including word meaning and sentence structure as well as pragmatic inference, and various types of default interpretations), none of which enjoy a compositional privilege over the others.

While different types of default or presumptive meanings have variously been advocated in Literature, I show how the variety of 'defaults' in Default Semantics are of the deepest theoretical interest. That is why they are espe-

cially intended to preserve the undeniable advantages of a principle of compositionality in semantic analysis and at the same time to take seriously into account the linguistic underspecification of utterance meaning.

Such task is pursued by resorting to a solid formalism, which is claimed to be able to cope with the various kinds of pragmatic contribution to utterance meaning.

The thesis is organized in three chapters, as follows:

In the first chapter, I provide a detailed introduction to Grice's theory of meaning and communication. The theory of conversational maxims and conversational implicature is thoroughly developed and several problems arising from the received view of his picture and different solutions to them available in Literature are presented.

In the second chapter, I put into test Grice's picture and offer a number of objections and counterexamples leading to the conclusion that Grice's rigid semantics/pragmatics distinction can hardly be maintained. After presenting some radical objections to Grice's semantic view, I give a detailed overview of some of the most influential approaches to semantic underdeterminacy, presenting them on a (virtual) scale of departure from Grice's received conception of Semantics. At the end of each presentation, I give a number of strong objections and counter-examples, eventually leading to the rejection of the presented approach.

Finally, in the third and last chapter, I present a detailed overview of Jaszczolt's Default Semantics. After developing in some details Jaszczolt's paradigm, I try to show that a large case study in Pragmatics is susceptible to treatment on the basis of merger representations and defaults, and I try to demonstrate how an approach of this kind can help to get a more fine-grained position about the Semantics/Pragmatics boundary, while saving what good has been proposed from the opposite fronts of the debate.

As a testing ground for Default Semantics and for the other paradigms presented, I chose to focus on the case study of sentential connectives, asking whether the standard enrichments of semantic meaning which is triggered by connectives in natural language can be traced to se-

mantics, pragmatics or some sort of defaults. To answer this questions, besides taking into account the debate concerning logical form and the syntax/pragmatics and semantics/pragmatics distinction, I will also consider evidences from comparative linguistics, and will try to show how the approach of Default Semantics, though slightly revised, is perfectly able to match the data provided by cross-linguistic study.

1

STEPS TOWARD GRICEAN PRAGMATICS

Context is a criterion in settling the question of why a man who has just put a cigarette in his mouth has put his hand in his pocket; relevance to an obvious end is a criterion in settling why a man is running away from a bull.

—GRICE (1989): 222.

1.1 PRELIMINARIES

Let's start from the beginning. In 1967 the English philosopher and linguist Paul Grice (1913-1988) gave a series of talks at the University of Harvard under the title of 'Logic and Conversation', as invited speaker in the celebrated William James Lectures. The text of these lectures remained for a long time unpublished (also due to Grice's notorious perfectionism ¹), although the manuscript of the talks widely circulated among the scholars and gave rise to a large debate. The lectures were finally published in 1989 in Grice's collection of papers 'Studies in the way of words', in a slightly revised and polished form. However, in the two decades between the Harvard conferences and the official publication of the text, the core ideas of Grice's view rapidly imposed and abruptly gave new directions to the studies in philosophy of language and linguistics. A new discipline was born under the title of Gricean Pragmatics.

The present work admittedly situates in the tradition which can be easily traced back to the works of Paul Grice.

¹ For the whole story about Grice's William James Lectures, and also for a enjoyable exposition of the background of Grice's ideas and idiosyncrasies, see [Chapman \(2009\)](#), especially pp. 100-113.

Besides, almost all of the account which I present and discuss in the course of the dissertation label themselves as neo-Gricean (at least in the spirit). We will see soon what does it mean in the specific. As regards to the central problem of this work, the relation between the topic of default interpretations and Grice's ideas will result, as I hope, more and more clearer in the development of the thesis. Also the choice of the specific case study of sentential connectives, which will be discussed in the second part, bears a remarkable connection with Grice's ordinary aims and interests, as we will see. For the time being, it is maybe worth noting that it is exactly a question concerning the nature of the logical particles and the relationship with their counterparts in natural language which is at the beginning of the first of Grice's Harvard lectures:

It is a commonplace of philosophical logic that there are, or appear to be, divergences in meaning between, on the one hand, at least some of what I shall call the formal devices \neg , \sim , \wedge , \vee , \supset , $(\forall x)$, $(\exists x)$, (ιx) (when these are given a standard two-valued interpretation) – and, on the other, what are taken to be their analogues or counterparts in natural language – such expressions as not, and, or, if, all, some (or at least one), the. Some logicians may at some time have wanted to claim that there are in fact no such divergences; but such claims, if made at all, have been somewhat rashly made, and those suspected of making them have been subjected to some pretty rough handling.

Although Grice's most extensive discussion is devoted to the theme of particularized conversational implicatures (that is, as we will see, to the sort of enrichment to the compositional meaning that is mostly dependent on contextual clues), there are quite undeniable evidences that that of default or standard enriched meanings was at the center of Grice's concerns, as it was conclusively proved by

Levinson (2000)². And this was so, exactly because ‘Grice was interested in the whole phenomenon of implicature largely because it promised an account of generally associated but defeasible inferences that rise from the use of the logical connectives. And he was particularly interested in the generalized implicatures, just because they are hard to distinguish from semantical or conventional content’³.

Be that as it may, such discussion is largely tangential to the main issue of default interpretations which, *pace* Grice and his alleged lack of interest for the matter, is nowadays widely acknowledged and is at the core of a widespread debate.

However, for the purposes of the present work a short overview of Grice’s own view and on his program is needed. There are at least two reasons for this: first, it is impossible to appreciate many of the technical notions and distinctions without a proper background in Grice’s theory of meaning and communication. As I already mentioned, many of the contemporary accounts label themselves as neo-Gricean and make extensive use of Gricean terms and concepts, also with the explicit aim of objecting to many of Grice’s own claims. Secondly, the sort of problems which will be discussed in the next chapters have quite often at their root a discussion which is traceable to readings of Gricean (or broadly Gricean) ideas, distinctions and also allusions. It would be quite hard to understand many of the issues arising within pragmatic view if they are not mirrored into original Grice’s picture.

² p. 18 and relative footnotes, including an instructive anthology of hasty comments of well-known theorists, like Sperber and Wilson: ‘[Grice’s] best known examples are particularized implicatures; the discussion of generalized implicatures is restricted to a few cases; and there is no evidence that he saw the distinction as theoretically significant’ (Sperber & Wilson (1987): 748) or Stephen Neale: ‘The distinction between ‘generalized’ and ‘particularized’ conversational implicature is not represented in this diagram [presented in Neale’s paper (Levinson’s note)] because it is theoretically inert (for Grice)’ (Neale (1992): 524, note 18.)

³ Levinson (2000):18.

1.2 MEANING

'Do you mean that you think you can find out the answer to it?' said the March Hare.

'Exactly so,' said Alice.

'Then you should say what you mean,' the March Hare went on.

'I do,' Alice hastily replied; 'at least – at least I mean what I say – that's the same thing, you know.'

'Not the same thing a bit!' said the Hatter. 'You might just as well say that "I see what I eat" is the same thing as "I eat what I see"!'

—LEWIS CARROLL, *Alice's Adventures in Wonderland*

The main discussion of 'Logic and Conversation' can be easily traced back to an often cited, however short, Grice's paper of 1957, programmatically entitled 'Meaning'⁴. Like for the Harvard Lectures, also this paper was written and had a certain circulation before its official publication⁵. This point is worth noting at least because it shows how the discussion of several themes (like the one of conventions and intentions) in large part anticipated, rather than follow, the publication of influential works like Austin's *How to do Things with Words* (published in 1962, but read at Harvard as William James Lectures in 1955) and Ryle's *The Concept of Mind*⁶.

Following a very common strategy among the so-called ordinary language philosophers, in *Meaning* Grice suggests to start from an analysis of how the verb 'to mean' is used

⁴ Grice (1957)

⁵ See Chapman (2009): 63. 'Grice wrote the paper in practically its final form in 1948 for a meeting of the Oxford Philosophical Society but, as usual, he was hesitant to disseminate his ideas more widely. Almost a decade later, Peter Strawson was worried that the Oxford philosophers were not sufficiently represented in print. Unable to convince Grice to revise his paper and send it to a journal, he persuaded him to hand over the manuscript as it stood. Strawson and his wife Ann edited it and submitted it to the *Philosophical Review*'

⁶ *Ibidem*

in English. Such an analysis leads to a distinction between two senses which the verb 'to mean' can bear. The first one, labeled as the *natural* notion of meaning, is that which is in play when someone utters a sentence like (1)

(1) These clouds mean rain.

As opposed to this use of the verb 'meaning', Grice claims that another different sense of the verb is involved when uttering a sentence like (2)

(2) Those three whistles of the referee (in a soccer game) mean that the match is over.

This latter variety is called non-natural meaning. According to Grice, at least five main differences between these two senses can be acknowledged. Such differences can be grouped as follows:

1. *Cancellability*⁷: in the former case, that 'x means p' also entails the truth of y, that is, the conclusion cannot be cancelled and it is not possible for a speaker to go ahead and say, e.g., 'x means p, but not-p'. By contrast, in the case of non natural meaning, the conclusion is not entailed and it is straightforwardly eliminable. For example, we cannot say:

(1.1) These clouds mean rain, but it won't rain.

However, we can say with no problems:

(2.1) Those three whistles of the referee (in a soccer game) mean that the match is over. But it isn't in fact over: the referee has made a mistake.

2-3. *Intention recognition* From an occurrence of natural meaning of the form 'x means p' it cannot be argued the

⁷ This condition is also referred by Grice as a condition of 'factivity' for the verb 'to mean': according to this distinction, natural meaning is factive, while non natural meaning is not. See the *Retrospective Epilogue* in Grice (1989): 359.

conclusion that 'what is meant by x is p ' or that 'somebody means p by x '. Exactly the opposite goes for non natural meaning. For example, from (1) it cannot be inferred that 'what is meant by these clouds is rain' or that 'someone means rain by these clouds'. On the contrary, it is perfectly possible to argue from (2) to the conclusion that 'what is meant by the referee with those three whistles is that the match is over'.

4-5. *Admissible restatements* Occurrence of natural meaning cannot be followed by quotation marks, while this is perfectly acceptable in the case of non natural meaning. Furthermore, utterances containing occurrences of non natural meaning can be restated in the form 'the fact that...' (for example, 'the fact that there are these clouds means that it will rain'), while the same construction is by no means a restatement of the meaning of the sentence in the case of non natural meaning.

Conditions 2-3 point directly at the core of Grice's notion of non natural meaning ($\text{Meaning}_{\text{NN}}$). What Grice wants to claim is that for a speaker to mean something is equivalent to have the intention of inducing in an audience a certain effect by means of the recognition of the intention behind that utterance, in a way that can be sketched as follows. Note that the kind of definition given in 'Meaning' (and reported here) is no doubt quite sloppy and has been object of several objections, pointing especially on its psychological inadequacy of Grice's definition⁸ However, for the purposes of the present research it doesn't matter whether such definition lacks of psychological consistency, it is enough to note that this definition involves a sort of reflexivity condition and that for the intention in play to be achieved it is sufficient that it is recognized⁹:

8 See Strawson (1964) for a classical discussion of the topic and Grice's attempt of emendation in Grice (1989), reprinted in Grice (1989): 86-116.

9 The definition as given is from Levinson (2000):13. See also Neale (1992): 544-550 for discussion and for the following, more fine-grained, definition (p. 550):

By uttering x , U meant that p iff for some audience A ,

- (3) S means_{NN} p by 'uttering' U to A iff S intends:
- a) A to think p
 - b) A to recognize that S intends (a)
 - c) A 's recognition of S 's intending (a) to be the prime reason for A thinking p .

What is worth noting about this kind of definition of 'meaning' is the idea that utterance meaning is not (or, at least, not only) function of the semantics of the sentence, that is, it does not only depend on the syntactic rules of composition of the sentence together with the truth-conditional value of its constituents, but it is, more crucially, a matter of what is intended by a specific speaker uttering a certain sentence (or, better, an occurrence or token of such sentence). The hearer's job of recovery of the speaker's intentions behind the performance of an utterance lies thus at the center of such a picture of communication. Of course, the anti-formalist claim that meaning cannot be reduced to the outcome of the semantic analysis of the sentence is not only proper of Grice, but is a common claim among the ordinary language philosophers. However, unlike Austin, who stressed the role of convention in performing a certain kind of speech act, what Grice - yet from this seminal paper - seems to be interested in is drawing a psychologically realistic explanation of language use, which is centered not generically on the non-linguistic, conventionalized potentialities of language use but, rather, on the way in which a conventional content interact with speaker's intentions and hearer's expectations in a given circumstance of utterance to yield a felicitous

-
1. U uttered x intending A actively to entertain the thought that p (or the thought that U believes that p)
 2. U uttered x intending A to recognize that U intends A to actively entertain the thought that p
 3. U does not intend A to be deceived about U 's intentions (1) and (2).

act of meaning. Such strategy can be seen as a radical re-interpretation of later Wittgenstein's slogan that meaning is its use (an idea which was so familiar to Oxford philosophers of 'ordinary language' orientation), or – to put it in Grice's terms – a way of exploiting the intuition that 'what words mean is a matter of what people mean by them'¹⁰.

1.3 LOGIC AND CONVERSATION

If I say to any one, 'I saw some of your children to-day', he might be justified in inferring that I did not see them all, not because the words mean it, but because, if I had seen them all, it is most likely that I should have said so: even though this cannot be presumed unless it is presupposed that I must have known whether the children I saw were all or not.

—MILL (1867): 501.

In the previous section, I mentioned the anti-formalist spirit behind Grice's analysis of meaning. Under the common name of 'formalists', Grice intends to refer to the important tradition in the analytical philosophy of 20th century that can be traced to the works of Frege: namely, the idea, common to the positivists and to philosophers with a strong predilection in mathematical logic (like Russell, Carnap, Quine, Ayer), that natural language is inadequate to meet the standards of precision required by scientific enterprise and should be hence replaced and clarified by unambiguous formal languages and devices. However, Grice's position in the formalist/informalist debate is more fine-grained than it could appear at first glance. Grice was all but a mere advocate of the informalist approach to natural language meaning. The attempt to make it clear how a middle level solution between the two fronts of the debate could be found was one of Grice's primary concerns in his 'Logic and Conversation', a solution which could have

¹⁰ Grice (1989):340.

at the same time the advantages of a strict methodological parsimony and of a grasp of psychologically relevant aspects of the process of communication.

The seminal intuitions of 'Meaning' are developed in a comprehensive theory of meaning and conversation in Grice's William James Lectures. The central topic of this lectures is the notion of implicature and specifically of conversational implicatures.

Before addressing the theoretical features of implicatures, some examples will be of help to understand the however commonplace phenomenon which Grice has in mind. One of Grice's most cited examples is the following: imagine that *A*, a philosophy professor, is supposed to write a letter of recommendation for one of his student, *Mr'X*. In this situation *A* writes as follows¹¹:

- (4) Dear Sir, Mr. *X*'s command of English is excellent, and his attendance at tutorials has been regular. Yours, etc.

In a circumstance like the one just described, the addressee of *A*'s letter is legitimate to infer that what *A* is trying to communicate goes beyond what he is explicitly writing. Very likely this will be the fact that Mr. *X* is indeed by no means a good student of philosophy. Such an effect is obtained by exploiting in a certain way the features of ordinary communication: in this case, from the fact that, when writing a letter of recommendation, one is normally expected to communicate information about the person recommended which are relevant for the purposes of the letter itself, the recipient of the letter infers that there is something else that is meant by *A*.

Here is another example given by Grice:

- (5) *A*: Smith doesn't seem to have a girlfriend these days.
B: He has been paying a lot of visits to New York lately.

¹¹ From Grice (1989):33

Clearly, what *B* is trying to communicate is that Smith is likely to have a new girlfriend in New York. Note that, in the appropriate context (e.g. that of Smith being an English trader whose company has a branch office in New York), *B*'s answer is consistent with the implicature that, for example, Smith is so overloaded with work at present that he has no time to find a new girlfriend. This clearly shows that implicatures are a linguistic phenomenon whose production is led by the exploitation of certain features of communication to get non-conventional linguistic effects and that (as the latter example clearly shows) these effects are by no means in a logical relation (e.g. of entailment) with the proposition expressed. That's why Grice uses the neologism 'implicature' to address this case study, which should not be confused with logical implication. However, the crucial point is that Grice is not interested in providing random examples of linguistic tricks and machineries. When focusing on this sort of examples, his central concern is that of giving a possibly unitary explanation of meaning in natural language, one being in line with the kind of analysis given in 'Meaning' 'in terms of complex audience-directed intentions on the part of the utterer'¹². According to Grice, such an account should programmatically be able to explain this sort of cases where speakers' intended meaning departs so significantly from encoded one, a job which has been widely neglected from philosophers of language of 'formalistic' tendency, but which in Grice's view is a central task for a theory aiming to provide a meaningful theory of linguistic communication.

According to Grice, the task of providing a maximally unitary explanation of this sort of case study is reached only once we acknowledge a strict correspondence between the production of conversational effects like the ones outlined above and a series of principles or maxims which are supposed to govern our communicative exchanges. More generally, those maxims are on a hierarchy of dependence and fall under an overall Cooperative Principle which is supposed to be always active in linguistic behaviours sub-

¹² Neale (1992):542.

mitted to a general assumption of rationality of the participants to a conversational frame¹³. The Cooperative Principle, in Grice's terms, is as follows¹⁴:

GRICE'S COOPERATIVE PRINCIPLE

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

As for the conversational maxims, Grice, 'echoing Kant'¹⁵ groups them in the four categories of Quantity, Quality, Relation and Modality. There is of course a semi-serious motivation of philosophical tribute underlying such grouping. However, as it has been noted by Chapman (2009), such distinctions were probably chosen 'more importantly to draw on their ideas of natural, universal divisions of experience':

The regularities of conversational behaviour were intended to include aspects of human behaviour and cognition beyond the purely linguistic. [...] Kant's claims for both the fundamental and the exhaustive nature of these categories are explicit [...] Kant goes so far as to suggest that his table of categories, containing all the basic concepts of understanding, could provide the basis for any philosophical theory. These, therefore, offered Grice divisions of experience with a sound pedigree and an established claim to be universals of human cognition¹⁶.

13 More in general, the assumption of rationality is taken to be at the root of human behavior in general. This is one of the unifying themes in Grice's whole work. See Chapman (2009):chapter 1.

14 From Grice (1989): 26.

15 Grice (1989): 26.

16 Chapman (2009): 100.

In any case, once that we have acknowledged these as actual grounds for Grice's choosing a Kantian label for his conversational maxims¹⁷ one could go ahead and pose to Grice the same question which quite naturally arises in the kantian case, i.e. the question of the completeness and alleged exhaustiveness of the table of categories. Could one ever be convinced about the need of these, and no more than these, four groups?

Be that as it may, such discussion would take us too far afield. What is worth stressing is only that, notwithstanding the prescriptive form of the maxims, they are nonetheless intended to serve as descriptive (and, in a sense, transcendently descriptive) of our conversational behaviour. The maxims are principles such that we automatically conform to them in our everyday conversational exchanges, rather than instructions we are supposed to follow. For the purposes of the present work it is sufficient to give quite schematically a list of Grice's maxims of conversation¹⁸.

GRICE'S MAXIMS OF CONVERSATION

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.

QUALITY

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

RELATION

¹⁷ It is worth noting that the label 'maxim' itself has a strong kantian connotation.

¹⁸ From Grice (1989): 26-27.

- Be relevant.

MANNER

- Be perspicuous:
 - Avoid obscurity of expression.
 - Avoid ambiguity.
 - Be brief (avoid unnecessary prolixity).
 - Be orderly.

I am not entering here into the discussion concerning the priority of certain maxims over others¹⁹. Let's rather come back to the examples (4) and (5) and add some comments in light of Grice's theories of cooperativeness and conversational maxims. Mr. X's letter of reference represent a blatant violation of the first maxim of quantity. On the other side, shared contextual knowledge, concerning what one is expected to write in a letter of reference, makes the manifestly poor information contained in the letter implicitly intended to communicate something else, namely that the writer is not in the position of writing anything good with respect to Mr. X's philosophical skills. The conversational implicature that 'Mr. X is by no means a good student of philosophy' (or something of the sort) is thus triggered through the explicit violation of one of the maxims. The assumption of cooperativeness which underlies

¹⁹ It is clear, indeed, that Grice acknowledged a priority to the maxim of quality: 'It is obvious that the observance of some of these maxims is a matter of less urgency than is the observance of others; a man who has expressed himself with undue prolixity would, in general, be open to milder comment than would a man who has said something he believes to be false. Indeed, it might be felt that the importance of at least the first maxim of Quality is such that it should not be included in a scheme of the kind I am constructing; other maxims come into operation only on the assumption that this maxim of Quality is satisfied.' (Grice (1989): 27). See also Neale (1992): 531. In fact, it is peculiar that one of the most influential approaches in cognitive pragmatics, i.e. Relevance theory, can no doubt be read as an attempt to argue for the alleged priority of the maxim of Relation over the others (which are then subsumed under the unique principle of Relevance).

communication leads to the search for an interpretation by virtue of which the violation of the maxim is used to generate some non-conventional conversational outcome, i.e. a conversational implicature. The case of the example (5) is similar, but here is a violation of the maxim of relation ('Be relevant'). In order to assume that *B* is being cooperative in his answer to *A*'s question, the addressee has to go beyond 'what is said' by *B* and his apparent nonobservance of relevance and accordingly get to the implicated message.

Grice distinguishes between particularized and generalized conversational implicatures (henceforth PCIs and GCIs respectively). PCIs are the kind of implicatures which we encountered so far: they are triggered in 'particular occasion by virtue of special features of the context'²⁰ (again, examples (4) and (5) are very good examples of PCI). GCIs, by contrast, are the sort of implicatures which are 'normally' triggered in almost all context of utterance by virtue of 'the use of a certain form of words in an utterance ... (in the absence of special circumstances)'²¹. Examples (6), (7) and (8) are standardly accounted for as cases of GCI²²

- (6) I have *three* children.
- (7) *Some* philosophy books are boring.
- (8) Mary and John got married *and* had a baby.

In the examples above, I emphasized (using italics) the lexical items which, according to Grice, (at least in 'normal' contexts) carries the generalized implicatures. In example (6) the number term *three* is claimed to have a conventional meaning ('*at least* three') which is pragmatically enriched to get the intended interpretation in most context ('*exactly* three'). In the case of (7), the quantifier expression 'some' is, in its logical interpretation, compatible with the claim that:

²⁰ Grice (1989): 37.

²¹ *Ibid.*

²² At least among those theorists who agree about the existence of the separate phenomenon of GCI, like Gazdar, Atlas, Horn and Levinson. Levinson (as we will see) developed an articulated theory of GCI.

(7.1) *All philosophy books are boring.*

However, in standard context of utterance, the inference to (7.1) is blocked by the generalized implicature that:

(7.2) *Some, but not all, philosophy books are boring.*

In the example (8), the use of the english connective 'and' is temporally (and maybe causally) marked. Such markedness is claimed to be not part of the encoded meaning of the lexical item 'and' (whose meaning, as we will see, is claimed to be analogous to this of the formal counterpart \wedge , and to be, accordingly, entirely truth-conditional) but to be the effect of a GCI which gives the intended interpretation (8.1)

(8.1) *Mary and John got married and then (as a result) had a baby.*

Even if, according to Robyn Carston, '[t]here is no evidence that Grice gave any theoretical weight to a distinction between generalized and particularized conversational implicature, and the postulation of a system of default logical rules, attached to particular lexical items, runs counter to the aim of accounting for pragmatic inference in terms of quite general conversational maxims rooted in considerations of human rationality²³', the distinction between GCI and PCI is today really customary in pragmatics (thought with substantial departures from Grice's original discussion) and gave rise to a wide debate.

²³ Carston (2002): 259.

1.4 WHAT IS SAID AND WHAT IS IMPLIED

House: 'I hired you because you are extremely pretty.'

Cameron: 'You hired me to get into my pants?'

House: 'I can't believe that that would shock you. It's also not what I said.'

—HOUSE MD: *Pilot*.

1.4.1 Conventional implicatures

Before getting to a summary of the whole Gricean picture, it is important to note that conversational implicatures (both GCIs and PCIs) do not exhaust, at least in Grice's view, the field of implicatures. One sort of implicatures is triggered - according to Grice - directly from the conventional meaning of certain words such as the contrastive reading of term 'but' in (9)²⁴:

(9) John is a philosopher but he is rich

Conventional implicatures are theoretically controversial, since they seem to blur two important and apparently rigid distinctions in Grice's theory: i.e. the distinction between what is said and what is implicated and the distinction between semantics and pragmatics. As Carston notes, conventional implicature 'falls on opposite sides of the two divides (it is semantic and it is implicated)²⁵'.

To explain this point it is needed to introduce another technical notion, correlative to that of implicature, i.e. the notion of 'what is said' (hereafter WIS). As a preliminary remark, we can observe that one of Grice's concerns is to stress the logical independence of conversational implicatures from the content of the expressed sentence. Remember that one of the distinguishing features of the notion

²⁴ From Bach (1999a): 332.

²⁵ Carston (2002): 104.

of Meaning_{NN} was the property of cancellability. What is non naturally meant by a certain act of communication (be that a linguistic utterance or an other sensory stimulus, like the whistles of the referee in example (2)) can always be dropped without contradiction. This fact, as we already noted, shows that what is meant_{NN} by a certain utterance is not part of what we can call the semantic content of the uttered sentence. If we now turn back to the examples of conversational implicatures, it is easy to note that the same condition of cancellability applies:

- (5.1) A: Smith doesn't seem to have a girlfriend these days.
 B: He has been paying a lot of visits to New York lately. But this is not to say that he has a new girlfriend there.
- (7.3) *Some* philosophy books are boring. In fact, all of them are.

Note that both GCI and PCI are cancellable (or *defeasible*), while conventional implicatures are not. It is indeed impossible to utter (9) without intending at the same time the (unfortunately not so alleged) contrast between being a philosopher and being well-heeled. This is why, even if conventional implicatures - inasmuch as they *are* implicatures - belong to the layer of utterance meaning that Grice labels as 'speaker's meaning' (as opposed to sentence meaning), nonetheless they behave like an hybrid element between conventional meaning (which belong to semantics) and implicatures (which are claimed to be entirely a matter of pragmatics). That's why their status is so controversial. To put it schematically, conventional implicatures are claimed to bear the following three features²⁶:

²⁶ I follow here [Bach \(1999a\)](#)

(10)

- They are triggered by certain locutions which give rise to implicatures in virtue of their own meanings (that is why they are *conventional*).
- The meaning of such locutions does not contribute to WIS.
- Their truth-value does not affect the truth-value of the entire utterance, so that the falsity of such proposition is compatible with the truth of the entire utterance (that is why they are *implicatures*).

At the same time, however, the contentious status of conventional implicatures helps to shed light on an overall rigidity of Grice's picture of communication, that is the hard-shelled separation between the three acknowledged layers of meaning: sentence meaning, what is said and what is implicated. To put it more vividly, the reader can find helpful to resort to Figure 1.1 at page 23.

1.4.2 Kent Bach on conventional implicature

However, theorists are not unanimously in agreement about the existence itself of the autonomous phenomenon of conventional implicatures. According to Kent Bach, to cite only one example, 'Grice's category of conventional implicature throws a monkey wrench into his distinction [between WIS and what is implicated], inasmuch as conventional implicatures derive from the meanings of particular expressions rather than from conversational circumstances. This monkey wrench needs to be removed'²⁷. In Bach's view, the appeal of conventional implicature is entirely intuitive and does not actually rely on any argument in favour of its existence. Grice borrowed this category directly from an idea of Frege, which can be found e.g. in his celebrated paper *The Thought*:

²⁷ Bach (1999a): 327.

Someone using the sentence 'Alfred has still not come' actually *says* 'Alfred has not come', and at the same time *hints* - but only hints - that Alfred's arrival is expected. Nobody can say: Since Alfred's arrival is not expected, the sense of the sentence is false. The way that 'but' differs from 'and' is that we use it to *intimate* that what follows it contrasts with what was to be expected from what preceded it. Such conversational suggestions *make no difference to the thought*²⁸.

Bach's strategy is to argue that the alleged category of conventional implicatures is a theoretical artifact, that is a myth, since there are no independent arguments in favour of the existence of such category. On the contrary, following a suggestion of Grice himself, he proposes an analysis of the locutions which are claimed to trigger a conventional implicature (what Bach calls *ACIDs*: alleged conventional implicature devices) in terms of second-order speech act operators. In a case like (9), Grice suggests that 'speakers may be at one and the same time engaged in performing speech-acts at different but related levels', that is to say the term 'but' introduces a second-order speech act, which acts as a modifier on the first-order (locutionary) speech act by introducing the relevant contrastive effect.

In Bach's analysis, terms like 'but', 'still', 'even' work as *preservative* operators, inasmuch as they preserve the original proposition while introducing the modification. Let, for example, B^1 be the unary preservative operator expressing the property F (e.g., the contrastive effect triggered by 'but'), and let S be the proposition that p , then $B^1(S)$ expresses both the proposition that p and the proposition that $F(p)$ ²⁹.

Bach's proposal articulates in three main steps: first, he shows that - contrary to Gricean assumptions - the enriched meaning which *ACIDs* allegedly convey by means of conventional implicature is, in fact, in many cases part

²⁸ Frege (1918/1956), in McGuinness (1984): 357 (italics is from Bach).

²⁹ Bach (1999a): 352.

of what is said. This is demonstrated by showing that locutions like 'but', 'still', etc..., pass the so-called *IQ-Test* (Indirect Quotation Test), which states, roughly, that an element of a sentence contributes to WIS of an utterance of that sentence if and only if there can be an accurate indirect quotation which specifies WIS and makes use in the 'that-clause' of that element. Hence, the second clause of the definition of conventional implicature in (10) is rejected.

Secondly, it is claimed that the conventional implicature analysis is guided by a silent assumption which surreptitiously underlines 'people's intuitions about what sentences do and do not say'³⁰. This is the assumption that 'every indicative sentence expresses exactly one proposition'³¹. Contrasting this assumption, Bach advocates for a multi-proposition view. In his account, '[w]ith sentences containing ACIDs like 'but', 'so', 'even', and 'still', there is no such thing as the proposition expressed - in these cases what is said comprises more than one proposition. And when the sentence does so without expressing the conjunction of these propositions, and these propositions differ in truth value, the sentence as a whole is not assessable as simply true or simply false.'³². Thus, in a case like (9), one should not claim for an analysis as the one in (9.1):

(9.1)

- (i) John is a philosopher *and*
- (ii) John is rich *and*
- (iii) there is a certain contrast between being a philosopher and being rich.

The above analysis is wrong because it is claimed that the utterance meaning is given by the conjunction of the propositions (i)-(iii), while it is hard to acknowledge that a report of WIS in sentence (9.1) would include something like clause (iii) (at least due to its redundancy). On the

³⁰ *Ivi*: 351.

³¹ *Ivi*: 350.

³² *Ivi*: 351.

other hand, IQ-Test ensures that contrastive meaning *is* in fact part of WIS, thereby involving that a different analysis is required. Bach's claim is that the analysis in terms of multiple proposition has the advantage of preserving the idea that WIS includes something like the clause (iii)³³ and at the same time that, unlike a conjunction of propositions, multiple propositions do not have a unitary truth-value: i.e. they are not true or false altogether, and (as in the case of implicatures) it is preserved that the falsity of the sentence expressing contrast is compatible with the truth of the sentences (i) and (ii).

According to Bach, the view that 'but' triggers a conventional implicature 'is the result of insisting on separating the contrastive import of 'but' from its conjunctive import'³⁴, while the contrastive one is obtained by means of a second-order speech act operator which, while modifying the proposition within its scope, at the same time preserves it. Hence, the third point in the definition (10) is rejected: the truth-conditional independence of the two sentences is saved but this does not involve the generation of an implicature. On the contrary, such fact is explained by resorting to a multi-propositional view.

Therefore, it is possible to reject in a very convincing way the idea that conventional implicatures are, in fact, implicatures. To sum up, this is why they affect the truth-conditional content of the sentence expressed by the utterance (i.e. they are part of WIS) and express multiple propositions, the relation among which is neither of entailment nor of implicature.

Conventional implicatures, as we already noted, present an obvious problem since they seem to belong at the same time to two different layers of the theory of meaning, which

33 However, as it is noted by Bach, the precise sort of contrast which is conveyed by the locution 'but' is to be contextually filled. In Bach's analysis of the layers of meaning, as we will see in the next chapter, the acknowledgment of the contrastive effect is to be recognized at that level of WIS which follows semantic completion, while the particular sort of contrastive effect has to be contextually fleshed out by means of a process of pragmatic expansion. See *infra*: 101.

34 Bach (1999a): 348.

are sharply severed. This quite straightforward consideration had led us to the result that the existence itself of this theoretical object can be easily questioned and the category of conventional implicature can thus be removed. In other accounts, like that of Relevance Theory, whose overall strategy consists in advocating for a continuum of cases of pragmatic enrichment against the sharp distinctions between WIS and the pragmatics acknowledged by Grice's theory of implicatures, the way adopted for rejecting the category of conventional implicature is quite different and makes use of the distinction between conceptual and procedural meaning. However, I will not enter here into this topic, just because such distinction will be discussed in the third chapters³⁵.

1.4.3 Grice on 'what is said'

In the previous section I presented Kent Bach's account on conventional implicatures. Such discussion has no direct import on the main issue of this work. However, it represents a first example of how the sharp picture of communication drawn by Grice can be criticized. And, more importantly for the purposes of the present work, such first criticism to Grice's view on implicatures is directed on those implicatures whose generation seem to involve no inferential commitment and are triggered in, at a first approximation, 'standard' contexts.

It is now time to put into test the overall picture which result from Grice's analysis. It can be useful to resort to Figure 1.1 and give some critic remarks on it. However, it is fair to note incidentally that the diagram provided is by no means neutral, in so much as it results from a reconstruction of Grice's theory. However, it represents quite straightforwardly the received view about Grice's picture of communication³⁶ and it can be accepted, I think, without further hesitation. As it should be clear, the red arrow

³⁵ see *infra*: 151.

³⁶ Similar schemes can be found e.g. in Bianchi (2004): , Carston (2002): 112, Neale (1992): Recanati (2004a):

represents the hybrid nature of conventional implicatures which, although belonging to the layer of speaker's meaning, are strictly related to the conventional meaning of the sentence.

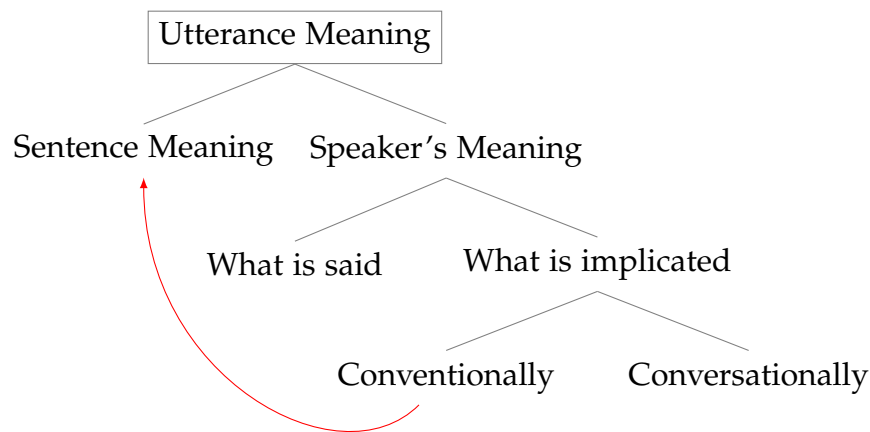


Figure 1.1: Grice's picture of communication

Following Grice's picture of communication, utterance meaning corresponds to the overall layer of what we can also call, echoing [Recanati \(1989\)](#), 'what is communicated'³⁷. Such level includes both conventional and non-conventional contributions to the meaning of a certain utterance and, most importantly, this two kinds of contributions are sharply severed in Grice's view. However, as we already noted, a first kind of counter-example to this scheme is represented by the phenomenon of Gricean conventional implicatures.

³⁷ Assuming that the equation *utterance meaning = what is communicated* actually holds, the distinction between the two labels is merely terminological and only helps to stress respectively a perspective oriented to the analysis of meaning or one which is more concerned with the steps involved in communication understanding. However, as we will see when focusing on the paradigm of *Default Semantics*, it is possible to question the idea that an analysis in terms of utterance really exhausts the dominion of what is communicated

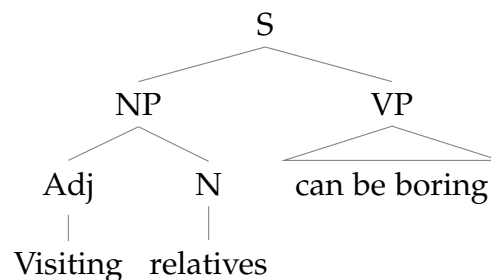
Nonetheless, also assuming that we are able to cope with such category, either in the Gricean or in the Bachian way, it is still possible to ask whether this is the only sort of phenomenon which apparently threaten the Gricean distinctions. Let's consider the following examples:

- (11) Jane went to the bank.
- (12) Visiting relatives can be boring.
- (13) He is here now, but she is not: she is at his place.

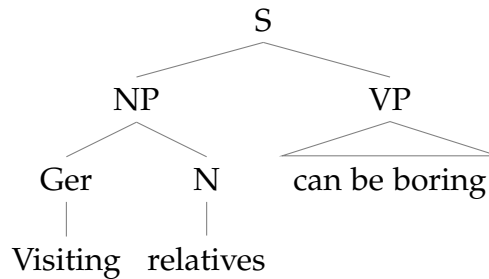
If we try to provide an analysis in Gricean terms of such utterances, it is easy to see that none of the examples (11)–(13) expresses a complete proposition after the conventional meaning of the sentences have been established. This is due to the polisemy of the term 'bank' in (11), which could refer both to the edge of a river (say, $BANK_1$) and to a financial institution ($BANK_2$). It is straightforward that deciding whether it is the case that Jane went to the financial bank or to the river bank is something which pertains to the level of what has been said by the utterer of (11) and cannot be by no means an implicature.

The same goes for (12), where the sort of ambiguity we are concerned with is not lexical but structural, that is to say it depends on the way we parse the syntactic structure of the sentence, either to mean that the act of visiting relatives can be boring (as in (12.1)) or that relatives who come to visit can be boring (as in (12.2))

(12.1)



(12.2)



Finally, in the case of (13), the full understanding of the utterance is subordinate to the resolution of the many indexical terms that is to say the assignment of references to pronouns, possessives, temporal and spacial deixis (like *here, now*). Assuming, for argument's sake, that *He* = John, *She* = Janet, *t* = the time of the utterance and *s* = Janet's house, the steps one hearer have to process to get a full proposition (like the one at the point 3.) are roughly as follows:

(13.2)

- (i) He_1 is here now, but she_2 is not: she_2 is at his_1 place.
- (ii) x is in s at t , but y is not: y is at x 's place.
- (iii) John is at Janet's house at the time of the utterance, but Janet is not: Janet is at John's place.

To get the right interpretation, i.e. the one at point 3. the hearer has to assign the correct reference to the indexical expressions (and correctly attributing the anaphoric anchors between co-referential pronouns, that is why of step 1.). It is easy to see that the proposition expressed by a sentence like (13) is strongly underdetermined by the surface structure of the sentence, at least until all the job of indexical resolution is done. What guides such process of reference instantiation is obviously a criterion of best fit which ultimately relies upon contextual knowledge. Grice

himself was well aware of this fact. In fact he proposed that what is said, as a technical notion of his picture, departs from sentence (conventional) meaning only in two respects:

1. It provides disambiguation for all possible ambiguous expressions (be that case of lexical or structural ambiguity) and
2. it provides a reference for all indexical expressions.

What we get, according to Grice, is a fully propositional item, something capable of being truth or false and, what is most remarkable, something which can suitably act as an input for the process of implicature generation:

To work out that a particular conversational implicature is present, the hearer will rely on the following data: (1) the conventional meaning of the words used, together with the identity of any references that may be involved; (2) the Cooperative Principle and its maxims; (3) the context, linguistic or otherwise, of the utterance; (4) other items of background knowledge; and (5) the fact (or supposed fact) that all relevant items falling under the previous headings are available to both participants and both participants know or assume this to be the case³⁸.

The importance given by Grice to the notion of WIS can hardly be overestimated. As was properly noted by Stephen Neale, '[t]he more one reflects on his work, the more one feels that the notion of what is said is for Grice a fundamentally important notion in philosophy³⁹'. And the reason for such centrality is not difficult to understand. Grice's first concern was to clear the field of philosophical debates from the confusions and fallacies arising from the misrecognition of the discrepancy between those aspects of meaning which bear logical relation between each

³⁸ Grice (1989): 31.

³⁹ Neale (1992): 555.

others, and those others whose links are only conversational. From the point of view of a theory of communication, this fact leads Grice to a sharp separation between what is conventionally conveyed and those aspects of meaning which rely upon the recognition of the intentions behind a speaker's uttering a certain utterance. In Grice's view, the field of meaning which depend upon contextual knowledge and inferential exploitation of the conventional meaning, i.e. the field of Pragmatics, should be hopefully taken apart, in order to preserve a methodological criterion of parsimony in philosophical and linguistic analysis, which could eventually help to deal with a notion of semantic meaning which is the most theoretically useful and treatable as possible. Hence, although a certain amount of 'contextual' contribution to WIS has to be acknowledged, at least in order to preserve the intuitions about what is for a sentence to express a complete proposition, one which is capable of being true or false, nonetheless such contributions - in Grice's view - had to be kept to a minimum. By doing so, one has the double advantage of safeguarding a conception of Semantics which is entirely a matter of

- (i) conventional meaning of the words;
- (ii) sentence structure and
- (iii) *compositionality* of (i) in accordance with the rules prescribed by (ii),

and at the same time invoking a single methodological criterion for the analysis of cases of departures from linguistic meaning.

This is why, as Grice explicitly writes,

[i]n the sense in which I am using the word *say*, I intend what someone has said to be closely related to the conventional meaning of the words (the sentence) he has uttered⁴⁰.

WIS is thus 'closely related', while of course not overlapping, to sentence meaning. Apart disambiguation, everything by virtue of which WIS departs from conventional

⁴⁰ Grice (1989): 25.

meaning is a matter of, we can say, indexicality in the *narrow context* sense⁴¹, i.e. only those elements in the sentence which are clearly indexical are necessary for a complete proposition to be uttered.

But, it may be asked, why allow exactly such components of contextual completion to be needed to WIS and not others? This is exactly because it is part of the semantics of pure indexicals (i.e. pronouns, variables for time and place,...) to refer to extra-linguistic context in a way that is, nonetheless, conventional, i.e. linguistically determined and mandated.

It is hence a very well restricted form of context-dependence the only one which is allowed (and, according to Grice, required) in order to WIS to express a complete proposition, by means of a slight departure from conventional meaning. A kind of context-dependence, the one 'exhibited by (pure) indexicals', which 'has nothing to do with the radical form of context-dependence which affects speaker's meaning⁴²'.

Everything else, according to Grice, is a matter of implicature and hence pertains to the level of Pragmatics.

Grice has a very well formulated methodological principle at the basis of his theory of meaning. It is a principle of methodological parsimony which closely reminds principles of ontological simplicity advocated by philosophers of Nominalistic orientation. Incidentally, this is why the title of the present chapter echoes the title of a celebrated paper by Nelson Goodman and Willard Quine⁴³. As a further wink to the nominalistic tradition, the principle is explicitly

41 For the distinction between narrow and wide context, see [Recanati \(2004a\)](#): 56-8 and in particular the following quotation from Bach, cited at the same place: 'There are two quite different sorts of context, and each plays quite a different role. Wide context concerns any contextual information relevant to determining the speaker's intention and to the successful and felicitous performance of the speech act . . . Narrow context concerns information specifically relevant to determining the semantic values of [indexicals] . . . Narrow context is semantic, wide context pragmatic'

42 [Recanati \(2004a\)](#): 56

43 [Goodman & Quine \(1947\)](#).

formulated as a modified version of the famous Occam's Razor⁴⁴:

MODIFIED OCCAM'S RAZOR

Senses are not to be multiplied beyond necessity

It is worth noting that the principle is introduced exactly at the end of Grice's discussion of the sentential connective \vee and its counterpart in natural language ('or'). According to Grice, it is not the case of postulating a linguistic ambiguity, where it is possible to explain a discrepancy between conventional (semantic) and conversational meaning of a certain linguistic item as an occurrence of pragmatic exploitation of the former (in terms of implicatures). In the case of sentential connectives, as we will see, the truth-functional meaning should be maintained as the primary meaning and the conversational enriched interpretation has to be explained in terms of implicatures. A really contentious conclusion which will be discussed in more details in the following chapters.

For the time being, let's consider Grice's overall conclusion about the distinguishing features of the three layers of meaning, namely sentence meaning, WIS, and implicatures. We know that WIS is a middle level, whose theoretical value is the one of a psychologically realistic though semantically very treatable representation of utterance meaning. The context-dependence of such semantic representation is reduced to a minimum, and all the contextual import to the sentence structure is limited to those, very controlled, aspects of contextuality which help to lead to a complete, truth-evaluable, proposition. Then, the level of what is said (i.e., the semantics of the sentence, in the sense of a proposition capable to bear an actual relation to a thought or a state of affairs) can undergo a process of pragmatic exploitation which, given the cooperative prin-

44 Grice (1989): 47.

ciple and the maxims of conversations, leads to the generation (and, from the hearer's perspective, calculation) of implicatures.

The obvious questions are now: is such picture of communication realistic? Whether or not psychological plausibility has a role to play in Grice's shaping the level of what is said, is this alleged level of meaning (also where intended as a theoretical object, whose utility is limited to semantic purposes) immune to independent counter-examples showing its theoretical fragility? The answer, in both case, has to be negative.

As a bridging passage to the next chapter (which will be entirely devoted to a discussion of some influential paradigms which have been proposed in response to the challenge to original Grice's picture) I will just consider a few examples which seem, at least at first glance, to threaten Grice's idea. These counter-examples will serve as an opening to more fine-grained, although Gricean in spirit, views of meaning in communication.

The question we have to ask ourselves is: are the linguistic processes of contextual filling acknowledged and isolated by Grice, i.e. disambiguation and indexical resolution, necessary and sufficient conditions for full propositionality? Let's consider the following examples:

- (14) He is an indiscriminate dog-lover; he likes some cats and dogs (from Levinson (2000): 175)
- (15) Paul's book is amazing.

Let's briefly discuss examples (14)-(21) above (we will come back to them in the next chapter).

The second clause of example (14) is an instance of something we have already encountered, i.e. structurally (syntactically) ambiguous sentences. Such sentence can be disambiguates in the following two ways:

- (14.1) He is an indiscriminate dog-lover; he loves [[some cats] and dogs].
- (14.2) He is an indiscriminate dog-lover; he loves [some [cats and dogs]].

Sentence (14.1) conversationally implicates that

(14.1.1) He loves *some-but-not-all* cats.

while sentence (14.2) has as implicature that

(14.2.1) He loves *some-but-not-all* cats and dogs.

Now, the implicature (14.2.1) is in fact incompatible with the truth of the first clause of (14), namely that 'he is an indiscriminate dog lover', which entails that 'he loves all dogs'. This predicts that the correct syntactic form is the one in (14.1), the paradox being that the mentioned implicatures 'are instrumental in the disambiguation process which is essential in arriving at 'what is said' by the utterance⁴⁵'.

That is to say: the same process which is in act in the generation of the implicatures seems to be in play for the disambiguation of a syntactic structure, a process, the latter, which is supposed to bridge the gap between sentence meaning and WIS and that is allegedly totally severed from the process (guided by the maxims) of implicature generation.

We have, so it seems, a first strong counterexample to the idea that (once fixed the reference for indexical elements) disambiguation is a sufficient condition for the determination of a full proposition. It seems clear from example (14) that the process of disambiguation can be itself guided by the same processes which guide the generation of implicatures.

This gives rise to the so-called 'Grice's Circle', which will be one of the topic of the next chapter.

Let's briefly turn to example (15): once fixed the reference for the proper name 'Paul'⁴⁶ it is hard to acknowledge that what we are facing is a complete proposition. For to say that Paul's book is amazing is not only to say something about a particular book (that it is amazing) but

⁴⁵ Carston (2002): 97.

⁴⁶ Irrespective of the issue of the semantics for proper names as rigid designators or abbreviations for definite descriptions.

also to acknowledge a certain relation between Paul and the book, a relation triggered by the genitive construction and which must be specified according to contextual consideration. Is the book the one owned by Paul, written by Paul, borrowed from the library by Paul, and so on... A possessive sentence like (15) means something like: there exists a book which bears the relation R to (the referent of the name) John and which is amazing. In a formal way, the Logical Form of the sentence expressed by (15) is something of the following sort:

$$(15.1) \quad \exists x(\text{book}(x) \wedge R(x, \text{Paul}) \wedge \text{amazing}(x))$$

The value (that is, in semantics, the meaning) of the relation R has to be contextually supplied. On the one hand, it is impossible to claim that the contextual instantiation of such relation is a case of implicature, since there is no complete proposition expressed (what is said) from which the implicature can be carried, before the instantiation of the relation. On the other hand, a principle of best fit, likely guided by Grice's principle of cooperation and maxim of relation, is at work for the job of instantiation of the free variable R and, accordingly, for the full proposition to be expressed. Here is another case in which for WIS to be elaborated it is necessary to resort to the kind of processes allegedly limited to the generation of implicatures.

I will turn back to these and similar examples in the next chapter. What these two examples show, however, is that there is a very well recognizable problem of context dependence also for filling the gap between sentence meaning and WIS. It is now clear that such gap is not as minimal as it has been claimed by Grice and that it requires to be filled by a set of contextual considerations which seem to be guided by the same principles which in fact guide the process of generation/calculation of the implicature. How it is possible to adjust Grice's picture in order to deal in a more convincing and sophisticated way with these kind of phenomena is the topic of the next chapter.

1.5 SUMMARY

For the time being, let's sketch a summary of the results reached in the present chapter. As a starting point, we considered Grice's contribution to the theory of meaning in his 1957 paper. As I have noticed, this paper makes an opening to an intention-based analysis of linguistic meaning. This seminal view is also 'inferential', since it is mainly interested in the inferential job the hearer is supposed to perform in order to go back to speaker's intentions behind his use of a certain sentence. Grice's work was oriented to stress the role of intentions in communication and, at the same time, to sharply distinguish the contribution of the inferential intention-based job from the conventional aspect of meaning.

In the Harvard William James Lectures, such analysis is developed in an articulated theory of linguistic communication, where the intention-based approach is grounded in a more general theory of rationality and cooperativeness and four groups of maxims allegedly regulating communication are stated by Grice and it is claimed that all non-conventional, i.e. conversational, effects are traceable back to the violation or to the exploitation of a certain maxim or of the more general cooperative principle.

Even if it is likely that Grice's main concern was to clear the confusion arising in philosophical arguing between strict logical relations (like entailment, contradiction, etc...) and those relation whose nature is not logic but only conversational, and to claim that the former, but not the latter, are relevant in philosophy, while conversational relations (like implicatures) represent the source of incorrectness and fallacy in many philosophical arguments⁴⁷, however, his work has been almost uniquely influential in the field of Pragmatics of language and communication. Examples of conversational implicatures have been provided and discussed, and the distinction between generalized and particularized conversational implicatures has been introduced.

⁴⁷ See [Carston \(2002\)](#): 102-105.

Furthermore, a wide discussion has been introduced about the very notion of what is said. What is its theoretical utility for Grice? Why has it been introduced and so sharply severed from other levels of meaning? Is it possible to support such rigid picture? Such questions have been addressed carefully, always keeping an eye on the examples. Starting from the case of so-called conventional implicatures, it has been demonstrated that such alleged phenomenon can be utterly questioned and also eliminated from our picture of communication. Bach's analysis, which has been explained in certain detail, shows that conventional implicatures, instead of being an hybrid, hardly treatable element between sentence meaning and implicatures are in fact part of what is said, which is then enriched in a way which, though minimal, was not predicted by Grice.

Moreover, I explained Grice's view concerning the distinction between sentence meaning and WIS and analyzed the sort of processes which, according to Grice, are necessary and sufficient conditions for sentence meaning to express a complete proposition. Such processes of contextual filling are disambiguation and indexical resolution, and are intended to keep to a minimum the role which the context has to play for the determination of the semantic content. Such role has to be one which is clearly recognizable, insofar as it is a form of linguistically controlled contextuality. Such idea has been eventually threatened by a pair of examples in the final section of the present chapters. What these examples shows is that disambiguation and reference assignment are in many cases not by themselves enough for a complete proposition to be expressed. By contrast, it seems that the same processes of contextual exploitation of what is said which are in play for the generation of implicatures have a role to play for the determination itself of propositional content, i.e. of what is said. Such examples have been used as a bridging point towards the next chapter, which will be entirely devoted to the phenomenon of semantic underdetermination.

2 | SEMANTIC UNDERDETERMINACY

In this field, our intuitions are not just a first shot at a theory – something like Wittgenstein’s ladder, which may be thrown away after it has been climbed up – but also *part of what the theory is about*. And as such they cannot be neglected.

—RECANATI (1989): 115.

2.1 TAKING STOCK AND LOOKING FORWARD

In the previous chapter, we ploughing through Grice’s theory of meaning and communication. It was a quite long enterprize, which eventually led us to the acknowledgment of certain deficiencies in the overall picture. We saw that Gricean picture, however genial and influential in its seminal intuitions, is unable to cope with a range of phenomena, which need to be account for in a different manner. These are the kind of cases where the explicit layer of utterance meaning (what is said) is itself underdetermined by the semantics of the sentence and is subordinate to the resolution of a high degree of context-dependence: a resolution which crucially depends on the same sorts of processes which guide the generation of implicatures.

In the present chapter, I will introduce the semantic underdeterminacy view and show that such phenomena unfitting with Gricean view represent in fact not only a little exception to the Gricean scheme, but on the contrary is almost the rule. While discussing the semantic underdeterminacy thesis, I will introduce in more details the distinction between Semantics and Pragmatics, and I will show to

what extant it overlaps the distinction between what is said and what is implicated in Gricean terms. Furthermore, a third important distinction, the one between explicit and implicit, will be introduced and discussed. I will show how these three distinctions have each its theoretical importance and how they eventually do not completely overlap. On the contrary, the however slight differences between such demarcations will be shown to be able to shed light on the right treatment of the chosen examples. Such distinctions will be gradually introduced through the discussion of some of the most influential extant paradigms in the Semantics/Pragmatics interface, with a strong predilection for those paradigms which share the assumption about semantic underdeterminacy.

I will show how the phenomenon of semantic underdeterminacy gives rise to a sort of circularity in Grice's view. In order to deal with such issue I will schematically present three possible sketchy solutions to it. Then, each potential solution will be developed, by taking thoroughly into account some representative approaches of the three orientations.

First, I will discuss the pretty conservative hidden indexical view, advocated among others by Jason Stanley.

Then, I will turn to an analysis of an intermediate proposal, due to Stephen Levinson. Levinson's approach tries to take seriously into account the circularity involved in Grice's theory, but to overcome it by means of a revision of the very Gricean assumptions and conceptual tools. The result is a theory of default interpretations which will be, in fact, the heart of the present chapter. I will discuss in details the variety of defaults introduced by Levinson and I will eventually give some conclusive reason to reject his view.

At the end of the chapter, I will outline a third, more radical approach to the problems arising from semantic underdeterminacy. This is the paradigm developed by François Recanati and labeled as 'Truth-conditional pragmatics'.

It will become clear in the next chapter how the threads intertwined in the wide and articulated discussion of the

present chapter can be pulled all together in a unified theory of default meanings.

2.2 THE CAT AND THE MAT

I shall begin from a famous 1978 paper by John Searle, *Literal Meaning*¹. In this paper Searle argues that the notion of Literal Meaning, as it is quite uncontentionally accepted, is not as acceptable as it can seem at first glance and has no theoretical plausibility at all. The consensus view, as Searle outlines it, is that:

Sentences have literal meanings. The literal meaning of a sentence is entirely determined by the meanings of its component words (or morphemes) and the syntactical rules according to which these elements are combined. (...)

The literal meaning of a sentence needs to be sharply distinguished from what a speaker means by the sentence when he utters it to perform a speech act, for the speaker's utterance meaning may depart from the literal sentence meaning in a variety of ways.²

Such a picture, according to Searle, has to be rejected, since eventually it can be shown that there is no such notion of (absolute, non-relativized) literal meaning at all.

It is easy to see that Searle's sketch of the received view about literal meaning closely resembles the Grice's view concerning the distinction between sentence meaning, what is said and what is implicated. We can straightforwardly paraphrase Grice and say that the literal meaning of a sentence p corresponds to the conventional meaning of p , enriched with those minimal elements of contextuality which contribute to provide a complete, truth-evaluable (and, accordingly, meaningful) proposition. In a nutshell, literal

¹ Searle (1978).

² Searle (1978): 207.

meaning equates with what is said, exactly in virtue of its close relation with sentence meaning.

But can actually such equation be plausibly maintained? We have already seen that counterexamples to this sharp picture are not hard to be found. However, Searle's claim is that such counterexamples are not so exceptional as they can appear, but they represent in fact the rule. He calls this idea 'thesis of the relativity of meaning'. According to Searle, perfectly unambiguous sentences lack the conditions for a unique, straightforward determination of their meaning and truth-conditions, as far as their meaning in conversation (their utterance meaning) can be shown to rely on a complex sort of background assumptions, which can by no means be fully specified. The literal, non-fi/-gu/-ra/-ti/-ve meaning of every declarative sentence, according to Searle, is dependent on a set of background specifications. Searle's celebrated example is with the sentence

(16) The cat is on the mat.

Such sentence seems to have a clear literal interpretation, one which can be roughly sketched as in Figure 2.1³



Figure 2.1: 'The cat is on the mat'

However, Searle argues:

But now suppose that the cat and the mat are in exactly the relations depicted only they are both floating freely in outer space, perhaps outside the Milky Way galaxy altogether. In such

³ From Searle (1978): 211.

a situation the scene would be just as well depicted if we turned the paper on edge or upside down since there is no gravitational field relative to which one is above the other. Is the cat still on the mat? And was the earth's gravitational field one of the things depicted in our drawing? What I think it is correct to say as a first approximation in answer to these questions is that the notion of the literal meaning of the sentence "The cat is on the mat" does not have a clear application, unless we make some further assumptions, in the case of cats and mats floating freely in outer space, and though our picture did not depict the earth's gravitational field, it like the sentence only has an application relative to a set of background assumptions.

Searle is not denying that the notion of literal meaning has to be utterly banished from our theorizing, however he thinks that only a restricted, relativized to a set of background assumption, notion of literal meaning can be maintained. What he wishes to preserve of the received view is the useful distinction between sentence meaning and speaker's meaning, and the related idea that contextual information can make the latter depart strongly from the former (as in the case of implicatures). However, he claims that a complex set of contextual information, one which is (not in principle, but as a mere matter of fact) not completely specifiable and accordingly does not have a semantic realization in the logical form of the sentence⁴ is in play also in the determination of the explicit content of simple sentences.

We can imagine a situation like the following: *A* and *B* both know that whenever their house-mate John goes out,

⁴ Searle gives two arguments against the full specification of background assumption and its semantic realization: '[f]irst, they are not fixed and definite in number and content; we would never know when to stop in our specifications. And second, each specification of an assumption tends to bring in other assumptions, those that determine the applicability of the literal meaning of the sentence used in the specification.' Searle (1978): 215.

he takes with him its cat. In this scenario, the following conversation takes place:

(16.1) *A*: Is John at home?

B: The cat is on the mat.

LITERAL MEANING = Sentence meaning + background assumptions.

IMPLICATURE = 'John is not at home'

In such a situation, context plays, in Searle's terms, a double role: the first one, is to provide all background assumption which are needed to set the standard scenario (the one sketched in Figure 2.1 for 'the cat is on the mat'. The second role the context plays (in Grice's terms) is, given the assumption about John's peculiar love for his cat and given the overt violation of the maxim of relevance, to trigger the conversational implicature that 'John is not at home'.

But how should we explain a phenomenon of context-sensitivity which, according to Searle, is so pervasive in communication and, at the same time, is different from implicature?

Following Grice's picture, it is clear that - apart from PCI (as it is the case of the implicature in the example (16.1)) - the only possible explanation for the contextual filling of a sentence like (16) is one which resort to the notion of GCI or of conventional implicature. But this is undoubtedly not the case: first, there is no lexical item in sentence (16) which triggers an implicature by virtue of its own meaning, unless we want consider the preposition 'on' as bearing, as an implicature, the contextual information about the standard cat-mat space disposition. What, of course, we do not want! Secondly, there is clearly no occurrence of GCI, since even if the standard scenario (the one in figure 2.1) is activated in the most contexts, it would be a paradox to draw the conclusion that the 'literal' interpretation of the sentence is, in fact, an implicature. We would be left with no clear distinction between literal and implicated meaning.

Let's sum up the conclusions of Searle's relativistic view: examples of apparently simple sentences whose interpre-

tation is 'literal' in most of the contexts show a pervasive phenomenon of context-dependence which can be by no means reduced to occurrences of Gricean implicatures, be those conventional, generalized or particularized.

The determination of literal meaning of a simple sentence (or, in Grice's terms, the determination of WIS) is itself dependent upon a complex set of background assumptions which cannot be made fully explicit and which however affect the truth-conditional content of the uttered sentence. All these evidences show that the conventional (linguistic) meaning of a certain sentence strongly underdetermines the utterance meaning, not only in a way which can be explained in terms of the exploitation of the maxims of conversations to get non-conventional, conversational (additional) meanings, but also in a way which is extremely pervasive insofar as it concerns - to use a Gricean terminology - the *said* itself of WIS, i.e. the explicit content of the sentence, irrespective of implicature.

We are now face to face with the core of the problem of semantic underdeterminacy. It has become really customary in Pragmatics to talk about semantic underdeterminacy⁵, as a phenomenon which is extremely pervasive in natural language and which needs to be explained in terms which radically overwhelm or at least considerably emend the original Gricean picture.

I began discussing John Searle's paper, as Searle is one of the advocates of the so-called radical underdeterminacy view. The thesis that the literal meaning of a sentence only determines a set of truth-conditions (or no set of truth-conditions at all) only relative to a set of background assumptions⁶. Searle's view about semantic underdeterminacy is radical insofar as linguistic meaning is claimed to fail to fully determine what is said, not only in a specific and well restricted class of examples, but for every utterance. In the words of François Recanati, one of the most

5 To my knowledge, the most beautiful and extensive discussion of semantic underdeterminacy is in Carston (2002): chap. 1. This is also one of the best books ever written on the Semantics/Pragmatics and, more specifically, explicit/implicit distinction.

6 Searle (1980): 227.

influential supporters of radical underdeterminacy thesis (what he calls 'Contextualism'),

semantic interpretation by itself is powerless to determine what is said, when the sentence contains a semantically underdeterminate expression. Now I take it that such expressions can be found all over the place...⁷

This is a very strong claim, as it supports the view that *every* utterance in communication expresses a proposition whose semantic content is underdetermined by the linguistic meaning of the sentence, that is to say 'the meaning encoded in the linguistic expressions used, the relatively stable meanings in a linguistic system, meanings which are widely shared across a community of users of the system'⁸.

Also, I have started the discussion of semantic underdeterminacy with Searle's paper because, whereas really weakly, it seems to hint the idea that the psychological process of reconstruction of the proper set of background assumption is guided, at least in cases of literal uses of language, by considerations of 'standardness' concerning the choice of the best fitting scenario in relation with our contextual knowledge of language and world.

2.3 I LOVE YOU TOO

Following the exhaustive repartition of Carston (2002), we can distinguish four sources of semantic underdeterminacy, which are as follows:

1. Multiple encodings (i.e. ambiguity);
2. indexical references;
3. missing constituents;
4. unspecified scopes of elements;
5. underspecificity or weakness of encoded conceptual content;

⁷ Recanati (2004a): 58.

⁸ Carston (2002): 19–20.

6. overspecificity or narrowness of encoded conceptual content.

As I mentioned, Grice considers only the forms of underdeterminacy at points (1) and (2): that is to say, he sees the processes of disambiguation and indexical resolution as the only ones needed for WIS to get fully determined.

We have already seen examples where pragmatic considerations of the sort of those involved in the generation of implicatures seem to *intrude* the semantics also in the case of ambiguity and reference assignment for indexical elements.

Such pragmatic operations are much more evident in the determination of the semantic content of linguistically underdetermined sentences by virtue of sources of underdeterminacy like (3)-(6).

So, e.g., examples (17)-(19) are cases of missing constituents, that is to say: cases where a constituent in logical form of the sentence is required for the utterance to express a complete proposition.

- (17) On the table.
- (18) It's raining.
- (19) John is not strong enough.

A sentence like (17), uttered e.g. in response to a question like 'where is Laura's book?', is a case of syntactic ellipsis where the missing elements undergo a process of mental reconstruction to get the truth-evaluable proposition that '[Laura's book is] on the table'. Irrespective of the details concerning how the syntactic process of reconstruction is performed, however such process is psychologically driven by clear pragmatic considerations. That is why it is considered as a case of semantic underdeterminacy, even if it pertains to the interface between syntactics and pragmatics more than the semantics/pragmatics one.

Sentence (18), at least in *normal* contexts, means that it is raining in the place where the utterance takes place. It is, roughly, as if a hidden constituent as a variable for place is in the logical form (that is, the deep structure) of the

sentence and it is filled with the most suitable location in the context. I will discuss in more details a similar view later in this chapter.

Finally, a sentence like (19) is not completely propositional, that is to say it cannot be evaluated as true or false until the right contextual parameter (strong enough for what?) is supplied.

In these three examples, we have a case of missing constituents (be those part of the logical form or only of the proposition expressed, i.e. of the *thought*) which need to be contextually provided for the sentence to express a complete proposition. The logical form of sentences (17)-(19) is incomplete and, accordingly, it lacks a truth-value until the appropriate value for the missing constituent is filled into it. This is why we can treat cases like these as examples of sub-propositional logical form.

Consider now the following examples:

(20) Everyone isn't hungry.

(21) I love you too.

In the first of the two above examples, it is possible to observe the non-specificity (or, following Jay Atlas ? sensegenerality of negation, which can be taken to have wide scope (i.e. not everyone is hungry) or narrow scope (i.e. everyone is not hungry). We treat such cases of underdetermined meaning as occurrences of non-specific logical form, since sentences (20) can accordingly give rise to two different logical forms, which are as follows:

(20.1) $\neg\forall(x)(\text{hungry}(x))$

(20.2) $\forall(x)(\neg\text{hungry}(x))$

Example (21) is from Bach⁹. It is a very nice example of semantic underdeterminacy, where the source of non-specificity is a particular linguistic element, in this case the particle '*too*'. In example (21), the particle can have scope

⁹ Bach (1994): ?, who adds that this is his favourite example.

over the entire sentence, as in (21.1), or over each different lexical element of the utterance, as in (21.2)-(21.4):

(21.1) [I love you]_x too_x.

(21.2) [I]_x love you too_x.

(21.3) I [love]_x you too_x.

(21.4) I love [you]_x too_x.

In other cases, the encoded conceptual content of a lexical item has to be pragmatically strengthened to get the correct interpretation:

(22) I have nothing to wear.

(23) I have had breakfast.

Examples (22) and (23) normally express, respectively, a manifest falsity and a clear truism. However, the right interpretation (at least in the most contexts) is that the utterer of (22) has nothing *appropriate* to wear and that the utterer of (23) has had breakfast on the day of the utterance. So in the first case, the domain over which the quantifier 'nothing' ranges has to be restricted to a contextually determined subset of the set universe. Analogously, in the second example the time-span to which the perfect tense refer has to be contextually supplied to cover only the day of the utterance. Notice that a perfectly analogous sentence like (24)

(24) I have eaten sushi.

can be perfectly appropriately uttered to mean that the utterer has eaten sushi once in her life.

Notice, moreover, that in the above examples, the truth-conditions of the intended sentence depart from the truth-conditions of the alleged 'literal' proposition expressed, so that while, literally speaking, (22) is always false and (23) is always true, the intended proposition can be true or false depending on the circumstances in which the sentence is uttered.

Finally, there are cases where the conceptual encoded meaning is not to be strengthened to get the intended proposition, but to be accommodated or loosened to the extent it is required from contextual evidence. So consider for example:

- (25) *A*: Do you want to go to the cinema?
B: I am tired.¹⁰
- (26) Her face is oblong.¹¹

In the example (25) what is communicated by *B* is the implicature that she is not inclined to go to the cinema. The implicature is generated starting from WIS by *B*, namely that she is tired, where the concept of 'tiredness' has to be contextually accommodated to get the correct interpretation i.e. - following Sperber and Wilson - 'that she is tired enough not to want to go to the cinema. If she were 'technically' tired, but not tired enough for it to matter, her utterance would be misleading, not just by suggesting a wrong reason for her not wanting to go to the cinema, but also by giving a wrong indication of her degree of tiredness.¹²'

Analogously in example (26) a literal interpretation would lead to an obvious falsity, while the encoded concept of 'oblong' has to be taken loosely to be suitably attributed to a human face.

I will turn back to these examples and discuss possible accounts of explanation for each of the mentioned phenomena later in the present chapter. Such overview on few examples has been only given to provide the reader some instantiation of the taxonomy for linguistic underdeterminacy sketched above.

For the time being, a bit of familiarity with these kinds of examples is only useful for the introduction of a first discussion about the Semantics/Pragmatics distinction, which is the topic of the next section.

¹⁰ From Sperber & Wilson (1997).

¹¹ Carston (2002): 27.

¹² Sperber & Wilson (1997): 12 (online version).

2.4 APPROACHING THE SEMANTICS/PRAGMATICS DISTINCTION

Let's briefly take stock. We have seen at the end of the previous chapter that there are counter-examples to the Gricean picture of communication, according to which all contextual contribution to utterance meaning, apart from disambiguation and indexical resolution, is a matter of conversational implicature. The resultant view about the distinction between Semantics and Pragmatics is something which can be put schematically in the following proportion:

(27) Semantics : Pragmatics = 'WIS' : Implicature.

This has been a hugely influential view among philosophers of language and linguists. For example, one of the most influential and discussed definitions of Pragmatics is the one by Gazdar, which explicitly states that:

(28) Pragmatics = meaning minus truth conditions¹³

Gazdar's slogan obviously reflects a conception of Pragmatics (which is of course Gricean), but - more importantly - it reflects a rigid conception of semantics as a discipline whose exclusive field of study is that of the truth-conditional side of linguistic meaning, where truth conditional meaning is considered in isolation as the formally treatable output of syntactic rules of composition and encoded meaning of portions of natural language, regarded in the same way of symbolic languages. More extensively:

The overall account is a truth-theoretically interpreted formal system which is rigorously compositional, predicting the meaning of a composite expression solely in terms of some function over the meanings assigned to its parts, those meanings defined relative to a unitary and ontologically parsimonious truth-theoretic concept

¹³ Gazdar (1979): 2.

of semantics (...). The corresponding assertion about natural languages is that a natural language can and should be defined on the same pattern with only minimal extension of the underlying semantic vocabulary (to worlds and times, each world-time pair being a discrete 'index of evaluation') to allow, for example, the interpretation of tense as involving truth of an assertion at some given world-time index. The consequence of this commitment is that the relation between string, assigned structure and interpretation must be direct, as in these calculi. There is no place for an intermediate level of representation since if there were, the conception of natural languages as sets of strings over which inference is directly definable would no longer be sustained. In so far as such representations are invoked in talking about meanings, it is assumed that they are for convenience only and are eliminable. Predictably, there is no allusion to psychological properties of reasoning¹⁴.

The quotation above refers to a particular, model-theoretic (i.e. Montagovian) account of semantics, but it shows very well the orientation of the contemporary studies in formal semantics.

Grice himself, as we know, wanted to preserve a independent role for semantic analysis: this is why he imposed a kind of *Syntactic correlation* constraint¹⁵ on his analysis of WIS: 'according to which what is said must correspond to 'the elements of [the sentence], their order, and their syntactic character' (Grice (1989): 87). A definition which closely resembles the requirement of strict semantic compositionality of Kempson's passage.

I will turn back soon to the compositionality issue: obviously compositionality is very natural and well-motivated requirement for a semantic theory, and according to many

¹⁴ Kempson (1996): 580.

¹⁵ The expression is from Bach.

scholars there are way to preserve compositionality also while supporting a radically underdeterminacy view¹⁶

Be that as it may, Gricean motivations are at the core of definitions of Pragmatics as Gazdar's. And what is central in Grice's sharpening the field of pragmatics is undoubtedly the issue of truth-conditions. Such motivation is clear if we consider the discrepancy between GCI and PCI in Grice's theory: while it is quite easy to agree with the assumption that PCIs represent clear cases of implicated meaning, something which goes manifestly beyond what has been uttered, it is by no means equally straightforward to view examples which involve meaning departures from the encoded meaning of logical particles like connectives (like in example (8)), quantifiers (as in (7)) and number terms (like (6)) as cases of actual implicature. According to Robyn Carston, indeed:

What appears to have bound these rather disparate aspects of utterance meaning together, and so motivated the common label of implicature, was that they did not contribute to the truth-conditional content of the utterance, that is, the proposition it expressed, or what the speaker of the utterance said¹⁷.

Carston's quotation makes definitely clear another equation which is claimed by the advocates of the literal Gricean picture: i.e. the equation between Semantics and three

¹⁶ As we will see, different paradigms have proposed solutions to the loss of the principle of compositionality in radically underdetermined views: according to Carston (2002: 72), we should resort to a kind of translational - i.e. conceptual, representational - rather than truth-conditional semantics to save the principle of compositionality as it traditionally is formulated. A different move is to invoke a kind of pragmatic compositionality which affect the truth-conditional content of the sentence uttered, like in Recanati's view (e.g. Recanati (2004a) and ?). A third option is the one of Jaszczolt's *Default Semantics* (Jaszczolt (2005a)): semantic compositionality, according to this approach, can be strictly preserved, by denying the compositional privilege of syntax over other sources of meaning. I will discuss in details this issues in the present and in the next chapter.

¹⁷ Carston (2004b): 65.

other layers of utterance meaning, namely the layer of truth-conditions, of the proposition expressed and of what is said. To these layers, we should add, at this stage, the level of the explicit, as opposed to the implicit (i.e. implicated) meaning.

Semantics =	<ol style="list-style-type: none"> 1. truth-conditional content 2. proposition expressed 3. what is said 4. explicit
--------------------	--

Table 2.1

Following the standard Gricean (and Gazdarian) view about the Semantics/Pragmatics distinction, we have therefore that Semantics is equated with points 1.-4. in the table 2.4, while the battlefield of Pragmatics is *tout court* equated with the phenomenon of conversational implicature.

One could then ask whether is such picture realistic. It would be enough to show that there are counter-examples to the Gazdarian formula (28), that more specifically is the same as to say that there are counter-examples to some or all of the equation sketched in Table 2.4.

In short, to reject the Grice-Gazdar thesis is to show that there are pragmatic phenomena which affect the truth-conditional content of the sentence uttered and which are not occurrences of conversational implicature.

We have already encountered examples of this kind at the end of the previous chapter. Example (14) and (15) are cases where Gricean allowed contextual processes leading to the determination of the truth-conditional content (WIS), i.e. disambiguation and reference fixing, seem to be themselves maxim-driven, that is to say such processes of minimal contextual filling seem to be subordinate to the same processes which guide the generation of conversational implicature. Besides these examples, I showed in the

present chapter that the meaning of sentence in communication is - at least in the most of cases - radically underdetermined by the semantic content of the sentence. Consider once again examples of semantic underdeterminacy like (17)-(25) listed before.

In all these examples there is a manifest discrepancy between the truth-conditional content of the alleged literal meaning (where it is possible to state one) and the intended sentence. In all the cases listed above, either the truth-conditions actually diverge (as, e.g., in (22)), or can diverge (as in (23)), or it is impossible to ascribe to the literal sentence any truth-value at all (like in the case of (17)).

Also, if we agree with the radical underdeterminacy view advocated by Searle, the process of understanding of in principle *any* sentence is dependent upon a complex set of background assumptions which are potentially infinite and which strongly underdetermines the truth-conditional content of the sentence, because, for example, the relevant cat-mat space relationship *is* by all means part of the truth-conditions of the sentence (16).

That the truth-conditionals of a sentence in isolation can be widely different from those of the sentence uttered in a specific context is particularly manifest in the case of clear tautologies like (29) and (30):

(29) Now means now!

(30) War is war.

All these evidences show that, once we acknowledge the Gricean picture and accordingly state that both (31).*a* and (31).*b* hold:

- (31) *a.* All pragmatically-derived (maxim-dependent) meaning constitutes conversational implicature.
b. Conversational implicatures arise from the application of conversational maxims to 'the saying of what is said' and so require the prior determination of what is said¹⁸.

¹⁸ From Carston (2004b): 69.

we are at the same time forced to recognize that there is a circularity in the traditional definition of the Semantics/Pragmatics distinction. Pragmatic processes play a role in the determination of the truth-conditional content of an utterance, by means of the same sort of processes which guide the derivation of implicatures. Stephen Levinson is one of the theorists who acknowledged and discussed this phenomenon and he felicitously labeled it as 'Grice's Circle' (Fig. 2.4).

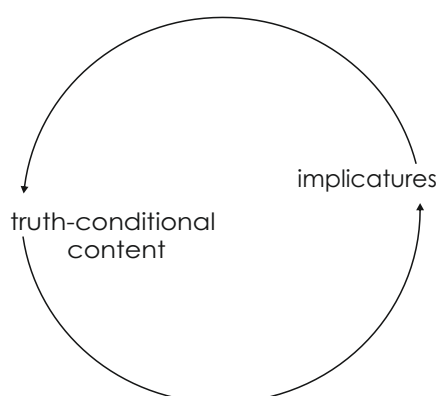


Figure 2.2: Grice's circle

Provided then that the phenomenon of linguistic underdeterminacy shows the weakness of Grice's picture, there are several possible solutions to escape the problems arising from the acknowledgment of Grice's Circle.

1. One can simply reject the existence of something like the Grice's Circle and try to show that all the alleged phenomena of pragmatic interference into the truth-conditional content of a sentence can be in fact semanticized and shown to be part of the (deep) syntactic structure of the sentence. This approach is advocated by the followers of a syntactacist or 'indexicalist' approach to Pragmatics, like J. Kings and Jason Stanley.

2. A different hypothesis is to recognize the existence of Grice's circle and accordingly try to accommodate the Gricean picture, specifically by allowing Pragmatics to *intrude* into the Semantics of the sentence. That is to say: one can recognize Grice's circle and claim that it is not a vicious circle and that, accordingly, it does not represent a real threat to the Gricean theory. One can go further, and suggest that the Gricean picture can be accommodated so to successfully deal with the phenomenon of semantic underdeterminacy simply by resorting to a more sophisticated sort of the same tools which Grice himself had initially introduced. One representative example of this approach is the one of Stephen Levinson himself.
3. A third option is to claim that the extremely pervasive phenomenon of semantic underdeterminacy (and the consequent acknowledgment of Grice's Circle) is indeed an argument to reject the Gricean picture about the Semantics/Pragmatics distinction. This is the way followed under different theoretical assumptions by Relevance theorists and by François Recanati in the foundation his Truth-conditional pragmatics.

Let's analyze these three options in the specific.

2.5 STANLEY'S INDEXICALISM

It is just as absurd to suppose that our conception of semantics should be modified to account for every communicative action which involves the use of language.

—STANLEY (2007): 46.

2.5.1 Syntax, semantics and logical form

In the Gricean picture, the only form of contextual filling of the logical form of the sentence is relative to disambiguation and reference assignment. That is, in reaching full propositionality for a sentence uttered, context provides evidences for choosing the relevant grammatical structure and for appropriately resolve the reference of indexical elements.

According to Grice, this is a semantic job, since this kind of processes are directly controlled by the grammatical structure of the sentence or by elements in the linguistic form of the sentence. Besides being linguistically controlled, such processes are also linguistically mandatory, since in many cases there is no proposition expressed at all before these two jobs are performed.

These are the central motivations for Grice to allow such determinate, minimal processes of contextual instantiation to be part of the job of semantics. This is also, as we noted, a very conservative variety of semantics, one which allows to have a very neat and formally easily treatable conception of semantic structure (and of logical form of the sentence), sharply severed from the pragmatic contribution to utterance meaning which, in Grice's view, is also quite straightforwardly treatable insofar as it is acknowledged as maxim-driven.

Semantically, we have then two roles that the context can play:

1. *grammatical* role of context;

2. *truth-conditional* role of context¹⁹.

The first one is added to the utterance to get the appropriate logical form (corresponding to the Gricean process of lexical and structural disambiguation), while the second is in play in the reference assignment to pronominal elements to get a truth-evaluable item.

Following the terminology of François Recanati (e.g. [Recanati \(1989\)](#), [2004b](#), [2004a](#)), we can label the process controlling the truth-conditional role of context as *saturation*, insofar as it provides an assignment for the open slots in the semantic structure of the sentence which linguistically require contextual instantiation.

Now, Stanley's claim is that saturation is the only process involved in the explanation of all contextual effects on the truth-conditional content of the sentence.

Advocates of the semantic underdeterminacy view taught us that there truth-conditional content can be affected by pragmatic processes of the sort of those involved in the derivation of implicature. Stanley contrasts this conclusion and argue that such alleged pragmatic effect can in fact be semanticized by showing that they can be traceable to syntactic elements in the logical form of the sentence.

Stanley's view is, in his own words, very conservative about semantics: despite he shares with theorists of the semantic underdeterminacy view the idea that semantics interprets not context-invariant sentences in isolation but, rather sentences relative to a context (a rich semantics, as we could call it), however Stanley claims that such view of semantics overlaps with Grice's conception of semantics according to which 'semantics concerns truth-conditions'²⁰ and it is the input for pragmatics.

Stanley's thesis is 'that all truth-conditional effects of extra-linguistic context can be traced to logical form'²¹. One important assumption of Stanley's view concerns the notion itself of logical form: he declares to be an advocate of a

¹⁹ See [Stanley \(2007\)](#): 37 and 78-80. As it is noted also by Stanley ([2007](#): 130 fn. 7) the grammatical role of context corresponds to the pre-semantic role of context as acknowledged by John Perry ,e.g. ([2001](#)): 40 ff.

²⁰ [Stanley \(2007\)](#): 33.

²¹ [Stanley \(2007\)](#): 30.

descriptivist conception of logical form²²: according to Stanley, '[t]alk of logical form in this sense involves attributing hidden complexity to sentences of natural language, complexity which is ultimately revealed by empirical inquiry²³.' There is, it is claimed, a deep syntactic structure of the sentence, which is different from the surface structure, and which contains elements sensitive to the contexts. In this view, all 'the effects of context on the truth-conditional interpretation of an assertion are restricted to assigning the values to elements in the expression uttered,²⁴' elements which are syntactically realized in the 'real' structure of the sentence.

Stanley's strategy consists in rejecting that the alleged cases of semantic underdeterminacy are in fact cases in which a pragmatic contribution to what is said is in play to get the complete propositional form. In each case, Stanley argues, it is possible to show that there is a variable in the logical form of the sentence which undergoes a process of contextual instantiation which is perfectly analogous to those in action in the process of saturation (i.e. indexical resolution).

Consider sentence like (18), repeated here as (32):

(32) It's raining.

According to Stanley, an advocate of free pragmatic contribution to the truth-conditional content of the sentence should, in this case, postulate an unarticulate constituent in the structure of the sentence, according to the following definition:

22 As opposed to the *revisionary* view about logical form, which is the logicistic (Frege, Russell) claim that natural language is defective and ambiguous in many ways and needs to be regimented to reach the purposes of objectivity of mathematical and scientific knowledge.

23 *Ibidem*.

24 Stanley (2007): 34.

 DEFINITION OF UNARTICULATE CONSTITUENT (UC)

x is an unarticulated constituent of an utterance u iff

1. x is an element supplied by context to the truth-conditions of u , and
 2. x is not the semantic value of any constituent of the logical form of the sentence uttered²⁵.
-

Assuming a covert temporal variable t for time, in an UC account a sentence like (32) would be analyzed as follows:

- (32.1) 'It is raining(t)' is true in a context c if and only if the denotation of 'rains' takes $\langle t, l \rangle$ to the *True*, where l is the contextually salient location in c .

The problem with this analysis is that in a sentence like (32.2), it fails to predict the most salient interpretation:

- (32.2) Every time John lights a cigarette, it rains.

The natural interpretation for (32.2) is obviously as follows:

- (32.2.1) For every time t at which John lights a cigarette, it rains at t at the location in which John lights a cigarette at t .

However, following to the UC analysis, it is impossible (according to Stanley) to get the natural interpretation. To the contrary, the only possible interpretation made possible by UC is the minimally salient (although not impossible²⁶) reading (32.2.2):

²⁶ For, as Stanley writes, 'suppose that John is a mad scientist, who has established a connection between his cigarette lighter and a certain location l , such that whenever he lights a cigarette with it, it rains

- (32.2.2) For every time t at which John lights a cigarette, the denotation of 'rains' takes $\langle t, l \rangle$ to the True, where l is the contextually salient location in the context of utterance of [(32.2)].

Contrary to the assumption of the UC view, Stanley suggests that if a hidden variable realized in the logical form of the sentence is also postulated for place (and not only for time) we would be able to straightforwardly get both the possible readings.

One possible option is to assume that, instead of introducing a couple of variables (both for time and place) 'rains' introduces a hidden event variable, 'which can either be bound as in [(32.2.1) (the natural interpretation for (32.2))], or free, as in [(32.2.2)]²⁷.

In this case, the semantic representation of (32.2) would be as in (32.2.7)²⁸

at location l . In this situation, standing at location l , [(32.2)] may be uttered with the interpretation as in [(32.2.2)]. Stanley (2007): 52 fn. 29.

²⁷ Stanley (2007): 53.

²⁸ Stanley (2007): 258. Notice that the alternative option, i.e. to postulate an hidden variable for place in addition to the one for time is rejected insofar as it is objectionable. In fact, Recanati (2004a: 109-111) objected to Stanley's analysis that if we consider the following example

- (32.2.3) Everywhere I go, it rains

we are forced, in Stanley's view, to acknowledge that the variable l for place is present also in the sentence 'it rains' uttered in isolation. However, Recanati objects, according to his 'variadic analysis', it is the sentence modifier itself 'Everywhere I go' which 'contributes both the expansive (adicity-increasing) variadic function *and* the operator which binds the extra argument-role' (Recanati (2004a): 111). Accordingly, Recanati claims, the correct semantic representation of (32.2.3) is as in (32.2.4):

- (32.2.4) [For every place l such that I go to l](in l (it rains))

where the operator in square brackets operates on the sub-formula (in l (it rains)), while the simple formula 'it rains' does not contain a free bindable variable l for place. However, in the event-analysis supported by Stanley this problem is not more present, as the proper

$$(32.2.7) \quad \forall e(\text{John lights a cigarette at } e \rightarrow \text{rains}(e))$$

Stanley's strategy should be now quite clear: under the 'quite innocent'²⁹ assumption (labeled as Binding Assumption) that 'for explicit quantifier expressions, within a clause, semantic binding and syntactic binding coincide'³⁰, i.e. that 'there is no binding without a bindable variable'³¹ in the 'real' logical form of the sentence, the strategy of UC advocates and, more generally, of advocates of any kind of free pragmatic enrichment to the logical form of the sentence (i.e. to the truth-conditional content) is rejected by showing that it is possible to build situations in which the alleged unarticulate constituent is in fact controlled by an operator in the sentence. This fact is claimed to prove that such constituent is indeed articulate, and is in fact present in the hidden logical structure of the sentence.

The indexicalist approach is quite the same in cases of sub-propositional logical forms like (19): in such cases, as in the case of (18) the relevant comparison class is claimed to be provided by a hidden indexical in the logical structure of the sentence by showing that it is, in the same way as in (32.2), bindable by an operator in the sentence. Analogous strategies are followed in the other cases of semantic underdeterminacy of the taxonomy presented above, and especially in cases of quantifier domain restriction as in (22)³².

representation of (32.2.3) is either as in (32.2.5) or as in (32.2.6) (from Stanley (2007): 258):

$$(32.2.5) \quad \forall x \forall e (e \text{ is a goint to } x \text{ by me} \rightarrow (\text{rains}(e)))$$

$$(32.2.6) \quad \forall x (\text{I go to } x \rightarrow \exists e (\text{rains}(e) \wedge \text{At}(x, e)))$$

²⁹ Stanley (2007): 48.

³⁰ *Ibidem*.

³¹ Recanati (2004a): 110.

³² See Stanley & Szabó (2000)

2.5.2 Some objections

A number of objections has been moved against the hidden indexical view advocated by Stanley (and also by King). One important objection, which I already mentioned, is due to François Recanati. According to Recanati, the overall indexicalist strategy rests on a fallacy which he labels 'Binding Fallacy'. In Recanati's view, as we already have seen in the case of a sentence like (18) (see footnote 28) the idea that there are always empty slot in the logical form to be contextually saturated is strongly undermined by the consideration that such slots are in fact generated only in presence of a sentence modifier introducing what he calls a variadic function³³. In the absence of such predicate modifiers, the relevant slots are absent (e.g. the slot for location in the 'raining' sentence), therefore a hidden indexical analysis cannot be invoked where sentences are uttered in isolation and not bound by a sentence operator. This is why the indexicalist argument is eventually fallacious.

However, Recanati's argument suffers of a double weakness: first of all, it depends on the acceptance of the variadic analysis for predicate modifiers and secondly, it can be bypassed by claiming that predicates standardly introduce an event variables (which include quantification over times, locations, etc..) rather than a number of free slots for each optional argument.

All in all, I think that the best argument against the hidden indexicalist view is that such account lacks a unitary principle of treatment for the whole case study. In particular, it is always up to the indexicalist to show that an alleged case of semantic underdetermined sentence has an appropriate semantic representation involving free slots in the syntactic structure. To use the words of Kasia Jaszczyt, it seems that, in each case, 'the onus of proof lies on the

³³ Roughly, a variadic function is a function which, in presence of a predicate modifier (adverb or prepositional phrase), takes as input the original relation and gives as output the same relation with a different adicity, i.e. an increased or decreased amount of argument-roles. See Recanati (2004a): 107-109.

advocates of syntactic slots and there has not as yet been any successful proof provided³⁴.

Moreover,

[O]ne can be *semanticizing* meaning without ascribing all of it to syntax. The divergence is not merely terminological: Stanley, Szabò, and King talk about a rich semantic content, not just semantic content that can be ascribed on the basis of the sentence alone. So, they want to have their cake and eat it: they want a rich semantic content, that is they want more than the sentence but at the same time they want to call it a sentence, a unit of syntax. One may wonder for what purpose they make this move. After all, semanticizing meaning (having rich semantics) can be achieved in more intuitively plausible ways in dynamic semantic theories³⁵.

2.6 THREE LEVELS OF MEANING. LEVINSON'S DEFAULT INTERPRETATIONS

In the previous section, I have sketched in some details the syntactic approach to the issue of semantic underdeterminacy. According to the view of Jason Stanley, for example, there is no question about Grice's circle, exactly insofar as 'all truth-conditional effects of extra-linguistic context can be traced to logical form' and are then integral part of the Semantics, and by no means of the Pragmatics, of the utterance.

However, semanticizing the truth-conditional import of context and accordingly getting rid of the entire phenomenon of semantic underdeterminacy at all is not the only possible alternative to escape the circularity involved in Grice's circle. Another possible solution is trying to refine Grice's own view and to articulate a more fine-grained picture of

³⁴ Jaszczolt (2005a): 15.

³⁵ Jaszczolt (2005a): 15–16.

communication, one capable of explaining the spectrum of phenomena of semantic underdeterminacy.

In the account of Stephen Levinson such goal is (allegedly) achieved by making use of a much more sophisticated version of the same theoretical tools which were first introduced by Grice himself.

2.6.1 GCI and the three heuristics

According to Levinson, 'Grice was essentially correct in thinking of meaning as a composite notion; that is to say, he correctly considered that the full import of an utterance could only be captured by distinguishing many different kinds of content'. However, his original distinction between sentence meaning and speaker's meaning (see Figure 1.1) is inadequate for the purpose of appropriately describing the such components of meaning, as it does not exhaust components needed to a correct analysis of meaning.

Grice's picture is indeed open to objections and it seems untenable when faced with the phenomenon of semantic underdeterminacy because it involves the sort of vicious circularity which is manifest in Grice's Circle (Figure 2.4).

However, Levinson claims, once we acknowledge that the shaped division of meaning levels ought to be relaxed to allow for a new layer, the difficulty of Grice's Circle immediately disappear and it is possible to cope with semantic underdetermined sentences in a straightforward way.

In Levinson's view, the two-levels view advocated by Grice, although of course responding to reasonable criteria of methodological parsimony, is inadequate and potentially pernicious, insofar as it 'underestimates the regularity, recurrence, and systematicity of many kinds of pragmatic inferences'³⁶. The idea is that a division which entails only a level of sentence-meaning, based on the conventional meaning of the words together with a standard compositional semantics, and a level of speaker's meaning, based on the recovery of the intentions behind the

³⁶ Levinson (1995): 93.

speaker's uttering a certain sentence, fails to acknowledge a fundamental and neglected level of communication, that is

a level of systematic pragmatic inference based not on direct computations about speaker-intentions but rather on general expectations about how language is normally used. These expectations give rise to presumptions, default inferences, about both content and force³⁷.

According to Levinson, to introduce this third layer of meaning is essentially to develop Grice's original notion of Generalized Conversational Implicature (GCI). Grice introduced this kind of implicature, but failed to fully develop its theoretical import and utility. To repeat, GCI 'are the sort of implicatures which are 'normally' triggered in almost all context of utterance by virtue of 'the use of a certain form of words in an utterance ... (in the absence of special circumstances)'. This is, plainly, a definition of a kind of standard mechanism of pragmatic enrichment of the conventional meaning of certain expressions, such as logical connectives and quantifiers, number words, etc... However, Grice did not insist on the systematic nature of such inferences, which is on the contrary the main purpose of Levinson's account.

To clarify the regularity with which such implicatures are generated, let's consider the following example:

(33) Two possible contexts for B's utterance(-form):

(a) Context 1.

A: 'What time is it?'

B: 'Some of the guests are already leaving?'

PCI: '*It must be late*'

GCI: 'Not all the guests are already leaving'

(b) Context 2.

A: 'Where's John?'

³⁷ *Ibidem.*

B: 'Some of the guests are already leaving?'
 PCI: '*Perhaps John is already leaving*'
 GCI: 'Not all the guests are already leaving'

What example (33) shows is that GCIs can coexist with PCIs, but that - unlike PCIs - the non-truth conditional contribution to the utterance meaning which GCIs provide remain unchanged, irrespective of the shift of context.

If Grice failed to acknowledge the utility of GCI, according to Levinson

Its utility lies precisely in the idea that certain linguistic expressions will tend to be associated with specific pragmatic inferences across a broad range of contexts, so that these associated inferences can be predicted in a systematic way, and play a systematic role in shaping patterns of lexicalisation and grammaticalisation.

Levinson claims that Grice was essentially right in claiming that the correct analysis of such phenomena of standard enriched meaning is in terms of implicature and should not be confused with the conventional meaning of certain expressions (e.g. connectives, numerals, etc...). Although these expressions are so regularly associated with the relevant generalized implicature, 'it is the regularity of association that makes the confusion so tempting'.

However, Grice's main omission was to sacrifice an important theoretical distinction on the altar of methodological parsimony. In fact, though being implicatures and not be possible of being semanticized, GCIs require a further bifurcation at the level of utterance meaning in order to be successfully treated. Such bifurcation calls into account the type/token distinction, firstly introduced by Charles Peirce. One thing, Levinson argues, is utterance-*token* meaning, that is the utterance of a specific sentence as it is used in a specific context by a specific speaker. Such is the level of Grice's speaker's meaning, a level at which PCIs are generated and at which the speaker's intentions

behind her uttering a certain sentence are in play for the determination of the overall communicated message. Another thing, by contrast, is the utterance-*type* meaning. It is at this stage, independent of a computation of speaker's intentions as triggered by specific contexts of utterance, that GCI arises.

With this move, we are left with the possibility of preserve an independent layer for conventional, sentence meaning³⁸ and with an independent level of PCI. In addition, there is a middle level - i.e. a level of systematic pragmatic inferences which, in absence of contrasting evidences³⁹, are generated in every context though not being part of the conventional meaning - at which all the phenomena of pragmatic enrichment to sentence meaning which are not occurrences of PCI belong.

That is to say, a level at which an analysis of semantic underdetermined meanings can be given in purely Gricean terms (See Figure 2.3).

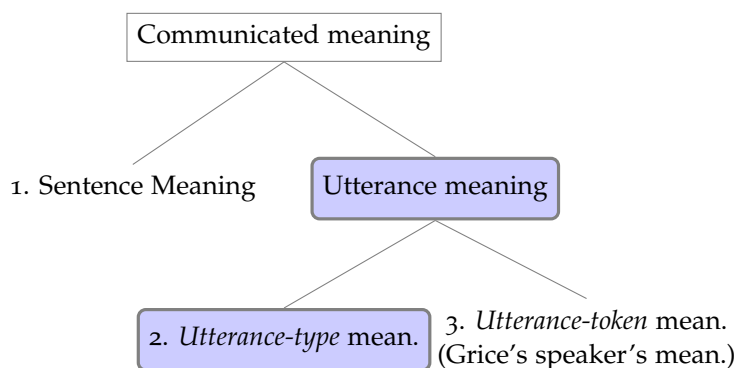


Figure 2.3: Levinson's three levels of meaning

³⁸ However, a further bifurcation between sentence-*type* and sentence-*token* meaning is always possible, and it roughly corresponds to Gricean distinctio between un-saturated/saturated sentence meaning.

³⁹ Indeed, insofar as they are implicatures, GCIs have the property of cancellability.

The natural question is then: what guides the generation of GCI? What makes such kind of implicature a case of 'presumptive' meaning and, accordingly, of systematic inference? According to Levinson, Grice's maxims are not sufficient to account for the regular nature of GCI.

According to Levinson, the crucial move is to change our view about Grice's conversational maxims.

Instead of thinking about them as rules (or rules of thumb) or behavioral norms, it is useful to think of them as primarily inferential heuristics which then motivate the behavioral norms⁴⁰.

When regarded as inferential heuristics, it is possible to see 'that some of the maxims and not others have a special status as inducers of GCIs'.

Two main arguments are given by Levinson in support of this view: first, the problem of the 'bottleneck of human communication' and secondly, the 'logical problem of reconstructing speaker's intentions⁴¹'.

According to the first issue, once we focus our attention on the incredible efficiency of human communication, i.e. 'the specialised physiology, the neurological pathways and the learning abilities that support the structural complexities of language, and above all the sheer miracle of the apparent speed and effortlessness whereby communicative intentions are encoded in articulatory gestures and acoustic signals converted into meanings', it is natural to acknowledge for a deep mismatch between such outstanding speed and efficiency and the incomparable slowness of the articulation process. In a slogan: 'we can think faster than we can speak', and moreover 'the psycholinguistic evidence seems to suggest that all the other processes in the entire complex chain of production and comprehension systems could run three to four times faster than the normal pace dictated by the articulation process⁴²'.

Hence, Levinson concludes:

⁴⁰ Levinson (2000): 35.

⁴¹ Levinson (2000): 30

⁴² Levinson (1995): 96.

It is this mismatch between articulation rates on the one hand, and the rates of mental reparation for speech production or the speed of speech comprehension on the other hand, which points to a single fundamental bottleneck in the efficiency of human communication, occasioned no doubt by absolute physiological constraints on the articulators⁴³.

Closely related to this issue, there is the problem of reconstructing speaker's intention. Such problem, as already noted, is implicit in Gricean view. From a logical point of view, an intention-based approach to meaning in conversation can be analyzed in the same terms as a standard logic of action or practical reasoning: 'we observe the behavior and figure out the underlying intention by the same rules that we convert intentions into the actions that will effectuate them'⁴⁴. The problem is that, when seen from the point of view of the hearer, the operation of reconstruction of such sort of practical reasoning can hardly be claimed to be realistic, and it is in fact impossible in principle. This is due to the fact that it is impossible for the hearer to 'work backwards from a conclusion to the premises from which it was deduced' as 'there is always an infinite set of premises which might yield the same conclusion'.

Levinson's argument is that it is no more possible to support a standard Gricean view, since it is radically undermined by these two abovementioned related issues. On the other hand, if we had a default mechanism which allows an interpreter to bring into the understanding of any minimal piece of coded message any kind of background knowledge and to accordingly to remarkably increase the informativeness of the message itself, we would have the possibility to find a solution to the mentioned problems

43 Levinson (2000): 28. See also Levinson (1995): 96. 'Although we may admire the rich monosyllables of husband-wife communication, the process of recovery of nonce speaker-meaning generally guarantees neither speed nor reliability.

44 Levinson (2000): 30.

and eventually 'to overcome the limit on the rate of encoding⁴⁵'.

Such standard patterns of inference which work as default inducers of GCIs are mutated from Grice's first and second Maxim of Quantity and from the Maxim of Manner⁴⁶. As implicatures, Levinson's default GCIs are cancelable given relevant clues in discourse. However, the main point is that, given the three heuristics, they arise automatically and without any inferential process⁴⁷.

Here are Levinson's three heuristics:

LEVINSON'S THREE HEURISTICS

FIRST (Q-) HEURISTIC

- What isn't said, isn't.

SECOND (I) HEURISTIC

- What is expressed simply is stereotypically exemplified.

THIRD (M) HEURISTIC

- What is said in an abnormal way isn't normal.
-

The first heuristic is responsible for scalar implicature and, in general, to implicatures where the correct interpretation 'depends crucially on a restriction to a set of salient alternates⁴⁸'. In such contexts, what the heuristic prescribes is that, relative to the relevant alternates, what is not said is not the case. So, for example, a case like (7), which triggers the scalar implicature from 'some' to 'not all' is induced by the Q-Heuristic. The Q-Heuristics works

45 Levinson (2000): 31.

46 See p. 12.

47 Although the heuristics give rise, in Levinson's terms, to the relative Q-, I- and M- inferences, nonetheless such label is not to be intended in the sense of a process. On the contrary, these are automatic, effortless 'inferences'.

48 Levinson (2000): 36.

the same way for most of the logical vocabulary, by introducing default inferences of the mentioned sort (e.g. connectives, quantifiers, modals...). Analogously, in the case of property which are 'extensionally compatible', the Q-Heuristics works to exclude some logically admissible implications. So, for example, in a case involving reference to colors, like (34):

(34) Her dress was red.

on the assumption of a Q-Inference it is conveyed that the relevant dress is not also blue or yellow.

The third heuristic relates to the relation between markedness of the used expression and non-stereotypicality of the situations described. Consider, for example, the differences between the two sentences of example (35):

(35) *a.* Bill stopped the car.
b. Bill caused the car to stop.

In such case, 'use of a periphrastic alternative to a simple causative verb [in (35).*b*] suggests some deviation from the expected chain of events⁴⁹'.

2.6.2 Intrusive constructions

I will now shortly focus on the second (I)-Heuristics. In the example (35).*a* the use of an unmarked expression induce the GCI that the car was stopped in the stereotypical manner (i.e. with the foot pedal).

Let's once again Searle's example of the cat and the mat (example (16)). Radical relativity of meaning, in Searle's terms, or radical semantic underdeterminacy view, in standard words, suggests that the interpretation of such example, when uttered in a specific context, is underdetermined by the semantics of the sentence, at least for what concern the interpretation to give to the particle 'on'. Searle suggests that a set of possible scenarios are compatible with

⁴⁹ Levinson (2000): 39.

the 'literal meaning' of the sentence (16) and that, accordingly, also for the determination of such literal interpretation it is necessary to resort to a complex set of background assumptions.

As I noticed incidentally, Searle seems to hint the idea that, at least in cases of relatively simple and unmarked sentences, the 'standard' interpretation seems to be reached following some vague criteria of 'standardness'.

Now, provided Levinson's second heuristics, we are in the position to concretize such suggestion, so that the literal meaning of a sentence like (16) and the subsequent standard interpretation of the cat-mat spatial disposition is no more a mystery but is straightforwardly obtained as a default I-Inference.

Given the unmarkedness of a sentence like (16) we have thus a simple explanation for the automatic ruling out of the counterintuitive interpretations imagined by Searle.

Given Levinson's second heuristic, such interpretations simply cannot arise!

The same sort of principle governs the choice of the best interpretation in cases like (15), repeated below as (36):

(36) Paul's book is amazing.

The choice of the best interpretation for the genitive (the book Paul *borrowed, written, read, ...* as appropriate) is regarded as a case of generality-narrowing and driven by the I-Principle to get a maximally informative (i.e. stereotypical) interpretation from a minimal specification⁵⁰.

But, one can object, given the specific status of GCIs as standard implicatures, that is as inducers of default inferences, why one should reject the original Gricean view that, insofar as they are in fact implicatures, such pragmatically derived effects of meaning are generated *after* the full determination of what is said?

That is to say: isn't Levinson's argument about GCIs independent on his conclusion about Grice's circle, and why should the one entails the other?

⁵⁰ See Levinson (2000): 37.

To clarify this point, Levinson introduces the notion of intrusive constructions. These are cases in which the intrusion of an implicature into a sub-part of a sentence seem to require that the derivation of the implicature is needed to develop the right truth-conditional analysis of the sentence.

To explain the point, it is worth resorting to a celebrated seminal paper by L. J. Cohen (1971). In this paper Cohen argues against Grice's view on the enriched interpretations arising in contexts where a logical connective is used. To repeat, Grice's claim - motivated by considerations of methodological uniformity and parsimony like his modified Ockham's razor - was that all the non truth-functional effects arising in the interpretation of utterances containing occurrences of logical connectives should not be ascribed to the semantics of these particles but, rather, have to be analyzed in terms of generalized conversational implicature.

Cohen's objection goes as follows. Consider two sentences like (37).a and (37).b:

- (37) a. If the old king has died of a heart attack and a republic has been declared, then Tom will be quite content.
 b. If a republic has been declared and the old king has died of a heart attack, then Tom will be quite content.

The two sentences of example (37) are of the form

- (37.1) a. $(p \wedge q) \rightarrow r$
 b. $(q \wedge p) \rightarrow r$

Given the truth-functional definition of the connective \wedge sentences (37).a and (37).b are truth-conditionally equivalent. However, it is easy to acknowledge that the two utterances can differ in their truth-conditions. In particular, given the additional temporal ordering and causal link between the two conjuncts of the antecedent, it is possible to imagine a situation in which the first sentence is true, while the second is false, and *vice versa*.

The point noticed by Cohen is that the pragmatic effect of temporal ordering and causal connection seem to affect the truth conditional content of the two antecedents. And, accordingly, it seems to affect the truth-conditional content of the entire conditional. So, given a strictly compositional analysis of the semantics of sentences involving conditionals, an example like (37) apparently undermines the view that what is composed, in a sentence including sentences embedded under logical operators, are the truth-values of such sentences obtained by the standard semantic analysis of such operators.

However, as it has been noticed (e.g. by Wilson (1975): 151), this is the case not only for conditionals but also for other kinds of construction like the one in (38).

(38) Driving home and drinking three beers is better than drinking three beers and driving home.

Provided that a sentence like 'A is better than B' would be contradictory if A and B weren't distinct, under the semantic interpretation of the connective 'and' a sentence like (38) would express an obvious falsity. Which is patently not the case!

Let's make a step back to better understand the point. It is important to recall Grice's distinction between saying, meaning and implicating. Grice's notion of saying is dependent on his notion of meaning something: it is impossible for a speaker to say something without such saying being (part of) what is meant by the speaker⁵¹. That of saying 'is thus a notion closely aligned with what is asserted. So, connecting this back to the definition of conversational implicatures, we see that a conversational implicature generated by an indicative utterance is calculated on the basis of what a speaker has asserted⁵².

51 This is the reason why in Grice's analysis, irony is regarded as an act of 'making as if to say': one cannot commit oneself to the said of an ironical statement, since what is meant by it is normally just the opposite.

52 Simons (2010): 141.

Furthermore, given the constraint on the definition of conversational implicature at (31).*b*, we know that 'conversational implicatures arise from the application of conversational maxims to 'the saying of what is said' and so require the prior determination of what is said'⁵³.

Merging together these two Gricean assumptions leads us to the conclusion that conversational implicature cannot arise locally, i.e. within unasserted sub-parts of a sentence, but need to be calculated (and generated) globally, that is to say, at the level of the whole asserted sentence.

The problem should be now clearer: if unasserted sub-clauses of declarative utterances cannot give rise to conversational implicatures, how is it possible to get the correct interpretation of the sentences like (37) and (38), provided that the right interpretations of the whole sentence crucially depend in such cases on the generation of conversational implicatures at sub-sentential level?

In Cohen's view, this kind of examples represent a conclusive counter-argument against Grice's conception about the pragmatic nature of the enriched meaning of sentential connectives, and at the same time such examples would lead - in Cohen's view - to the conclusion that such enriched interpretation should be built-in into the semantics of the natural language counterparts of logical connectives.

However, Levinson argues that if we are not yet committed to the idea that pragmatics cannot intrude into the truth-conditional content of the sentence, and if we are then prepared to reject the clause *b* of Carston's definition (31), then we are in the position to reverse Cohen's argument and to use this sort of examples exactly to show that pragmatics is intrusive into semantics and that such intrusive readings are default and are in fact governed by Levinson's three heuristics.

53 From Carston (2004b): 69.

2.6.3 Some objections

Consider again the effect of embedding sentences involving standard GCIs (conjunction buttressing⁵⁴, standard scalar implicature and specification of the semantics for number terms as in examples (39), (40) and (41)) under the scope of other sentential operators:

- (39) If you have a baby *and* get married, then the baby is strictly speaking illegitimate (Levinson (2000): 206)
- (40) Either the guests stole some of the teaspoons, or we didn't have many to begin with. (Simons (2010): 149)
- (41) If each side in the soccer game got *three* goals, then the game was a draw. (Levinson (2000): 205)

In each of the examples (39)-(41) the relevant GCI (from '*and*' to '*and then*', from '*some*' to '*some but not all*' and from '*twenty*' to '*exactly twenty*') has to be generated for the truth-conditional content of the whole sentence to be determined.

In Levinson's analysis this shows that there is indeed a circularity between what is said and implicature. Nonetheless, rather than representing a threaten to Gricean picture, this only proves the need to introduce into this picture the idea that pragmatics can be intrusive into semantics. Such circularity can be successfully treated, avoiding any 'semantic retreat' simply by acknowledge that pragmatic intrusions are matter of GCIs and default inferences which are driven by Levinson's heuristics.

However, such conclusions are not as straightforward as it can appear from my presentation above. According to Mandy Simons (Simons, 2010) there is no need to resort to default mechanisms to explain cases of pragmatic intrusion. In particular, slight modifications to Grice's original

54 As Levinson labels the phenomenon of standard conjunction implicatures

theory would work, without any commitment to automatic processes and defaults.

Provided that '[t]here is no reason why, as theorists, we have to take Grice's views as an unseparable whole', there is no insurmountable theoretical motivation for maintaining that implicatures derive only from asserted pieces of discourse. On the contrary, it is perfectly 'commonsensical' to think that un-asserted subparts of complex sentences can generate implicatures at sub-sentential level which eventually interact with global pragmatic considerations.

Once acknowledge that conceptual strengthening arise locally, it is easy to see that in example like ??-(41) both the antecedent of the conditionals and the single disjuncts are 'visible' to the interpreter 'as a linguistic unit with a specific function within the discourse'⁵⁵.

On this account, once slightly reformulated, standard Gricean conversational maxims can be held to guide the process of local derivation of implicatures, without postulating any additional 'default' heuristic.

[The interpreter] seeks to assign to it an interpretation which maximizes the cooperativity of the speaker. But interpretation is not necessarily linear. We need not assume that the interpreter assigns an interpretation to the antecedent entirely independently of the attempt to make sense of the utterance as a whole. Rather, it seems plausible that the interpreter assigns to the antecedent an interpretation which improves the overall sensibleness of the utterance

Another couple of strong objections to Levinson's theory are offered by Emma Borg⁵⁶. Borg is an advocate of a form of semantic minimalism which try to take seriously into account the phenomenon of semantic underdeterminacy.

Borg's objections are directed against respectively Levinson's account of intrusive construction and his idea of default inferences.

⁵⁵ Simons (2010): 157

⁵⁶ See Borg (2010).

Starting from the first objection, Borg argues that one *desideratum* of any successful theory of implicature is to find a way to accommodate 'the putative semantic (truth-conditional) relevance of some implicatures⁵⁷' into the Gricean picture.

However, Borg writes, on this specific point Levinson's account of intrusive construction, far from representing a successful treatment of such kind of phenomena, runs the risk of being a mere *re-description* of it⁵⁸. One destitute of any explanatory power about the phenomenon, to explain which it has been introduced. I find such objection really appropriate. It is undoubted that Levinson's discussion of intrusive constructions very much resembles a simple taxonomy of these case study. Furthermore, beyond the acknowledgment that such examples represent cases of genuine GCIs, Levinson's account of semantic analysis, which is based on DRT, is only tentative and does not offer more than a direction of further inquiry.

Furthermore, Borg goes on by exposing a relevant mismatch between Levinson's own theory and experimental evidences. Concerning a typical case of Q-Implicature, such as scalar implicature leading from, e.g., '*some*' to '*not all*', Borg writes that:

The problem is that experiments seem to show that the logical readings of scalar implicatures are accessed more quickly than pragmatic readings, yet such findings undermine the claim that it is the pragmatic reading which provides the default interpretation in these cases⁵⁹.

Such evidence seems to undermine the view that scalar implicatures are in fact default implicatures: the fact that they are delayed inferences, rather than effortless ones, seem to militate in favor of a view which keeps apart 'literal semantic content and pragmatically determined implicatures⁶⁰'.

57 Borg (2010): 268.

58 See Borg (2010): 272.

59 Borg (2010): 272.

60 Borg (2010): 274.

Moving on, against the very notion of utterance-*type* meaning, which is central in Levinson's default interpretation view, are directed some of the objections of Anne Bezuidenhout⁶¹). Bezuidenhout have two main objections against Levinson's theory.

First, she claims that it is hard to see in which sense it is possible to say that GCIs are associated with certain types of expressions (utterance-*type*), while the case study seem to suggest that such inferences are highly context dependent.

Second, Bezuidenhout argues that one of the assumed purposes of Levinson's theory, i.e. that of explaining how the theory of default interpretations and GCIs can help to get over the 'bottleneck' of human communication, is far from being reached. On the contrary, she argues, there are examples which show that the generation of multiple GCIs leads to 'exacerbate processing difficulties rather than alleviating them'⁶².

However serious such objections are, I am inclined to think that they are slightly misguided.

Let's start from the first line of objection. Bezuidenhout considers examples like (42), (43) and (44):

(42) John smiled at the *secretary*.

(43) *John's* book is on the table.

(44) Susan turned the key *and* the engine started.

These all give rise to GCIs according to Levinson's I-principle. In example (42), the concept of secretary is by default restricted to that of *female* secretary. In (43) the relevant relationship between John and the book is automatically fulfilled. Finally, (44) is a standard example of conjunction buttressing.

According to Bezuidenhout, Levinson's theory of enrichment to a stereotype (in case of I-inferences) can hardly be maintained if we acknowledge that in both cases (42) and (43) the information required to access the stereotype re-

61 See Bezuidenhout (2002)

62 Bezuidenhout (2002): 265.

quire a knowledge of the wide context which are incompatible with the stereotypical reading being associated with simply a type of expressions. In her words:

...we have reason to think that if stereotypical information is used in the course of the enrichment processes required by the I-Principle, this information is not confined to stereotypical information made accessible through the use of certain types of expressions. (...) However, if the stereotypes needed in enrichment are independent of utterance type, this suggests that the presumptive meanings that depend on these stereotypes are themselves not associated with the utterance type. And this threatens the claim that presumptive meanings belong to a special level of utterance type meaning intermediate between sentence-type meaning and speaker meaning.

I find this line of objection a bit confused: the search for a stereotypical reading is triggered by I-heuristic in Levinson's view, but this does not mean that such stereotype is directly associated with a lexical item or a linguistic expression. In an example like (45):

(45) Philosophers love drinking.

the narrowing of the encoded conceptual content from '*drinking*' to '*drinking alcoholics*' is stereotypical to such an extent that it is lexicalized not only in English. In cases like this it is possible to say that a stereotypical reading is directly associated with an expression type.

However, this is not what is intended by Levinson's I-heuristic. Everything which is activated by this inferential shortcut is a rule which roughly prescribes to search for the most stereotypical reading (of course, in a specific context) and then stop. The fact that such stereotypes can often be found only by resorting to the extra-linguistic context is by no means an objection to the existence of the I-heuristic.

The case of conjunction buttressing ((44)) is quite analogous. Bezuidenhout notes that the same kinds of associations which are generated by the use of the connective 'and' are triggered also by the simple 'narrative' juxtaposition. So an utterance like (44) generates the same (temporal/causal) connections as the utterance (46).

(46) Susan turned the key. The engine started.

As Bezuidenhout writes:

...the fact that adjoined sentences invite some of the same inferences as conjunctions counts against the claim that it is the connective 'and' itself that carries the default meanings.

But, again, it is possible to say that sentences (44) and (46) trigger the same sort of GCI in force of the same default interpretation without being forced to reject the conclusion that the former do so by virtue of its utterance-*type* meaning. The fact that the syntactical realization of the two sentences is different does not militate against their activating the same implicature. In both case, i.e. parataxis and explicit conjunction, it is the same principle, namely 'the tendency to find from minimal specifications maximally cohesive, rich interpretations⁶³' which is in play.

Two sentences of different utterance-type can give rise to the same kind of GCIs. It is true that adjunction itself does not 'count as an utterance-type to which these GCIs can be attached'. However, the fact that the same kind of enrichment can be obtained by means of a stylistic device does not block the possibility of a generalization over a class of expression types. Moreover, we can go further and argue that the sort of narrative juxtaposition which is in play here standardly mirrors the utterance-type of conjunctive sentences, is regularly associated with the same sort of (at least temporal) connection between the juxtaposed sentences and therefore represents by itself a closely resembling utterance-*type*. In one case it is a matter of a specific

63 Levinson (2000): 126.

expression (a connective), in another the GCI is due to criteria of discourse coherence and adhesiveness. What is central in both cases is that the heuristic works the same way by suggesting the maximally informative interpretation (through the search for a stereotype) for the minimally specified form.

All in all, I think that, while responses to Bezuidenhout's first objection can be found, it remains nonetheless very corrosive with respect to the claim for existence of a middle layer of meaning, while it is substantially inoffensive against the very idea of default interpretations.

As for the second objection, Bezuidenhout argues that in many cases potentially more than one GCI is activated. In case of conjunction buttressing, for example, at least the following alternative enriched readings are possible:

1. The second event is understood to be temporally contained in first. For example, 'He went to London and he saw the Queen'.
2. The two events are understood to be contemporaneous. For example, 'She likes to ride her bike and to listen to her Walkman'.
3. The first event is understood to enable but not to directly cause the second. For example, 'I forgot to hide the cake and the kids ate it'.
4. The second event is understood to come into being as the first unfolds. For example, 'I talked to Susan and found I liked her'.
5. The first event is the reason for the second. For example, 'His calculator gave the answer '3' and he wrote down '3' as his answer'.

According to Bezuidenhout

...this great variety of causal, temporal, and justificatory understandings cannot all be default interpretations, in the sense that all these possible enrichments are simultaneously accessed

whenever a hearer processes a conjunction. That would defeat the idea of a default interpretation, which presumably is meant to make processing easier, not to add to the processing load. So if Levinson is committed to the idea of default interpretations, he owes us an account of which of these possible enrichments counts as the default interpretation and why it is the default⁶⁴.

But, again, two assumptions in Bezuidenhout's argument are misleading. First, it is a mistake to think that a particular utterance-type deterministically activates a certain GCI. This is not true, since the role of the heuristics in presence of certain expressions is just to offer a shortcut to the inferential job and lead to the most accessible, default reading.

Secondly, it is wrong to claim that the hearer actually processes all the possible GCIs simultaneously. Everything which is needed is that, in presence of certain expressions like and-conjunction, such enrichments are *in principle* available to the hearer as default inferences linked to a specific expression. Given this proviso, the search for the default is obviously context-dependent (remember that it is nonetheless a matter of utterance and not of sentence type) but in a way which is highly constrained by the utterance-type. It is this strong constraint which is supposed to highly accelerate, rather than delay, the interpretation process.

Finally, one line of objection which I find really conclusive against Levinson's view is due to Robyn Carston. However, this is a meta-level objection, depending on the acceptance of certain underlying assumptions in the theory of communication.

We should step back to the Gazdarian definition of Pragmatics, introduced at the beginning of the present chapter (see (28)).

To repeat, Gazdar thesis, mutated from Grice's received view, states that all the pragmatically derived aspects of meanings are severed from the truth-conditional content of

64 Bezuidenhout (2002): 272-3

the sentence, and specifically, are derived *after* the 'said' of what is said (semantic content) has been fully determined.

These conditions are schematically summed up by Robyn Carston in the abovementioned constraints on the definition of conversational implicature((31), repeated here as (47)):

- (47) *a.* All pragmatically-derived (maxim-dependent) meaning constitutes conversational implicature.
b. Conversational implicatures arise from the application of conversational maxims to 'the saying of what is said' and so require the prior determination of what is said⁶⁵.

According to Carston, it is only when one is committed with the Grice-Gazdar thesis that the issue of Grice's Circle arise. In particular, Levinson's view about intrusive constructions is induced by the purpose of maintaining the received view. This is performed by slightly accommodating the case study with a slight modification of requirement *b.* in definition (47).

By attaching the notion of *default* to that of GCI, Levinson is then able to fully preserve the condition *a.* and accordingly to maintain that all pragmatic effects of meaning are occurrences of conversational implicatures, thus supporting the shape distinction between truth-conditional semantics and non truth-conditional pragmatics. At the same time the idea if GCI as default interpretation 'makes it possible to preserve the essence of assumption *b.* since only a very circumscribed and distinct type of pragmatic inference contributes to what is said.' However, according to Carston, such approach is unsatisfactory. And precisely because it requires to split the pragmatic field into 'two totally distinct subtheories'. And with the additional paradox that, to save Grice's letter, both the subtheories are involved with the same kind of phenomena (conversational implicatures broadly conceived), while at the same time

65 From Carston (2004b): 69.

[t]he two systems run their own distinct modes of inference, in accordance with their proprietary pragmatic principles; the first is a component of an overall theory of grammar, while the second is simply part of general reasoning'

Therefore, to escape the *impasse* generated by Levinson's theory the only alternative seem to assume that there is only one kind of pragmatic inferential principle which is responsible for both the generation of GCI and PCI. No matter about the pragmatic intrusion into the truth-conditional content.

However, Levinson objects, this equates to a 'semantic retreat', since by allowing the pragmatic processes to freely interact with truth-conditions, there is no room left for the semantic enterprise as it is traditionally conceived.

Semantic retreat therefore has the consequence that semantics does not look like either of the familiar, conventional, rival enterprises: it is not about truth-conditional content on the one hand, nor about the relations of sense that hold between sentences on the other hand. Instead, it is exclusively about a new, strange level populated by semantic wraiths a level of fragmentary structures, underspecification and half-information, even archi-sememes (Atlas 1989: 146). The recognition of the existence of this level is one of the important sea changes in the history of semantics it is real enough, but it is relative *terra incognita*⁶⁶.

However, Carston's responses, one which is common in Relevance Theory, is that it is necessary to distinguish two senses of semantics. The first, i.e. linguistic semantics, is concerned with 'the context-invariant meaning encoded in the linguistic system and naturally takes its place within a wider theory of utterance meaning⁶⁷'. So, linguistic semantics offer the input to pragmatics and they both outputs in

66 Levinson (2000): 241.

67 Carston (2002): 99.

logical forms and propositions. These latter are then input to the second kind of semantics, truth-conditional semantics. Truth-conditional semantics deals with propositions or thoughts, i.e. mental objects which are independent from encoded meaning.

The picture we end with has a clear semantics/pragmatics distinction, where semantics is understood as translations of linguistic forms into logical forms, partially articulated conceptual representations which are the output of the grammar. Natural language semantics, then, is autonomous and provides the input to pragmatics, which plays a major role in determining the explicature of an utterance as well as determining implicatures, both of which are distinct and complete propositional forms, and as such are the domain for truth-conditional semantics⁶⁸.

Be that as it may, the idea that to escape the theoretical oddity and non-economy of Levinson's theory it is needed to reject the Gazdarian conception of Pragmatics seem the only one available. In the next section, I will sketch one of the most influential paradigms which share this assumption, namely Recanati's Truth-conditional Pragmatics.

However, from Carston's objection it seems to follow that we have to throw out the baby with the bath water, that is to say, that, if we want to preserve the theoretical uniformity of treatment without resorting to different pragmatic machineries, we have to give up the very idea of default meanings, at all. However, as it will showed in the next chapter, this is not the case.

2.7 TACKING STOCK (II)

It is maybe worth taking stock very shortly and sum up the road I am drawing in the present chapter.

68 Carston (1988): 49.

Let's start from recalling the three options I presented in section 2.4⁶⁹ as potential alternatives to overcome the *impasse* in Grice's theory created by the phenomenon of Grice's Circle.

In section 2.5 I presented a representative of the first theoretical possibility, i.e. the extremely conservative hypothesis of hidden indexicalism advocated, among others, by Jason Stanley.

In the previous section, I presented a detailed overview about Levinson's theory of GCIs, which is the most remarkable representant of the second option, i.e. one which, although acknowledging the counter-examples threatening Grice's theory at its heart, tries to respond to such objections, by means of a revision of Grice's own concepts.

What I am going to present now is a really influential variety of the third approach, i.e. the most radically revisionary of Grice's received view. This approach is characterized by a radical account about semantic underdeterminacy and is shared among philosophers of language of different orientations: in particular, Relevance Theory and Contextualism in philosophy of language. It is this latter theoretical option which I am going to present here, specifically in the influential and articulated version developed since the end of the '80s by François Recanati.

2.8 FRANÇOIS RECANATI. TRUTH-CONDITIONAL PRAGMATICS

In the previous section, while analyzing Levinson's account, I focused on one of the equations that I presented in Table 2.4⁷⁰, i.e. the one between semantics and truth-conditional content. I showed how such equation can hardly be maintained, due to the phenomenon of the intrusion of pragmatic elements into the truth-conditional content of uttered sentences.

69 See p. 52

70 See p. 50.

Approaching the problem of semantic underdeterminacy, the French philosopher François Recanati focuses on another, closely related, equation in our Table, i.e. that between semantics and Grice's notion of 'what is said'. Recanati shows how it is necessary to recast the standard conception of what is said, by basing this latter on speakers' *intuitions* about truth-conditions.

Recanati's highly provocative view starts from a radical underdeterminacy view and takes into account the psychological process of recovery of pragmatically derived interpretations. His approach eventually results in a theory of 'truth-conditional pragmatics', which allows pragmatic processes of enrichment to freely intrude, although at different levels of conscious availability, into each stage of language understanding.

2.8.1 Semantic minimalism

As I tried to show, 'what is said' for Grice is a crucial notion, whose exact collocation in his theory is problematic. Recanati refers to the three levels of the Gricean picture as to the 'basic triad': sentence meaning, 'what is said', 'what is implicated'.

As we have seen, according to Grice, 'What is said' explicitly belong to the speaker's meaning, however due to the strict relation we pointed out to the sentence meaning, it behaves like an hybrid element between the two sides and seems to be a very strict neighbor of sentence meaning. Grice himself focuses on this point:

In the sense in which I am using the word say, I intend what someone has said to be closely related to the conventional meaning of the words (the sentence) he has uttered⁷¹.

Commenting on this Gricean claim, Recanati⁷² argues that different theoretical perspectives definitively depend on the sense one wants to accord to this 'close relation'.

⁷¹ *Ivi*, p. 25.

⁷² Recanati (2004a), p. 7.

Schematically, there are only two possibilities: the first one is to associate ‘what is said’ with sentence meaning against ‘what is implicated, as Grice’s quotation above seems to suggest. The second is to link ‘what is said’ with ‘what is implicated’ by setting them against sentence meaning. This second reading is supported by other considerations in Grice’s account, first of all the idea that ‘what is said’ is part of the speaker’s meaning (Table ??).

The common name Recanati uses to refer to the set of theories that argue for the first choice is Minimalism. The central notion here is that of ‘minimal proposition’. Recanati sketched a hypothetical (and likely too schematic) scale of theories which go from Literalism to Contextualism⁷³.

Minimalism, in Recanati’s terms, is concretely the first theoretically solid and quite sophisticated variety of Literalism. Recanati characterizes Minimalism as follows:

What I call ‘Minimalism’ construes the constraint [between sentence meaning and ‘what is said’] very strictly: ‘what is said’, in the minimalist framework, departs from the conventional meaning of the sentence (and incorporates contextual elements) *only when it is necessary to ‘complete’ the meaning of the sentence and make it propositional*. In other words, the distance between sentence meaning and what is said is kept to a minimum (hence the name ‘Minimalism’)⁷⁴.

Using a Minimalist perspective, ‘what is said’ corresponds to the minimal expressed proposition, whose only form of context-dependence lies in (that of) those components of the sentence, having a semantic value that is a parameter rigidly referred to the context of use, i.e. to the pure indexical elements (demonstratives, pronouns, verbal tenses,...).

As already mentioned, Recanati calls this ‘minimal’ contextual-dependent process ‘saturation’. Saturation is a form

⁷³ *Ivi*, p. 86. On the literalist side Recanati indicates the following scale: Literalism, Indexicalism and the Syncretic View, while on the contextualist side there is only Quasi-Contextualism and Contextualism.

⁷⁴ *Ivi*, p. 7

Literal Meaning	{ Sentence Meaning What is said	Literal Meaning
<i>vs</i>		<i>vs</i>
Speaker's Meaning		Speaker's Meaning { What is Said What is Implicated

Table 2.2

of *meaning-controlled* contextuality: ‘for a minimalist, the level of WIS is determined on the basis of literal meaning, flanked by contextual considerations (i.e. ‘departures’ from meaning) only to the extent to which literal meaning itself is sensitive to the identity of this or that contextual parameter’⁷⁵. This means that the process of saturation is ‘linguistically mandated’, that is there is a slot in the sentence itself that has to be completed or a free variable requiring ‘contextual instantiation’⁷⁶, and whose reference to the context is strictly driven (controlled) by linguistic considerations (*bottom-up*, in Recanati’s terms⁷⁷). Let’s consider the example (6). In the minimalist account we have three steps:

1. The sentence meaning: ‘*x* has three children’ (the interpretation of the quantifier ‘three’ being the *standard* interpretation, i.e. ‘at least three’). This expression is not yet fully propositional, since it misses the reference of the indexical element, which has to be ‘saturated’ with reference to the context at hand.
2. The Minimal Proposition (or ‘what is said’): ‘*P* has (at least) three children’.
3. ‘What is implicated’: ‘*P* has (*exactly*) three children.

⁷⁵ Predelli (2006), p. 26.

⁷⁶ Recanati (2004a), p. 7.

⁷⁷ Ivi, p. 18.

2.8.2 Intuitive Truth-conditions

The crucial point Recanati is concerned with deals with truth-evaluability. Since propositionality coincides, in Recanati's view, with truth-evaluability⁷⁸, the sentence at the point 1. above has not truth-conditions at all. It is a pure abstraction or, as Recanati says 'a semantic schema'⁷⁹. The problems arise when we consider the truth-conditions of 2. and 3., which clearly differ. 2. can be true if the utterer of (6) has three children as well as she has five, while (47). is true *if and only if* the speaker has (*exactly*) three children. Should we admit, as the Minimalist view seems to suggest, that in understanding an utterance like (6) one preliminarily deals with the alleged minimal proposition, whose truth-conditions are not that of the intended proposition? The question becomes even more urgent if we consider some other examples, like (18) and (23), repeated below as (48) and (49)

(48) It rains.

(49) I have had breakfast.

An utterer of (48) would *say* a trivial truth, since there is always a place in the universe where it rains⁸⁰. According to Minimalism, the correct interpretation of (48) as 'It rains *here*' is a case of *genuine* conversational implicature (arising from the violation of the maxim of quantity). Similarly, an expression like (49), once *completed* by virtue of saturation, would express the banal truth that the utterer of (49) has had breakfast at least once in her whole life (before the time t^* = the time of utterance, according to the

78 *Ivi*, p. 90. 'According to Contextualism - a provocative view which certainly deserves to be explored - there is no level of meaning which is both (i) *propositional (truth-evaluable)* and (ii) minimalist, that is, unaffected by top-down factors' (italics added).

79 *Ivi*, p. 56. 'On my view semantic interpretation, characterized by its deductive character, does not deliver complete propositions: it delivers only semantic schemata - propositional functions, to use Russell's phrase'.

80 See p. 58, fn. 28

interpretation of the verb tense⁸¹). And the contrary of ?? 'I haven't had breakfast' would express the obvious falsity that the speaker has *never* had breakfast before the time of the utterance.

The absurdity of such claims is self-evident. However, it is necessary to clearly focus the point of the discussion before giving up the Minimalist claim. Recanati's first assumption is the coincidence between propositionality and truth-evaluability. Once a sentence is made fully propositional by virtue of the only, meaning-controlled, process of saturation, a minimalist would say that it actually is passable to be true or false, even if its truth-conditions are manifestly different from those of the intended proposition. This is, a minimalist suggests, a purely semantic way to ascribe to a sentence truth-conditions. This seems reasonable! What Recanati is concerned with is a very restricted notion of truth-conditions, that is to say the notion of *intuitive* truth-conditions.

I take the conversational participants' intuitions concerning what is said to be revealed by their views concerning the utterance's truth conditions. I assume that whoever fully understands a declarative utterance knows which state of affairs would possibly constitute a truth-maker for that utterance, i.e. knows in what sort of circumstance it would be true⁸².

The point is crucial, since the difference between the two notions is deeper than it could appear at first glance. So far as we are concerned with intuitive truth-conditions we are not dealing with an automatic, linguistic dispositive, otherwise we are strongly dependent on the speaker's and hearer's linguistic competence. This is particularly manifest if we consider an example like (50).

(50) Oscar cuts the sun.

81 See Recanati (2004a), p. 8.

82 Recanati (2004b), p. 6.

‘Without a proper background’⁸³, Recanati writes, ‘we are unable to specify intuitive truth-conditions for the predicate ‘cuts the sun’⁸⁴. The semantic and intuitive truth-conditions in this case does not only *differ*, as in the examples above. In one case we do have truth-conditions (that is, we have a meta-linguistic propriety of the proposition, depending from the compositional rules of the sentence (50)), while in the other we *don’t have* truth-conditions at all!

However, Recanati asks, what are actually the semantic truth conditions of a proposition like (50). Well, provided that there is ‘a crucial difference between ‘knowledge of truth-conditions and knowledge that truth-conditions are satisfied’⁸⁵, the Literalist’s response will be to intend the truth-conditions of (50) in a ‘purely ‘disquotational’ manner’⁸⁶: that is to say:

the sentence ‘Oscar cuts the sun’ does possess truth-conditions; such truth-conditions are determined by a recursive truth-theory for the language, which issues theorems such as ‘*Oscar cuts the sun* is true iff Oscar cuts the sun’. We know those truth-conditions provided we know the language. What we don’t know, simply in virtue of knowing the language, is a method of verification for those truth-conditions⁸⁷.

This is a purely semantic way to ascribe to a proposition truth-evaluability and it seems acceptable. Why does Recanati insist that a notion of *intuitive* truth condition is still required? The point is that truth-conditions, considered in the ‘disquotational’ sense, are merely propriety of the propositions, insensitive of the meaning such propositions can bear in a concrete conversational exchange. ‘If pure disquotational knowledge counts as *knowledge of truth-conditions* (in a suitably weak sense), then knowledge of

83 Recanati (2004a), p. 92 (footnote 19).

84 *Ivi*, p. 92.

85 *Ibidem*, The inner quotation is from Emma Borg, ‘Saying What you Mean’.

86 *Ibidem*.

87 *Ibidem*.

truth-conditions (in that sense) does not count as *knowledge of meaning*⁸⁸.

As it is clear from the emphasis, the point of such an argument is *epistemological* rather than linguistic; better, Recanati argues that there is no legitimate linguistic arguments (in the sense of the study of natural languages) without such a reference to epistemological and psychological considerations.

2.8.3 Availability approach

In introducing the scheme of Recanati's discussion so far, I intentionally inverted the presentation order of his arguments. The reason for this strategy is that Recanati always starts by presenting his 'Availability based Approach' first, and only at a second stage explains the distinction between semantic and intuitive view on truth-conditions⁸⁹. I consider my presentation order to better serve explanatory purposes, as once we understand that what we are concerned with is a psychological notion of truth-condition, we can appreciate the value of Recanati's response to the main objections of Literalism, representing a response aiming to have psychological plausibility.

The point of the 'availability based approach' is that what is said 'corresponds to the primary truth-evaluable representation made available to the subject (at the personal level) as a result of processing the sentence'⁹⁰. Let's recall the example (6). In a minimalist account the minimal proposition expressed by the utterer of (6) is, as we have seen, the proposition that 'I have at least three children'. This minimal proposition corresponds to 'what is

88 Recanati (2004a), p. 93 (footnote 25). Emphasis added.

89 Both in the paper we discuss and in the book *Literal Meaning* Recanati actually introduces the distinction at the very beginning, but he doesn't explain the technical notion of intuitive truth conditions. He only notes that 'this divergence between the intuitive truth-conditions of an utterance and the literal truth-conditions postulated by the [minimalist] theorist is particularly striking' in connection with the example of the 'three children' (see Recanati (2004a), pp. 10-11).

90 Recanati (2004b), p. 8.

said' by the utterer of (6), distinct from 'what is implicated', that corresponds to the proposition that I have no more than three children. For a minimalist, the intended proposition arises from the combination of 'what is said' and 'what is implicated' and corresponds to a different level in language understanding, that is the level of what is globally communicated ('I have *exactly* three children'). However this latter, Recanati claims, is the only proposition the speaker and the hearer are actually conscious of. From a psychological point of view, the problem with this picture is that it 'lacks generality'⁹¹. In particular, it actually holds in the cases of GCIs, like (6) or like (8), repeated below as (51):

(51) Mary and John got married *and* had a baby.

(51) is an example of 'bridging-inference' or, in Levinson's terms, conjunction buttressing.

In these cases, the globally communicated expression (the proposition that I have *exactly* three children and the proposition that Mary and John got married and *then* had a baby) is actually the only conscious proposition for both speaker and hearer, 'what is said' and 'what is implicated' (and the inferential relation between them) being processed at the sub-personal level.

The problem is that, as we know, GCIs, in Grice's pictures, do not exhaust the dominion of conversational implicatures, the complementary set being that of PCIs.

To repeat, the main feature of this kind of implicatures is that they are strictly dependent on the (encyclopaedic knowledge about the) context of utterance. An example like (52)⁹²:

(52) I am Italian,

implicating, in the relevant context, that 'I am a good cook' is an example of PCI.

⁹¹ *Ivi*, p. 2.

⁹² Example (slightly modified) from Recanati (2004a), p. 8.

In such cases, the overt violation of Gricean maxims is straightforwardly used to produce some non-conventional conversational effects. In these cases - that is, cases of *genuine* conversational implicatures - one is aware both of 'what is said' and of 'what is implicated', and also of the inferential relation linking them. The minimalist account does not explain the dissymmetry⁹³, at the psychological level, between generalized and particularized implicatures: its account on conscious awareness and communication seems to fit for the former but not for the latter ones.

Recanati's availability Principle states that "what is said' must be analysed in conformity with the intuitions shared by those who fully understand the utterance - typically the speaker and the hearer, in a normal conversational setting'⁹⁴. The notion of intuition plays here a great role, and is supposed to justify my inversion of the topics. What Recanati says is that 'what is said' is the first conscious truth-evaluable representation made available by the speaker, that is to say that the truth-conditions of the minimal propositions have no role to play at all in a concrete account on language understanding. 'What is said' captures thus an important level in language understanding that roughly corresponds to (and safeguards) the semantic intuitions of the participants to a conversational exchange about the content of an utterance.

2.8.4 Primary pragmatic processes

As we saw, the only form of context-dependence affecting the Minimal proposition is that of the pure indexical expressions (components which in a standard Kaplanian analysis refer to the extra-linguistic context in virtue of their own conventional *semantic nature*). The only process allowed from a Minimalist point of view for the resolution of such context-dependence was that of *saturation*, a process, which eventually yielded to the first *complete* (truth-

⁹³ But, one should ask, is it supposed to?

⁹⁴ Recanati (2004b), pp. 5-6. For the notion of 'normal interpreter' see Recanati (2004a), pp. 19-20.

evaluable) proposition, i.e. the Minimal proposition ('what is said').

Now, the *psychological* notion of 'what is said' represents a much richer proposition than the minimal proposition. This proposition has its own (intuitive) truth-conditions, and it is regarded, psychologically, as the first proposition actually encountered in any conversational setting. To be so, it has to undergo a train of processes whose nature is entirely pragmatic. What Recanati commits himself to is the assumption that the truth-conditions of 'what is said' are affected from a train of pragmatic processes which are totally unconscious and that eventually give as their result a complete and conscious proposition, namely 'what is said'. This proposition can then undergo a process of *inferential exploitation* to give rise to the implicatures. Recanati's parallel between perception and language understanding can be very helpful to explain his central idea (*Table 2.3*).

The core of this analogy is the idea that 'what is said', like perception, works both as the first output of a complex train of processing which ultimately yields a 'conceptual experience'⁹⁵, and as an input for further processes of inferential exploitation. This means that 'what is said' is a form of well determinate (truth-evaluable) representation ('conceptual' in a very technical sense) whose primary character (psychologically speaking) is its conscious availability.

Besides saturation, the other sorts of primary (unconscious) pragmatic processes⁹⁶ (not linguistically mandated, up-bottom) are Enrichment, Loosening and Semantic Transfert. These are well-documented phenomenon in linguistics, exemplified by the following propositions:

- (53) Mary took out the key and opened the door.
- (54) France is hexagonal.
- (55) The ham-sandwich left without paying.

⁹⁵ Recanati (2004a), p. 7.

⁹⁶ For further discussion see Recanati (2004a), pp. 23-37.

<i>Unconscious</i>		<i>Conscious</i>		
Visual Stimulus	<i>Train of Processing</i>	Perception	<i>A is aware of what he sees</i> <i>A is aware of the fact that he is seeing</i>	Further processing (inferential exploitation)
Retinal Stimuli	→	John's car	→	John is around
<i>Unconscious</i>		<i>Conscious</i>		
Speaker's Utterance	<i>Primary pragmatic processes</i>	Experience	<i>A is aware of what is said</i> <i>A is aware of the fact that the speaker is saying it</i>	<i>Secondary pragmatic processes</i>
Auditory Stimuli	(Saturation and Enrichment, Loosening, Transfert) →	WIS	→	Implicatures

Table 2.3

In the example (53) the connective 'and' is used to convey a *richer* sense than the conventional one, namely the clause that Mary opened the door 'with the key' (or, alternatively, the predicate 'to open' is used to convey a richer concept than the lexicalised one, namely the *ad hoc* concept⁹⁷ OPEN WITH THE KEY. In the example (54) the predicate 'hexagonal' is used in a 'loose sense' (to convey the

⁹⁷ The notion of *ad hoc concept* was firstly introduced in the 80s by the cognitive theorist Lawrence Barsalou (see Barsalou (1983), (?)). The core idea is that the process of categorization is not so rigid as the theories of the prototypes suggest and often involves the formation of 'occasional' concepts with respect to special contexts and goals. The *ad hoc* categories were particularly exploited in the theoretic area of the *Relevance Theory*: integrated with the cognitive principle of relevance it has been seen as a unitary solution to the problems of semantic underdeterminacy at the lexical level (lexical pragmatic). See for discussion Wilson & Sperber (2002).

ad hoc concept 'APPROXIMATELY HEXAGONAL' or 'HEXAGONAL TO THE EXTENT SUCH A GEOPOLITIC ENTITY CAN BE'). In the proposition (55) the substantive ham-sandwich refers to the ham-sandwich orderer, that is to a fully different concept bearing a systematic relation to the former.

The crucial point is that these processes affect the intuitive truth-conditions of the utterances. In a semantic account the truth-conditions of the sentence are functions of the components of the sentence itself, according to the Fregean principle of compositionality. Allowing pragmatic processes to affect the truth-conditions of a sentence means to deny that semantic compositionality is the mark of truth-evaluability.

What I am rejecting is not the claim that the literal interpretation of the constituent is accessed before the derived interpretation - that I take to be obvious - but the claim that a similar priority holds at the level of the complete sentence; that is, I reject the claim that the process of semantic composition begins by paying attention only to literal semantic values, and turns to derived values only after the literal semantic value of the whole (the proposition literally expressed) has been computed. It is this picture which I think is unwarranted⁹⁸.

What Recanati suggests is a form of 'parallelism' between the processing of semantic (literal) and derived interpretation: 'the literal meaning has not *compositional privilege* over derived meanings'⁹⁹. The view of Recanati is hence double: his account on language understanding is not purely inferential, but *associative*¹⁰⁰ plus inferential, while the Gricean account was inferential in a very conservative way. This view is called by Recanati 'truth-conditional

⁹⁸ Recanati (2004a), p. 28.

⁹⁹ *Ibidem*.

¹⁰⁰ *Ibidem*. 'On this view, derived meanings still proceed (*associatively*) from literal meanings, which they indeed presuppose; but, although generated serially, they are processed in parallel'. (Italics added).

Pragmatics'. The problem is that in such an associative picture we have different candidates (literal or non-literal) for each linguistic component, none of which has a 'compositional privilege' over the others. What drives the process of language understanding is hence the *intuitions* on 'what is said' shared by the language users: the choice of the best interpretation for each component of the sentence (either the literal, semantic one or the derived one) is function of its 'order of accessibility'¹⁰¹ (that depends on the context at hand), without committing us to the idea that the semantic value is computed *before* the derived one.

If we recall the schematic idea of Literalism in the figure (27) we easily see that Recanati reformulated the proposition as follows:

(56) 'What is said': 'what is implicated' = 'Pragmatics & Semantics': 'Pragmatics'

What does this actually mean? If we recall the examples of generalized/particularized implicatures, we easily see that the cases of GCIs like (6) or (53) are now reclassified as the outputs ('what is said') of primary pragmatic processes (of free enrichment), while the only form of genuine (inferential) implicatures ('what is implicated') remains that of the particularized implicatures like (8). The asymmetry at the psychological level is thus removed¹⁰².

In this way, Recanati is able to overcome the apparent paradox in Levinson's view. Generation of both GCI and PCI is explained by resorting to the same sort of pragmatic processes, without invoking any intermediate level of utterance-*type* meaning.

At the same time, Grice's intuitive distinction between the two varieties of implicatures is maintained and justified on the basis of a principle of conscious availability. Moreover, such a distinction based on a psychological criterion on conscious accessibility allows for a distinction between default and non-default (inferential) interpretation.

¹⁰¹ *Ivi*, p. 31.

¹⁰² Recanati (2004b), p. 10.

Default meanings, therefore, are the ones based on primary pragmatic processes (so they belong to pragmatics) and are accordingly non consciously available. Non-default interpretations are the ones based on secondary pragmatic processes and their nature is hence inferential.

2.8.5 Some objections

Let's summarize some of the results of the present chapter in the light of Recanati's view.

The literalist proportion (27) customarily implies another sort of proportion:

- (57) 'What is said': 'What is implicated' = Explicit: Implicit
 (= Semantics : Pragmatics).

This is, roughly, true not only of Minimalism but also of Grice's theory of communication.

Even though he construed saying as a variety of non-natural meaning, Grice espoused Minimalism. On his view, disambiguation and saturation suffice to give us the literal interpretation of the utterance .- what is literally said. All other pragmatic processes involved in the interpretation of the utterance are secondary and presuppose the identification of what is said. Interpretation is construed as a two-step procedure: (i) The interpreter accesses the literal interpretations of all constituents in the sentence and uses them to compute the proposition literally expressed, with respect to the context at hand; (ii) on the basis of this proposition and general conversational principles he or she infers what the speaker means (which may be distinct from what is said, that is, from the proposition literally expressed)¹⁰³.

¹⁰³ Recanati (2004a), p. 27.

What is relevant here is that Recanati sees a clash between two technical locutions in Grice's account: that of *saying* and that of 'what is said'. Although *saying* is a variety of non-natural meaning (that is, it is a matter of intention recognition), and although 'what is said' is, on this very basis, placed by Grice on the side of the speaker's meaning, nonetheless Grice considers 'what is said' (the explicit) as strictly related to the semantic content of the sentence, and 'what is implicated' (the implicit) as the only true pragmatic contribution to the speaker's meaning. As we know and as Robyn Carston pointed out, the level of the implicit, so conceived, is an hybrid containing very different kinds of 'implicatures', namely *conventional* and *conversational*, but also - as we saw from Recanati - among the latter, *generalized* and *particularized*.

What appears to have bound these rather disparate aspects of utterance meaning together, and so motivated the common label of *implicature*, was that they did not contribute to the truth-conditional content of the utterance, that is, the proposition it expressed, or what the speaker of the utterance *said*¹⁰⁴.

This kind of concern in Grice's theory, namely the concern of safeguarding a purely semantic ground for the 'explicit', collides with the well-documented phenomenon of semantic underdeterminacy

As it should be clear, Recanati argues in favor a radical form of semantic underdeterminacy view. According to Recanati 'such [semantically underdetermined] expressions can be found all over the place'¹⁰⁵. Primary pragmatic processes affect the explicit ground of the sentence: the outcome is a level, the level of 'what is said', that - very different from Grice's received view - is now regarded as a pragmatic notion.

¹⁰⁴ Carston (2004b), p. 65. Carston's paper belongs to the same collection in which Recanati's paper is published, namely Bianchi (2004).

¹⁰⁵ Recanati (2004a), p. 58.

Syncretic View and other objections

Provided the impossibility for the Minimalist view to account for semantic underdeterminacy, in a way that is consistent with purposes of psychological reality, Recanati refers himself to a different and more sophisticated form of Literalism, one that tries to seriously take into account the problems of semantic underdeterminacy. This whole set of theories is identified by Recanati under the common name of 'Syncretic View'. The reason for this title is that this perspective tries to accommodate both the (alleged) theoretical need of a notion of minimal proposition and the psychological concerns of truth-conditional Pragmatics.

Schematically, the difference between the Minimalist and Recanati's availability approach can be sketched as follows:

Min	Sentence Meaning -> <i>Saturation</i> -> WIS(min/sem) -> <i>Optional processes</i> -> What is communicated
Rec	Sentence Meaning -> <i>Primary pragm. Processes</i> -> WIS (pragm) -> <i>Secondary pragm. Processes</i> -> What is communicated

Table 2.4

As we saw, what commits Recanati to the existence of a train of (unconscious) pragmatic processes, implied also in the determination of 'what is said', is the fact that the level of the *explicit* is in many cases (for Recanati, in *every* case) underdetermined from the semantic content of the sentence. According to Recanati, indeed, this leads to the conclusion that pragmatic processes can't only be concerned with the understanding of implicatures *from* their explicit content, as some pragmatic processes are involved in the determination of the explicit content itself. Following this line of reasoning, Recanati argues against the notion of minimal proposition, at least in the semantic sense.

The point made by Syncretist theorists is that the rigid distinction between explicit and implicit is misleading. Philosophers who - like Recanati - claim to criticize the Gricean picture, don't realize that they themselves embrace this preliminary distinction and move along the same track of Grice. They then account for a more labelled schema, where one can, roughly, distinguish two notions of a Minimal proposition: a purely semantic and a pragmatic notion.

I will take now into account what I consider to be the most convincing perspective in the Syncretic panorama: the view of Kent Bach. According to Bach, the phenomenon of semantic underdeterminacy is actually a pervasive phenomenon in natural languages, however it has not to be accounted in Recanati's terms. Recanati's solution - Bach claims - safeguards Grice's distinction between Explicit and Implicit, and only 'draw[s] the distinction differently - widening the scope of what is said and calling that explicit content-but Ë keep[s] it exhaustive'¹⁰⁶. For Bach, there is a middle ground between the explicit and the implicature, that he calls the 'implicit' (and 'implicatures'). As we saw, every semantically underdetermined sentence does not convey any complete proposition. To be completed, Bach claims, these sentences need to undergo a process of *completion*: this process is conceptually mandated, 'because the utterance of a semantically underdetermined sentence leaves out a conceptual element (or a relation between conceptual elements)'¹⁰⁷. The outcome of this process of completion is what Bach calls the 'implicit' (or the 'implicatures'). Let's see some example:

(58) Steel isn't strong enough.

(59) Willie almost robbed a bank.

As Bach writes, these sentences 'though syntactically well-formed, are semantically or conceptually incomplete, in the sense that something must be added for the sentence to express a complete and determinate proposition (some-

¹⁰⁶ Bach (1994), pp. 38-39.

¹⁰⁷ Ivi, p. 10.

thing capable of being true or false)¹⁰⁸. The point is that the required form of completion is only *conceptual*, that is it does not need to affect the ‘explicit’ ground, since there is ‘no syntactic reason why everything needed to deliver a complete proposition should correspond to something in the syntactic structure of the sentence’¹⁰⁹. This is quite evident in a sentence like (21), repeated here as (60)

(60) I love you too.

(60) can be interpreted in four different ways, depending on the component to which ‘too’ applies. To understand this proposition is to conceptually complete the semantic content of the sentence, by adding some further conceptual information that corresponds to nothing in the syntactic structure of the sentence itself. This distinction between explicit and ‘implicit’ (distinct from ‘implicated’) is, according to Bach, quite clear, and the only reason why a philosopher like Recanati can ‘count implicatures as explicit contents of utterances, or identify them with what is said, is that [he] uncritically assume, along with Grice, that there is no middle ground between what is said and what is implicated’¹¹⁰.

Furthermore, there is another form of pragmatic process which affects the complete proposition and that is different from implicature, that is the process of ‘expansion’ (Bach refers to his account as ‘expansionism’). While Completion is the ‘filling in of a propositional radical’, Expansion is ‘the fleshing out of the minimal proposition expressible by an utterance’¹¹¹. Let’s recall the example (47)

(47) You are not going to die.

In the relevant context, the proposition (47) expresses the *complete* (once saturated the indexical element) proposition that ‘the kid is not going to die’. However this, as

¹⁰⁸ *Ivi*, p. 3.

¹⁰⁹ *Ivi*, p. 8.

¹¹⁰ *Ivi*, p. 19.

¹¹¹ *Ivi*, p. 22.

we saw, is not the intended proposition: according to Bach, the intended proposition is an expanded proposition of the sort: 'You are not going to die from that cut. This - Bach claims - is neither a case of Recanatian 'explicature'¹¹² nor of genuine implicature; rather it is an example of 'implicature'. The fact that the expanded proposition is not part of the explicit ground ('what is said') is testified to the very feature that these 'expansions' are 'defeasible' without contradiction:

(47.2) You are not going to die - said the goddess Thetis to his immortal son Achilles¹¹³.

Bach's central claim is that the implicit (inexplicit) is a pervasive ground of natural language *meaning*, which does not affect *saying*.

I agree with Grice's critics that neither is a case of implicature, although both involve basically the same sort of pragmatic process as in implicature proper, but I see no reason, as they do, to extend the notion of explicit content, of what is said. *For me there is inexplicit meaning but no inexplicit saying*¹¹⁴.

In this perspective, there is still room for a notion of Minimal proposition, that corresponds to the first *completed* proposition.

The main point of Bach's defence of the Minimal proposition *against* Recanati is that this defence is neither argued for the sake of an alleged priority of semantic, nor in virtue of the theoretical value of the Minimal proposition. To the contrary, the point is exactly psychological. According to Bach, even if Recanati is right assuming that in many events the alleged minimal proposition is never accessed

¹¹² The term 'explicature' actually refers to a technical notion (quite the same of Recanati's view) of *Relevance Theory*. See Sperber & Wilson (1986), pp. 176-193 (2nd ed.).

¹¹³ The example is from Claudia Bianchi.

¹¹⁴ Bach (1994), p. 22.

1. Sentence Meaning		
2. WIS (less-than-minimal)	<i>Saturation</i>	
3. WIS (minimal)	<i>Completion</i>	
4. WIS (Pragmatic)	<i>Expansion</i>	}
	<i>Secondary Pragmatic Processes</i>	
5. Implicatures		

Table 2.5

in the actual process of utterance understanding, nonetheless it is *exactly* this proposition that is *needed* to access the linguistic content of the utterance. That the minimal proposition is *available* in a case like the one of the ham-sandwich is what actually keeps the ‘local process’ of semantic transfer ‘from being triggered in a case like (55) [‘the ham sandwich is getting eaten’], uttered in similar circumstances’.

The point here is that the expansionist account does not pose as a theory about the temporal order of the process of understanding. Rather, it is a theory about the character of the information available to the hearer in the process, whatever the psychological details, of identifying what the speaker is communicating, that is, what is implicit in an utterance that explicitly expresses only a minimal proposition. The level of the minimal proposition, of what is strictly and literally said, is needed to account for the hearer’s access to the linguistic content of an utterance. What it does suggest is that what is strictly and literally said need not be consciously accessed. This leaves open the possibility that it is accessed unconsciously or at least

that it be available to the hearer, even if not actually accessed¹¹⁵.

Recanati takes into account two different sorts of Syncretic view, Bach's 'expansionist' account and Scott Soames' theory of the minimal proposition as a 'common denominator'. I consider his objections to the Syncretist challenge extremely conclusive for the latter but not for the former. Soames' strategy of abstracting the minimal proposition *from* 'what is said' in the pragmatic sense, by filtering out all the context-dependent elements, is demonstrably invalid, since it holds only in those cases where 'what is said', in the pragmatic sense, is *richer* than 'what is said', in the semantic sense. This is of course true of the cases in which 'what is said' (pragmatic) is the output of a process of free enrichment (a proposition like (53)). Only in those cases 'it is plausible to suggest that the minimal proposition itself is part of what is asserted'¹¹⁶. If one assertively utters (55), in Soames' view, one commits oneself to (55). However, Recanati comments, 'one cannot commit oneself to the truth of a specific proposition *p* without committing oneself to the truth of a less specific proposition *q* which it entails'¹¹⁷. Therefore, the utterer of (55) not only would commit himself to the proposition that 'the ham-sandwich orderer left without paying', but also to the absurd *minimal* proposition that 'the ham-sandwich itself left without paying'.

Recanati doesn't have an equally convincing argument against the Bachian view. He simply objects to Bach that there is 'no such thing as a complete proposition autonomously determined by the rules of the language with respect to the context but independent of speaker's meaning'¹¹⁸. However, as we saw, Bach agrees with Recanati that in cases of semantic underdeterminacy the semantic contents of the sentences in context are non-propositional: that's why he regards as 'minimal' only the first (conceptually) *completed* proposition. Recanati assumes that what is 'deeply wrong'

¹¹⁵ *Ivi*, p. 37.

¹¹⁶ Recanati (2004b), p. 15.

¹¹⁷ *Ivi*, p. 16.

¹¹⁸ Recanati (2004a), p. 59.

with the Syncretic View (insofar it is based on the literalist picture) 'is the assumption that semantic interpretation can deliver something as determinate as a complete proposition'¹¹⁹. But this claim, we saw, focuses exactly the sort of problem Bach tries to avoid, by arguing in favour of a non-semantically controlled form of completion in processing the minimal proposition.

Recanati shows that the process of saturation is itself context-driven in a way that forces us to appeal to the *wide* (extra-linguistic) *context*. Consider the following example:

Suppose that there has been a ritual fight between respectively five warriors and five beasts. The beasts are a wolf, a lion, a hyena, a bear, and an alligator; the warriors are armed with swords, and carry shields with distinctive decorations (the first warrior has the moon on his shield, the second one has the Eiffel Tower, the third one has the Metro-Goldwyn-Mayer roaring lion, and so on). Each warrior is assigned a particular beast which he or she must stab to death. After the ritual fight, the five beasts lie on the ground with swords through their bodies. This is the context. Now suppose that in this context I utter 'Bring me the lion's sword - I want to have a look at it'. In this context I think there are two accessible interpretations for 'the lion'; 'the lion' can be interpreted literally as referring to the lion (one of the beasts), or non-literally as referring to the warrior who has (a picture of) a lion on his shield. If we choose the first interpretation, the relation which will be contextually assigned to the possessive construction will be one of the salient relations which hold between the lion (the animal) and the sword which can be seen emerging from its pierced body. If we choose the second interpretation, the relation will be totally different; it will be one of the salient relations between the warrior

119 *Ivi*, p. 56.

and the sword which he used in his fight against, say, the bear.

Now suppose the correct interpretation is the second one: the speaker actually refers to the warrior with a lion on his shield and wants to see his sword (that is, the sword which emerges from the bear's body). What is the minimal proposition expressed by the utterance, in this context? I doubt that there is one, but if the minimalist insists, here is the only available procedure for determining it: to get the minimal proposition, we must give the word 'lion' its literal interpretation, because the non-literal interpretation results from an optional, non-minimalist process; and we must assign a particular value to the variable 'R' carried by the possessive construction. Which value? Well, the value which corresponds to what the speaker actually means. (Remember: there is no other way to determine contextually a value for the genitive, than by appeal to a speaker's meaning.) But that value is that which goes together with the intended non-literal interpretation of 'lion'! The result is a monster: what the phrase 'the lion's sword' contributes to that is said in the minimalist sense is something like THE SWORD WHICH THE LION (THE ANIMAL) USED DURING THE FIGHT. The minimal proposition thus determined is absurd and evidently corresponds to no stage in the actual process of understanding the utterance.¹²⁰

. As the above example seems to show, the alleged minimal proposition, even in the Syncretic sense, would be a 'monster'¹²¹, between sentence meaning and speaker's meaning, with no psychological relevance at all. This is fully correct, but one can still wonder whether this kind of objection holds in the case of Bach's completion. The only

¹²⁰ Recanati (2004a), p. 63.

¹²¹ *Ibidem*.

sort of response I think Recanati could give is that in the example of the ritual fight the type of effect obtained on the intuitive truth-conditions is a 'strong pragmatic' effect, something which can't be neither an instance of saturation, nor of Bachian completion.

I think that the distinction shaped by Jason Stanley between propositional and *non-propositional Syncretism*¹²² comes in handy at this point. As Recanati has shown, the former is actually 'a difficult position to maintain'¹²³, while for the latter there could be a suspicion 'that there is no great difference between non-propositional syncretism and Recanati's contextualism'.

My suspicion is therefore that the most important disputes in the theory of meaning are not between contextualism and syncretism [. . .]. Rather, the genuinely important disputes in the theory of meaning are between those who maintain that the contents primarily asserted by the speakers are *not* generally the semantic contents of the sentences they use (even relative to those contexts), and those who maintain that the contents primarily asserted by speakers are generally (not always, but typically) the semantic contents of the sentences used (relative to those contexts)¹²⁴.

Hence, I think Recanati could reject Bach's view only on the basis that such a multiplication of sense levels is theoretically uneconomical, while a single criterion of context-dependence is preferable. And Bach could reply, using the words of Stanley, that 'linguistic communication is rule-governed and convention-bound in a way that would be mysterious, if there were strong pragmatic effects on intuitive truth-conditions'¹²⁵.

¹²² See Stanley (2007), p. 234.

¹²³ *Ivi*, p. 236.

¹²⁴ *Ivi*, p. 237.

¹²⁵ *Ivi*, p. 238.

2.9 SUMMARY

In the present chapter I introduced the phenomenon of semantic underdeterminacy. Such phenomenon seems to radically undermine Grice's picture and the related shape borderlines he drew between, respectively, Semantics and Pragmatics and Explicit and Implicit.

I started from a radically relativistic approach to utterance meaning, the one supported by John Searle, in order to show how the issue of semantic underdeterminacy can be claimed to be extremely pervasive in communication. Searle shows how the phenomenon of 'linguistic relativity' seems to threaten the entire semantic enterprise at its heart and to frustrate even the simplest attempt of semantic analysis.

After this sketchy and quite informal presentation of the phenomenon, I went on presenting a taxonomy, due to Robyn Carston, of the possible sources of semantic underdeterminacy and I discussed in some details a large case study. More importantly, I attempted a first approach to the Semantics/Pragmatics distinction, by illustrating some of the commonly accepted assumptions concerning the semantic job. I presented the so-called Grice-Gazdar thesis, which states that pragmatics can be equated to '*meaning minus truth-conditions*'. Then, counter-examples to this view are presented and the Grice-Gazdar thesis is strongly undermined by showing that pragmatic factors actually are very often involved in the determination of the truth-conditional content of sentences. I labeled this kind of *impasse* in Grice's shape picture of communication as '*Grice's Circle*' and outlined three possible theoretical options to overcome such *impasse*.

A first, very conservative paradigm is presented. Such an approach, due to Jason Stanley and others semanticists of traditional orientation, has been labeled as '*hidden indexicalism*'. The main idea behind this view is that '*all truth-conditional effects of extra-linguistic context can be traced to logical form.*'. The approach is developed with respect to several examples, and it is shown how, in Stan-

ley's view, every occurrence of semantic underdetermined meaning is in fact a case in which the value of a hidden indexical in the logical form has to be contextually supplied. Stanley's conclusion is then that there is no pragmatic contribution to the truth-conditional content, since every truth-conditional effect can in fact be successfully semanticized.

At the end of this presentation, I illustrated some objections to this thesis. It seems eventually that hidden indexical view is untenable since, for each instance of semantic underdetermined meaning, 'the onus of proof lies on the advocates of syntactic slots and there has not as yet been any successful proof provided'.

I then turned to Levinson's theory of presumptive interpretations. This is a theory which acknowledge the problem represented by Grice's Circle (incidentally, the definition of 'Grice's Circle' is due to Levinson himself) but claims to be able to overcome such issue maintaining at the same time the validity of the Grice-Gazdar thesis, and by means of a revision of Grice's own concepts.

I introduced for the first time the theme of defaults. I discussed at length Levinson's view and showed why his view of *default* interpretations is, at the end, untenable, but how it represents, at the same time, an important opening to the idea of preferred interpretation. An idea which can be maintained and, with opportune modifications, further developed.

I explained in details how Levinson's view involves a revision of received Gricean picture leading to the introduction of an intermediate level of meaning between sentence-meaning and speaker's meaning. This is the level of utterance-*type* meaning. It is at this level that GCI arise. GCIs, in Levinson's view, are default interpretations which are generated automatically according to three heuristics. Such heuristics (modelled on Grice's conversational maxims) are inferential shortcuts that help to overcome the bottleneck of human communication, which is represented by the slow rate of the articulation process.

I focused on the second (I) heuristic, which is the one that is responsible for example for phenomena of enrichment of the meaning of logical connectives. I introduced

Levinson's intrusive construction view, which is a first attempt to overcome the problem represented by counterexamples to Grice-Gazdar thesis. Levinson's view is that there is circularity in Grice's view, insofar as pragmatically derived interpretations can intrude into truth-conditional content. However, far from being a threaten to Grice's theory, this is a further proof of the existence of Levinson's middle layer of meaning: only GCIs can indeed intrude into truth-conditions and default interpretations therefore can straightforwardly interact with semantic content. Levinson suggests that such mixed semantic-pragmatic view about truth-conditional content can be approached using a correlative mixed formal approach. He suggests to resort to the formalism of DRT, however this proposal is not further developed.

I then presented several objections to Levinson's view. Some of these are objections which are internal to Levinson's theory and are due to Emma Borg and Anne Bezuidenhout. While trying to respond to some of such objections, I encompassed the ones that I found most conclusive. Moreover, I illustrated some external objection to Levinson's theory, which are due to Robyn Carston. On the one hand, I showed how the line of objection argued by Carston is very conclusive, under the assumption that the Grice-Gazdar thesis has to be rejected in view of a successful treatment of semantic underdeterminacy. On the other hand, I illustrated Levinson's quite convincing counter-objection that this kind of approach eventually represent a 'semantic retreat'. I ended the section with an open question: is it possible to advocate for the existence of default interpretations without resorting to a Gricean apparatus (and, correlative, without encompassing Grice-Gazdar thesis) and, at the same time, without being blamed of semantic retreat? A tentative answer to this question will be the topic of the next chapter.

Finally, I turned to a more radical approach to the issue of semantic underdeterminacy. Starting from the acknowledgment that one possible option to overcome the impasse created by Grice's Circle is to reject Gricean picture as a whole, I illustrated how such an attempt is pur-

sued by one of the most influential contemporary pragmatists, François Recanati, in his 'truth-conditional pragmatics'. I showed how concerns of psychological plausibility are at the heart of this approach, a feature which such approach shares (together with a radical underdeterminacy view) with the relevance theoretic paradigm. I illustrated Recanati's conception of What is said and his Availability based approach, and showed how a radically different approach to the issue of truth-conditionality is possible, when truth-conditions are analyzed from the point of view of the 'intuitions' shared by competent speakers and interpreters.

In the present chapter, a multiplicity of threads have been interlaced. My purpose in the next chapter is to show how such threads can be pulled all together in a unitary theory of default interpretations.

3 | DEFAULT SEMANTICS

I do not pretend that this notion is straightforward, and I grant that it is not easy to defend. Yet I believe that the idea of a *preferred (or default) interpretation* is much too important to be ignored just because it is a difficult concept. Moreover, the existence of preferred interpretations has (for me at least) something of that brute self-evidence that Dr. Johnson invoked when he kicked a stone to dispatch Berkeley's idealism. We grope to grab and harness the beast without the slightest doubt about its existence.

—LEVINSON (2000): XIII.

3.1 OPEN ISSUES

In the previous chapter, we have seen that the picture of communication which stems from Grice's theory of conversational maxims and implicatures is subject to a number of objections and counterexamples. All such objections and revisions to Grice's theory start from the acknowledgment of a phenomenon of pervasive linguistic non-specificity, which goes far further Grice's domain of conversational implicature and which strongly undermines his sharp division of labour between Semantics and Pragmatics. This is the phenomenon which I have labeled (following an influential tradition) as 'semantic underdeterminacy'.

To repeat, Grice's claim is that, for the full determination of 'what is said' (= semantic/truth-conditional content) of an uttered sentence, the only form of context-dependence needed (and allowed) is restricted to lexical or syntactic dis-

ambiguation and indexical resolution. The resultant full-fledged propositional form can then undergo a process of pragmatic exploitation which generates conversational implicatures. In a slogan, due to Gerald Gazdar, Pragmatics is '*meaning minus truth-conditions*'

Semantic underdeterminacy view, advocated by many philosophers and linguistics, shows that it is not possible to keep to a minimum the degree of context dependance needed for the determination of the semantic content. By contrast, a number of apparently pragmatic factors very often intrude into the semantics of sentences in communication. The view that semantic content, once completely determined, provides the input for pragmatic exploitation is strongly threatened and, accordingly, a circularity between 'what is said' and implicatures is recognized in Grice's own theory (Grice's Circle).

I showed that there are schematically three possible alternative to face the problems arising from semantic underdeterminacy view. In a nutshell, the three options are as follows:

REJECTED SEMANTIC UNDERDETERMINACY The first option consists in rejecting the idea that *there are* semantic underdetermined meanings, by claiming that each apparent pragmatic effect on truth-conditional content can in fact be semanticized (e.g. [Stanley \(2007\)](#));

CONTROLLED SEMANTIC UNDERDETERMINACY the second hypothesis is to acknowledge a form of semantic underdeterminacy, but to claim that it is only a controlled form of the phenomenon, where the alleged cases of pragmatic intrusion into the truth-conditional content are limited to *default* interpretations guided by three pragmatic heuristics (and assimilated to Grice's GCIs) which interact with semantic analysis, metaphorically in the way two pens of different colors write of a same sheet (the contributions are, then, distinguishable but give rise to a unique text) (e.g. [Levinson \(2000\)](#));

RADICAL SEMANTIC UNDERDETERMINACY the third alternative consists in rejecting tout-court Grice's borderline between semantics and pragmatics (and, accordingly, between explicit and implicit, what is said and what is implicated) and argue in favour of a radically free contribution of pragmatics to the truth conditional content. In truth-conditional pragmatics, the variety of radical semantic underdeterminacy view advocated by François Recanati, the sole criterion for distinguishing 'what is said' from implicatures is that of conscious availability. A different sort of such radical view is advocated by Relevance Theorists. (e.g. Recanati (2004a) and Sperber & Wilson (1986), Carston (2002))

As we have seen, each of the paradigms taken into account as representative of one of the proposed alternatives is unsatisfactory and open to several objections. Each account is defective insofar as it leaves a number of unresolved questions and it is unable to present a unitary model of treatment for the relevant case study. Either the solution is too restrict, or it seems ad hoc or, rather, too vague.

To be sure, all these paradigms also raise a lot of good questions and, in many cases, make some steps toward the search for suitable solutions. However, though partially convincing, they all lack something important for a tenable, really explanatory semantico-pragmatic theory.

I will shortly summarize some of the objections we have mentioned against the presented paradigms and try to give a map of merits and deficiencies of the extant theories:

- As regards to the first theoretical option, it has been objected that the solution is too limited and extremely dispersive insofar as it lacks a unitary principle of explanation and resorts, for each occurrence of alleged semantic underdetermined meaning, to the search for a suitable deep structure involving hidden indexicals. All in all, although the goal of semanticization is desirable insofar as it points toward the manipulability and formal treatability of the case study, however such approach seems to lack any predictive power

and, accordingly, to lose much of its theoretical (not to mention its intuitive) appeal. To quote the words of Katarzyna Jaszczolt:

All in all, [hidden indexicalists] make an important point that before postulating truth-conditional pragmatics with free, not syntactically controller enrichment (...), before discarding intuitions about semantic form, one has to investigate all semantic options. But they fail to investigate any further beyond the least plausible: syntax of some non-existent 'sentences'¹

- As for the Levinsonian proposal of *default* interpretation, it has been argued that it crucially rests on a unjustified Gricean assumption concerning the 'implicative' nature of pragmatic contributions. Such assumption eventually forces this approach to introduce a potentially useless further level of meaning. Moreover, it forces the account to catalogue under a 'rather eclectic category' (that of GCI) a nonhomogeneous case study, including GCIs arising 'at the level of word, phrases, sub-sentential expressions and whole sentences'². Finally, while it seems intuitively appealing to resort to the category of *default* interpretations, the composite semantico-pragmatic formal treatment which is hinted for such category is not further developed and the metaphor with which such treatment is introduced seems to rest on a crucial confusion concerning the very notion of 'semantics'.

To adopt a metaphor, in these proposals there is a common slate, a level of propositional representation, upon which both semantics and pragmatics can write he contributions may be distinguished, let's suppose, by the color of the ink: semantics in black, pragmatics in red. Semantics and

¹ Jaszczolt (2005a): 16.

² Jaszczolt (2005b): 39.

pragmatics remain modular 'pens' as it were: they are separate devices making distinctively different contributions to a common level of representation. The slate thus represents the semantic and pragmatic content of accumulated utterances, and it is this representation as a whole that is assigned a model-theoretic interpretation.³

- . Carston argues that such metaphor involves a confusion between the two notions of semantics advocated by Relevance Theorists (linguistic and truth-conditional (see p. 84)). The first, blue ink, semantics seems to be close to Carston's 'linguistic' (context-invariant) semantics. However, being representational (which, following Carston I see as an advantage of a semantic theory) it involves a translation from the purely symbolic system into a representational (logico-conceptual) one. Such a 'translation', according to Carston, gives rise to the second, truth-conditional notion of semantic content, which crucially involves pragmatic filling to become complete. On this analysis, we no longer have a composite semantico-pragmatic device which writes on the same piece of paper but where, at the same time, the two contributions are transparently distinguishable by the analyst. On the contrary, we have a double conception of semantics, where the second, 'real' semantics is inextricably (and indistinguishably) interlaced with pragmatic elements.
- Concerning the third, more radical option, it seems intuitively very appealing to claim that there is in principle no restriction to the contribution that pragmatics can give to 'what is said'. In fact, provided the apparent pervasiveness of the phenomenon of semantic underspecificity, it seems a theoretical quality to state no upper bound for the degree of pragmatic enrichment and development of the logical form which is the output of syntax to get a full-fledged proposi-

³ Levinson (2000): 193.

tion. Furthermore, it seems as well desirable to let default and non-default inferences to be clearly distinguishable by means of a psychological criterion of conscious availability. By contrast, it seems that, exactly insofar as it is extremely 'liberal', the account lacks any predictive power and it is useless to the aim of providing a model for linguistic competence and understanding. It seems moreover that at the end there is no long room for a notion of semantics in the traditional sense. As Stefano Predelli has correctly pointed out:

Minimalism's presumed defeat would remain largely irrelevant for the treatment of genuinely semantic questions. On the other hand, if the true target of Recanati's discussion is a semantically relevant level of WIS, that is, the outcome of a semantic procedure of interpretation, it is unclear why the ideas of complete propositionality or automaticity may be relevant⁴.

It seems, to use Levinson's incisive slogan, that although we have apparently got grasp on the extreme variety of contextual contributions to utterance meaning by means of a single methodological criterion, we have nonetheless reached this goal at the cost of a true 'semantic retreat'.

3.2 WHAT MAKES A GOOD THEORY?

The summary of open issues in the theories presented so far led us to a retrospective list of the methodological merits and weaknesses of each of the (broadly conceived) presented theoretical options.

Such a comparative prospectus can now be useful to foil by contrast the features which we expect a successful semantico-pragmatic theory should present. What we

⁴ Predelli (2006): 31.

hope to end up with is a theory which is able to preserve what seems intuitively plausible in Grice's paradigm and at the same time to cope with the issue of semantic underdeterminacy without giving up the possibility of a semantic analysis in standard, model-theoretic fashion.

More specifically, we ask for our theory the following requirements:

METHODOLOGICAL PARSIMONY First of all, it seems intuitively appealing to have a theory which preserve Grice's advice of avoiding the multiplication of senses (i.e. the postulation of ambiguity) in favour of a single principle of explanation in cases of multiple readings. However, provided the arguments concerning semantic underdeterminacy developed in previous chapter, standard Gricean analysis involving a rigid semantic content and a pragmatic layer restricted to conversational implicature seems manifestly precluded. We want then our theory to show a more fine-grained, though clearly understandable, borderline between semantics and pragmatics.

INTENTION-BASED APPROACH A second, important Gricean requirement which our theory should intuitively be able to preserve is that of being a theory of meaning based on the recovery of the intentions behind a speaker's uttering a certain sentence. An intention-based approach, à la Grice, would of course require additional explanation regarding the sort of psychological processes and the kind of intentionality which are claimed to be in play. It should also clarify whether the resultant representation of meaning is to be taken to information from the speaker's side or from the side of the addressee. Finally, it should make it clear on which kind of inferential model it resorts and whether there a difference is advocated between inferential and non-inferential processes of meaning recovery.

LEVELS OF MEANING As a corollary to the first requirement, we want our paradigm to clearly state how many levels of meaning we account for and exactly at

which layer each contribution from a different sources is supposed to come in play. The theory should accordingly explain if such division of levels is actually mirrored in a psychologically plausible theory of information recovery from such different sources. Moreover, provided a clearly defined notion of, respectively, semantics and pragmatics, the paradigm should explain if the level at which a comprehensive modeling for the process of language understanding belong to the semantics or the pragmatics.

FORMAL APPARATUS AND COMPOSITIONALITY If the aim of our theory is the one of explaining linguistic performance by means of a plausible model of language understanding, it seems reasonable to ask for a formal device which help such modelling. The alternative view is to acknowledge that formal enterprise with respect to natural language understanding is eventually un-explanatory, insofar as the variety of pragmatic contribution is completely free and, in principle not specifiable. This could be the case: however, what we hope out theory to be equipped with is a way to accommodate pragmatic information coming from different sources into a plausible formal representation. A couple of corollaries follow from such requirement: first of all, we expect our formalization to hold predictive power with respect to the formalization of new pieces of case study. Our formal devices should be not only a way for accommodating a suitable logical form from complex utterances, it should also make the right predictions when fed with new inputs. Secondly, it seems intuitively plausible for a theory which allows for formalization and which holds predictive power on new and potentially unanalyzed pieces of information to be compositional. It seems to be a minimal adequacy condition for a semantic theory aiming to mirror the actual process of language understanding.

DEFAULTS The discussion of Levinson's theory of presumptive interpretations left us with the aftertaste of a unsatisfactory analysis of an otherwise basically unobjectionable notion. It seems, therefore, that a suitable theory of language understanding should allow for the category of default interpretations. However, such category should not be constrained in an undue Gricean dress, but should be shaped in line with the three abovementioned requirements. That is to say, the theory should clarify whether defaults are to be recognized at semantic or pragmatic level; it is desirable that the introduction of such category does not lead to the introduction of an additional and potentially redundant level of meaning (as it is the case in Levinson's account) but, at the same time, the category of default interpretations should be treatable in accord with the requirement of formal manipulability, which means, moreover, that such category should be clearly distinguishable in our semantic representation and should respect the compositionality condition stated above.

3.3 JASZCZOLT'S DEFAULT SEMANTICS

A theory which matches all the previously listed requirements would not of course be immune from objections. However, it would be at least a paradigm capable of escaping many of the theoretical dead-ends of the theories taken into account so far.

Such an approach would preserve the undeniable advantages of a pragmatic, intention-based, Gricean picture and at the same time it would take seriously into account the need for semanticization and formal modelling of the process of language interpretation and the related need for preserving meaning compositionality.

Now, I will tentatively suggest that a theory which seems to satisfy all the above mentioned requirements can be

found in the paradigm of Default Semantics, developed in several books and papers by Kasia Jaszczolt⁵.

As the name of the paradigm clearly suggests, this is a theory which crucially depends on the acknowledgment of default meanings. However, the theory of preferred interpretation is the outcome of a complex and articulated theory of meaning and language interpretations.

Before addressing thoroughly the details of Default Semantics (hereafter DS) I would like to briefly indicate some important merits of such theory: first of all, it is a theory which approaches in a radically new way the phenomenon of semantic ambiguity and underdeterminacy. Jaszczolt puts into question every single accepted concept in use in the extant semantic and pragmatic paradigms and shows how such notions can be recast or even abandoned in favour of more workable ones.

Accordingly, and what is for me more important, it shows how most of the theoretical oddities and impasses affecting the extant pragmatic theories derive from the way many distinctions are commonly shaped, unquestioned and assumed to be relevant.

Jaszczolt shows, by contrast, that in many cases there is no need for many of such discussions once we acknowledge for a radically different view of approaching the case study. That the theory will result at the end in a convincing paradigm or that one would object it and also reject it at all, makes no difference with respect to the hugely instructive way of facing a common battery of issues and show how it is possible to analyze them in an utterly new fashion by building an extremely well motivated theory which, most of all, appears to be theoretically well aware of every distinction and subtleties which is in play.

All in all, as it often happens for really new philosophical theories, DS is built on the ruins of a number of commonly accepted and hardly questioned theoretical assumptions.

⁵ See for example [Jaszczolt, 1999](#), [2005a](#), [2005b](#), [2006](#), [2011](#).

3.3.1 Logical form and semantic underdeterminacy

Consider Levinson's presumptive interpretations. The motivations for the introduction of such category, besides its intuitive appeal, are to be found, according to Levinson, in the search for a plausible explanation for the incredible speed and efficiency of human communication as compared with the incomparably slower rate of the articulation process.

This is intuitively a very stringent reason which apparently lead us to acknowledge the existence of a system of shortcuts in language understanding by means of default or preferred interpretations. However, as I have already noticed, it seems quite odd that in order to explain the rapidity and efficiency of human linguistic competence one is forced to introduce a further level of meaning, as Levinson does.

Such a move, by contrast, seems to be suggested by 'external' considerations, concerning the re-modulation of the unitary Gricean category of GCIs as holders of default meanings, rather than by 'internal' motivations of theoretical consistency. It is possible that forcing such defaults into an eclectic category including hardly unitary expression-types (like words, phrases, sub-sentential forms, whole sentences) would give the advantage of a unitary Gricean re-description of the phenomenon. However, either one have to recognize that such further level of meaning is theoretically needed but psychologically inert, or it is true that such additional layer would 'exacerbate processing difficulties rather than alleviating them'⁶.

It seems then that a theory which allows for defaults should not increase the complexity of the picture, at least if it is claimed to mirror the actual interpretation process.

Default Semantics is a theory of meaning which allows for a single-level of representation. Such single level consists in a merging of information which are allowed to come from different sources. The crucial point is that none

6 [Bezuidenhout \(2002\)](#): 265.

of these sources hold a compositional privilege over the others.

To escape the problem posed by semantic underdeterminacy, Levinson introduced the notion of intrusive constructions. The picture of DS is as well intrusionist insofar as it allows pragmatic enrichments to freely enter into the semantic representation. However, the model is intrusionist in a very different way as compared to Levinson's one. In this latter theory we were faced with the problem of how to explain apparent cases of contextual effects into the truth-conditional content of the sentence. Levinson's solution was to let a controlled variety of pragmatic elements to intrude into the semantic content.

However, a different solution involving semanticization, was advocated by hidden indexicalists who claim that such elements can be eventually traced back to the logical form (hidden truth-functional structure of the sentence).

According to Jaszczolt, the crucial mistake is to consider logical form and the related notion of truth-conditional content, in terms of the semantically developed output of the syntactic module, as a theoretically useful and psychologically relevant notion at all.

In the traditional Gricean picture, the role of semantics is to determine a full propositional content which can act as the input for pragmatic exploitation. Semantic representation is equated to such truth-conditional logical form. Once acknowledged that such picture is untenable, due to the phenomena of semantic underspecificity, theorists - as we have seen - has proposed various way in which pragmatics can contribute to the development and embellishment of such logical form.

However, Jaszczolt argues, once we acknowledge that Gricean picture is unsatisfactory, there is no need to save the very notion of logical form at all. According to DS, such obstinate attempt to preserve the centrality of this notion rests on the undue assumption of a privilege of the syntactic representation as input to semantic analysis and to the correlative assumption that semantic content has to be equated with logical form. Once we reject such idea, we have no longer reasons to claim that logical form has to be

pragmatically enriched, since logical form is no longer the 'core source of meaning'.

Logical form is what it is: the output of syntactic processing, and all attempts to make it what it is not, or embellish or complete it with information coming from elsewhere, succumb to the myth that gives the logical form a privileged place in utterance interpretation, that is treats it as the core source of meaning. The latter, however, is not an assumption that one must necessarily follow.⁷

All in all, that of logical form can be maintained as 'at best a theoretical construct device for explanatory purposes rather than a viable stage in processing meaning'⁸

What does it mean, then, to reject the centrality of the notion of logical form? It means to reject the heart of the very idea of semantic underdeterminacy. Grice's central precept was the one summed up in his Modified Ockham Razor that 'senses has not to be multiplied beyond necessity'. Accordingly, far from posit ambiguities in cases of multiple readings, it is better to acknowledge a single semantic, more general, meaning which can then undergo pragmatic processes of exploitation and give rise to the multiple readings.

Semantic underdeterminacy view start from the recognition of such precept and then concludes that, when the resolution of similar multiple readings affects the determination of the semantic content, logical form has to be underdetermined (or, in Atlas's view, unspecified) with respect to such contextual parameters.

If we look at this analysis more closely, it clearly appears that the unspoken assumption is that logical form has to be equated to semantic representation. This is why, following Stanley and others, tracing back to logical form all contextual effects of truth-conditions seems and accordingly get a

⁷ Jaszczolt (2005a): 19.

⁸ Jaszczolt (2005a): 25.

richer semantic representation is claimed to be a definitive rejection of the semantic underdeterminacy thesis.

But, if we acknowledge for a rich semantic representation, why should such semantic representation be constrained at the level of logical form, traditionally conceived? Once again, it seems that the assumption of syntactic output as the privileged source of compositional representation of meaning is responsible for such analysis.

Accordingly, DS does not allow for semantic underdeterminacy as well as for semantic ambiguity. Or, better, it acknowledges semantic representation to be underdetermined only in those cases where it seems to play a cognitive role, that is 'in the situations where the addressee reasons from genuinely underspecified or ambiguous premises':

In other words, in addition to saying that underspecified semantic representation is not normally a cognitively real level of utterance processing, I am saying that even theoretically it need not be discerned very often⁹.

However, it seems that rejecting both ambiguity and underspecified semantic representation left us without a way for acknowledging for the standard case study of semantic underdeterminacy view. In fact, one cannot resort to a skeleton logical form to be filled by means of hidden indexicals, since there is no such thing as a logical form in standard sense. Moreover, neither can one claim for any of the underspecified semantic schemas which are accounted for in the different theories, nor it is possible to argue in favour of any of the other forms of semantic/pragmatic enrichment/development of the semantic representation, insofar as such semantic representation (conceived as the output of syntactic module) has simply disappeared from our theoretical picture. As a consequence:

In Default Semantics (...) logical form has no privileged status. In such an approach to meaning construction, there is no semantics/ prag-

⁹ Jaszczolt (2005b): 11-12.

matics boundary, and the ambiguity/underspecification dilemma proves to be a wrongly posed problem¹⁰.

However, given the overriding both of the semantics/pragmatics distinction and of the ambiguity/underdeterminacy alternatives, how it is now possible to fruitfully deal with the various case study so far considered?

In DS, the answer to this question consists in moving the level of semantic representation, 'so to speak, one level higher'¹¹ and, furthermore, in considering the various sources which contribute to such higher single level representation 'on equal footing'.

It might be of help considering the Table 3.1¹². Here I schematically summarized the various theories taken into account with respect to the way each of these paradigms shapes the sub-distinctions within the semantics/pragmatics boundary.

<i>Author</i>	<i>Semantic representation</i>	<i>Disambiguation & reference resolution</i>	<i>Minimal proposition</i>	<i>Enriched proposition</i>	<i>Additional proposition</i>
Grice 1989	Sentence meaning	What is said		Implicature	
Relevance Theory	Semantics ₁	Explicature ⇒ Semantics ₂			Implicature
Levinson 2000	What	is said		GCI (<i>defaults</i>)	PCI
Recanati 2004	Sentence meaning	What is said _{min}		WIS _{prag}	Implicature
Bach 1994	What	is said		Implicature	Implicature

Table 3.1

Although very differentiated, it is worth noting that *all* the theories fit the scheme provided in the first row of

¹⁰ Jaszczolt (1999): 9.

¹¹ Jaszczolt (2005a): 91.

¹² This is a revised version of the table in Levinson (2000): 195.

the table. That is to say: even though there are theories which allow for a 'parallel' processing between semantic and pragmatic contribution to utterance meaning (e.g. Relevance Theory and truth-conditional pragmatics and, in a sense, Levinson's view), nonetheless all such approaches acknowledge for a left-to-right reading of the table above, which crucially involves a 'syntax-based logical form in the process of utterance interpretation that is temporally prior to the output of the other sources'¹³.

DS overrides such level of representation (the column in light-blue in Table 3.1) and moves the semantic output one level higher than the other sources of linguistic meaning which are conceived on equal footing.

Two questions naturally arise. Provided that completely different sources of meaning contribute to a single semantic representation, which kind of semantics is in play here? And, secondly, given that information from extra-linguistic context enter in the determination of such single representation, why is it Default Semantics and not Pragmatics?

The answer to the first question is that this is a kind of non-linguistic semantics, whose objects are 'thought-like objects'. It is a kind of semantics more close to Carston's truth-conditional semantics (Semantics₂) in the table 3.1, but without entailing any development of the logical form to get a full thought (or proposition)¹⁴.

As for the second issue, it is true that DS allows contribution from any source to contribute to the semantic content. In this respect, therefore, it is in agreement and goes even far beyond truth-conditional pragmatics. However, as we will see, it crucially rests on the assumption that such complex set of contributions can be semanticized in a singular, though dynamic, semantic representation.

¹³ Jaszczolt (2005a): 94.

¹⁴ As a matter of fact, in DS there is no commitment to the representation of 'thoughts'. What is semantically represented is a more coarse-grained representation of what is truth-conditionally relevant in the representation of a thought, something which DS labels as 'generalization over thoughts'. This is why, as we will see, the basic units of analysis in DS are neither sentences nor utterances but rather 'acts of communication'. See Jaszczolt (2005a): 74-75.

DS is thus contextualist as regards to the truth-conditional content, however it does not share with Recanati's view the idea that the nature of speaker's meaning is integrally pragmatic¹⁵.

In the next section we will see more closely how such single level semantic representation looks like.

3.4 MERGER REPRESENTATIONS

3.4.1 Recasting theoretical constructs

We have seen that the central assumption in DS is that all possible sources of linguistic information are regarded as on equal footing and they all contribute to a unique, single-level semantic representation.

Such conclusion of DS is a natural consequence of a methodological principle, which is assumed in DS and which is claimed by Jaszczolt to be an application of Grice's Modified Occam's Razor to levels of representation of meaning.

As we know, Grice's MOR states that 'senses should not be multiplied beyond necessity'. Now, according to Jaszczolt such principle has been betrayed in semantic underdeterminacy view, since in order to avoid the multiplication of senses (semantic ambiguity) theorists have postulated the multiplication of levels of meaning (to account for different degrees of underspecified logical form). Once we reject the idea that underspecification has in fact a role to play, unless in context where it has psychological relevance, there is no more room left for multiple layers of meaning.

The methodological principle of Parsimony of Levels states as follows:

POI Levels of senses are not to be multiplied beyond necessity¹⁶.

As a result of PoL, no independent semantic realization is assigned to a syntax-based logical form of the sentence.

¹⁵ See Jaszczolt (2005a): 96.

¹⁶ Jaszczolt (2005a): 14.

Such an apparently simple move allows DS to argue against the theoretical utility of the following constructs:

- Semantic underdeterminacy
- Logical form
- Sentence meaning
- What is said
- Middle level of meaning (Bach, Levinson)
- Semantics/Pragmatics borderline.

I have already give reasons for the rejections of the first two abovementioned points.

Given the assumption about the equal compositional value of the various sources of meaning, utterance meaning is not primarily governed by constraints of word meaning and sentence structure. Accordingly, given PoL, there is no need for such level of meaning as 'sentence meaning' to be semantically realized in the theory.

Hence, provided we get rid of sentence meaning as a notion having semantic realization in our theory, the closely related notion of 'what is said' loses its theoretical importance. This is straightforward if WIS is regarded in Grice's terms as a minimally contextually saturated logical form.

However, also when considered in Recanati's terms as the first conscious truth-evaluable representation made available by the speaker, it is nonetheless the output of an associative semantico-pragmatic train of processing which has at its basis a syntax-based form. So, we can get rid of Recanati's WIS as well.

According to Jaszczolt, indeed, the notion of WIS is theoretically redundant as it is an unnecessary complication deriving from considering sentence level as the core source of meaning. Moreover it is a senseless notion if we try to use it without further specifications, like: '(i) in what unit: sentence, utterance, discourse;²⁹ (ii) by what/whom: by the unit considered or by the speaker; and (iii) from whose

perspective: the speaker's, the audience's, or the theoretician's¹⁷.'

All in all, I propose to retain the semantic innocence and treat what is said as it is treated in everyday parlance and not introduce it to semantic theory. What is said is not a level in utterance processing; it is not a theoretical unit either. It can be many things. And if it can be many things, let us respectfully exclude it from theorizing¹⁸.

As for the variously advocated middle level of meaning, DS has it easy to reject Bachian conception of 'implicature'. Bach's implicatures are a middle level between minimal proposition and implicature and are accordingly introduced to reject the intrusionist view. Bach's implicature (driven by the processes of completion and expansion) are indeed subcategories of what is said, regarded as the output of syntax (plus saturation). Now, if we have no longer a notion of WIS it is hard to see how Bachian implicature can arise.

As for Levinson's utterance-type meaning, the point is much more crucial in DS, as Levinson's view calls into account the very notion of default interpretations. As already mentioned, I think that Jaszczolt has perhaps one of the most conclusive objections against Levinson's middle level. The category of GCI as shaped in Levinson's theory is rather eclectic.

All it does is create an illusion of categorial unity beyond the eclectic collection of salient senses¹⁹.

. Levinson's postulation of a single middle level of meaning including a great variety of units from which GCIs arise seems to be widely *ad hoc*. Moreover, GCI are not implicature in standard Gricean sense insofar as they are

¹⁷ Jaszczolt (2005a): 22.

¹⁸ Jaszczolt (2005a): 24.

¹⁹ Jaszczolt (2005a): 43.

claimed to arise locally and not at propositional level. And the related cancellability of GCIs seems to run against the primary purpose of a theory of default interpretations, i.e. give reason of the speed and efficiency of human communication. In conclusion:

If embellishments are eclectic as far as their sources are concerned, then the 'level' they create cannot be but a waste basket²⁰.

Finally, the whole construction which is attempted in DS leads almost naturally to the conclusion that the Semantics/Pragmatics issue is at least a wrong posed problem. Once a single rich semantic representation, allowing for contribution of different sources on equal footing, is acknowledged there is no semantics/pragmatics (but also no syntax/semantics or syntax/pragmatics) borderline.

Once the assumption of a merger is in place, the interfaces do not belong to our theoretical discourse. They pose the problem of interpretation in the wrong way, focusing on what is only an intratheoretic issue of boundaries, rather than an issue about discourse processing²¹.

3.4.2 Acts of communication and compositionality

I have so far set the scene through showing how DS completely recasts the standardly used theoretical constructs. However, besides such *pars destruens*, DS introduces new notions and concepts to account with such reformulated scenario.

Rejecting the view that language understanding proceeds linearly from sentence meaning to implicature, in favour of a picture in which a single semantic representation receives information from different and equally relevant sources, requires asking which kind of unit is the one which is object of semantic analysis in DS.

²⁰ Jaszczolt (2005a): 26.

²¹ Jaszczolt (2005a): 33.

Semantic unities in DS could be of course be utterances, and there is no doubt that DS *is* a theory of utterance meaning. However, as we will see, insofar as it is a dynamic semantics and it resort to a formalism (the one of DRT) which is explicitly construed to account for pieces of discourse which are larger than sentences (and, accordingly, utterances of such sentences), utterances cannot be the ideal unit of our theory.

Moreover, DS is radically post-Gricean insofar as it defines meaning in terms of a composite notion²². However, DS takes such Gricean assumption to its extreme consequences, and defines meaning not as (primarily) the output of the *stricto sensu* linguistic source of information but as the merging of multiple sources of information which 'are treated as temporally interrelated as far as their contribution to the merger representation is concerned²³.'

On this view, taking utterances as the units of DS would be misleading as utterances are standardly regarded as primarily linked to sentences.

For both these reasons, DS is claimed to be rather a semantic theory of 'acts of communication'. The locution seems appropriate, since it is designed to be intermediate between the too narrow notion of 'utterances' and the too wide notion of 'thoughts'.

Relevance Theoretic truth-conditional semantics (Semantics₂ in Table 3.1) is claimed to be a semantics whose unit of analysis are thoughts (or proposition). It is a non-formal, entirely conceptual, sort of semantics which is entirely guided by the principles of Relevance. Jaszczolt shares with Carston the idea that thoughts are too much fine-grained to serve as a unit of semantic analysis in formal terms. However, she argues that we can single out a representation which, though more coarse-grained than thoughts, is nonetheless capable of capturing the relevant truth-conditional import of various sources of information.

Acts of communication so defined appears then to be a suitable semantic unity which is basically not linguistic but

²² See Levinson (2000): 91.

²³ Jaszczolt (2005a): 94.

acts as a generalization over thoughts²⁴. It is a generalization insofar as the semantic representation is not claimed to be able to capture the structure of a thought, but only to represent its truth-conditional content.

Now, in addition, such truth-conditional content is claimed to be compositional. This is why DS is qualified as a 'compositional theory of acts of communication'.

But what kind of compositionality is here in play? Well, of course there is no matter of compositionality in the traditional Fregean sense, as compositionality of word meanings in accordance with sentence structure. In fact, we are working under the proviso that word meaning and sentence structure are only *one of* the multiple sources of acts of communication. But, once again, how it is possible to preserve a compositional semantics while rejecting the centrality of syntactic form?

I should now introduce a further central concept in DS, that of *merger representation* (henceforth MR).

MRs are exactly the sort of semantic representation of acts of communication. They are mergers of the following four sources:

1. Combination of word meaning and sentence structure
2. Conscious pragmatic inference₁
3. Cognitive defaults
4. Social-cultural defaults₁

It is important to remember that all these sources are claimed to be on the same level. Points 1. and 4. in the list hold the subscript ₁ to distinguish them from social-cultural defaults and conscious pragmatics inferences which are at the base of the generation of implicatures. MR, indeed, are representation of meaning of acts of communication, they merge information coming from linguistic knowledge, mental states and social-cultural encyclopedic information. DS shares with the extant paradigms accounted

²⁴ Jaszczolt (2005a): 240.

in the previous chapter the intuitive idea that (particularized) implicatures come one (inferential) step later.

Compositionality in DS arises at the upper level of MRs. There is no need for compositionality 'at the level of the *combination of word meaning and sentence structure* - neither is such a level necessary as an independent construct'²⁵.

Rather,

Compositionality is then, so to speak, removed from the linguistic 'level' and placed on the level of representing acts of communication. It can be appropriately called metacompositionality²⁶.

3.4.3 Intentionality and cognitive defaults

I will leave for the moment the analysis of the way in which the compositional representation is accounted more specifically (i.e. also in formal details) and turn to the more general topic of the status of the sources of MR.

DS is claimed to rest on a leading assumption (from [Searle \(1984\)](#): 89).

Just as it was bad science to treat systems that lack intentionality as if they had it, so it is equally bad science to treat systems that have intrinsic intentionality as if they lacked it.

DS resorts to the influential tradition which can be traced back to the works of, among others, Brentano, Bolzano and Husserl and Searle. According to such tradition, mental states exhibit 'aboutness', that is to say they have the property of being about something or to have an object.

Intentionality as a propriety of mental states or as a feature of our brain²⁷ is inherited by language. What is for human language to have intentionality? It is the same as to have a referent of discourse. In DS it is assumed that the primary intention in communication is to secure a referent of the speaker's utterance. Accordingly,

²⁵ [Jaszczolt \(2005a\)](#): 83.

²⁶ [Jaszczolt \(2005a\)](#): 83.

²⁷ [Damasio \(1999\)](#): 78-79.

In short, intentionality can be understood for our purposes as that property of linguistic expressions that makes them refer to objects \bar{U} be it individuals or states, events or processes. 'Intentional' can be coarsely equated with having a referent. If we allow events, states and processes to count as such referents, then intentionality can be understood as the *referentiality* of linguistic expressions.

Intentionality is thus intended as referentiality in DS. Such move can be read as a radicalization of Grice's intuition that reference assignment is the only pragmatic process which is part of the semantics²⁸.

Moreover, intentionality in DS, according to Searle's precept, is claimed to be one of the possible and allowed sources of speaker's meaning. More importantly, the acknowledgment of intentionality as one of the sources of meaning makes it possible to introduce the notion of default interpretation, at least in its cognitive variety.

Cognitive defaults (CD) in DS are the sort of preferred interpretation which can be traced back to the intentionality. How? To explain the point it is needed to introduce to further principles of DS.

One is the already mentioned principle of Primary Intention, which states that:

- PI The primary role of intention in communication is to secure the referent of the speaker's utterance²⁹.

The second is the principle of Degree of Intentions:

- DI Intentions allow for degrees³⁰.

The idea behind the two principles PI and DI is that it is possible to account for many of the issue traditionally

²⁸ See Jaszczolt (2005a): 115 for a similar remark.

²⁹ Jaszczolt (2005a): 52.

³⁰ Jaszczolt (2005a): 51.

accounted in the semantics/pragmatics interface by resorting to these two simple principles and allowing the meaning of acts of communication to be (also) a function of the strength or degree of intentionality of a certain expression.

The strongest intentionality is also the default intentionality and it gives rise to cognitive defaults, i.e. default which can be traced back to intentions of the underlying mental states according to PI. DI, on the other hand, which is a result of the assumed basic 'referentiality' of linguistic expressions, enters in the assignment of referents in cases of presupposition, anaphoric links, definite descriptions, in accordance with PI.

To explain the point, let's consider a simple example which takes into account definite descriptions³¹.

(62) The best architect designed this church.

According to the semantic underdeterminacy view, sentence (62) is semantically underspecified as regards to the kind of reference which is held by the definite description. In fact, the phrase 'the best architect' can refer to some specific individual (say, Antoni Gaudí, in a context in which the utterer of (62) is pointing to the *Sagrada Família* in Barcelona), or it can have no referential import and be a property attributed to who the utterer of (62) thinks is the best architect, whoever he is.

According to Jaszczolt³², there is a third type of reading which is allowed, that is the one involving a sort of referential mistake. Accordingly, the speaker of refchurch can utter the definite description with the (mistaken) intention to refer to, say, Simon Guggenheim, designed the *Sagrada Família*).

Correlatively, we have three alternative logical forms to account for the (underspecified) sentence (62), corresponding respectively to the referential, the mistakenly referential and the attributive reading.:

³¹ The example and relative discussion are taken from Jaszczolt (2005a): 106-111.

³² See for example Jaszczolt (2002): 130ff.

- (62.1) Designed the church (a) a = Antoni Gaudì
 (62.2) Designed the church (a') a' = Antoni Gaudì
 (62.3) $\exists x(\text{Designed this church } (x) \wedge \forall y(\text{Designed this church } (y) \rightarrow y = x) \wedge \text{Best architect } (x))$

It seems that the, in the most contexts, the referential reading is the unmarked one, that is it is the preferred interpretation unless the context suggests otherwise. Accordingly, Jaszczolt claims, the strongest intentionality is linked with the referential use of the definite description.

In such case the intentionality is un-dispersed, intersubjectively accepted and so it is the best candidate to hold the strongest, default intentionality.

In the readings (62.2) and (62.3) the intentionality of the underlying mental state is respectively dispersed, subjectively strong but intersubjectively unacceptable, and very weak (in case of attributive use).

The idea should be clear: instead of accounting for the different readings in terms of semantic unspecificity of the logical form, DS claims that the alternative readings are function of the intentionality of expression which is inherited from the degree of intentionality of the underlying mental states. The strongest the intentionality, the strongest is the chance for the default interpretation to arise.

We have then a notion of default which does not invoke an eclectic and rather un-explanatory category of expression-types but, rather, resorts to the intentionality in its different degree as a possible source of utterance meaning.

In short, where intentionality-based defaults are discernible, intentions interact with the logical form and produce a full semantic representation³³.

³³ Jaszczolt (2005b): 15.

3.5 DRT IN A NUTSHELL

DRT is a semantic theory developed by Hans Kamp, starting from his seminal paper [Kamp \(1981\)](#).

The main idea behind the theory is that semantic interpretation should take into account not sentences in isolation but, rather, discourse chunks.

One related main feature of DRT is the idea that discourse interpretation is incremental. This is to say that, in order to give formalization of the way in which interpreters understands pieces of discourse it is needed to acknowledge for the way in which the interpretation of new sentences *updates* the context in which the following sentence will be uttered.

On this approach, there is no clear-cut distinction between content and context, insofar as the content of a given sentence in discourse serves as the context of the following one. DRT's strategy of updating context aims to mirror the actual processing of utterance understanding. In fact, DRT is furthermore a representationalist theory of interpretation, i.e. the semantic structures (Discourse Representation Structures or DRSs in DRT) are claimed to be a reproduction of the kind of mental representation which one interpreter build up in the course of discourse interpretation.

DRT was principally introduced to give an analysis of anaphora resolution, and particularly to provide a successful formalization for well-known Geach's Donkey Sentences.

Donkey Sentences are problematic sentences like [\(63\)](#):

(63) Every farmer who owns a donkey beats it.

The problem with sentences like [\(63\)](#) is that if we try to give an analysis of it in classic first-order predicate logic it would seem that the following would be the case:

$$(63.1) \quad \forall(x)(\text{Farmer}(x) \wedge \exists(y)(\text{Donkey}(y) \wedge \text{Owns}(x, y)) \rightarrow \text{Beat}(x, y))$$

However, such analysis turns out to be incorrect, insofar as the second y is out of the scope of the existential quantifier.

The right rendering of the sentences would be then as in (63.2):

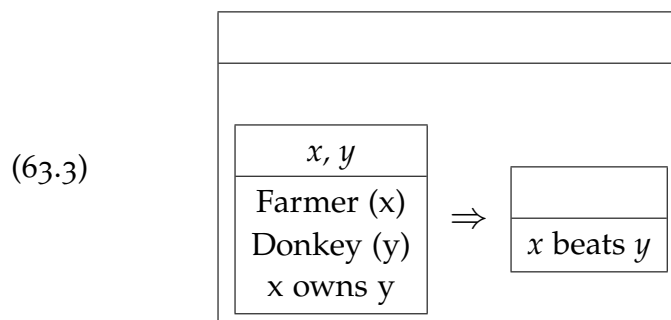
$$(63.2) \quad \forall(x)\forall(y)((\text{Farmer}(x) \wedge \text{Donkey}(y) \wedge \text{Owns}(x, y)) \rightarrow \text{Beat}(x, y))$$

We are accordingly left with the problem of how to account for the fact that to an indefinite construction (like our 'a donkey') has to be assigned universal force in order to capture the anaphorical link between the indefinite description and the indefinite pronoun ('it').

In DRT we have DRS which are composed as follows: we have a universe of discourse referents which are introduced in the first row of the diagram and which correspond to bound variables in the classic first-order predicate logic, and a list of 'discourse conditions' in the main box, with correspond to predicates of first order logic.

A DRS is verified by a so called embedding function with maps discourse referents onto individuals of a given model M . Accordingly, sentence interpretations in DRT can be standardly provided in model-theoretic fashion.

In DRT the interpretation of a sentence like (63) is straightforwardly given in a DRS like (63.3):



Given the definition of embedding function (i.e. verifying function) for DRSs (I will drop details here), the reference markers in the antecedent box are accessible to the

consequent, so it is possible for the consequent to refer to y . The point can be further spelled out by means of an intermediate representation where we could introduce further reference markers (say, v and w) in the right box and accordingly add the conditions $x = v$, $y = w$ and $\text{Beats}(v, w)$ ³⁴.

The main point, however, is that DRS assigns no quantifying force to indefinites *per se*. An indefinite like 'a donkey' in (63) only introduce a new discourse referent.

What quantifying force they seem to have is not theirs, but derives from the environment in which they occur. If the semantic material associated with 'a donkey' is introduced in the main DRS (...) the quantifying effect will be existential, owing to the fact that this DRS is verified in a model M iff there is a way of verifying it in M . If the semantic material associated with 'a donkey' is introduced in the antecedent of a conditional, as in [(63.3)], the quantifying effect will be universal, owing to the fact that a condition $K \rightarrow K'$ is verified in M iff every way of verifying K can be extended to a way of verifying K' . This view on indefinites lies at the heart of DRT.

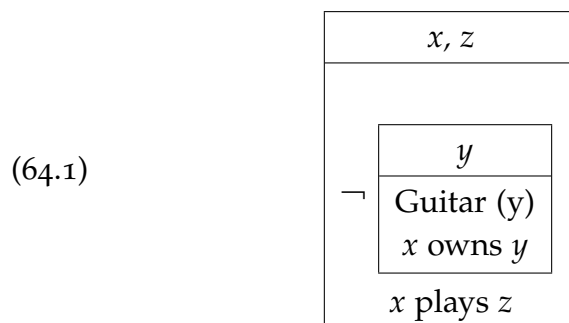
Hence, given the formalism of DRT, the issues related to 'donkey sentences' disappear and the formal treatment that DRT provides in terms of DRSs is quite unproblematic and straightforward. Also, the constraints on marker accessibility which stem from the semantics defined for DRSs,

³⁴ Notice that the discourse referents are not introduced in the main DRS but in a newly introduced subordinate DRS. This is why, intuitively, the universally quantified expression concerns discourse referents which are only hypothetically introduced as arbitrary bearers of the conditions stated in the antecedent and are not individuals which are part of the domain of the main DRS ('markers belonging to the universe of the main DRS get an existential interpretation' van Eijck & Kamp (1997): 186.). This obviously makes them non accessible to anaphoric link with the main DRS: a restrictive condition which, unsurprisingly, turns out to make the right prediction. See Kamp & Reyle (1993): 166-171.

makes it possible to get the available anaphoric links between discourse referents and to preclude the possibility of unavailable links as in (64):

(64) John does not own a guitar. He plays it.

The DRS for (64) is as in (64.1)



In such DRS variable y is introduced in a subordinate DRS and is then not accessible by the main DRS. Accordingly the marker z cannot bind y (by means of a condition like $z = y$). This means that it is not possible to interpret the pronoun 'it' as referring to the 'guitar' in the first sentence. This happens in fact to be the right prediction.

I will not enter into details of the semantics for DRS. This sketchy overview on DRT was only given to make the reader a bit familiar with the formalism which (in an emended and extended form) is used in DS.

Besides formalities, it is worth stressing some main features of a theory like DRT which are crucial for its being a semantic formal theory for the paradigm of DS:

- DRT is a semantic theory of 'coherent **multi-sentence** discourse and text'. Accordingly, it takes into account and produces semantic representation which goes beyond the borderlines of sentences uttered in isolation.
- As a result of the multi-sentential nature of its semantics, DRT is an **incremental** theory, which is claimed

to mirror the actual process of discourse understanding which precedes 'bit by bit'.

- Finally, given these two assumptions, DRT is a theory which is often (even if not necessarily) equipped with a dynamic semantics, 'where the center of the stage, occupied so long by the concept of truth with respect to appropriate models, has been replaced by context change conditions, with truth conditions defined in terms of those'³⁵

3.6 THE BEST ARCHITECT

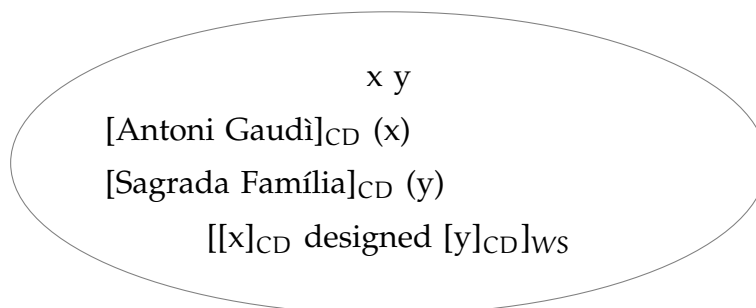
I will now turn back to example (62). As we have seen, there are three possible interpretations for the definite description 'the best architect', which in DS are claimed to reflect three possible degrees of intentionality of the underlying mental belief, respectively

1. strong or un-dispersed intentionality = default, referential reading
2. dispersed intentionality (between speaker and hearer) = non-default referential reading
3. weakest, dispersed intentionality = attributive reading

Using a DRT-style diagrams, Jaszczolt argues that the following are suitable semantic representation for the three readings:

(62.1.1) Default referential reading

³⁵ van Eijck & Kamp (1997): 181.

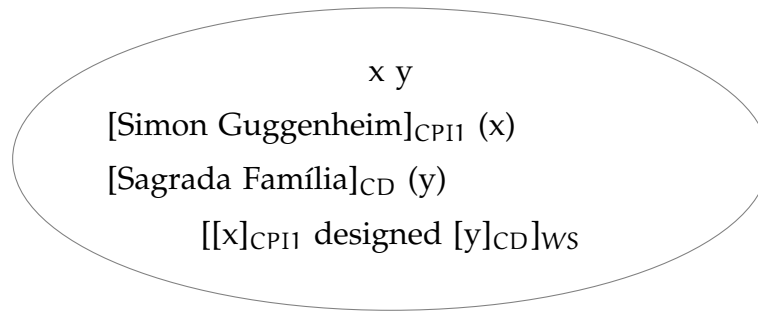


As in DRT diagrams, we have a first line in which the universe of the DRS is introduced and the following lines in which the conditions are given. The only difference with DRT is that in Default Semantics DRS syntax is not the only input of semantic representation, that's why the content of the square brackets can be something which is not even syntactically realized in the sentence. This is the case for the description 'the best architect' and the demonstrative 'this church'. Instead of such phrases we found in the semantic representation the correspondent referents, with the subscribed indication of the source which is responsible for a particular bracketed material³⁶.

Merger representation (62.1.1) represents then the first, default referential reading, where the referent of the description 'the best architect' and of the demonstrative 'this church' are provided by means of Cognitive Default (CD) and the resultant relation 'x designed y' is given by the interaction of word meaning and sentence structure (WS) and cognitive defaults.

(62.2.1) Non-default referential reading

³⁶ Obviously, the semantics of our DRSs has to be implemented to allow variables for referent markers to range over the set of discourse referents both in default and non-default readings

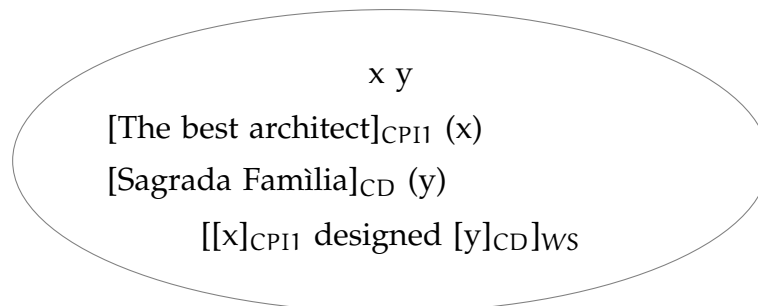


In an analogous way, MR for (62.2) is given by (62.2.1). In such case we have that the mistaken referent intended by the speaker of (62) is recovered by the hearer. Assuming the hearer 'has the correct and sufficient knowledge base for referential identification of the individual talked about', such process of recovering of a speaker's mistakenly intended referent involves by the hearer a process of overriding of the default.

Two points are worth noting: first, that in DS semantic representations are representations mirroring the process of understanding of an act of communication by a *model hearer*.

Secondly, that the overriding of the default reading in case of conscious pragmatic inference (CPI₁) does not involve the cancellation of the default, since - different from Levinson's cancellable GCIs - both CD and CPI₁ are claimed to be computed at global level, that is: after the whole utterance (or, better, act of communication) has been processed. Accordingly, there is no risk that the overriding of defaults leads to a slowdown, rather than to a speedup, of the interpretation process.

(62.3.1) Attributive reading



The attributive interpretation comes with the weakest intentionality. The default reading does not arise and 'the speaker's thought is taken to be about no particular, known, identifiable individual³⁷'.

In conclusion, what the case of definite descriptions shows is that in a typical context in which multiple readings are allowed, there is no need to resort to semantic underdeterminacy. First of all, as the semantic representation is a merger which mirrors the result of a process of interpretation, it is straightforwardly introduced the pretty intuitive claim that underdeterminacy of logical form, as well as ambiguity, is in play only when it has psychological relevance, that is to say not as frequently as the semantic underdeterminacy view seems to suggest.

Furthermore, there is no longer room for discussion concerning the role that the underspecified propositional form holds in the actual process of utterance understanding, since it has in fact none. There is only *one* resultant semantic representation, one which is intended to mirror the mental representation of an ideal hearer. Such mental representation is thought-like (even if it is not claimed to be the representation of a thought), insofar as it represents the truth-conditional skeleton of a hearer's thought. MR is then more coarse-grained than a thought, but, insofar as it is both compositional and truth-conditional, it has at the same time the advantage of being a theoretical object which is much more suitable for semantic analysis than a thought by itself.

3.7 CONNECTIVES IN DS

3.7.1 Overview

In conclusion of this discussion of DS, I will now address the topic which has been a privileged case study in the present work, i.e. the issue concerning the alleged semantic ambiguity of logical connectives in natural language.

³⁷ Jaszczolt (2005a): 113.

In chapter one (see p. 2), I started the discussion of Grice's theory of meaning with a long quotation from the very beginning of Grice's *William James Lectures*. Such initial passage is indeed devoted to the theme of sentential connectives and their counterpart in natural language and shows how this sort of questions, concerning the best way to shape the borderline between logical particles and their enriched natural language equivalents.

As a philosopher and a logician, Grice was manifested a keen interest for this kind of issues, which are able to shed light to the very heart of the relation between logic and natural language semantics.

As we know, Grice's assumption of methodological parsimony (his Modified Occam's Razor), led us to the search for a unitary and entirely pragmatic treatment of the enriched interpretation of logical particles. Senses are not to be multiplied beyond necessity: therefore, there is no need to postulate an ambiguity between two or more meanings of logical connectives. By contrast, it is enough to single out a unique, more general interpretation - the one which is along the lines of the truth-tables for classical boolean connectives - as the semantic meaning. And to derive all the enriched non-truth functional contributions which are standardly attached to sentential connectives as occurrences of (generalized) conversational implicatures.

Grice devoted several pages to this topic, particularly addressing the issue of the inclusive/exclusive ambiguity of disjunction³⁸ and the defence of a purely logical way of describing implication in natural language³⁹.

Grice's analysis was famously defended by Gerald Gazdar⁴⁰, who also resorts to Gricean principles of conversation in order to show why only the classical negation operator (\neg) is present in English among the four combinatorially available one-place operators and, analogously, why only the four two-place connectives are lexically realized ($\wedge, \vee, \rightarrow, \leftrightarrow$) among the sixteen available possibility⁴¹.

38 See Grice (1989): 44ff.

39 See Grice (1989): 58-85.

40 See Gazdar (1979): chapter 4.

41 Gazdar (1979): 68ff.

Gazdar also attempts a defence of Grice's view against the already mentioned approach of Cohen (1971). As we have seen, Cohen tried to show that the Grice's analysis in terms of GCIs as allegedly responsible for the enriched interpretations of sentential connectives cannot be maintained, insofar as such implicatures would have to arise also in contexts in which sentences triggering GCIs are embedded in longer and more complex sentences (e.g. conditionals) and accordingly does not express a complete statement, in blatant contradiction with Grice's own theory of conversational implicatures.

Gazdar's defence of the traditional view consists in rejecting Grice's analysis of natural language conditionals in terms of material implication. Following Stalnaker's analysis of conditionals, Gazdar argues that the role of the antecedent in a conditional is simply to update the context of evaluation of the whole sentence with information which are consistent with the previous contextual assumptions. In case of examples like the ones of the old king's death (see (37) and (37.1) of chapter 2, p. 71), then, both the consequents would be evaluated with respect to the information made available in the context by the antecedents, including the respective implicatures. That is to say, in the first case, the fact that 'Tom will be quite content' would be evaluated in a context in which, given the antecedent and the relative implicature, old king's death precedes the declaration of a republic, while in the second the same fact would be evaluated in a context in which the temporal order of the events is the opposite.

If, unlike Grice, we are not tied to a classical view of natural language semantics, then there is no good reason to try and treat all or any conditionals as cases of material implication. At the same time, just because we allow a more complex semantics for *if...then...* sentences on the basis of rather strong evidence, this does not entitle us to elaborate the semantics of all the other logical operators on the basis of the argument presented by Cohen. This is especially

so when the apparent deviations of *and* from \wedge and *or* from \vee are so well accounted for by the Gricean hypothesis.

All in all, Gazdar's defence of Grice's analysis rests on the possibility for implicatures to be generated locally, contrary to Gricean view.

Levinson's view, as we have seen, also is an attempt of preserving Grice's analysis in terms of GCIs. Levinson tries to show that intrusive constructions (as he labels contexts like the one of Cohen's 'old king's death'), far from showing the insufficiency of Grice's analysis, are a proof of the peculiar intermediate status of GCIs which are default interpretation triggered by the use of certain expression-types (like, e.g., natural language. Given the assumption of Grice's circle, i.e. that generalized conversational implicatures can contribute to the truth-conditional content of a sentence, such preferred interpretation are allowed to be generated also at sub-sentential level (i.e. locally) and are subject of cancellation given the appropriate contrasting evidence.

All in all, however, though having a peculiar nature, enriched interpretations of logical connectives are treated by Levinson as cases of conversational implicatures and the Gricean analysis is therefore preserved.

As we have seen, an utterly different analysis is given in truth-conditional pragmatics in terms of free enrichment. Conjunction buttressing, exclusive reading of disjunction, conditional perfection⁴² are all cases in which literal meaning undergoes a train of unconscious pragmatic processes which eventually yield an enriched proposition, which is

⁴² For Conditional perfection, firstly noticed by Geis & Zwicky (1971), it is intended the phenomenon by virtue of which a conditional is strengthened to a biconditional as in

(63) If you mow the lawn, I will give you five dollars.

. Example (63) seems to trigger the implicature that 'if you don't mow the lawn, I won't give you five dollars', and accordingly that 'If and only if you mow the lawn, I will give you five dollars', i.e. a strengthening from *if* to *iff*. For discussion, see e.g. Jaszczolt (2002): 78ff, Levinson (2000): 119ff. and van der Auwera (1997).

equated with What is said, as the first consciously available representation of speaker's meaning.

In an analogous way, in Relevance Theoretic framework, enriched interpretation of connectives are regarded as none-inferences, that is they are not occurrences of implicatures, but of development of the logical form by means of inferences triggered by the contexts. In Relevance Theory, a major distinction is made between conceptual and procedural meaning⁴³: it is argued that some connectives, like the standard boolean connectives, do contribute to the encoded conceptual (i.e., in terms of RT, truth-conditional) semantic content, while others discourse markers (like 'therefore', 'nonetheless', etc...) do not contribute to the conceptual content, but rather provide 'a constraint on, or indication of, the way some aspect of pragmatic inference should proceed'⁴⁴.

Be that as it may, according to Carston, thinking of inferences in case of connectives as default inferences (in the sense of Levinson's GCIs) 'runs into a number of problems'. As for the case of 'and', e.g., the default view:

...does not account for the wide range of subtly different temporal, cause-consequence and other relations, which 'and'-conjunctions can communicate (...); it postulates a default inference rule for temporal sequence attached to 'and', but the same inference goes through for juxtaposed cases (...); it cannot account for the fact that temporal sequence may be assumed, on the basis of conjunct ordering, even when it is inconsistent with highly accessible general knowledge (and so should be defeated according to GCI theory)⁴⁵.

Though not allowing for defaults, nonetheless Carston's analysis is based on the existence of highly accessible cognitive scripts, i.e. for temporal ordering or cause/effect

43 The distinction is due to Diane Blakemore and introduced in [Blakemore \(1987\)](#).

44 [Carston \(2002\)](#): 379.

45 [Carston \(2002\)](#): 259 fn. 1.

relation in case of 'and'-conjunction. Such mental schemas are accessible by virtue of the cognitive and communicative principles of Relevance, which state, respectively, that 'human cognition tends to be geared towards the maximisation of relevance' and that 'every ostensive stimulus conveys a presumption of its own optimal relevance'⁴⁶.

Considering an example like (64):

- (64) He handed her the scalpel and she made the incision.

Carston gives an explanation in Relevance theoretic terms of the reasons why the interpretation in (64.1) is very much likely to arise than the one in (64.2):

- (64.1) He handed her the scalpel and a second or two later she made the incision with that scalpel.
 (64.2) He handed her the scalpel and simultaneously she made the incision with her pocketknife.

The hearer constructs the most accessible interpretation (that is, the stereotypical one) and, provided that it satisfies his expectation of relevance, he stops there. Abstracted from any narrative or conversational setting as the example is there, the default assumption is that this highly accessible interpretation does give rise to the expected range of effects, so the hearer doesn't go on to consider other less accessible interpretive hypotheses. Furthermore, the other logically possible interpretations, such as [(64.2)], are not just less accessible, but massively much less accessible, and no particular one of them is more obviously available than dozens of others, so that even a hearer dissatisfied with [(64.1)] could have no idea which hypothesis to try next. It follows that a speaker who wanted to communicate something other than [(64.1)] would not

⁴⁶ Sperber & Wilson (1986) : 255.

be able to do so by uttering [(64)] and, if functioning rationally, would not attempt to do so.

3.7.2 The Myth of Logical Connectives?

All summed, hence, it seems that intuitively Carston's relevance theoretic approach, though not resorting to an explicit category of default meanings, is much more close to DS-style explanation, than it is, e.g., an explicitly default oriented approach as Levinson's. And in fact it turns out to be the case.

However, before approaching the relatively simple view of DS on sentential connectives, a point is maybe worth noting. The unspoken assumption that, from Grice's analysis on, is in play in the treatment of sentential connectives in natural language is that of them being the natural counterpart of boolean operators of classical logic. This apparently odd assumption is motivated by a number of arguments: first of all, the simplicity and effectiveness of a semantic analysis in terms of truth-functional particles is hard to be abandoned and it also offers a very elegant and unitary explanation (in terms of pragmatic inferences) of the enriched meanings conveyed by such particles in natural language. However, as the whole range of examples provided in semantic underdeterminacy view, such approach can hardly be maintained, as it is exposed to a number of conclusive counter-examples.

Secondly, one standard argument in favour of the assimilation of natural language connectives to logical ones is the fact that many of the default enrichments which are triggered by means of implicatures are claimed to be universal and, nonetheless not lexicalized in any languages, and accordingly they are claimed to be witnesses of a 'real pressure in language against independent lexicaliation of notions made redundant by implicature'⁴⁷.

To make just an example, it is commonly argued that, though ambiguity is a typical intra-linguistic phenomenon, that is if a word is genuinely ambiguous between two senses

⁴⁷ Gazdar (1979): 78.

in a language, one would expect to find languages in which such ambiguity is resolved. However, this is not the case for the inclusive/exclusive reading of disjunction. To cite the words of Gennaro Chierchia:

Although it would be possible for natural languages to have more than one morpheme to express disjunctions, such morphemes tend to be all systematically ambiguous between an inclusive and an exclusive sense. It would thus be the case of an universal ambiguity, a case without precedent⁴⁸.

However, while we can easily reject the first Gricean argument in favour of the assimilation of natural language connective to logical ones, evidences from cross-linguistic studies make also possible to undermine the second one.

As it is quite conclusively demonstrated by [Mauri & van der Auwera \(2012\)](#) 'the notion of connective is not defined in formal terms. A given interclausal relation may indeed be encoded by an array of morphosyntactic structures, ranging from invariable discourse connectives, to auxiliaries, clitics, pre- and post-positions, case affixes, adverbial affixes and even suprasegmental marking⁴⁹'.

Cross-linguist evidences provided by [Mauri & van der Auwera](#) show that the customary analysis of connectives as abstractions over logical boolean operators is unmotivated and a number of counterarguments runs against such assimilation.

According to the data collected by [Mauri & van der Auwera](#), there is a strong discrepancy between the semantic/pragmatic distinctions which are identified between logical and natural language connectives (temporal, causal ordering of end; inclusive/exclusive reading of disjunction, etc...) and the actually coded distinctions in natural language.

What comparative researches seem to show is, by contrast, that many of the commonly acknowledged distinctions (and exactly those distinction for which semantic and

⁴⁸ [Chierchia \(1997\)](#): 185. Translation mine.

⁴⁹ [Mauri & van der Auwera \(2012\)](#): 1.

pragmatic paradigms have tried to give explanations) are of marginal or even no relevance to natural language.

Reversing Chierchia's argument, it is claimed for example that the unattested existence of independent lexicalization for inclusive and exclusive reading of disjunction, far from showing a universal inferential pattern governed by Gricean maxims, is by contrast index of the irrelevance of such distinction for natural language disjunction.

By contrast, a number of different semantic distinctions are encoded in several languages, such as sequential and non-sequential disjunction, declarative and interrogative disjunction, 'simple' and 'choice-aimed' disjunction, etc... Furthermore, it is easy to find languages which does not encode a connective for 'or' and also, as it has been surprisingly demonstrated by Paul Gil in the case of Maricopa language spoken by Native American in Arizona⁵⁰ languages which lack a connective for 'and'.

In conclusion:

Such a discrepancy strongly challenges the plausibility of a direct equivalence between logical connectives and connectives in natural languages, and suggests that a more promising direction of research would be to understand what strategies such languages employ to express conjunction and disjunction: should we assume that in such cases it is all left to pragmatics? What seems to be more interesting is to examine the division of labor between the part of meaning that is encoded in the connective and the part of meaning that is inferred through pragmatic processes, looking at this borderline as a flexible notch, moving along both a diachronic and a synchronic continuum⁵¹.

According to [Mauri & van der Auwera](#) the semantic/pragmatic borderline as regards to connectives is dynamic in two senses: in diachronic terms, it is easy to see how highly

⁵⁰ [Gil \(1991\)](#).

⁵¹ [Mauri & van der Auwera \(2012\)](#): 3.

conventional implicatures can gradually become lexicalized. This is a phenomenon which has been widely observed and which does not concern primarily sentential connectives (let's think of the shift from 'drinking' to 'drinking alcoholic' which is almost universally lexicalized in European languages).

Secondly, from a synchronic perspective, the borderline is dynamic with respect to the distinction between the kind of information which is encoded and the sort of information which is left to pragmatic inference. As far as such distinction is in play, it is shown that 'the world's languages put the borderline between coding and inferencing at different points along the continuum⁵²'.

Space considerations prevent me from dealing with the wide variety of data which are provided by [Mauri & van der Auwera](#) in favor of their approach. What is worth stressing is only the point that cross-linguistic evidence shows that there is apparently no independent motivation to argue in favor of the equivalence of logical and natural language connectives.

This does not mean that it is useless for the semanticist to try to isolate the encoded, semantic meaning of a particular connective in a given language and to analyze which kind of information is semanticized and which is left to pragmatics. However, such task has to be performed keeping an eye on the proviso that such borderline is flexible, and, more importantly, that the distinctions between encoded and enriched interpretations, for which semantic theories traditionally try to give reasons, can be of marginal (if not of no) linguistic relevance.

3.7.3 Connectives and merger representations

I will now turn back to DS and shortly give an overview on the analysis which in this paradigm is given for the case study of sentential connectives.

Quite surprisingly, it will turn out that the analysis for connectives which is attempted by Jaszczolt in DS seems

⁵² [Mauri & van der Auwera \(2012\)](#): 5.

to match very well the provisos which arise from cross-linguistic studies.

Consider examples (65), (66), (67)⁵³:

- (65) I dropped the glass and it broke.
- (66) I looked up and it started snowing.
- (67) I smiled and John smiled too.

In (65) a cause/effect relation (besides, of course, a temporal enrichment) seems to be quite indisputably involved in the interpretation of the sentence, to the effect that speaker's dropping of the glass caused its breaking.

Consider now example (66). Which kind of relation is triggered here by the conjunction? Of course a relation of temporal order, as it is presumed that the snowfall has begun immediately *after* speaker's looking up. It seems indisputable that there is no causal relation involved here. But what if sentence (66) is uttered by someone equipped with the supernatural power of make it snow, say Santa Claus? In such (however fictional) context, we should recognize that *now* a cause/effect relation is entailed.

Let's turn to example (67). Would we be prepared to say that, in this case, a causal relation is in play or it is only the case for a temporal ordering? Well, as Jaszczolt notices, such example seems to be intermediate between the two just discussed.

What it seems to be concluded by these example is that, intuitively, the enrichment is in a sense default, while in another it is highly dependent on contextual factors (for example me being or not being Santa Claus in example (66)).

The question is thus how can we maintain such intuitions in a way which is consistent with the assumptions of DS.

Apparently, it seems appealing to postulate the existence of a kind of cognitive default to explain those cases, however at a closer glance, such conclusions looks implausible, as it seems that we should allow for the existence of a

⁵³ Examples are from Jaszczolt (2005a): 206-207.

number of different cognitive defaults governing the different sort of event-relations which are triggered in different contexts. Analogously, if we tried to give a Gricean explanation in terms of defaults, to the effect that we postulate that the causal reading in cases like (65) is the default given the degree of informativeness conveyed by the speaker is stronger if the interpretation is causally enriched, such kind of explanation would be hardly controllable and it would easily give rise to overgeneration, that is to the postulation of cognitive defaults where there is none. With the unwelcome side-effect of a decisive weakening of the theory⁵⁴.

However, it seems that explanation in terms of default schemata or cognitive scripts, like the one advocated by Carston, comes at handy at this point. It is an analysis which resorts to a notion of default, but which crucially does not attach such default interpretation to a lexical expression (a connective), but rather to a situation-type of the kind of 'dropping-breaking' one in example (65). This is a solution which allows for a certain degree of context-dependence and at the same time it allows to resort to the concept of default.

But, one could ask, which kind of defaults? If not CD (provided the risk for overgeneration) the only possible alternative in DS are Social Cultural Defaults (SCD₁). As a matter of fact, it seems that such category would do the job in the case of sentential connectives. We have an enriched interpretation which is explained in terms of default, preserving the intuitive appeal of such claim, and at the same time is not attached to a lexical item, preserving the context-dependence of such default inference, and more importantly, we have an explanation which calls into account social-cultural factors which are the kind of factors which, following Mauri & van der Auwera, are claimed to be responsible for the different degree of pragmatic information which is intended to be added to the encoded information.

54 Concerning the risk for overgeneration in DS see Jaszczolt (2005a): 61-62.

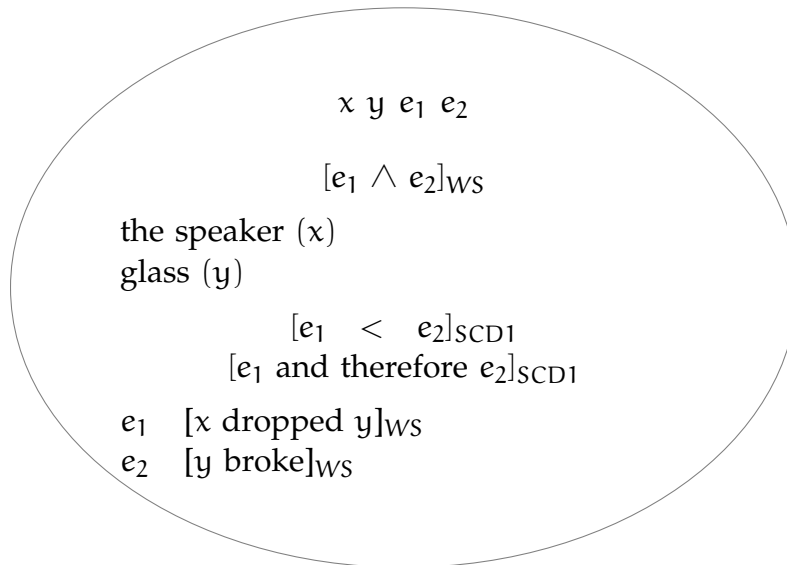
While it would seem of course too strong to postulate a kind of cognitive defaults, insofar as these are 'universal in that they are governed by the structure and operations of the human brain', furthermore such move would also strongly contrasts with evidences from comparative studies in linguistics concerning the great diversity between encoded information and default inferential enrichments for sentential connectives in different natural languages.

All summed, then, it seems that the category of SCD_1 , i.e. simply 'more ordinary 'shortcuts' in reasoning', is ideal in that it make possible to maintain the force of our intuitions concerning the default nature of connective enrichment, and at the same time to support the assumption of context-dependance and, more importantly, of cultural flexibility of the kind of information supplied by such default inferences.

Moreover, the category of SCD_1 makes it possible to provide an intermediate solution between the less plausible approach in terms of Levinson's GCIs and the more plausible, but too much compromised with relevance theoretic (both cognitive and linguistic) assumptions, Carston's theory of default cognitive scripts in terms of nonce-inferences.

The MR for a sentence like (65) (for the sake of simplicity, tenses are left unanalyzed) is then given as follows:

(67.1) MR for sentence (65): 'I dropped the glass and it broke'



In conclusion,

All in all, the point I am making is this. The debates over the semantics and pragmatics of sentential conjunction and can be easily surpassed when we acknowledge the fact that conscious pragmatic inference or default enrichment are themselves the product of the act of communication situated in context. Pace [Levinson \(2000\)](#), context-dependence and nonce-inference are very different concepts and context-dependence does not preclude defaults when the latter are understood as CDs and SCDs₁⁵⁵.

Concerning the case of disjunction, DS goes along the lines of the semantic analysis for 'and'. However, in case of 'or', there are some further complications which are not present in the conjunctive case.

Jaszczolt shares with [Mauri & van der Auwera](#) the assumption that the fact that the exclusive reading of disjunction is not lexicalized in natural language militates against the actual relevance of such distinction. However, according to Jaszczolt (who follows in this case [van der Auwera & Bultinck \(2001\)](#): 181.) such lack of lexicalization is reflected

⁵⁵ [Jaszczolt \(2005a\)](#): 209.

at the cognitive level and strongly prevents the postulation of a cognitive default for this kind of enrichment.

Given this assumption, Jaszczolt concludes that resorting to SCD_1 can also in this case do the job. However, it cannot be claimed that there is a social cultural default which is uniquely responsible for the exclusive reading of disjunction, insofar as the variety of additional readings in case of disjunction is much more fine-grained than in case of conjunction.

Accordingly, there is no way to postulate exclusive disjunction as the most salient (i.e. default) interpretation. Such picture once more suggests that, if a SCD is in play, it is a default which is related with the sentence content, rather than with the connective itself.

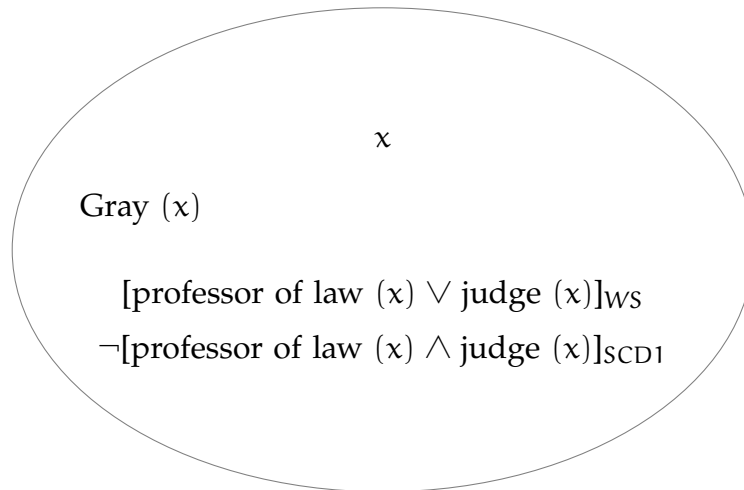
It seems that, just as is the case with conjunction, the processing of sentential disjunction gives rise to more and less salient interpretations but these interpretations are based on the content of the sentence. If there are defaults, they are not defaults for or but rather defaults for the sentence⁵⁶.

The point seems intuitively well argued, and, what is more important, it also seems to fit the data provided by comparative linguistics. Accordingly, the MR for the exclusive reading of (68), intended as triggered by means of SCD_1 is given as in (68.1):

(68) Gray is a professor of law or a judge.

(68.1) MR for sentence (68)

⁵⁶ Jaszczolt (2005a): 211.



Such a MR crucially rests on the assumption that the exclusive reading of *or* is provided by means of a (default) scalar inference. It is, indeed, customarily assumed (after Grice (1978/89)) that exclusive reading of *or* is obtained following Grice's first maxim of quantity, to the effect that a speaker's being cooperative and uttering a disjunctive sentence like (68) would be taken to believe (and then implicate) that the correlative conjunction is false. This is why conjunction and disjunction forms an entailment scale $\langle \textit{and}, \textit{or} \rangle$ where the former entails the latter, but not vice-versa. Thus, though a disjunction is (truth-functionally) compatible with both disjuncts being true (and hence compatible with the correlative conjunction), the use of a disjunctive form is taken to implicate that the relative conjunction is false, as a cooperative speaker would have uttered the latter if he had been in the position to do so.

Even though Jaszczolt acknowledges that a generalization so as to maintain the view that exclusive reading of *or* is due to a scalar inference is objectionable, nonetheless she claims that such view can be supported in light of the following considerations⁵⁷:

⁵⁷ Jaszczolt's remarks are made keeping an eye on the 'semantic map' of the relations between conjunction and (inclusive/exclusive) disjunction given in terms of Aristotelian square of opposition in van der Auwera & Bultinck (2001): 177.

[T]here are still sufficiently strong reasons to adopt scalarity of *<and, or>*. English conjunction and disjunction easily fit in the Aristotelian square of oppositions in that (i) \wedge has a contrary $\wedge\neg, \neg\vee$; (ii) \vee has a subcontrary $\vee\neg, \neg\wedge$; and (iii) exclusive disjunction can be easily built into the square of oppositions between $\neg\wedge$ and \vee . Naturally, this 'building into' the square of oppositions has to be understood in terms of concepts for conjunction and disjunction rather than words. This conceptual distinction can then be approached in terms of pragmatic or semantic scales.

Although DS is neutral with respect to the assimilation of natural language connectives with their logical counterpart, it seems that maintaining the assumption that *<and, or>* form a semantic or pragmatic scale is still too strong. This is why such an assumption is based on the idea that connectives can be built in the Aristotelian square of opposition and that, accordingly, the pragmatic scalarity reflects the correspondent logical entailment scale between conjunction and disjunction (in fact, in the Aristotelian square disjunction is the subaltern of conjunction, i.e. the former is implied by the latter).

However, as it has been convincingly argued by [Mauri & van der Auwera \(2012\)](#), [Mauri \(2008\)](#) concerning languages which show different inferential enrichments for disjunction and also languages which lack connective for disjunction and accordingly manifest different strategies for expressing it, natural language disjunction seems to be better captured by a relation expressing the 'potential, rather than truth-functional status of the linked SoAs [states of affair]⁵⁸. It has been noted, in particular, that (1) there is a clear tendency among language which lack a lexicalized operator for disjunction to express it as a list of potential alternatives and (2) language which have two different connectives expressing disjunction does not use them to

⁵⁸ [Mauri & van der Auwera \(2012\)](#): 12.

distinguish inclusive and exclusive readings (therefore confirming the marginal relevance of such distinction) but by contrast to express the distinction between choice-aimed vs simple disjunction. Such evidences strengthen the hypothesis that of a 'crucial anchorage of disjunction on the one hand in the modal dimension of epistemic possibility, and on the other hand in the discourse dimension of speakers' expectations regarding hearers' reactions to their utterance, which may or may not result in a choice⁵⁹'. These data seem to threaten the assumption that natural language disjunction can be analyzed in terms of the correlative truth-functional operator and, accordingly, to undermine the view that conjunction and disjunction form a semantic or pragmatic scale.

By contrast, a different treatment of disjunction in terms of epistemic modalities has been advanced in the field of logic and formal semantics by Zimmermann (2000) and Geurts (2005).

Dropping formal details, in both the two slightly different approaches disjunction is analyzed in terms of the conjunction of modal alternatives. In such an approach, the essential contribute of 'or' is to provide a list of alternatives, so that a disjunctive proposition like (68) is roughly equivalent to (68.2):

(68.2) Gray might be a professor of law and he might be a judge.

However, if the right interpretation of (68) has the form of (68.2), then obviously there is no way to get the exclusive reading by means of a scalar implicature. The crucial point of this analysis of disjunction is then that:

If disjunctions are covert modals (...) a conjunction does not entail the corresponding disjunction, so there is no good reason for assuming that 'and' and 'or' form a pragmatic scale. Hence, on the present account there is no obvious way of obtaining the scalar implicature

⁵⁹ Mauri & van der Auwera (2012): 15.

that is usually held responsible for the exclusive reading of 'or'⁶⁰.

According to Geurts, the exclusive reading of or is equally obtained by means of a maxim-driven implicature, but not a scalar one.

the two conjuncts of [(68.2)] address the same question, say, what Gray's job is or might be, and as the speaker is supposed to be cooperative, there is a presumption to the effect that he will attempt to specify each alternative in all relevant respects. Hence, in both possible cases entertained by the speaker we are entitled to assume that Gray has just a single job, as a corollary of which it follows that in the first case he is not a judge and in the second he is not a law professor. Whence the exclusive interpretation of [(68.2)]. I submit that exactly the same applies for the disjunction in [(68)].

This seems an elegant solution, which is able so preserve the evidences collected by Mauri & van der Auwera (2012) to the effect that natural language disjunction expresses a modal relation between the two states of affair and at the same time to give a formally well defined treatment of disjunction.

The question is then which is the result of such a re-analysis of disjunction on the treatment which is made of 'or' in DS? Well, it seems that rejecting the assumption that exclusive reading of or is obtained by means of scalar inference does not result in the impossibility to manipulate such exclusive readings as social-cultural defaults. First of all, in DS there is the assumption that such defaults (like the one for exclusive disjunction) are defaults for sentences rather than defaults for specific lexical items.

All summed, it seems that a slight modification of the MR for disjunctive sentences would do the job. However,

60 Geurts (2005): 403.

such modification would crucially rest on the possibility of introducing modal operators into MRs.

As a matter of fact, however, a modal operator of epistemic nature (Δ) has already been introduced in DS to account for the different ways of expressing futurity in English⁶¹. Crucially, such modal operator allows for gradation modality aiming to reflect the degree of intentionality behind different strategies of expressing future events.

As noted by Jaszczolt, 'other modals, such as *may*, *might*, *can*, *could*, *would*, can be accounted for by extending the current analysis so as to include further specifications of Δ ⁶². It seems then that the exclusive reading of disjunction can be maintained in DS as the result of SCD₁ in suitable contexts of acts of communication, and that, even though the analysis of disjunction is shifted from a truth-functional to a modal one, a minor implementation of the formal apparatus of DS would do.

However, for the purposes of the present work, I will not attempt such implementation. What I want to stress is only the fact that DS analysis of the inferential enrichment to disjunctive sentences seems to be perfectly compatible with a different and more plausible way of accounting for the connective 'or'.

I will stop here the analysis of connectives in DS without addressing the however interesting topic of conditionals and negation, as it would lead us too far from the central topic of such research.

Let's only notice that Jaszczolt's analysis of conditional perfection is given in terms of restriction of the discourse topic, without assuming an actual process of strengthening to biconditional. As it has been noted by Mauri & van der Auwera (2012), 'cross-linguistic data seem to confirm Jaszczolt's account of conditionals protases in terms of topics⁶³', therefore providing further evidence in favor of the paradigm of DS.

61 Jaszczolt (2005a): 160-174.

62 Jaszczolt (2005a): 173.

63 Mauri & van der Auwera (2012): 17.

3.8 SUMMARY

In the present chapter I introduced the paradigm of Default Semantics (DS). Such approach has been introduced in order to offer a solution to the difficulties shown by all the approaches based on the semantic underdeterminacy view.

I started summarizing the weaknesses of the extant treatments of semantic underdeterminacy. The main deficiencies have been identified either in some theories' being predictively powerless or incapable of matching speaker's intuitions (e.g. hidden indexicalism), or in the search for ad hoc solutions aiming to preserve standard Gricean apparatus (Levinson) or finally in the loss of the possibility of modeling utterance interpretation by means of standard semantic tools (e.g. Relevance Theory and Truth-conditional pragmatics).

In contrast with such acknowledged defects of the extant theories, a sketchy outline of the features a good semantico-pragmatic theory should match has been introduced. I found that some crucial traits of a suitable theory should be as follows: first, the theory should preserve Gricean core principles of methodological parsimony (that is, avoiding the multiplication of senses or levels of sense) and of an intention-based theory of meaning. Secondly, the theory should match speaker's intuitions and be able to mirror them in a suitable formal representations which is ideally compositional. Finally, it seems a intuitive requirement to ask our theory to allow for the category of defaults.

Next, I tried to show that the theory of Default Semantics, developed by the philosophers of language and linguist Katarzyna Jaszczolt, is able to match the abovementioned requirements and at the same time to avoid the problems arising from the extant theoretical alternatives.

DS crucially rests on the assumption that logical form as the syntax-based representation of meaning is *only one* of the possible sources of utterance meaning and, moreover, one which does not hold any compositional privilege over the others. According to this assumption, the classical di-

chotomy between genuine ambiguity and underspecified logical form in cases of multiple readings is surpassed in favour of a picture in which utterance meaning is obtained by means of a merger of different sources of meaning and where, accordingly, there is no room for a notion of underdetermined propositional form (at least in contexts where such underdeterminacy has no psychological relevance).

I showed that the assumption of a merger representation replacing the classical analysis of utterance meaning in terms of semantic and pragmatic developments on the syntactic output (be such developments either linear or interactive) leads contextually to the rejection of other core notion of extant semantic and pragmatic theory, i.e. the notions of 'what is said' and sentence meaning. As a result of such radical moves, I showed how the classical issue concerning where locating the borderline between semantics and pragmatics is argued to be misguided and eventually proved to be an irrelevant problem.

I then turned to the clarification of the central concepts of DS. I showed how DS is based on a restatement of the suitable units of semantic analysis. DS is indeed committed to the idea, quite common in dynamic approaches, that semantic representation should mirror the incremental nature of discourse processing. On this assumption, which DS shares with formal approaches like DRT, I showed how it is needed to shift from utterance meaning as the unit of semantic analysis to the meaning of so-called *acts of communication*. Acts of communication are claimed to be thought-like objects, which reflects the merge of information which compose propositions, and are more coarse-grained than thought themselves. However, such intermediate degree of granularity makes them suitable theoretical objects for semantic analysis.

Acts of communication, indeed, are claimed to be compositional. However, compositionality is not intended as a property of sentence meaning, i.e. it is not the product of word meanings and sentence structure, but is located, so to speak, one level upper, at the level of merger representations. In such way it is possible to enjoy the advantages of a compositional and formal semantics (which resorts to a

revised and extended form of the formalism of DRT) and at the same time to have a single-level semantic representation which crucially includes contributions from any side (including pragmatic ones).

I then turned to the central notion of 'default' in DS. I showed how DS assumes the existence of scales of salience of meaning. The most salient the interpretation, the easiest is for the hearer to understand it. Salient interpretations are default interpretations in DS. Defaults in DS divide into cognitive and social-cultural ones. Cognitive defaults are rooted in human brain and reflects the intentionality of mental states behind the use of a certain linguistic expression. Intentionality in DS is in fact treated as one of the possible sources of linguistic meaning.

Crucially, scales of salience are claimed to reflect the correlative degrees of intentionality of the mental belief underlying the use of a certain linguistic expression. The highest degree of intentionality reflects the default interpretation, which is understood as such by the hearer. To reflect such interpretation process, merger representations (MRs) in DS allows for the interpretations deriving from cognitive defaults. Such move results in a semantic representation which perfectly mirrors speaker's intuitions concerning the meaning of a certain utterance, although very often it considerably departs from the meaning encoded in the uttered words and sentence structure.

As an example of the treatment of multiple readings provided by DS, I showed how the theory is perfectly able to deal with ambiguities in definite description. On the assumption that definite descriptions allow for three different degrees of intentionality corresponding respectively to the referential, mistaken and attributive reading, I showed how the MRs for such readings can naturally be built following the guidelines of DS.

As a necessary interlude, I briefly introduced the formalism of DRT and shortly explained the *raison d'être* of such theory of discourse processing.

Finally, I turned to the analysis of the privileged case study of the present work, i.e. that of sentential connectives and showed how the (however only tentative) treat-

ment of DS works for such case study. I gave an outline of the decades-old debate (spurred by the works of Grice on the topic) concerning the nature of the enriched information supplied by sentential connectives. Also, I presented a number of data from comparative linguistics which strongly undermine the view that the meaning of natural language connectives can be equated to that of their logical counterparts.

Turning back to DS, the theory shows how the distinctions classically involved in such debate can be surpassed in favor of a view which analyzed sentential connectives in their contexts of utterance.

The analysis of default semantics shares with Relevance theoretic approaches the idea that enrichments generated by connectives are triggered by the activation of cognitive scripts concerning stereotypical situation-types. Such assumption makes it possible to detach default interpretations from the connectives themselves (as it happens in Levinson's default theory) and to ascribe such preferred interpretations to inferential shortcuts guided by social-cultural knowledge concerning situation-types.

According to this assumption, the semantic representation for sentential connectives resorts to the category of social-cultural defaults and gives a convincing analysis in terms of them.

Finally, I shortly questioned the analysis which is given in DS for disjunction. As cross-linguistic studies seem to show that the distinction between inclusive and exclusive reading is irrelevant for natural language disjunction and starting from the hypothesis (also stemming from comparative linguistic evidences) that disjunction is better explained in terms of modality, I sketchily presented an alternative logic treatment of disjunction which treats disjunctive sentences as a list of (conjoined) alternatives, by resorting to modal notions and formalisms.

Finally, I suggested that such evidences do not threaten the analysis of connectives which is provided in DS and that a slight implementation of its formal apparatus to allow for the introduction of an operator of epistemic modality (of the sort which is required in modal accounts

of disjunction) can come at handy in order to maintain the spirit of DS-analysis of disjunction, while slightly revising its letter.

CONCLUSIONS

This pragmatics-rich semantics pertaining to merger representations is possibly the most radical move a compositional theory of meaning can make in the direction of pragmatics.

—JASZCZOLT (2005A): 98.

We have then reached the end of our research path. It is maybe worth shortly looking back and concluding the work, in Grice's style, with a 'retrospective epilogue' so as to evaluate what we have eventually end up with.

Grice's theory of meaning and communication, introduced at length in the first chapter, has proved to be incredibly influential in the development of contemporary Pragmatics. Not only have the issues left open in Grice's own picture and the evident weaknesses of his approach been at the core of all the following attempts to develop a theory of utterance meaning. More importantly, however, many of Grice's original ideas and suggestions, where appropriately revised, have proved to be the first step toward a suitable solution to many of such open questions.

The Semantics/Pragmatics interface as it stemmed by Grice's insights has been the topic of a widespread debate during the last four decades. Where are we supposed to posit the borderline between, on the one hand, what is encoded in and, on the other, what is inferentially added to speaker's meaning? According to Grice, as we have seen, a conservative conception of semantics can be maintaining by allowing contextual contribution to 'what is said' to be kept to a minimum, i.e. to disambiguation and reference resolution. All other kinds of contextual enrichment to speaker's meaning is a matter of conversational implicature.

Conversational implicature is inferentially derived, is guided by the maxims of conversation and the cooperative principle, is not part of the encoded meaning insofar as it is cancelable and, most crucially, it is computed *after* the semantic content of the sentence has been completely determined.

As I have tried to show in the second chapter, such rigid picture is no longer supportable, as the assumption of semantic determination clashes against a pervasively attested phenomenon in natural language, i.e. that of semantic underdetermination (or underdeterminacy, or underspecification, sense-generality, etc...).

Can we really leave everything which is not encoded in the semantics of word and the structure of the sentence to implicature? Is it realistic a picture which claims for the previous determination of a 'semantic content' which very often completely departs from the intended meaning? More radically, isn't it true - as it has been argued by John Searle - that *every* utterance rests, for its felicitous interpretation, on a set of background assumptions which is potentially infinite and practically non specifiable?

Since the beginning of the 70s of the Twentieth Century, such kinds of questions have rapidly eroded the core of Grice's dichotomy between semantics and pragmatics. Two main theoretical orientations have gradually arisen: a first, more conservative one, which claimed that Grice's picture with its traditional conception of semantics could be maintained by means of slight revisions of his theory; and a second, more radical, aiming to prove that the phenomenon of semantic underdeterminacy conclusively undermines Grice's theory.

As for the former, side, it has been argued, for example, that Grice's theory should be implemented, in case of multiple readings and underspecificity of logical forms, to allow for semantic content to be not properly underdetermined but rather 'general' with respect to the possible interpretations. 'Sense-generality', as it has been labeled by Jay Atlas, makes it possible to cope with semantic underspecification and at the same time to preserve Grice's pic-

ture of communication, according to the Kantian assumption that:

Pragmatic inference without sense-generality is blind, but sense-generality without pragmatic inference is empty⁶⁴.

Otherwise, as in hidden-indexicalist view, scholars of such orientation have argued that all truth-conditional effects of extra-linguistic context should be traced back to the logical form, i.e. it is possible to distinguish between a surface and a deep structure of the sentence, and alleged pragmatic contributions to the semantic content can be proved by contrast to be part of the (deep) semantic structure, by means of hidden indexicals.

On the other side, as we have seen, scholars more involved in psychological and cognitive concerns have argued that, for Gricean view to be preserved, it seems to be required that interpreters actually process 'minimal propositions' (or semantic, truth-conditional content) also in situations in which this substantially departs from speaker's intended proposition. And it is claimed that, from a cognitive point of view, this assumption can hardly be maintained.

By contrast, it has been suggested that it is necessary to resort to different kinds of 'cognitive principles' (i.e. Relevance theoretic 'cognitive principle of relevance' or Recanati's 'availability principle') to explain how really the process of utterance understanding takes place. I showed that endorsing a (radical) pragmatic theory equipped with such sort of cognitive principles seems to have the advantage of matching speaker's intuitions concerning utterance meaning. Nonetheless, as I tried to show, it has the drawback of allegedly leading to abdication of the traditional role of semantic theory, an accusation which has been appropriately labeled (by Stephen Levinson) as 'semantic retreat'.

Next, I showed how the concept of default interpretation seems to offer a middle solution between the two approaches, at the same time both fitting speaker's intuitions

⁶⁴ Atlas (1989): 124.

about utterances' truth-conditionals and offering a solution which, in a sense, allows for 'semanticization' of speaker's meaning.

However, the first articulate theory of default interpretations which has been introduced, i.e. Levinson's theory of GCIs, although it makes an important opening to the theory of meaning based on default interpretations, seems to be eventually jeopardized by an undue commitment to Gricean assumptions.

Finally, I presented the paradigm of Jaszczolt's Default Semantics. I stressed the point the such approach seems to be able to account for semantic underdeterminacy without giving up a (formal) semantic treatment of utterance meaning and, at the same time, by developing the tools for accounting for every sort of pragmatic contribution to speaker's meaning.

The theory also crucially involves the notion of default meanings, which are claimed to be directly traceable to the intentionality of mental states underlying linguistic expressions.

In conclusion, it seems that a great variety of case study is possible of treatment on the basis of merger representations in DS. Nonetheless, only little part of the history has already been told. Default Semantics is a relatively new paradigm, which, to date, has been convincingly developed only to account for definite description and belief reports (two topics which, incidentally, are closely interrelated).

So, even though if the theory seems to be intuitively very appealing and methodologically splendidly motivated, nonetheless large part of the job is still to be done. In particular, it is necessary to show that DS is able to provide an unitary account for all cases of semantic underdeterminacy, and it must be said that many of the issues traditionally accounted for in semantics/pragmatics discussions are at present largely untouched.

In future, Default Semantics should prove to be able to show that the semantic representations which it provides are not *ad hoc*, but are by contrast based on unitary and

solid semantic principles which are eventually capable of equip the theory with a strong predictive power.

At present, in fact, DS seems to lie on excellent theoretical foundations: it offers a radically new approach to traditional problems and provides a new and convincing recasting of classical concepts. Thanks to its new philosophical assumption, DS gives the possibility of facing traditionally difficult issues and, very often, to abandon them as false problems (confront the case of semantics/pragmatics borderline).

However, to such outstanding methodological foundations it does not corresponds, at present at least, a uniform semantic treatment capable of proving itself really predictively powerful. For the time being, the construction of MRs for DS seems still quite random and hardly predictive. Furthermore, as compared with an analogous approach (one whose formalism DS borrows and implements) as is DRT, it seems that DS still crucially rests on the intuitions of the semanticist who perform the job of formalization, and is far from providing a construction algorithm for merger representations.

The theory, therefore, is by no means exempt from critics. Nonetheless, a Default Semantics project is currently active at the University of Cambridge, with scholars from different theoretical backgrounds contributing the development of the theory.

We can thus hopefully and reasonably expect that the theory will be fruitfully developed and implemented in the next years.

An however little contribution to such enterprise, I hope has been also given with the present work.

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