Still Relevant: H.P. Grice's Legacy in Psycholinguistics and the Philosophy of Language[1]

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RESUMEN

En este artículo presento evidencia de que la influencia de Paul Grice en psico-lingüística y en filosofía del lenguaje sigue siendo importante y duradera. Me concentro en dos casos particulares: en el papel de las *intenciones* dentro de la psicolingüística del desarrollo y en la noción de *lo que es dicho* dentro de los debates actuales sobre la noción de contenido semántico y sobre los límites entre la semántica y la pragmática. Acabo el artículo con una breve discusión acerca de una posible dificultad con la que se enfrentan aquellos que quieren hacer encajar la actitud de Grice hacia el naturalismo con esta obra.

ABSTRACT

In this paper, I outline evidence of Paul Grice's enduring influence in Psycho-linguistics and the Philosophy of Language. I focus on two particular cases: the role of *intentions* within developmental psycholinguistics and the notion of *what is said* within current debates over the notion of semantic content and the semantic-pragmatic boundary. I end the paper with a brief discussion of a possible difficulty facing those who hope to square Grice's stance on naturalism with this work.

I. INTRODUCTION

In 1957, H.P. Grice published a monumental article entitled, simply, "Meaning". He begins by noting an important difference between two uses of 'means'. 'These red spots mean that he has measles' and 'The recent budget means that we shall have a hard year' involve a sense of 'mean(s)' which is quite distinct from its use in 'Those three rings on the bell (of the bus) mean that the bus is full' and 'His terse remarks mean that he is disappointed in the department'. The former uses of 'means' capture what he calls *natural meaning*, which he takes to be an indicating or factive notion. The latter uses capture what he calls *non-natural meaning*, which is not a factive notion. That is, it is perfectly reasonable to say that, regarding non-natural meaning, "Those three rings on the bell (of the bus) mean that the bus is full" yet also say "But it isn't in fact full — the conductor has made a mistake". After drawing this

important distinction, Grice attempts to capture the central aspects of non-natural meaning. "Meaning" would become the seminal article for the semantic program that Stephen Schiffer eventually dubbed "Intention-based semantics" (IBS) due to its strategy of explaining the meaning[2] of an utterance in terms of the intentions of the speaker who uttered it.

The central notion for IBS is the explication of the meaning of a particular utterance[3] on a particular occasion (speaker meaning) in terms of a specific type of reflexive communicative intention in the speaker — an intention to produce a belief in the interlocutor (at least partly) by getting him to recognize the speaker's intention to do this. This constitutes a reductive program — if we need to account for the meanings of both our psychological states and our linguistic entities, why not see if we can explicate one class (linguistic meanings) in terms of the other (psychological meanings)? This semantic program has two stages: (1) reduce the semantic properties of natural languages to complex psychological states, and (2) explain how these complex psychological states (beliefs and intentions) get their semantic properties.

The first stage of this program has two sub-stages. The first is to explain speaker meaning in terms of psychological states, and the second is to explain the meanings of utterance types in terms of speaker meanings. The basic proposed analysis for the first sub-stage is presented in "Meaning" as something like the following:

(1) S meant something by uttering x iff S uttered x intending:

(a) that S's utterance of x produce a certain response, r, in a certain audience, A,

(b) that A recognize S's intention (a), and

(c) that A's recognition of S's intention (a) shall function as at least part of A's reason for r.

One looks to the right side of the biconditional and finds only psychological states — the semantic properties of utterance tokens, then, have been given in terms of these psychological states.

The second sub-stage is (or was) to be handled by explaining the meanings of linguistic types as conventional signals of certain speaker meanings. The account of conventions that was offered was itself a psychological account that explained a convention as, on Jonathan Bennett's account, "a behavioral regularity which a community maintain because they mutually know that they have maintained it in the past and that it solved for them a recurring kind of coordination problem" [Bennett (1976), p. 177]. Philosophical interest in coordination problems and conventions is due largely to David Lewis,

who explains these problems as those in which "the agents have a common interest in all doing the same one of several alternative actions" [Lewis (1969), p. 24]. The specific behavioral regularities that are maintained by the linguistic community in question are the specific meaning conventions—the correlations of intentions with utterance types. As Bennett summarizes, a community will "have a meaning-convention, in the full Gricean sense of 'meaning', just so long as they maintain *as a convention* a regularity of the form 'Whoever utters *S* intends thereby to communicate *P*'" [Bennett (1976), p. 181]. Hence, utterance types are explained in terms of conventional signals for sets of speaker meanings, and speaker meanings are explained in terms of propositional attitudes such as intentions and beliefs[4]. If this analysis is successful, a semantic theory need only complete the second stage of the reduction—provide an account of how these psychological states get their meanings. This topic, what has been generally dubbed *psychosemantics*, has been an intense area of study in the philosophy of mind for the past quarter-century.[5]

IBS, however, is now seen as a dead research program. Oddly enough, Schiffer is the one credited with killing it, despite having provided its most subtle development and defense in his *Meaning* (1972). Indeed, Schiffer's *Remnants of Meaning* (1987) develops and defends each of the serious doubts that have arisen for the IBS reduction.[6]

Despite this consensus about the failure of IBS, Grice's legacy is still remarkably strong in many fields studying language and meaning. Gricean themes still shape much work in pragmatics, and his particular views on *conversational implicature*, the phenomenon which Grice first drew to our attention, are still dominating the theorizing about this phenomenon.[7] In this paper, however, I want to examine some other Gricean influences in the study of language. I will not attempt to summarize Grice's overall philosophical perspective or examine his comprehensive views on the philosophy of language.[8] Instead, I want to focus on two quite distinct sorts of Gricean influences. The first influence occurs in psycholinguistics, where theorists are making great use of the Gricean conception of communicative intentions. The second influence can be found in current attempts to define the semantic-pragmatic distinction, where radically different theorists find inspiration either in Grice's account of communication or his particular way of drawing a distinction between semantic content and pragmatic content. I will conclude with a brief remark about a possible difficulty regarding Grice's stance towards philosophical naturalism.

II. Gricean Influences in Psycholinguistics

Much of the current influence of Gricean themes in psycholinguistics can be traced back to events in comparative and developmental psychology.

These disciplines began to examine the social competence in non-human primates and young children and questioned what they understood about other creatures with minds (and what they understood about their own minds, for that matter). Did they understand other creatures as having folk psychological states that affected their behavior, or did they understand other creatures using some other, non-mentalistic framework? In contemporary cognitive science, this mentalistic capacity to understand, predict, and explain intentional behavior came to be explained by positing a *Theory of Mind* (ToM). So, researchers began to wonder if non-human primates and young children have a mentalistic ToM like adult humans, one which incorporates beliefs, desires, intentions, and the like, or whether they were using some other more basic non-mentalistic capacity in their social interactions. Moreover, they began to wonder how they might test for the presence of a ToM.

One popular way of understanding the current interest in studying the ToM capacities is to trace interest in the issue back to a paper by David Premack and Guy Woodruff (1978) on the social understanding of chimpanzees. Premack and Woodruff explained that much of chimpanzee social life requires the participants to have a robust understanding of the minds of other chimps. It was argued that much of the deceptive and collective behavior that has become part of popular culture's understanding of these close cousins of humans could not be explained if the chimpanzee lacked an understanding of what conspecifics believed and desired, and what they would do given those beliefs and desires. Premack and Woodruff coined this capacity to impute mental states to the self and other agents as a 'theory of mind'.

Many readers of this paper, however, tried to discount the nature and quality of the understanding required to explain chimp behavior and pressed their colleagues to become more precise about what sort of understanding was entailed by this so-called ToM. Some critics claimed that the behavior of the chimps could be explained without positing a theory of mind, but instead could be explained by positing some sort of cognition that did not require an understanding of other chimps as things having mental states. They reasoned that mere induction based on experience of behavior could explain chimpanzee social competence. Daniel Dennett (1978) proposed that a more robust standard needed to be applied to the question of whether a creature had a theory of mind. He considered what it was that human adults could do in reasoning about the mind that could be tested experimentally in children and other creatures that could act as a robust standard for having something like an adult ToM. He reasoned that it should be possible to detect whether a creature had *beliefs about the beliefs* of others as opposed to some more limited ability (e.g. the ability to predict and understand another's behavior based on past instances). Heinz Wimmer and Josef Perner (1983) devised a task which they believed would test this capacity of having beliefs about beliefs. This task required understanding that an agent can have a different belief about a

situation than the attributor has. This procedure and its variants have come to be known as the false belief task, and it has widely been accepted as the litmus test for ToM. A popular version of the task goes as follows:

> A child is shown a series of events involving puppets and some sort of salient object, in this case, a roll of Smarties (the British version of M&Ms). After becoming familiar with the puppets and objects, the test begins with one of the puppets, Sally, coming into the scene, placing the candy into a covered container, and then leaving the scene. In Sally's absence, another puppet enters the scene, removes the candy from where Sally placed it and places it in a second covered container. The child is asked to report where Sally will look for the candy.

The reasoning behind the experiment is that someone who fully understands the concept of belief must grasp the dependence of belief on observation. Someone who understands the dependence of belief on observation will realize that since Sally did not see the second puppet change the location of the candy, Sally will think that the candy is in the location where she placed it. Such a person will realize that Sally's belief is different from her own belief because of Sally's absence. Someone who lacks this understanding will not realize that Sally will not know that the location has changed and will report that Sally will look at the current location of the candy. This ability to predict that Sally will look where she believes the candy to be, even though the child knows that the location of the candy is different, is said to be critical for a full-blown ToM. The task is reliably passed by normal children around the age of four, though many can pass the task at around 3 ½ years.

Many developmental psychologists have challenged the idea that this task should count as the central measure of ToM for several reasons.[9] First, chimpanzees cannot be expected to understand or answer the crucial question, so this will be unhelpful as a test for non-human primates. Second, it seems like younger children might not possess the linguistic competence to answer the question, despite the fact that they might understand beliefs (and false beliefs). Third, the task is so cognitively demanding that children might fail it because their cognitive capacities (other than ToM) are not sufficiently developed. Finally, it seems like other aspects of ToM might be present at ages earlier than those required to pass the false belief task. Many researchers, in fact, argued that some interesting ToM capacities seemed to emerge at much earlier ages. Specifically, it seems like children can form and understand certain intentions at ages earlier than those required to pass the false belief task. Crucially, for the aim of this paper, young children seemed to be able to form and grasp *communicative intentions*, those very elements which are central to Gricean accounts of meaning and communication. In psycholinguistics, a Gricean theme emerged, but in a new lingo: how is ToM (and

specifically, those elements dealing with communicative intentions) involved in (a) young children's communication and (b) their ability to learn the meanings of words? In what follows, I outline a plausible account of the ontogeny of intentional communication and review some experimental results which stress the Gricean mechanisms involved in early linguistic development.

There seem to be at least three important stages in the intentional behavior of children through their first nine months. The first stage involves intentional attempts to change their environment. In these first few months of life, it is clear that the child does not understand much, if anything about the mentality of herself or the audience. The second stage involves intentional attempts to change their environment which now includes objects with mentality. Elizabeth Bates and her colleagues distinguish the behavior that expresses this rudimentary understanding, *intentional behavior designed to influence other persons*, from *genuine intentional communication*. Examples of the former are the precursors to the latter, but they do not demonstrate a sufficient knowledge of the mind of the other subject, or of how the child's behavior could affect the audience. Examples of this more rudimentary behavior are children aged 3 months, repeating their behavior so that adult will repeat his or her behavior, and children at 7 months, repeating actions that led to laughs, expecting laughs to follow. Children of this age can play games where roles are carried out and the children will show disappointment if the game ceases suddenly [Bates *et alia*, (1975)]. The third stage involves intentional attempts to change the objects with mentality via certain aspects of their mentality. It is this final stage, I will argue, that achieves a sufficiently reflexive Gricean character—that of being a second-order intention.

This crucial breakthrough in intentional understanding occurs in children around the age of nine months (right around the time that they acquire their first words). By the age of nine months, children will follow an adult's line of regard and his or her gestures [Bloom (2000), p. 62]. This allows the adult and the child to fix upon a common referent. Moreover, parental instruction is more competently understood. For example, if a parent shows the child a hole through which a peg will fit, instead of trying to make a gross approximation of the indicating movement of the parent, the child will actually try to place the peg in the hole [Trevarthen and Hubley (1979), reported in Bretherton (1991)]. This sort of behavior by the child indicates that the child does not merely observe the movements of the adult but sees them (1) as intentional actions by the adult, and (2) as different from what the adult wants the child to do.

More germane to the issue at hand is that full-blown intentional communication emerges at this time. According to Bates, full-blown intentional communication is to be understood as the following:

> Intentional communication is signaling behavior in which the sender is aware, *a priori*, of the effect that the signal will have on his listener, and he persists in that behavior until the effect is obtained or failure is clearly indicated. The behavioral evidence that permits us to infer the presence of communicative intentions include: (a) alternations in eye contact between the goal and the intended listeners, (b) augmentations, additions, and substitutions of signals until the goal has been obtained, and (c) changes in the form of the signal toward abbreviated and/or exaggerated patterns that are appropriate only for achieving a communicative goal [Bates (1979)].

One needn't worry too much about what she means by '*a priori*' here. What is crucial is that the child understands that the utterance can have a certain effect on the audience, in virtue of certain aspects of his or her mentality. The child understands that the audience must recognize the child's intention to communicate, and the child will follow certain constraints in order to achieve this recognition. The child understands what sorts of things can lead to that effect or intention not being realized. He or she realizes that eye gaze is crucial and he or she makes sure that the audience is attending to the signal.

Moreover, if the signal is not successful as uttered, the child will make various changes to the signal, and continue to make these adjustments until the desired effect is achieved. The adaptation of signals across interactions is also crucial. The child begins to recognize that previous signals can be shortened or combined and still be recognized. For example, a common signal used by children of holding up their outstretched arms to communicate that they want to be carried is often truncated to a more subtle lifting of the arms. Of course, many of these early signals are nonverbal, but as the child begins to realize that words can have similar effects, the child begins to choose words as another class of signals. This all occurs in children before they celebrate their first birthday.

A surprising phenomenon in very young children (those at the one-word phase of speech (i.e. 10-18 months)) was revealed by Greenfield and Smith [(1976), reported in Bretherton (1991)]. It turns out that even at this early stage of development, children would take the consideration of the other agent's epistemic position into account when deciding how to proceed in talking about an event. When there is joint attention towards an object (either established through eye gaze or through previous speech (by children or adults)) children will simply comment on the object, whereas if an object was not being attended to, the child consistently mentions the name for the object to draw the attention of the interlocutor, waits for uptake, then gives the comment.

In an examination of this phenomenon, Scollon [(1979), reported in Bretherton (1991)] notes that children will go through a lengthy series of attempts to draw the attention of a parent towards an object before commenting on it. In one instance, a child repeatedly utters sounds that resemble the word

'fan' but the mother is unable to fix the reference. In this series of exchanges, the child utters the phrase, then observes what his mother attends to. Frustrated, he utters the signal again, only to have his mother attend to another, improper object. This occurs several more times with all sorts of objects in the environment, and after each miscue she receives another attempted utterance of 'fan' until she finally fixes on the fan. The child then uttered 'cool', to which the mother replied, 'Cool, yeah. Fan makes you cool'. It appears that children are sensitive to the epistemic state of the interlocutors at this early stage. One might expect the children to simply comment on the object that he or she is attending to, assuming that the interlocutor must be aware of what the subject of the speech is, but this is not what the children do. They are keenly aware, at an age younger than18 months, that they need to inform the interlocutor as to what they will be talking about and they will persist in manifesting this intention until it is recognized.

    This type of data seems most relevant to demonstrating an understanding of how intentions figure into the *production* of utterances, and how those utterances affect people, but there is also data to support the role of intentions in the development of language and the *comprehension* of language that word learning requires. Dare Baldwin (1991) devised some interesting experiments to test the comprehension of intentions in word learning situations. In these experiments, 18 month-olds are allowed to play with one unfamiliar object while another unfamiliar object is placed into an opaque bucket. While the child is playing with and attending to her unfamiliar object, the experimenter gazes into the bucket and says 'It's a flob.' If the child is unaware of the role of communicative intentions and lacks ToM capacities, the child will probably think that the word 'flob' refers to the object that she is attending to. The child, however, when later asked to pick out the flob when presented with both objects, picks out the object to which the experimenter was attending. Indeed, during the word-naming task, when the experimenter announces the name of the object, the child's attention shifts from her manipulation of the toy to the gaze of the experimenter and follows the gaze to the object in the bucket.

    This behavior in children between the ages of nine and eighteen months suggests that they have a significant grasp of second-order intentions, though perhaps not quite the intentions involved in Grice's original analysis (1). It is argued that they form second-order communicative intentions of the form *I intend to produce a response in the audience at least partly based on the audience's recognition of this intention*. Or, more conspicuously, *I intend for the audience to recognize* (*I intend to produce a response in the audience*). As an interpreter, the child must understand, S *intends for me to recognize* (S *intends to produce a response in me*). In order to demonstrate this grasp, it is not enough for the children to demonstrate that they intend to produce a response in the audience, nor is it enough for them to realize that some of the things that they interact with have minds and are agents. What is required in

order to demonstrate a second-order communicative intention is to perform multiple complex behaviors in order to achieve the recognition of the intention that they intend to communicate. While it is difficult to demonstrate that these children are producing and inferring second-order (or reflexive) communicative intentions, the fact that they are sensitive to and exploit aspects of the mind of their interlocutor make it plausible that they are not merely intending to produce a response, but rather intending to produce a response through a recognition of some such intention. Most importantly, the children are taking the idea of recognition very seriously.

To put the point differently, is it reasonable to think that the child is intending to produce a response in her audience, but by some other route than by the audience's recognition of that intention? What sort of evidence could we imagine that would demonstrate that she has the first-order communicative intention *I intend to produce a response in the audience*, with no additional intention of how the production of the response is to take place? The sort of evidence we would be looking for is that the child repeats the same behavior without modification, or that the child does not track eye gaze and seek to maintain it, or ignore the impact of previous conversations or contexts on what the child chooses to do. When the behavior of producing a signal, however, begins to take various considerations about the method of production into account, ones that are deeply mentalistic, it becomes second-order, if only in a rudimentary way.

One might deny that any second-order elements are involved, and argue that what these behaviors manifest is a first-order intention, *I intend for them to recognize my behavior* (*signal*), but this is just a version of a second-order intention that disguises the reflexive element, packing it into the seemingly innocuous notion of *recognition*. When a rich understanding of how agents recognize signals is employed, there is evidence to show that something like the intention for the audience to recognize the intention to produce a response. There is something in recognizing how the response is generated that can be understood as deeply mentalistic, and this mentalistic understanding seems especially warranted in cases where the behaviors are sustained and complex. If this does not demonstrate the existence of second-order intentions, it demonstrates the existence of the seeds for second-order intentions.

Other experimental strategies also reveal Gricean delights. Francesca Happé and Eva Loth (2002) have run some ingenious experiments in order to explore whether a truly robust ToM might first emerge in the activity that is so dear to Grice — the ability to track speaker's intentions. They establish a difference in the ability to track false belief in communicative, language learning situations (those in which a novel word is given), and the ability to track false belief in the standard false belief task (which requires a prediction of Sally's action).

They tested a group of subjects both on the standard false belief task and their novel task, and compared the results. Happé and Loth created this new task based on another experiment by Baldwin (1993) in which 18-month-olds could track the intended referent of a novel word even if the object the word names was out of sight (children would assume the word referred to the object that was previously placed in an opaque covered container). Happé and Loth created a false belief task in a naming situation in which the subject would have to determine the intended referent of the agent who named the object. In this task, the puppet would place an object A in a container and leave the scene. Another puppet would enter the scene and replace the object in the container with another object B. The first puppet would then enter the room, pick up the closed container and say, 'Do you want to see the modi? There's a modi in this box. Let's see the modi!' They predicted that if the subjects could track the first puppet's intention and her false belief, they would pick A when asked to pick up either A or B in a subsequent test that asked them to identify the modi. If they could not track these factors, they would either select A or B at chance, or show a preference for the object that was in the container when the object was named (B).

The word-learning task was, in fact, easier than the standard false belief task, i.e. significantly more children passed the former than the latter, and for children who couldn't pass both, it was significantly more likely that they would pass the former and fail the latter, than for them to pass the latter and fail the former [(2002), p. 29]. According to Happé and Loth:

> The results suggest that preschool children find it significantly easier to track a false belief in a word-learning task than in a standard test of false belief. In other words, children can access a representation of another's mistaken belief in order to identify the correct (intended) referent for a novel word, before they are able to use such a representation in order to predict a person's action [Happé and Loth (2002), p. 30].

Malinda Carpenter and her colleagues [Carpenter *et alia* (2002)] have run similar tasks which explore a child's understanding of false belief in these sorts of naming scenarios. They found that children as young as 2 years, 8 months were able to understand false belief in similar naming scenarios, and that of the children who could pick out the proper referent, half of them where younger than 2 years, 11 months.

Another Gricean theme emerged as researchers began to challenge the work of Ellen Markman, Lila Gleitman, and Barbara Landau, among others researchers, who have postulated constraints on word meaning which need not appeal to any claims about the mental states of others. These psychologists argue that the language processor uses *linguistic* constraints to guide

lexical acquisition that have no ToM component and do not require any appeal to metabeliefs.

One of the candidate rules that is said to constrain lexical acquisition is a bias against lexical overlap. Ellen Markman (1989) has proposed that children (and to some extent, adults) are biased to believe that objects have only one name. For example, when two objects are presented to children, one familiar object whose name is known (a fork) and an unfamiliar object whose name is not known (a whisk) and told a new word, the children are more likely to believe that the novel word names the unfamiliar object. Moreover, when presented with a single familiar object whose name is known, children will assume that a novel word is not another name for the object, but instead names some property or part of that object. Markman claims that this tendency in children is a specifically linguistic rule — something that only applies to word learning.

Paul Bloom, however, argues that this capacity is not specifically limited to gaining novel linguistic information, and he explains that something like this rule applies to domains other than the linguistic domain. He wants to argue that this phenomenon is a result of a ToM, and not of any particular linguistic ability. Gil Diesendruck and Lori Markson (2001) have provided the best evidence for Bloom's thesis since they have shown that this same bias exists when children are told novel facts about an object (as opposed to some linguistic fact about the object, such as its name), and it appears that the children are using pragmatic or ToM considerations to guide their decisions. In their experiment, Diesendruck and Markson showed children two objects, A and B. A was given a novel name 'Fep' and the children were asked by the researcher 'Can you show me the Jop?' The children in this study, as in Markman's study, tended to show the researcher B, assuming that its name was 'Jop'.

The crucial test for Diesendruck and Markson came when they showed another group of subjects and told them that A had been given to the researcher by her sister, and asked the subjects to show them the one that dogs like to play with. As Bloom would have predicted, the subjects tended to show the researcher B, assuming that the new information was about the other object. In a further test to demonstrate the fact that ToM information was being used in this task, the researchers hypothesized that if two people were to participate in the experiment with the child, each of whom would give a different fact about the objects, the child should not show any preference between the objects. So, if one of the researchers says that A is something that her sister gave to her, and another researcher asks the child which is the one that dogs like to play with, the child relying on ToM processes that concern the intentions of the speakers and what speakers tend to do in informing people about the world should not think that the second bit of information is probably about B since the second bit of information came from a distinct speaker. This is exactly what occurs in Diesendruck and Markson's experi-

ment, leading them (and Bloom) to conclude that "lexical contrast has its origin in children's expectations about the communicative behavior of others" [Bloom (2002), p. 44]. Those familiar with Grice's conversational maxims [Grice (1975)] will note that even these young children seem to base their judgments on how they expect other speakers to behave, specifically in terms of how much information they are giving and how it is relevant to the situation at hand.

Bloom has extended this strategy in a number of other domains, showing that it is ToM abilities that best explain the whole object bias (the tendency in children to assume that names refer to whole objects, as opposed to their parts or attributes) [(2000), (2002)], the naming of visual representations, and the naming artifacts in general [(1996), (1998), (2000), (2002)]. Grice is being invoked and vindicated through a wealth of psycholinguistic investigation. It seems that ToM and its capacity to understand communicative intentions are crucial components to the mastery of linguistic behavior.

III. Gricean Influences on The Semantic-Pragmatic Distinction

The theories I discuss in II are Gricean in spirit, and many of the researchers usually pay homage to Grice by citing "Meaning" or "Logic and Conversation", but in this section, I want to consider work in the philosophy of language which has much deeper connections to some of Grice's critical theses. Specifically, I will focus on Grice's arguments against the *code model of communication* and his insistence that we must distinguish between *what an utterance says* and *what it merely implicates or suggests*. Both of these issues are involved in current debates about how to separate semantics from pragmatics.

Dan Sperber and Dierdre Wilson credit Grice with offering a crucial alternative to the claim that linguistic communication consists in the straightforward decoding of a linguistic signal. Grice's alternative is to see that communication is an inferential affair, where the speaker provides evidence in the way of an utterance which he expects the audience to be able to recognize and infer what the speaker intends the audience to comprehend. In their own words, Grice makes the case for an *Ostensive-inferential communication*, in which "the communicator produces a stimulus which makes it mutually manifest to communicator and audience that the communicator intends, by the means of this stimulus, to make manifest or more manifest to the audience a set of assumptions" [Sperber and Wilson (1995), p. 63]. It was Grice who enabled them to see that for humans, "Whereas ostensive-inferential communication can be used on its own, and sometimes is, coded communication is only used as a means of strengthening ostensive-inferential communication" [Sperber and Wilson (1995), p. 63]. Sperber and Wilson develop their

own account of how considerations of *relevance* (one of Grice's conversational maxims) shape the ostensive-inferential practice of communication, leading to their widely discussed Relevance Theory of communication.

Grice's other crucial thesis is that within cases of non-natural meaning, there can be three different notions of meaning or content in play. To demonstrate these three notions, consider the following conversation:

A. J.: Do you have money to pay the delivery boy?

CAMPBELL: I went to the bank today

The utterance of interest here is Campbell's: "I went to the bank today". One might first note the literal or conventional meaning of that utterance as being something like the following proposition <*the speaker went to the bank on the day of utterance*>. This proposition does not yet capture the propositional content which Campbell asserted. That content would require that the deictic elements receive their referents, and the ambiguous 'bank' receive its meaning, as in <*Campbell went to the bank$_{money}$ on Tuesday*>. This meaning or content captures, in Grice's terms, what the speaker said or asserted with that utterance. There is a further element, however, which could also be meant by the utterance, but this is something which goes beyond what is said, and is merely *implicated* or *suggested* by that utterance. What is implicated is that Campbell has money to pay the delivery boy. Crucially, though, this meaning is not mandatory, and has the property of what Grice calls *cancellability*. That is, there is no contradiction in saying, "I went to the bank today, but I don't have any money", whereas there is a problem in saying (taking 'bank' univocally), "I went to the bank today, but I didn't go to the bank today". Of course, A.J. has every right to be upset with Campbell's reply, since it violates conversational maxims, but this is another matter.

Keeping these Gricean theses in mind, there is much current interest in trying to decide if there is a useful semantic-pragmatic distinction, and if there is such a distinction, how it should be drawn. The traditional conception of the distinction comes from Charles Morris (1938), who is usually cited as having delivered the most intuitive and influential demarcation of *semiotics* — the theory of signs.[10] He broke down semiotics into three parts: *syntax*, *semantics*, and *pragmatics*. The first is to deal with the grammaticality or well-formedness of signs. The second is to deal with the meanings of signs irrespective of the context in which they are used. The third is to deal with the meanings of signs as they are used in specific contexts. The problem with this traditional break down is that there seems to be elements of meaning which seem to be of semantic relevance, yet whose values seem to vary from context to context. If this is correct, then context-dependence or context-

sensitivity seems to be not merely an issue for pragmatics, but for semantics as well. Consider a few examples:

(a) *Deictic expressions* such as demonstratives like 'this' and 'that' and indexicals like 'I', 'you', and 'him' require that their referents in the context in which they are used be specified by some means. The propositional content of the expression in which they are embedded cannot be given until this has been accomplished.

(b) *Incomplete definite descriptions* such as 'the table' 'the president' do not, unlike complete definite descriptions, satisfy the condition that they pick out one and only one referent. Hence, in the sentence 'The table was covered with books' the referent must be specified relativized to the context in which it is uttered in order to specify the propositional content of the utterance.

(c) *Proper names* are not often recognized as context-sensitive linguistic elements until one realizes that the content of my utterance of "Charlie can have a beer" depends on whether I am referring to my colleague or the young daughter of another colleague, both of whom are named "Charlie."

(d) Determining the *domain of a quantifier* is another context-sensitive matter. Suppose I enter into a party and I announce, "Everybody's a philosopher." As my interpreter, one needs to discover whether I am trying to be clever and exclaim that, at heart, every human is philosophically inclined, or whether I am showing excitement (or disgust) that every person attending the party is a professional philosopher.

(e) The *standards of precision* or *vagueness* that constrain the manner in which an interpreter assigns truth conditions to a sentence also vary according to the context. Tokens of 'France is hexagonal' are going to be assigned different meanings based on the standards of precision that have been established for the context in which it is situated. Someone learning the geography of Europe may utter the sentence to the teacher acceptably, but a geometer wishing to demonstrate the size of the interior angles of a hexagon is not going to be allowed to utter such a claim with the same meaning as the student of geography [Lewis (1979)].

(f) It is also necessary to perform *sense selection* among conventional senses of a word according to the context in which it is used. A widely used example of this sense selection is the choice between the two conventional meanings of 'bank'—the sense of 'bank' associated with money storage and the sense associated with rivers.

(g) Sometimes an utterance includes elements which are not constrained in the number of senses, unlike the cases of sense selection. In these cases, one must use a form of *sense construction* since an indefinite number of senses for an element seem plausible, i.e. no limited range of preexisting senses exists. A famous example is 'He finished the book', where the sense of 'finished' must be constructed so that it is clear what the agent accomplished — was he writing, binding, tearing, burning, …? Another famous example is 'finger cup' where there seem to be several possible senses for this construction, e.g. a cup's having the shape of a finger, a cup containing finger of whiskey, a cup that one holds with a finger. Yet another example is 'John's book' where one has to decide the sense in which the possessive is to be understood. Is this the book he owns, wrote, gave, received? Also consider 'Robert's team' where it must be decided whether it is his favorite team, the one he owns, the one of which he is a member, etc which is of relevance.[11]

(h) Another context-relative element involves examples closely studied by Kent Bach that involve *specification*. In sentences like 'He wears rabbit' the sense of rabbit is quite different (it is fur) from sentences like 'He eats rabbit' (it is meat, and NOT fur that he eats). Understanding these sentences requires us to interpret the general meaning of 'rabbit' in a much more specific sense, depending on the specific construction and the context in which it is used. Recanati argues that for cases of specification, we are forced to choose from an indefinitely large set of specifications or *specifizations* (1995).[12]

The reaction of some current formal theorists to these phenomena has been to admit that there are context-dependent factors involved in the process of determining the meaning of an utterance in a context, but they have chosen to shrink the scope of their theories in order to merely explain the semantic stuff — the stuff that is not affected by context or only minimally affected. The reaction of many working in pragmatics has been to exclaim that so much more than we once thought is now a part of pragmatics — so much that we should reconceptualize the nature of semantics in such a way that general pragmatic factors are properly part of what determines the propositional content of an utterance. In short, most theorists want to establish *some* distinction between semantics and pragmatics, but there is no consensus about how this should be done. In what follows, I will sketch some ways of drawing this distinction, noting the invocations and influences of Grice.

III.1 *Introducing Some Terminology*

'Literal meaning' is not used universally by those writing on these subjects. Other theorists use 'sentence meaning', 'linguistic meaning', or 'conventional meaning' as names for this type of meaning. Though these notions

are more perspicuous than the notion of literal meaning[13], in what follows, I will follow Richard Heck (2001) in calling this type of meaning *standing meaning*. All I want to capture with the notion of standing meaning is that for any expression *e* in a natural language, *L*, the standing meaning of *e* is its context-independent meaning, or for many expressions, the standing meaning will encompass a *set* of meanings as opposed to a single meaning. The standing meaning, as it should be clear by now, may not be fully propositional in all cases, and may stand in need of augmentation in order to become propositional. Hence, standing meaning determines neither truth conditions, nor propositional or semantic content, in at least some cases.

'Speaker meaning' is also widely used in ways which are not standardized. Some people include all pragmatic phenomena as part of speaker meaning, others separate what is said from what is implicated, and use 'speaker meaning' to refer to what is said. In what follows, I will use the phrase 'what is said' or 'what is asserted' as the level of meaning that concerns the meaning of utterances. I define 'implicated meaning' negatively to indicate all of the meaningful aspects of language that arise when it is used that are not semantic, i.e. are not part of what is said.

In order to introduce the issues involved in discussing context-sensitivity, I want to introduce two extremely broad categories which describe two basic strategies for dealing with context-sensitivity. One of the two basic strategies for how to supplement standing meaning to get to propositional content, the *minimalist* strategy, minimizes the amount of context-sensitivity and denies the role of something like intentions in determining the contextually dependent values. The *pragmatic-based* strategy, on the other hand insists that the distance between standing meaning and what is said is not as minimal as the minimalist hopes. It stresses the fact that many contextual elements may be crucial to determining what is said and these factors are not so heavily constrained by linguistic facts or relations.[14] For the pragmatic strategy, many factors in the propositional content of the utterance depend for the determination of their values on the intentional states of the speaker of the utterance.

III.2 *Two Processes: Saturation and Free Enrichment*

Since both the minimalist and the pragmatics-based strategies recognize the need to contextually determine the semantic values for at least some utterances, their major disagreement should be seen as a conflict over the types of processes and the type of information that are considered in fixing the values of the context-sensitive elements. These two approaches have their favorite processes which they believe to be representative of the types of processing that occurs in getting from the standing meaning to the propositional content. The minimalists prefer to describe the processing that occurs in terms of *sa-*

turation of placeholders for the elements which are in need of specification for the utterance in question, whereas the pragmatics-based accounts prefer to describe many of the processes as involving what they call *free enrichment*.[15]

Saturation is a bottom-up process in which the context-dependent elements are given values. Such a process is seen to be *mandatory* because the features must be filled in to obtain any propositional content for the utterance whatsoever.[16] The variables which must receive a value may be either present in the surface structure, or absent in the surface structure, but present as a variable in the logical form (LF) of the sentence. Examples of the first sort of saturation are like those in

(2) I am here

where the elements that require saturation are the indexicals 'I' and 'here'.[17] Examples of the second sort are like

(3) Robert is at home

where, according to Jason Stanley, the propositional content of the sentence is something like the following: *Robert is at the home of N*, where N is "a contextually salient person" and where this additional factor of N is to be found when one looks at the LF of the sentence [Stanley (2000), p. 421]. The general idea is that for any contextual factor that contributes to the specification of the propositional content of the statement, there will be some constituent in the LF of the statement that must be saturated in order to specify a proposition. According to Recanati, the processes (what he calls "primary pragmatic processes") that are required to saturate these empty slots are both mandatory and sub-personal, i.e. the saturation is something that must occur and it happens without being consciously available[18] to us [(2002a), (2002b), (2004)].

The types of processes that interest the pragmatics-based theorists, however, can be described generally as forms of free enrichment, and consist of the examples I described (d)-(h). In this sort of pragmatic processing, what is needed is not the filling in of an element of the statement that is required in order for there to be a proposition expressed at all, but rather either (i) the enrichment of an element of the sentence in order to capture what the speaker intended to assert, (ii) or the addition of some feature to the sentence in order to capture the intuitive truth conditions of the utterance. In these cases, there is not some obviously context-sensitive element that is clearly present in the surface structure of the statement or a factor found in LF. In fact, the element that requires enrichment may be, in other respects, something that appears to be context-*in*sensitive. Indeed, Recanati notes that the reason that this type of processing is called *free* enrichment is because it is not linguistically controlled (2002b). These processes are pragmatic through and through and are

completed by taking the intentional states of the speaker into account in order to specify what is said on that occasion by the speaker.

In order to further understand free enrichment, consider the following example from Kent Bach, which is a statement from a mother to a child who is crying because the child has just cut his finger:

(4) You're not going to die

The intuitive meaning of this utterance seems to be that the child is not going to die from that cut, but whatever process generates this proposition seems unlike saturation. The sentence, as it stands, is in no obvious need of saturation in order to generate a proposition (once saturation is used to give the value for 'you'); hence, the added processing does not seem mandatory. Pragmatics-based theorists insist, however, that the truth conditional content of an utterance will often be generated by processes like free enrichment. They argue that without these processes, the content of the utterance will be misunderstood or misinterpreted. If one only saturates the sentence, one must insist that the mother asserted that the child was immortal and could have only implicated the further proposition that he wouldn't die from that cut. The pragmatics-based theorists think that there are surely other things that could be implicated by the utterance, e.g. that the child needs to stop overreacting, but the assertion expressed is the one arrived at via free enrichment, i.e. that the child is not going to die *from that cut*.

III.3 *Two Extremes and Lots in Between: Literalism and Contextualism*

The general categories of 'minimalist' and 'pragmatic-based' were helpful in explaining the difference between standing meaning and what is said, and gave us two broadly distinct processes that could be used to get from standing meaning to what is said, but, as described, they remain silent about too many crucial factors. Several theorists have argued over the extent to which saturation can handle the factors relevant to generating what is said, and the extent to which some sort of free enrichment is required in order to generate the intuitive proposition that is expressed by an utterance. Recanati (2004)[19] usefully outlines the conceptual space involving these stances as follows, where literalism occupies the minimalist end of the spectrum, and contextualism occupies the pragmatics-based end:

Literalism:

   Strong Literalism
   Weak Literalism
            Indexicalism
            Syncretic view

Contextualism:

> Quasi-Contextualism
> Full-fledged (or Full-blown) Contextualism

In the following sections, I briefly explain the differences among these approaches.

III.3.1 *Strong Literalism*

Strong Literalism, according to Recanati, claims that "it is the linguistic rules, not the speaker's beliefs and intentions, which fix the content of the sentence with respect to context. So Literalism in its modern form holds that *the truth-conditions of a sentence are fixed by the rules of the language* (*with respect to context*) *quite independent of speaker's meaning*" [Recanati (2004), p. 85]. This position is committed to the thesis that no optional, top-down pragmatic processes determine what is said.[20] Only mandatory bottom-up processes like saturation are used in the determination of propositional content. Considerations about the psychological states of the speaker are not used in interpreting the statement; only the rules of language are needed to get from standing meaning to what is said — one needn't think of any specific aspects of the speaker at all.

Introducing some more terminology should help here. John Perry [(1997), (2000c)] distinguishes "automatic indexicals" from "intentional in-dexicals." Automatic indexicals are context-dependent expressions whose content is fixed without taking the beliefs and intentional states of the speaker into account, e.g. 'I' and 'here'. Intentional indexicals are context-dependent expressions whose content is fixed by taking the beliefs and intentional states of the speaker into account, e.g. 'he', 'this book'. According to Strong Literalism, then, all context-dependent expressions that have semantic significance are like Perry's automatic indexicals, i.e. they are generated by following linguistic rules (e.g. 'I' REFERS TO WHOEVER UTTERS THE SENTENCE IN WHICH IT IS EMBEDDED).[21]

III.3.2 *Weak Literalism*

The two forms of weak literalism differ from Strong Literalism in that considerations about the intentional states of the speaker can come into consideration during the determination of propositional content. This loosening of standards allows some of the semantically significant context-dependent expressions to be intentional indexicals in Perry's sense.

III.3.2.1 *Indexicalism*

For the Indexicalist, there are no optional, top-down processes that contribute to what is said.[22] Another way of expressing this claim is that Indexicalists deny that there are "unarticulated constituents" that contribute to what is said. According to contextualists, some sentences contain these context-dependent elements that are not available either in the surface structure of the sentence or in its LF, i.e. they are *unarticulated*. To use an example from Recanati, consider the following:

(5) It is raining[23]

Just as in (3), Recanati and other contextualists insist that there is no element in the surface structure or LF of (5) that could undergo saturation or be filled in, yet there is an unarticulated constituent of the expression that involves the location of the raining event and can be captured in the truth conditions of the utterance.

The Indexicalist makes use of intentional indexicals to explain which features of an utterance contribute to what is said. By denying that there are any unarticulated constituents, he is committed to the fact that any aspect of meaning that contributes to what is said by an utterance must have a slot in LF which can be filled in by linguistic rules or by ToM capacities. Hence, all semantically relevant constituents of utterances must be available in LF and are mandated to be filled in by linguistic or psychological considerations. Hence, when confronted with an alleged unarticulated constituent as in (5), he has two options, keeping in mind that he is committed to the fact that if there is a context-dependent entity that is not articulated (in the surface structure or the LF) it cannot contribute to what is said, but only to what is implicated. He can either deny that the temporal location is included in what is said or he can show that there is a hidden variable in the LF of the sentence that ranges over locations. In order for Indexicalism to be defensible, the decision to take either of these options must be independently motivated (e.g. for genuinely syntactic reasons) as to avoid charges of being ad hoc.

III.3.2.2 *The Syncretic View*

The Syncretic view allows that optional, top-down processes *do* contribute to what is said, but only in its intuitive sense, i.e. there can be unarticulated constituents that contribute to what is said in its intuitive sense.[24] In allowing this, however, the Syncretic view distinguishes among four levels of meaning — standing meaning, what is said strictly, what is said intuitively, and what is implicated. The first two belong to the realm of semantics, and the second two belong to pragmatics.[25] For example, according to a version of the Syncretic view, (5) has a standing meaning that is completely deter-

mined by linguistic rules. What is said (strictly) when it is uttered is that it is raining in some place or other. What is said (intuitively) is that it is raining at the location that the speaker finds relevant. What is implicated is, perhaps, that we should run to the car, or that we should not try to play tennis.

III.3.3 *Quasi-Contextualism*

The Quasi-Contextualist is someone who disagrees with the various minimalist or literalist positions over their insistence that a minimal propositional content; i.e. something like what is said (a la Indexicalism) or what is strictly said (a la Syncretic theory), must be constructed both temporally and logically prior to the point at which truly pragmatic, i.e. optional top-down factors can come into play in the determination of what is said in the intuitive sense.[26] Quasi-Contextualists deny that a determinate *minimal proposition* is always generated by linguistic rules to derive a literally construed assertion, which *could* then be operated on by various optional pragmatic factors in order to generate what is intuitively meant or what is implicated. For example, in a case of sense transfer, when a waiter asserts

(6)   The ham sandwich just left

the Quasi-Contextualist denies that the minimal and absurd proposition that a particular ham sandwich has left the restaurant is first semantically generated and then fed into the pragmatic processor to draw the seemingly nonliteral interpretation of the statement that the person who ordered the ham sandwich just left.[27]

III.3.4 (*Full-blown*) *Contextualism*

The robust contextualist does not merely deny that the minimal proposition must always be generated in the interpretation process; he denies that there is anything like a stable standing meaning out of which the minimal proposition is to be generated. Instead, the meaning of the current phrase is generated out of similarity judgments as to how the current linguistic elements compare to past instances of similar elements. The Full-blown Contextualist is someone who denies that linguistic types have meanings and argues that only speech acts are the bearers of meaning. Hence, there is no formal contribution for the linguistic type to generate except for whatever the token of the type awakens in the memory of the hearer. Such a theory is considerably stronger than the Quasi-Contextualist theory in that the Quasi-Contextualist does not deny that there is a level of meaning that can be described and about which semantic theorists can have intuitions. The Full-blown Contextualist, however, denies that there is a theoretically useful level of meaning for semanticists to study. A Full-blown Contextualist, for exam-

ple, might deny that 'cat' has a standing meaning, and that 'The cat is on the mat' is something that has a standing meaning.[28]

III.4 *Tracing Grice's Influence*

This debate is couched in some terminology which would be unfamiliar to Grice, but the two central theses I noted at the beginning of §3 are still critical influences in this debate. What is most fascinating is that almost every camp in this debate takes some aspect of one of these theses to heart in theorizing about the semantic-pragmatic interface. Although it is impossible to tell how Grice would describe his position using this new terminology, it is clear that some version of the minimalist accounts is actually quite similar to Grice's views on this matter. He argued famously for what he called the "Modified Occam's Razor" in which he warned that one should not multiply meanings beyond necessity [Grice (1975)]. He believed that the only factors that needed to be taken into account (i.e. added to the standing meaning of an utterance in order to specify the propositional content of the utterance) were provided by a process of saturation that filled in indexicals and demonstratives and handled whatever ambiguities were present in the language being analyzed. This propositional content is then available as the input to a procedure that generates conversational implicatures for the statement. Hence, Grice did not qualify as someone who thought that intentions had to be invoked in determining what is said or asserted.

It is widely acknowledged that though Grice found the intentions of speakers relevant to speaker meaning he seemed to minimize the semantic significance of context-dependence. This is, after all, one of his main disagreements with ordinary language philosophers who argued that ambiguity should be found in standing meaning (as in, famously, the logical connectives). If Grice would claim that intentions are relevant to the determination of propositional content (in the determination of the reference for indexicals, for example), however, he *would* qualify as a weak literalist, but if he denied their role, he would fall into the Strong Literalist camp.

Returning to the central theses, we can see that Grice's arguments against the code model of communication are central features in both contextualist camps. No one can doubt that it is necessary to consider the intentions of someone who utters something metaphorical or nonliteral, or when a slip of the tongue occurs; in these cases the code model will obviously be defective. Cases of utterances where some additional meaning is *implicated* by the speaker also require the interpreter to delve into the psychological states of the speaker. These phenomena do not, however, directly motivate the need for the contextualist theories, since no matter how rarely one speaks literally, there are still cases of literal meaning where these intentions need not be considered. But, importantly, according to Recanati, what we need to note is that,

"Even when the speaker speaks literally and 'means what he says', interpreting an utterance requires consideration of the speaker's beliefs and intentions" [Recanati (2002a), p. 113]. Another way of making this point is to say that the meanings of utterances are often, or perhaps always, sensitive to the *context* in which they are uttered. The contextualists differ as to how much inferring and filling in is needed, but it is the genuine failure of the code model which leads them to see the linguistic input as being incomplete and standing in need of augmentation via something like the Relevance Theory's model of communication. Grice was right to stress the need for some inferential model when it came to implicatures, but he failed to realize the extent of context-sensitivity in language and hence, failed to see the need for an inferential model in the determination of what is said or asserted. According to the contextualists, once one sees how much inferring is required, that the utility of a separate determination of the standing meaning of an utterance, and then the determination of what is said, in route to the determination of what is implicated or communicated by an utterance, may just evaporate. Once one recognizes the truth of Grice's attack on the code model of communication, one will realize that the semantic level of content or meaning either plays a very minor role in communication (a version of Moderate Pragmatics) or no interesting role at all (a version of Radical Pragmatics).

It is in response to this collapse of the semantic-pragmatic distinction (into some form of Pragmatics) that the other crucial Gricean thesis comes into play. Most contextualists would wish to defend Moderate Pragmatics, or Quasi-Contextualism, merely stressing that the inferential model is needed in most, if not all acts of utterance interpretation, but that some level of semantic content (though incomplete) still makes a major contribution. From the Literalist camp, Herman Cappelen and Ernie Lepore (hereafter 'C&L') think that the best reason to be a Literalist is that the alternative positions are motivated by unsound arguments and have unpalatable consequences. For any position that is not Strong Literalism, they argue that it will be shown to be a version of Full-blown Contextualism, i.e. in their lingo, any position except theirs will entail that the standing meaning of a sentence cannot determine the truth conditions of the sentence. The other alternatives will be committed to the fact that no utterance of a sentence has truth conditions; only utterances relativized to a rich background of assumptions and information have truth conditions.

C&L [(2003), (2005a), (2005b)] explain that the intermediate theories distinguish between sentences that are semantically complete and those that are semantically incomplete. For example, consider

(7) Steel isn't strong enough

Contextualists argue that by shifting the context in which this sentence is to be interpreted, this sentence will turn out to be semantically incomplete because it does not specify the factor for which the steel is lacking sufficient strength. One can shift the context of the utterance of this sentence and ask the question "Is the steel strong enough for X? For Y? For Z?" etc. The intermediate theories will argue that the factor is an unarticulated constituent (Quasi-Contextualism). The sentence becomes semantically complete only when this factor is contextually supplied, as in

> (8)   Steel isn't strong enough to support the roof

C&L, however, insist that the intermediate theories underestimate the force of their own context-shifting arguments. They insist that an argument parallel to that which shows the incompleteness of (7) can be used to demonstrate the incompleteness of (8). They argue that, according to the intermediate theories, still other factors must be taken into account in order to make the sentence semantically complete. Once one starts examining the factors that could possibly be relevant, and hence, in need of completion in some context or other, where does one stop, i.e. when is the sentence finally semantically complete? C&L specifically raise questions about the temporal factors which could be in need of completion (e.g. "How long is the support supposed to last? Do a few seconds suffice? More than three days? Many years?"), and insist that many other factors that the contextualists have learned to generate cannot be ruled out without some sort of effective criterion. There seem to be indefinitely many factors that could be relevant, in some context or other. Hence, the contextualist arguments, even the more moderate versions, entail that, no matter how many context-dependent features are completed, there will always be others that could be relevant, in some context, and hence, stand in need of completion.

     To summarize, C&L argue that there seem to be the following three ways of looking at the relationship between standing meaning and what is said: (a) No standing meanings need to be augmented by context-dependent elements other than automatic indexicals, i.e. all grammatical sentences are semantically complete; (b) Some standing meanings need to be augmented by context-dependent elements other than automatic indexicals, i.e. some grammatical sentences are semantically complete; and (c) there are no standing meanings, i.e. no sentences are semantically complete (only utterances of them, granting certain background assumptions, are semantically complete). C&L insist that only (a) and (c) are plausible, since (b) is so unstable that it will collapse into (c). Since they take (c) to be an absurd and fanatical position, they advocate (a).

     In making these criticisms of the contextualist theories, the Literalists are invoking the importance of the second of Grice's crucial theses — that

what is *implicated* or *communicated* can and *must* be distinguished from what an utterance strictly speaking *says* or *asserts*. For the stronger versions of Literalism, this defense of the second Gricean thesis leads to an account of semantic content which is (self-admittedly) minimalist, where the content of what is strictly speaking said or asserted may be incomplete or not fully propositional. C&L, in fact think that speakers intuitions about what is said by an utterance can be too infected with pragmatic concerns to be a reliable resource for semantic intuitions. Because of this, they claim that sentences like 'It is raining' and 'Mary is ready' have minimal semantic contents, i.e. what they literally assert is *<it is raining>* and *<Mary is ready>* and that the specification of where it is raining and what activity Mary is ready for a non-semantic issue.[29] Many people find this quite counterintuitive.

Nevertheless, I think this argument concerning *semantic completeness* is absolutely crucial to the proper demarcation of the semantic-pragmatic divide. The threat of collapse of semantics into radical pragmatics is real and something must be done to avoid this collapse. Hence, I agree that we must take this argument seriously. The problem is actually quite worse than I have suggested. C&L not only level this attack on contextualist theories but on other versions of Literalism; basically, they think that if you believe that the context is relevant in filling in anything other than the common class of indexicals and demonstratives (in basically the automatic way) then your position will collapse into Radical Pragmatics. This argument, however, is valid, but is unsound. Elsewhere, I have shown that there are viable candidates for (b) that do not collapse into (c) [Thompson (2004)]. C&L's slippery slope argument works for some theories, but the slope is not as slippery as they suggest. I argue that there are multiple versions of theories which capture the following critical idea: *There is a single, theoretically and intuitively motivated level of semantic representation that captures both the truth conditions of the sentence and what is intuitively said by the uttering of the sentence.*

These theories, all versions of what I call *Intention-dependent Semantic theories*, offer a version of semantic content which is tied closely to our intuitions about what an utterance intuitively says and still maintains a level of content which fails to collapse into radical pragmatics (or Full-blown Contextualism). These theories allow for a modest number of context-dependent expressions which are, in fact, specified in a context by the very apparatus which was the focus of Section II — ToM. Basically these context-dependent expressions have their values at least partially determined by taking intentional factors into account—a task achieved by using ToM. According to these theories, the sematic-pragmatic distinction may be drawn along Gricean lines: Everything required to determine what is intuitively said by an utterance counts as semantic; everything else which contributes to what is communicated in pragmatic.[30]

In the end, Grice's influences in this debate over the semantic-pragmatic distinction are fascinating and useful to catalog. It is surely a testament to his philosophical prowess that almost everyone involved in the debate finds him as a crucial inspiration, no matter how divergent these figures become. In the end, if Grice were still with us, I suspect that he would lean towards the Literalist camps, noting that the code model is indeed a flawed general account of communication, but warning that what the words in a sentence contribute to an act of communication is of critical importance. But, perhaps if he saw the substantial context-sensitivity now highlighted in language he might think that he had underestimated what needed to be considered in the determination of what is said. If so, finding a way of defeating C&L's slippery slope argument would take on critical importance for him. Indeed, I think that Intention-dependent Semantic theories offer a Gricean minimalist (though not overly minimalist) account of what is said that puts consideration of referential and communicative intentions in their proper place.

IV. FITTING GRICE INTO THE NATURAL WORLD

In closing, I think that it is important to situate the theories outlined in this paper in a proper context, given Grice's qualms about philosophical naturalism. Many of the theories discussed have basically ignored these qualms, or used them as a way of distancing their theories from those of Grice. Many of these theories have basically naturalized Grice (or the mentalistic notions they adopted from Grice, to greater and lesser degrees). Grice saw his ruminations about reasoning, and the inferences involved in accounting for meaning, not as a psychological description of what literally is going on in the head of speakers when they reason or communicate, but rather as a rational reconstruction of what could make sense of the behavior from within a rational framework. Many of the theories discussed in this paper are theories which, in contrast, are supposed to have some level of psychological reality, as theories about how we actually reason or how utterances actually are produced and interpreted. It will be interesting to see, in the future, just how these conceptions of meaning and intention fit into the psychological frameworks being offered in psychology and psycholinguistics. It could be, as I think is the case up to this point, that the basic elements of Grice's system have fairly smoothly fit into the causal scientific picture of the world, without significant remainder. Yet, later in life, Grice seemed content to see his analysis of speaker meaning (something like (1)) as a psychologically unrealizable ideal, but one which could be used as a benchmark for how non-ideal cases of meaning measured up [Grice (1982), see Thompson (forthcoming) for an story explaining why this is not so bad for Griceans]. So, one might wonder what would happen if many of Grice's claims, as unearthed through

years of analyzing our concepts — they very concepts which underpin meaningfulness itself — start to look less likely as candidates for our psychological theorizing. If this happens to be the case, Grice warns,

> We must be ever watchful against the Devil of scientism, who would lead us into myopic over-concentration on the nature and importance of knowledge, and of scientific knowledge in particular; the Devil who is even so audacious as to tempt us to call into question the very system of ideas required to make intelligible the very idea of calling into question anything at all; and who would even prompt us, in effect, to suggest that, since we do not really think, we had better change our minds without undue delay [Grice (1974/1975), p. 53].

I believe Paul Churchland (1981) shows why this sort of argument, as stated, is fallacious, but I think that if the sciences of the mind and of language tend to turn towards radical eliminativism, the normative and rational aspects of mind and language may just begin to reassert themselves, and Grice's own views might be quite well poised to tell a different sort of story than the scientific one. I think that it is more likely that key elements in his picture will appear in our psychological and psycholinguistic theorizing in the years to come, but if something truly and radically different is needed, those old conceptual analyses and rational reconstructions, to many of us, may not seem so bad after all.

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NOTES

[2] Hereafter, all uses of 'meaning' will concern non-natural meaning.
[3] It should be noted that, following Grice, 'utterance' is to be understood liberally enough to include vocal utterances, written inscriptions, the ringing of a bell, gestures, and any behavior that can be understood as meaning something by something.
[4] Grice (1989), Ch. 5, 6, and 18, Schiffer (1972) and (1981), Bennett (1976), and Loar (1982) are the most notable attempts at carrying out the IBS reduction.
[5] See Fodor (1987) and Stich and Warfield (1994) for a discussion of these psychosemantic theories.

[6] A weaker IBS thesis, that linguistic meaning should be spelled out in terms of psychological meaning, is still alive and well, despite the fact that Schiffer (1987) also levels substantial attacks on this thesis as well.

[7] See Davis (1998) and Saul (2002a, 2002b) for very different takes on Grice's theory.

[8] These topics have already been covered — see Grandy and Warner (1986) and Neale (1992).

[9] See Bloom and German (2000).

[10] Rudolph Carnap (1956) follows the lead of Morris.

[11] See Pustejovsky (1991) and Kay and Zimmer (1967), or see a summary in Recanati (1995).

[12] Recanati (1995) notes that although specification seems quite similar to sense selection, sense selection is a distinct phenomenon since it is seems analyzable in terms of a hidden constituent in the logical form of the expression (e.g. 'Robert's book' may have the logical form *the book that bears relation R to Robert* where the value for R needs to be saturated or filled in by the context (see Stanley 2000, 2002). In the case of specification, there appears to be no such analysis in terms of a hidden constituent, or so says Recanati.

[13] For example, I'm not looking for the contrast class for nonliteral meaning.

[14] Indeed, for the most radical of the pragmatic-based theorists, the amount of constraint offered by linguistic facts or relations, and the distance between standing meaning and what is said must be reconceptualized so thoroughly that the very existence of standing meanings and any possible constraints this level of meaning could offer is actually denied (and, hence, there is no *distance* between what is said and the (nonexistent) standing meaning) To exploit the notion of distance, a radical pragmatics-based approach would have to say that there is a huge distance between what is said and what *one might think of (or what other theorists describe)* as the standing meaning.

[15] See Recanati (2004) and Carston (2002a).

[16] The sense of bottom-up and mandatory is used in the standard sense of describing a computational system which needs no rational or non-demonstrative control in carrying out its task. The input to these processes is a logical form which has a slot in it which is filled in by the computational process. There is no possibility that a properly-functioning process which is bottom-up and mandatory could "decide" to activate itself or "decide" once running that the process needn't be completed. These are also, as noted below, sub-personal.

[17] Assuming that 'here' isn't being used as a demonstrative, e.g. to pick out your location on a map.

[18] Recanati explains that primary pragmatic processes are sub-personal, but surely he must concede that occasionally (or perhaps often) the process of reference fixation is consciously accessible.

[19] The influence of Recanati (2004) shouldn't be understated in my understanding of these issues. It has served (first in draft form, and now in print) as a guide through this literature and these positions. Most comprehensive projects in this area begin with a general distinction between something like saturation and free enrichment (see Carston 2002a and Sperber and Wilson (1995)), and go on to develop criticisms of the positions of various theorists, but Recanati has finally tried to bring

these theorists under general categories. Hence, my adoption of his way of cutting up the issues is justified, in my lights. I diverge a bit in how I categorize people within these categories, as I will note along the way, but his categories have made this literature comprehensible, and his efforts deserve praise. Indeed, other accounts usually give just *two* categories — decoding vs. inferential strategies, formal vs. pragmatic accounts, Gricean vs. non-Gricean accounts. As I hope to show, these dichotomies blur or cloak crucial issues in the debate.

[20] This view is fairly close to those of Grice, Cappelen and Lepore (2003, 2005a, 2005b) and Borg (2004), but there is some case to be made that they hold a really radical version of the Syncretic view. I think it is easier to see them as at least not objecting to their characterization as Strong Literalists.

[21] Perry's discussion is more subtle than this suggests. He also distinguishes between wide and narrow contexts for the indexicals, where narrow contexts only take into account agent, time, and position, and wide can take any aspect into account. Hence, there are four categories: Automatic/Narrow (e.g. 'I', 'here', 'now'), Automatic/Wide (e.g. 'tomorrow', 'yea' as in 'yea big'), Intentional/Narrow (e.g. 'now', 'here'), Intentional/Wide (e.g. 'that', 'this man', 'there'). One may note that 'here' and 'now' are included in two categories. Perry is unsure what to say about these, especially if one takes these to be pure or essential indexicals, or the indexicals in terms of which the others can be defined, since, as I note below, they may not be as *automatic* as one might think. See his (1997, 2000c).

[22] King and Stanley (2005) and Thompson (2004) develop this sort of view.

[23] The example, and the term 'unarticulated constituent' are due to Perry (2000b). The use of the term has undergone some changes, and when I use it, I intend it in the way of Recanati (2002b), as explained in what I say below. Perry's original use was introduced in the context of trying to explain how one could think about something without representing it (as a piece in his theory of self-knowledge).

[24] Such a view is held by Kent Bach (1994a, 1994b), Nathan Salmon (1986) and Scott Soames (2002).

[25] Not every Syncretic theorist has to explain what is said (intuitively) by appealing to unarticulated constituents as theoretical entities. What is critical is the difference between the two notions of what is said, and one could imagine different processes leading to these different levels of meaning. In fact, there may be some difference among Syncretic theorists about what sorts of processes are responsible for the strict sense of what is said and about what sorts of processes are responsible for the intuitive sense. Indeed, there may be significant variation in what the Syncretic theorists find to be of semantic relevance, so that the first three levels could be judged as semantic as opposed to merely the first two.

[26] I take the Relevance Theorists to be defenders of this view; see Sperber and Wilson (1995) Carston (2002a), (2002b), and Recanati seems to take this as his preferred position.

[27] See Recanati (2002a, 2004) for his account of how this processing story is supposed to be told.

[28] In Chapter 9 of Recanati (2004), we are given four names for possible approaches to contextualism. For interested readers, I interpret Recanati to include the "Wrong Format", "Pragmatic Composition" and "Strong Optionality" views under "Quasi-Contextualism" and reserves "Full-blown Contextualism" for "Meaning Eliminativism".

Recanati suggests that he may actually not find Full-blown Contextualism all that unpalatable, so he counts as a more timid supporter of this view. Wittgenstein, Austin, Searle, Travis, and Waismann defend some such view.

[29] Depending on how much of an affinity C&L feel towards the Syncretic position, they could also state that at best, what these utterances literally assert are the following complete but minimal propositions <*it is raining someplace or other*> and <*Mary is ready for something or other*>. But no matter which sort of contents C&L choose, these sentences seem to assert claims which will rarely or ever be false. C&L have no problem with this counterintuitive result, but most people find this hard to accept as the proper semantic contents.

[30] Cappelen and Lepore explicitly jettison notions about *what is said* from semantic theorizing. For problems with this move, see Richard (1998), Reimer (1998) and Thompson (2004).

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