MARCELO DASCAL AND THE LITERAL MEANING DEBATES

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Abstract: *What role does literal meaning play in people's understanding of indirect and figurative language? Scholars from many disciplines have debated this issue for several decades. This chapter describes these debates, especially focusing on the arguments between the author and Marcelo Dascal. I suggest that Dascal's defense of "moderate literalism" may have some validity, contrary to some of my earlier arguments against this point of view. The chapter acknowledges the strong contribution that Marcelo Dascal has made to interdisciplinary discussions on language and thought.*

Key-words: *literal meaning; non-literal meaning; pragmatics; implicature; metaphor.*

I have had the privilege of knowing Marcelo Dascal for over ten years, and have known of his work for a much longer period of time. Marcelo is an extraordinary philosopher whose scholarship on pragmatics, rhetoric, history of science, politics, and 17th-century philosophy (he is a great admirer of Leibniz) has touched many people in a wide-number of academic fields. He is a true interdisciplinarian, and has been a leading figure in the movement to examine questions of

meaning and language use from a cognitivist perspective (e.g., his editorship of the journal *Pragmatics and Cognition*). Marcelo, unlike many philosophers, explicitly explores the connections between philosophy, linguistics, and psychology, and in doing so pays more than mere lip service to the idea psychology can, and should, inform philosophical theory. Of course, Marcelo does not uncritically accept any empirical finding from psychology simply because it supports his particular point of view. Instead, as an astute reader of psychology and linguistics, among other fields, he evaluates the import of any work on both methodological and theoretical grounds.

My aim in this paper is to briefly describe Marcelo's work on one topic that has been of great interdisciplinary interest for over twenty years. The claim that certain linguistic meanings are "literal" and serve as a foundational starting point for theories of utterance interpretation has been widely and fiercely debated. Marcelo has made an important contribution to this debate, specifically in his criticisms of some of my own work and writings as a cognitive psychologist. I want to tell the story of our interaction over the years on the topic of literal meaning. Yet I also want to openly acknowledge, now after many years of resistance, that I believe that Marcelo may be quite right in his defense of some notion of literal meaning, *contra* my own attempts to abolish this idea as a useful theoretical construct in psychological theories of language use.

1. TRADITIONAL VIEWS OF LITERAL MEANING IN UNDERSTANDING

Consider the following exchange between two university students:
Greg: "Have you heard Prof. Smith teach?"
Nicole: "His lectures are sleeping pills for insomniacs."

Nicole's response to Greg's question is metaphorical and strictly speaking violates the norm that English sentences must be literally (i.e., syntactically and semantically) well-formed. Yet listeners are usually able to infer Nicole's intended meaning from their understanding of the context, and perhaps of Nicole herself.

Consider another conversation between two students:

Ken: "What happened to your sick cat?"
Beth: "Poor Boots finally kicked the bucket."

Although Beth's response is literally well-formed, the literal meaning of what she says varies considerably from what she intends to communicate by the phrase "kicked the bucket." Once again, competent American English speakers are able to infer the intended, non-literal meaning of Beth's expression, even if what she literally says differs from what she means.

Both these examples raise interesting questions about the possible role of literal meaning in ordinary utterance interpretation. The debate on literal meaning in theories of language processing has focused on two main issues: (1) Are there conditions by which the literal meaning of a sentence can be appropriately identified?; and (2) Is there some evaluation of literal meaning during the interpretation of natural language utterances?

The traditional view of literal meaning is that sentences have literal meanings that are entirely determined by the meanings of their component words (or morphemes) and the syntactical rules according to which these elements are combined. Some sentences have more than one literal meaning, as in ambiguous sentences. Other sentences may have ill-formed or defective literal meanings. Most importantly, a sentence's literal meaning is sharply distinguished from what a speaker

implies by use of a sentence. Under this view, literal meanings are context-independent semantic meanings, while speaker meanings are contextually-specific.

The most influential ideas on the role of literal meaning in utterance interpretation come from Grice's theory of conversational implicature and Searle's work on speech act theory. Grice ((1975), (1978)) noted that much of the information that is conveyed in conversation is implied rather than asserted. He argued that speakers and listeners expect each other to interpret their utterances as if they were acting in a rational and cooperative manner (the "cooperative principle"). To do this, speakers and listeners operate according to several maxims that include Quantity (make your contribution as informative as needed), Quality (do not say what you believe to be false), Relevance (be relevant), and Manner (avoid ambiguity). Listeners determine the conversational inferences (or "implicatures") of a non-literal utterance, for instance, by first analyzing the literal meaning of the sentence (i.e., its compositional, semantic, context-free meaning). Second, the listener assesses the appropriateness and/or truthfulness of that literal meaning against the context of the utterance. Third, if the literal meaning is defective or inappropriate for the context, then and *only* then, will listeners derive an alternative non-literal meaning that makes the utterance consistent with the cooperative principle. Searle (1979) offered a similar rational analysis of figurative language interpretation. He proposed various principles that allows listeners to figure out just how sentence and speaker meanings differ in metaphor, irony, indirect speech acts, and so on. Searle believed that Grice's principles of cooperative conversation and the rules for performing speech acts are sufficient to provide the basic principles for inferring what speakers mean when this departs from what they literally say.

The traditional view about literal meaning in language processing suggests three related claims about how non-literal expressions are understood (Gibbs, (1984); Glucksberg & Keysar, (1990)). First, the analysis of a sentence's literal meaning is obligatory, and always derived before other figurative meanings can be determined. Second, understanding non-literal speech requires that a defective literal meaning be found before searching for a non-literal meaning. Figurative meaning can be ignored if the literal meaning of an utterance makes sense in context. Finally, additional inferential work must be done to derive figurative meanings that are contextually appropriate.

My article "Literal meaning and psychological theory" (Gibbs, (1984)) examined these claims from the perspective of contemporary psycholinguistic research. I first argued that there is not a well-defined set of conditions for specifying the literal meanings of sentences in terms of compositional analysis. Second, I argued that the experimental evidence speaks negatively as to whether people must analyze the literal meanings of sentences as part of the process of understanding speakers' utterances. For example, the results of many psycholinguistic experiments have shown this claim to be false (Gibbs, (1994)). Listeners/readers can often understand the figurative interpretations of metaphor (e.g., "billboards are warts on the landscape"), metonymy (e.g., "The ham sandwich left without paying") sarcasm (e.g., "You are a fine friend"), idioms (e.g., "John popped the question to Mary"), proverbs (e.g., "The early bird catches the worm"), and indirect speech acts (e.g., "Would you mind lending me five dollars?") without having to first analyze and reject their literal meanings when these tropes are seen in realistic social contexts. Furthermore, people apprehend the non-literal meanings of simple comparison statements (e.g., "surgeons are butchers") even when the literal meanings of these statements fit perfectly with context (Glucksberg & Keysar, (1990)). Even without a

defective literal meaning to trigger a search for an alternative figurative meaning, metaphor, to take one example, can be automatically interpreted. Finally, metaphor, metonymy, irony, and indirect speech acts require the same kind of contextual information as do comparable literal expressions (see Gibbs, (1994) for a review of these studies).

From these observations, I suggested that the widely-accepted distinctions between literal and metaphoric meanings, and between semantics and pragmatics, have little utility for psychological theories of meaning and language use. Similar psychological mechanisms appear to drive the understanding of both literal and figurative speech at least insofar as very early cognitive processes are concerned.

The psychological evidence suggested, to me back in 1984, an alternative view where people can comprehend the intended meanings of many non-literal utterances directly if these are seen in realistic social contexts (Gibbs, (1994)). The "direct access view" simply claims that listeners need not automatically analyze the complete literal meanings of linguistic expressions before accessing pragmatic knowledge to figure out what speakers intend to communicate. This view doesn't claim that listeners never access something about what the individual words mean (perhaps, but not necessarily, these words' literal meanings) during processing of what speakers imply. Nor did the direct access view claim that people never take longer to process a figurative meaning than to understand a literal one. People may sometimes take a good deal of time to process, for example, novel poetic metaphors. Yet it is not at all clear that the additional time needed to understand some novel expressions is necessarily due to a preliminary stage in which the non-pragmatic, literal meaning for an entire utterance is first analyzed and then rejected.

2. MARCELO'S DEFENSE OF LITERAL MEANING

Marcelo responded to my 1984 article with a paper published in 1987 defending the notion of literal meaning. Although Marcelo agreed with my essential point that literal meaning should not be equated with compositional meaning, he alleged that the concept of literal meaning can be profitably redefined as the conventional interpretation for a sentence (see Giora, (1997) for a related idea in terms of "salience"). He proposed an alternative view of literal meaning, called "moderate literalism," which abandons the attempt to offer a set of necessary and sufficient conditions for something to be a literal meaning. In its place, Marcelo suggests that several conditions and criteria are semantically relevant to literal meaning but that no single condition or criterion is strictly necessary or sufficient. Even though compositionality is not sufficient to give a complete determination of literal meaning, it is still one source of information used in constructing the literal meaning of a sentence. This less formal description of literal meaning should allow one, Marcelo argued, to include as part of the literal meanings of sentences aspects of meaning such as hints, suggestions, and emotive meanings, along with the criteria of non-cancelability (in Grice's sense) and context invariance. Each of these aspects of meaning converge with compositionality to produce the literal, or as Marcelo proposed, the conventional, meaning of a sentence. Presumably this level of semantic representation plays an obligatory role in the process of leading listeners to identify the contextually appropriate meanings of utterances.

Marcelo demonstrated an example of the need for some notion of literal meaning in his discussion of jokes, hypnosis, and dreams. He argued that the communicative and non-communicative aspects of the language in jokes, hypnosis, and dreams presuppose, and reinforce, the idea that words, phrases, and sentences must have literal meanings. For

example, in his analysis of jokes, Marcelo referred to Freud's idea that for "a story to be understood as a joke, it should operate at least at two detectable levels of meaning" ((1987) p. 269), one of which presumably reflects an awareness of literal meaning. A listener is initially led to comprehend a story as having one meaning, while another meaning eventually turns out to be the correct interpretation. Consider the joke discussed by Freud (taken from Marcelo, (1987) p. 270).

The first Jew asks: "Have you taken a bath?" The second replies asking the other in return: "Why? is there one missing?"

Marcelo contends, as do others, that the double meaning in jokes consist of "primary" and "secondary" meanings with the "primary" being associated with the literal meaning and the "secondary" with its metaphorical interpretation. Although Marcelo admits that metaphorical meaning may not be computed from the literal, the fact that listeners are able to recover the "primary" meaning when interpreting a joke suggests to him that literal meaning must be "in the offing for ready usage by the listener" ((1987) p. 270).

Contrary to my earlier position, then, Marcelo stated that with this revised definition of literal meaning one can easily see that some analysis of literal meaning plays a role, no matter how minor, in guiding understanders to the contextually appropriate interpretations of speakers' messages.

Finally, Marcelo claimed that the alleged empirical evidence against literal meaning, reviewed in my 1984 paper, really supports his view of literal meaning and its purported role in language processing. These experimental findings generally indicate that people take no longer and in many cases less time, to process the non-literal interpretations of idioms, indirect speech acts, sarcasm, and metaphor than to comprehend their literal interpretations. Marcelo assumed that because these experiments primarily examined comprehension of conventionalized

figurative speech, the data really lead to the conclusion that the conventional meanings of utterances are, in fact, their literal ones.

3. THE DEBATE CONTINUES

Marcelo's argument, only part of which I have summarized here, was compelling in all the usual ways one expects to see in Marcelo's scholarly writings. Not surprisingly, I disagreed with aspects of Marcelo's criticisms and his defense of literal meaning. I responded in 1989 to Marcelo's 1987 paper, with Marcelo providing the final word in a subsequent paper in 1989. In my reply, I argued that there is nothing wrong with characterizing the concept of literal meaning as a kind of prototype with various sources of information, but no single set of conditions, contributing to its make-up.

But two specific problems arise when defining literal meaning as a prototype. First, how are the various aspects of meaning and criteria, alluded to by Marcelo, combined to produce a specific semantic representation that is necessary for understanding speaker meaning? It may be relatively easy to discern the conventional meaning of idiomatic phrases (e.g., "kick the bucket" literally or conventionally means "to die"). But it is not obvious how to apply the various criteria when determining the conventional meanings of utterances with innovative, figurative meanings. For example, is the literal meaning of the metaphorical utterance "His lectures are sleeping pills for insomniacs" related to this statement's compositional analyses or some other confluence of meanings more closely associated with its non-literal interpretation? Marcelo didn't mention the likely possibility that composition and convention can give conflicting (i.e., incompatible) interpretations which only context can reconcile.

One concern with Marcelo's list of meaning sources and criteria is that these may not be capable of generating literal meanings for sentences in a way that listeners can use such information when understanding what speakers mean. The set of heuristics used for determining literal meaning should operate in such a manner so that literal meaning can be automatically computed in real-time (i.e., within a few hundred milliseconds). At the same time, if the determination of literal meaning is a necessary part of understanding language, then there must be some way of differentiating the criteria used in specifying literal meaning from those criteria, including literal meaning itself, that apply when understanding different aspects of contextual, speaker meaning.

One possible way of separating the knowledge used in determining literal meaning from that used in recognition of speaker meaning is to maintain Searle's (1978) distinction between background and context. Background assumptions are very general shared knowledge, which would be absurd to miss, while context includes those assumptions that are involved in interpreting non-literal or indirect utterances, such as irony, metaphor, indirect speech acts, and so on. Searle (1983) suggests that background, unlike context, is not part of meaning. Background does play a crucial role in our understanding, but is not part of meaning since it is non-representational and pre-intentional. According to Searle, "Meaning exists only where there is a distinction between Intentional content and form of its externalization, and to ask for the meaning is to ask for the Intentional content that goes with the form of externalization" ((1983) p. 28).

Marcelo did not appeal to this possible difference between background and context. I describe this problem in some detail in my 1984 paper. At that time, I argued that the idea that background knowledge is deeply presupposed, and quite unconscious, does not mean that is must be evaluated before other knowledge in the foreground is

accessed. Searle's ((1978), (1983)) notion that literal meaning can only be determined relative to a set of background assumptions leads to the clear prediction that people must go through an extra stage of analysis in comprehending indirect and non-literal speech. Nevertheless, this hypothesis is clearly not supported by the experimental data, at least back in 1989.

I also had problems with Marcelo's argument that when understanding a joke, there seems to be a moment when we quickly recover a different meaning from a line or phrase that we previously believed to have correctly understood. I did not comment on this in my 1989 paper, but why must one of a joke's potential meanings, through which the joke achieves its humor, be the "literal" meaning, while the other is referred to as the joke's "secondary" or "metaphorical" meaning? The belief in a literal or primary meaning assumes that the humor in jokes lies in the text itself rather than in the (mis)interpretations of the speakers' intentions. Thus, Freud's joke seems funny precisely because the listener misinterprets the speaker's actual intention in stating the question "Have you taken a bath?" in the later context of a missing bath. It is the shifting of speaker's intentions through which a joke gets its humor, not in the shift from a "literal" to "secondary" meaning in the text. It makes no sense to call one possible intention a "literal meaning" unless one can state exactly what makes this meaning psychologically primary. All Marcelo correctly showed is that there are a variety of "products" that result from language understanding. Nobody disputes this as an aspect of psychological reality. I did, however, dispute the notion that some of these products are primary and reflect the output of a unique cognitive process.

In summary, Marcelo raised some important possibilities for reconceptualizing literal meaning in such a way that it may better serve as a foundation for linguistic processing than the more traditional idea of

compositional meaning. In 1989 I was skeptical of some of Marcelo's suggestions and still have some concerns about viewing literal meaning in the moderate way Marcelo proposes. Yet I also now recognize that the words people use must have some role in understanding speaker meaning. Inferring communicative intent can not simply be a matter of context alone. People may indeed analyze something of what speakers say along the path toward inferring what they contextually implicate.

4. WHAT SPEAKERS SAY AND LITERAL MEANING

I now describe some of my recent empirical work that has led me to adopt a position closer to Marcelo's view of moderate literalism. This work examines the importance of what speakers pragmatically say in understanding what speakers conversationally implicate. I argue that people may indeed analyze what speakers pragmatically say as part of their inferring what speakers intend to communicate. In this way, listeners do not necessarily analyze the semantic, context-free meanings of sentences, but do infer something about what speakers are saying, in an enriched pragmatic manner, as a starting step in comprehending contextually-appropriate meaning.

Paul Grice's theory ((1975), (1978), (1989)) suggests that any linguistic act conveys two levels of communicated propositional content: (a) the level of "what is said," which is the proposition explicitly expressed, closely relevant to its linguistic, semantic content and usually is equated with the truth-conditional, literal content of the utterance; and (b) the level of "what is implicated," or the further propositions intended by the speaker which depend on pragmatics for their recovery. Although even Grice acknowledge that some contextual information must play a role in determining what speakers say, such as that needed to resolve

ambiguity and fix indexical reference, what speaker says is essentially a minimally pragmatic meaning.

I now argue that Grice was essentially correct in claiming that people, at least sometimes, analyze what speakers say as part of their understanding of what speakers imply in context. But Grice and others were incorrect in assuming that what a speaker says is equivalent with an utterance's context-free, semantic, literal, or truth-conditional meaning. My claim is that significant aspects of what speakers say, and not just what they totally communicate, are fundamentally dependent upon enriched pragmatic knowledge. People may analyze aspects of what speakers pragmatically say as part of understanding what speakers conversationally implicate. Under this revised theory, some aspects of pragmatic knowledge shape listeners' understanding of what speakers say, while other pragmatic information enables listeners to construct reasonable interpretations of what speakers imply in context. This new theory, then, casts a very different, and more complete, role for pragmatics in a psychological theory of linguistic understanding than has previously been envisioned.

In recent years, several linguists and philosophers have persuasively argued that the traditional, Gricean view of implied meaning ignores the fact that essentially the same sorts of inferential processes used to determine conversational implicatures also enter into determining what is speakers say (Carston, (1993); Recanati, (1989), (1993); Sperber & Wilson, (1986)). Consider a case where a speaker says to you "I haven't eaten." In this case, at least once the indexical references and the time of the utterance are fixed, the literal meaning of the sentence determines a definite proposition, with a definite truth-condition, which can be expressed as "The speaker has not eaten prior to the time of the utterance." This paraphrase reflects the minimal proposition expressed by "I haven't eaten" (Recanati, (1989)). However,

a speaker of "I haven't eaten" is likely to be communicating not a minimal proposition, but some pragmatic expansion of it, such as "I haven't eaten today." This possibility suggests that significant pragmatic knowledge plays a role in enabling listeners to expand upon the minimal proposition expressed to recover an enriched pragmatic understanding of what a speaker says.

Gibbs and Moise (1997) demonstrated in several experimental studies that pragmatics plays a major role in people's intuitions of what speakers say (for further discussion of these findings, see Nicole and Clark, (1999); and Gibbs, (1999)). Consider the expression "Jane has three children." According the Gricean view, the interpretation that "Jane has exactly three children" comes from applying specific pragmatic information to the minimally-pragmatic proposition of what is said (e.g., "Jane has at least three children), a process that results in what Grice referred to as a "generalized conversational implicature" (i.e., implicatures that are normally drawn regardless of the context). But we showed in series of experiments looking at students' intuitions about what speakers say that people do not equate the minimal meaning with what a speaker says. A first study showed that participants chose significantly more enriched pragmatic paraphrases of what speakers say (e.g., "Jane has exactly three children"), than they did paraphrases that were minimally pragmatic (e.g., "Jane has at least three children and may have more than three"). A second study revealed that even when alerted to the Gricean position (i.e., what is said is equivalent to the minimal proposition expressed), people still reply that enriched pragmatics is part of their interpretation of what a speaker says and not just what the speaker implicates in context.

The fact that people prefer enriched pragmatic paraphrases for what speakers say doesn't mean that they are unable to distinguish between what speakers say and what they implicate. The findings of

another study reported in Gibbs and Moise (1997) demonstrated that people recognize a distinction between what speakers say, or what is said, and what speakers implicate in particular contexts. For instance, consider the following story:

> Bill wanted to date his co-worker Jane.
> Being rather shy and not knowing Jane very well,
> Bill asked his friend, Steve, about Jane.
> Bill didn't even know if Jane was married or not.
> When Bill asked Steve about this, Steve replied
> "Jane has three children."

What does Steve say and what does he implicate by his utterance? Steve implicates by his statement "Jane has three children" in this context that "Jane is already married." To the extent that people can understand what Steve says, but not implicates, by "Jane has three children," they should be able to distinguish between the enriched and implicated paraphrases of the final expressions.

The results of one study showed this to be true. When participants were asked to choose the best paraphrase of what a speaker says in a context like the above one, they chose one that reflected the enriched pragmatic meaning (i.e., "Jane has exactly three children") and not implicature paraphrases (i.e., "Jane is married"). These findings show that pragmatics strongly influences people's understanding of both what speakers say and communicate. It appears that Grice's examples of generalized conversational implicatures are not implicatures at all but understood as part of what speakers say. More generally, the Gibbs and Moise (1997) findings suggest that the distinction between saying and implicating is orthogonal to the division between semantics and pragmatics.

One possibility is that comprehending what speakers pragmatically say serves as the foundation, in part, for further contextual elaborations to infer what speakers pragmatically imply. There may be two kinds of pragmatic information or knowledge, primary and secondary, that become activated during normal language understanding (Gibbs & Moise (1997); Recanati (1993)). Primary pragmatic knowledge apply deep, default background knowledge to provide an interpretation of what speakers say. Under this view, primary pragmatic knowledge relates to deeply held, perhaps non-representational (Searle (1983)) knowledge that is so widely shared as to seem invisible. To take a classic example (Searle (1978)), our interpretation of the expression "The cat is on the mat" presupposes an enumerable set of assumptions, such as that the cat chose for some reason to sit on the mat, and that the cat and mat are on the ground operating under the constraints of physical laws like gravity and are not floating in space in such a way that the cat is on the mat by virtue of touching the underneath part of the mat as in "The fly is on the ceiling." Our ability to infer what speakers say when uttering any word or expression rests, in large part, with deeply held background knowledge that is very much part of our pragmatic understanding of the world.

Secondary pragmatic knowledge, on the other hand, refers to information from context to provide an interpretation of what speakers implicate in discourse. For instance, a speaker who utters "The cat is on the mat" might implicate that the addressee should get up and let the cat outside. Listeners draw the appropriate inferences about what speakers intend by recognizing specific features of the local context based on their common ground between themselves and speakers (i.e., their mutual beliefs, attitudes, knowledge). Thus, a speaker and listener may have as part of their common ground that the cat usually desires to go outside when it sits on the mat by the front door. Overall, though, listeners'

stereotypical background knowledge dominates the application of secondary pragmatic information to reveal what is said by a speaker's utterance as distinct from what the speaker implicates (See Recanati (1993)).

My embrace of the primary-secondary pragmatics distinction is a significant change in my view from my 1989 reply to Marcelo's 1987 paper. I now believe that primary pragmatic information may be more salient and accessed more quickly than more elaborate, local, secondary pragmatic information (cf. Recanati (1993)). Very recent experimental evidence lends credence to this idea.

Three studies by Hamblin and Gibbs (2001) examined the speed with which people understand expressions in which speakers' communicative intentions were either identical to what they pragmatically said or varied in some way, thus requiring listeners/readers to derive a conversational implicature. Consider the following stories, each of which ended with the same sentence:

Said/Implied Identical

Ted and Michele ran into each other at the mall.
Ted asked Michele what she had been doing lately.
Michele said that she had been busy car shopping.
Looking for ideas, Michele decided to consult Ted.
Michele asked Ted about his own car.
Ted mentioned:
"I drive a sports utility vehicle." (enriched pragmatic meaning)

Said/Implied Different

Ted and Michele are planning a trip to Lake Tahoe.
Michele had heard that there was a terrible storm there.
She wondered if it was going to be safe for them to go.

Michele was concerned about the vehicle they would drive.
She asked Ted if he thought they would be okay.
Ted replied:
"I drive a sports utility vehicle." (implicature)

In the first context, what the speaker pragmatically says by "I drive a sports utility vehicle" is identical to what he implies in that there is no further pragmatic meaning he wishes for listeners to infer beyond that he drives a particular kind of car. But in the second context, the speaker not only says one thing (i.e., about the kind of car he drives), but also implies something beyond that meaning, namely that his particular car is safe to drive in a storm.

If people access primary pragmatic information sooner than they do secondary pragmatic knowledge, readers should take less time to comprehend utterances in which what speakers mean is identical to what they pragmatically say than to understand messages in which what speakers say underdetermines what they mean. This is exactly what we found. Drawing conversational implicatures increased processing effort over that needed to understand what speakers say. The data are consistent with the idea that people analyze what speakers say as part of their determination of what speakers imply.

Follow-up studies showed that people did not view conversational implicatures as ambiguous, but recognize that more than one meaning is specifically intended for them to understand. This is consistent with the view that inferring implicatures requires processing of both what speakers pragmatically say and pragmatically implicate. Moreover, participants in another separate study suggested that they only understood enriched pragmatic meaning in the said/implied identical condition, but inferred both enriched pragmatic and pragmatically implied meanings in the said/implied different condition. Although these

data only reflect people's intuitions about the meanings of what they read, the findings are clearly consistent with the idea that people analyzed what speakers pragmatically said as part of their understanding of speakers' conversationally implicated.

A second main experiment investigated processing of what speakers say and imply in a different way. Consider the following story, and two different final expressions:

> Bill is a new tenant in an apartment building.
> His neighbor Jack has lived there for four years.
> Bill was concerned that the building might be too loud.
> Bill decided to ask a neighbor about it.
> Bill asked Jack since he was the only neighbor Bill had met.
> Jack replied,
>
> "This is a very noisy building." (said/implied identical)
> "I usually sleep with earplugs." (said/implied different)

Understanding "I usually sleep with earplugs" demands that listeners draw a pragmatic inference beyond that needed to understand what this same expression pragmatically says. However, understanding "This is a very noisy building" in this context only requires listeners/readers to comprehend what the speaker pragmatically said. For this reason, participants should take less time to read "This is a very noisy building" than "I usually sleep with earplugs" in this context.

The results showed that people took significantly more time to read sentences necessitating the implicatures than they did the sentences requiring only enriched pragmatic said meanings. Once again, it appears that people more easily understand speakers' messages when these are identical to what they pragmatically say than when what is said

underdetermines what the speakers intend to communicate (i.e., conversational implicatures).

Experiment 3 specifically examined processing of the five types of indicative utterances studied by Gibbs and Moise (1997) to determine if the same results from Experiments 1 and 2 hold across these other linguistic expressions. These sentences were placed at the end of contexts designed to convey meanings where what speakers say was identical to what they implied (i.e., direct assertions), or where what speakers implied differed from what they pragmatically said (e.g., conversational implicatures).

Consider the following example ending in a cardinal target sentence:

> Bill wanted to date his co-worker Jane.
> But Bill really didn't know much about her.
> Being a bit shy, he first talked to another person, Fred.
> Fred knew Jane fairly well.
> Bill wondered is Jane was single.
> Fred replied,
>
> 1. "Jane is already married." (said/implied identical)
> 2. "Jane has three children." (said/implied different)

Sentence 1 conveyed what the speaker implied directly. Yet Sentence 2 conveyed a conversational implicature in which what the speaker pragmatically said underdetermines what he implied in context (i.e., a conversational implicature). We examined the time it took people to interpret these two kinds of final statements. The results revealed that people took less time overall to read the final sentences when these conveyed the implied messages directly than when the sentences

conveyed conversational implicatures. Moreover, separate studies showed that participants did not see conversational implicatures as being ambiguous and that both enriched pragmatic and pragmatically implied meanings were understood when reading statements conveying conversational implicatures.

These findings provide further evidence that people take longer to draw conversational implicatures than to understand assertions that only convey what speakers pragmatically say. Understanding indicative expressions such as "Jane has three children" to imply in context that Jane is married requires additional time over that needed to interpret the same expression when it directly conveys what the speaker pragmatically says (i.e., Jane has exactly three children). Once more, people's complex pragmatic knowledge appears to be applied differently when understanding what speakers pragmatically say and when interpreting what speakers implicate in context.

My main conclusion from this set of reading-time experiments is that pragmatics is not simply used in understanding speakers' intended meaning, but plays a role in utterance interpretation from the earliest stages of linguistic processing. In this sense, Grice was right in suggesting that people may analyze what speakers say before inferring what they implicate. But Grice and others are incorrect in assuming that understanding what speakers say refers to minimally-pragmatic meaning and that enriched pragmatics only has a role in deriving conversational implicatures.

5. WHAT SPEAKERS SAY AND FIGURATIVE MEANINGS

My recent work on the importance of what speakers say in understanding what speakers imply seems to be a rejection of the direct access model I argued for in 1984 and 1989. To a large extent, this is

true. But if people analyze something of what speakers say when understanding non-literal speech, doesn't this demand that figurative language should always take longer to process than more literal speech where what speakers say is identical to what they imply? Under what conditions will listeners' analyses of what speakers implicate when using figurative language demand more time to process than to comprehend what speakers only say?

One possibility to consider in answering these questions is that some aspects of figurative meaning are understood as part of what speakers pragmatically say and others as part of what speakers implicate. Several linguists claim that the non-literal meanings of certain indirect speech acts (e.g., "Can you pass the salt?"), metaphors (e.g., "John is a pig"), metonymies (e.g., "The buses are on strike"), and ironies (e.g., "You're a fine friend") are understood as part of our interpretation of what a speaker says, called "explicatures" and not derived as conversational implicatures (Pilkington, (2000)).

Consider the remark by Flaubert about the poet Leconde de Lisle: "His ink is pale" (Pilkington, (2000)). This poetic metaphor is not familiar or conventional, but may still be understood as part of what the speaker said. Readers may interpret this metaphor as suggesting that de Lisle's poetry is weak and may not have long-lasting significance. They do so by immediately engaging in pragmatic processes of enrichment where the terms "ink" and "pale" are instantiated. Cognitive instantiation in this case requires that readers create *ad hoc* categories for the non-lexicalized ideas that "ink" and "pale" only loosely refer to. Thus, readers must infer that "ink" metonymically stands for de Lisle's poetry, based on their knowledge of de Lisle, and not just his handwriting. Similarly, "pale" is understood as expressing a range of meanings based on the encyclopedic entry for "pale" in combination with the metonymic reading of "ink." The creation of new concepts is the normal state of

affairs in utterance interpretation. Understanding *ad hoc* categories *via* cognitive instantiation is central to deriving a pragmatic reading of what speakers say and may occur quite quickly, and not as a result of slower, more elaborate process of drawing contextual implicatures.

Of course, not all instances of figurative language are understood as part of what speakers say. For instance, if someone says to her passenger "I love drivers who signal before turning" right after some other driver has cut in front of her without signaling, the listener will likely need to expand on what the speaker says to correctly infer her ironic meaning. Just as a speaker might say "Jane has three children" to imply that "Jane is married," a speaker might say "I love drivers who signal before changing lanes" to ironically implicate that "I hate the driver who just switched lanes without signaling." What a speaker says in both of these instances underdetermines what he or she wants to communicate. A similar process of elaborating upon what a speakers says to infer what he or she implicate may be the norm when people process many kinds of novel metaphors, proverbs, and ironies.

These different possibilities suggest more nuanced ways of thinking about figurative language understanding than the long debates over whether literal meaning does or does not play a role in non-literal language use. The idea that some aspects of what speakers pragmatically say may indeed have a significant part in comprehending speakers' message when using different kinds of figurative language makes a good deal of intuitive sense and opens up new empirical avenues to explore in future research.

CONCLUSION: MARCELO WAS RIGHT!

My personal journey in studying the putative role that literal meaning has in utterance interpretation has been significantly shaped by

my debate with Marcelo. His 1987 paper offered reasonable alternative ways of conceptualizing literal meaning to perhaps include some aspects of pragmatic meaning. Most importantly, I no longer hold the radical interpretation of the direct access model in which people use context to immediately infer speakers' intended meanings. Significant questions remain, however, over how to distinguish the kinds of pragmatic information that gives rise to, in my view, what speakers say, as opposed to the pragmatics that influence our understanding of what speakers implicate. But it seems clear that ordinary people distinguish between these two kinds of pragmatic meanings and one of these, which determines what speakers say, may be primary. In this sense, what speakers say may constitute the foundation for on-line linguistic understanding that scholars have long sought. I remain somewhat dubious about whether it is a good idea to call what speakers say as "literal" meaning *per se*, specifically because of the long-time association of literal meaning with non-pragmatic and compositional meanings. Yet on both philosophical and psychological grounds, it is evident that some aspects of pragmatic meanings are basic to linguistic understanding. One possibility is that the inclusion of some aspects of pragmatics in analyzing what speakers say is exactly what Marcelo referred to in his concept of moderate literalism. Marcelo Dascal was quite right to strongly argue against a more radical contextualist view on literal meaning and utterance interpretation that I embraced earlier. The controversy over literal meaning will continue to flourish in many academic disciplines. My hope is that these debates will always be informed by the likes of outstanding scholars such as Marcelo Dascal.

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