SEMANTIC SLACK: What is said and more
Kent Bach

Like Humpty Dumpty, many philosophers take pride in saying what they mean and meaning what they say. Literalism does have its virtues, like when you're drawing up a contract or programming a computer, but generally we prefer to speak loosely and leave a lot to inference. Language works far more efficiently that way.

Two Kinds of Looseness

It helps if you can rely on people not to take you too literally. Imagine a child, upset about a cut finger, whose mother assures him, "You're not going to die, Peter." The budding philosopher replies, "You mean I'm going to live forever, Mom?" Was Mrs. Unger stretching the truth? In a way, yes. She could have said, "You're not going to die from this cut," which would have been more to the point, but she didn't. She didn't bother saying that because she saw no reason to spell out what she meant. She wasn't being obscure and she didn't expect Peter to be so obtuse. Surely any normal boy would have taken her to mean that he wouldn't die from that cut and would never have considered, at least not consciously, the possibility that what she meant was that he wouldn't die at all. But Peter was annoyingly right: what she meant was not what she said, at least not exactly. She was not speaking literally.

This example illustrates a common but not widely recognized form of nonliterality: A sentence can be used nonliterally without any of its constituents being so used. Suppose clever Peter had asked his mother, "When you said I'm not going to die, did you mean it literally?" Mrs. Unger, having used each of her words literally, might not see the point of the question. Had she said to him "You're not going to croak" and he asked if she meant that literally, she would have understood that the use of a particular constituent was in question. *Sentence* nonliterality is nothing like metaphor or any other kind of *constituent* nonliterality, but it is still a kind of nonliterality in its own right (Bach 1987, pp. 71-72). What we call "loose talk" is often not a matter of using words nonliterally, or of using vague or ambiguous words, but simply a matter of leaving words out. So, for example, if you say "I haven't eaten" you don't include *dinner today* or anything of the sort, if you say "Everyone must wear a costume" you don't include *who comes to the party*, and if you say "Tigers have stripes" you don't include *normal*. Using sentences nonliterally in this way is so common that we tend neither to be aware of doing it nor to think of it as not literal when others do it. But we do it all the time (as I did just then). Rather than insert extra words into our utterances so as to make fully explicit what we mean, we allow our listeners to read things into what we say. This suggests, at least if what is said is a complete proposition but not the one that is meant, that being inexplicit is a way of not being literal (intuitively we may not think of it as such because no words are being used figuratively).

Consider typical utterances of sentences like the following:

(1) You are not going to die.

(2) I haven't eaten.

In each case, at least once the indexical references and the time of the utterance are fixed, the (literal) meaning[1] of the sentence determines a definite proposition, with a definite truth condition expressible roughly as follows:

(1-TC) The addressee of the utterance of (1) is immortal.

(2-TC) The utterer of (2) has not eaten prior to the time of the utterance.

Each of these determines the *minimal* proposition (Recanati 1989/1991, p. 102) expressed by the sentence, so-called because it is the proposition which, when compared to whatever the speaker is likely to mean, is linguistically more closely related to the sentence. An utterer of (1) or (2) is likely to be communicating not a minimal proposition but some *expansion* of it. I call this an expansion because what is communicated could have been made explicit with the insertion of an appropriate phrase, such as *from this wound* after *die* or *dinner today* after *eaten*.[2]

Not to be confused with sentence nonliterality is another phenomenon, which gained modest recognition in the late seventies and early eighties under the labels *semantic generality* (Atlas 1977) and *nonspecificity* (Bach 1982) and is more widely known these days as *semantic underdetermination*. Akin to the older notion of sense-generality of words (such as *deep, push,* and *before)*, which lexical semanticists distinguish from homonymy, ambiguity, and vagueness (see Atlas 1989, ch. 2), semantic underdetermination is a feature of sentences. An (indicative) sentence is semantically underdeterminate if it fails to express a complete proposition—determine a definite truth condition—even after ambiguity and vagueness are resolved and indexical references (including the time of the utterance) are fixed. Simple examples include utterances of

(3) Steel isn't strong enough.

(4) Willie almost robbed a bank.

These sentences, though syntactically well-formed, are semantically or conceptually incomplete, in the sense that something must be added to the sentence for it to express a complete and determinate proposition. With (3) we need to know strong enough for what (it does not express the weak proposition that steel isn't strong enough for something or other). The problem with (4) is due to the word *almost:* what could be communicated is that Willie nearly succeeded at robbing a bank, that he decided against robbing a bank and robbed something else instead, or that he barely refrained from robbing a bank. In these cases what the conventional meaning of the sentence determines is only a fragment of a proposition or what I call a *propositional radical*; a complete proposition would be expressed only if the sentence were elaborated somehow, so as to produce what I call a *completion* of the proposition. Semantic underdetermination is not a case of (sentence) nonliterality because the speaker does mean what he says—it's just that that is not the whole of what he means. What a speaker means must be a complete proposition, but, as will be explained later, in semantic underdetermination the content of what a speaker says is merely a propositional radical.

So we have two distinct phenomena, sentence nonliterality and semantic underdetermination, in which what a speaker means is not fully determined by what the sentence means—even if no words are being used

figuratively and nothing is being conversationally implicated (no speech act is being performed indirectly). In one case there is a (minimal) proposition expressed by the sentence, but expansion is needed to deliver the more elaborate proposition expressed by the speaker; in the other case, completion is needed just to deliver a proposition. The difference is simply this: with sentence nonliterality a minimal proposition is fleshed out; with semantic underdetermination a propositional radical is filled in.

Delimiting what is said

Both of these phenomena—expansion and completion—have been thought to signal a major oversight in Grice's account of the distinction between what is said and what is implicated. For it seems that pragmatic processes of the same sorts as those involved in conversational implicature, whatever exactly these processes are (here I am not concerned with the adequacy of Grice's or other accounts of these processes), come into play prior to the working out of implicatures. That is, whether or not the hearer takes an utterance literally and directly, he relies on the presumption that the speaker intends his communicative intention to be identifiable under the circumstances (Bach and Harnish 1979, pp. 12-15). He reasons on the supposition that if the speaker cannot plausibly be taken to mean what he says or just what he says, then what the speaker does mean is inferable from what he is saying together with contextual information evident enough to have been expected to be taken into account. A number of philosophers have contended that Grice completely overlooked the fact that inferential processes of essentially the same sorts as those involved in implicature enter into determining what is said. Of course he did recognize that not just linguistic knowledge but certain types of (salient) contextual information play a role in determining what is said. Here he had in mind contextual information relevant to resolving ambiguity and fixing indexical reference (including the time of the utterance), together with the supposition that the speaker's idiolect conforms with standard use of the language (1967a/1989, p. 25). Clearly, then, Grice did recognize a role for pragmatic processes in determining what is said. His critics, noticing that he overlooked what I have been calling expansion and completion, contend that his theory incorrectly counts these phenomena as implicature. They suppose that his conception of saying is too restrictive and that he draws the line between what is said and what is implicated in the wrong place. As I will argue shortly, there is no *line* to be drawn between what is said and what is implicated. Instead, there is considerable middle ground between them.

Sperber and Wilson (1986) as well as Carston (1988) regard expansions and completions as explicit contents of utterances, not as implicatures. However, these phenomena do not fit Grice's conception of what is said, inasmuch as they are not "closely [enough] related to the conventional meaning of the É sentence É uttered" (1967a/1989, p. 25). On the other hand, they are too closely related to linguistic meaning to qualify as implicatures. Sperber and Wilson coin the word *explicature* for this in-between category (1986, p. 182). Why they call it that is not entirely clear. The word *explicature* is supposed to refer to the explicit content of an utterance, but it is a cognate of *explicate,* not *explicit.* And the content of an explicature produced by expansion or completion is not "explicitly communicated," since part of what is communicated is not expressed. Perhaps this is why Recanati avoids using the

term *explicature* in making his case for including expansion and completion (he calls them *strengthening* and *saturation*—1989/1991, p. 102) in the category of what is said. Here he is clearly going beyond Grice's "intuitive understanding of the meaning of [the word] *say*" (1967a/1989, pp. 24-25), on which what is said must correspond to "the elements of [the sentence], their order, and their syntactic character" (1969/1989, p. 87), but Recanati argues that his extension of Grice's notion is intuitively natural and has the theoretical virtue of not counting expansion (strengthening) and completion (saturation) as cases of implicature.[3]

To some extent the issues here are merely terminological—Grice's "favored" sense of *say* is stipulative and admittedly "artificial" (1968/1989, p. 118)—and, having not confronted the problems of sentence nonliterality and semantic underdetermination, he had no occasion to fit the cases of expansion and completion into his scheme. However, two other considerations led Grice to refine the distinction between what is said and what is implicated. First, he distinguished saying from merely "making as if to say" (1967a/1989, p. 30), as in irony and metaphor (p. 34), and allowed that making as if to say, like saying, can generate implicatures. Second, he insisted that part of what a speaker means can be closely related to conventional meaning and yet not be part of what is said—it is "conventionally" rather than conversationally implicated. Leaving these two complications aside for the moment, I grant that Grice did give the impression that he intended the distinction between what is said and what is implicated to be exhaustive. Accordingly, since expansions and completions are not related closely enough to conventional meaning to fall under what is said (in Grice's favored sense), it does seem that for him they would have to count as implicatures. Sperber and Wilson, Carston, and Recanati all find this result unintuitive. I agree with them, though not for their reasons and despite the stipulative character of Grice's distinction. For in my view, what we need in order to maximize intuitive plausibility is more stipulation. Let me explain.

Saying and Stating

There are certain peculiarities to Grice's favored sense of saying. Most notably, for him saying something entails meaning it. This is why Grice uses the locution "making as if to say" to describe irony, metaphor, etc. since in these cases one does not mean what one appears to be saying. Most of us would describe these more straightforwardly as cases of saying one thing but not meaning that and meaning something else instead. That's what it is to speak nonliterally—at least if one does so intentionally. One can also *un*intentionally not say what one means, owing to a slip of the tongue, misusing a word or phrase, or otherwise misspeaking (Harnish 1976/1991, p. 328). Finally, one can say something without meaning anything at all, as in cases of translating, reciting, or rehearsing in which one utters a sentence with full understanding and doesn't just parrot it (recall Austin's distinction between the "phatic" and the "rhetic" act), and yet doesn't use it to communicate. To reckon with these various ways of saying something without meaning it, Grice could have invoked Austin's distinction between locutionary and illocutionary acts, but he did not (he generally avoided the jargon of speech act theory and seemed rather unconcerned with its distinctions). Austin, it may be recalled, defined the locutionary act (specifically the rhetic act) as using certain "vocables with a certain more-or-less definite sense and reference" (1962, p. 95). That sounds a lot like Grice's notion of saying,

except that for Grice saying something entails meaning it: the verb *say* does not mark a level distinct from the level marked by such illocutionary verbs as *state, tell, ask,* etc., but rather functions as a generic illocutionary verb. It describes any illocutionary act whose content is made explicit. Since virtually all of Grice's examples involve indicative utterances, in practice he uses *say* to mean *explicitly state*. Indeed, the original formulation of his distinction (in Grice 1961) was between stating and implying. Clearly Grice opted for the word *say* in order to widen the scope of his distinction beyond statements.[4]

Considering that he describes nonliteral utterances like irony and metaphor not as saying but as making as if to say, it is puzzling that Grice should have assimilated these to implicature. Intuitively, one thinks of implicating as stating or meaning one thing (i.e. saying something in Grice's favored sense) and meaning something else as well, not as meaning something else instead. Since Grice denies that irony and metaphor are cases of saying in his sense, he should not have described their nonliteral contents as implicatures. The same sorts of inference processes are involved as in genuine implicatures, but there is still a big difference between saying one thing and meaning something else as well and meaning something else instead, between speaking indirectly and speaking nonliterally (Bach and Harnish 1979, ch. 4). Since implicature is a kind of indirect speech act whereas irony and metaphor are species of nonliteral but direct speech act, the latter should not be classified as implicature. Unfortunately, this is done by both Grice and many of his critics.

So far I have suggested two ways to improve on Grice's taxonomic scheme: replace Grice's distinction between saying (in his favored sense) and merely making as if to say with the distinction (in indicative cases) between explicitly stating and saying in Austin's locutionary sense, and don't classify nonliterality (including sentence nonliterality) as implicature. In this way we have a notion of what is said (correlative to the notion of saying) that applies uniformly to three situations: (1) where the speaker means what he says and something else as well (implicature and indirect speech acts generally), (2) where the speaker says one thing and means something else instead (nonliteral utterances), and (3) where the speaker says something and doesn't mean anything. What is said, being closely tied to the (or a) meaning of the uttered sentence, provides the default interpretation of the utterance (at least up to indexicality, ambiguity, and underdetermination), the least (as it were) a speaker could mean in using the sentence. And it provides hearer with the linguistic basis for inferring what, if anything, the speaker means in addition or instead. Next we need to consider how expansion and completion fit into the picture.

Impliciture

In the case of expansion the speaker is using all his words literally but is not using the sentence as a whole literally. Although he could make what he means fully explicit by inserting additional words or phrases into his utterance, he does not. Since part of what he means is implicit, in effect he intends his audience to read those words into his utterance. Of course, what he really intends the audience to do is to figure out the proposition that would be expressed with the embellished sentence, not to construct the sentence itself. The audience is making an inference over propositions, not sentences.[5] Anyway, the resulting proposition is not identical to the proposition being

expressed explicitly, since part of it does not correspond to any elements of the uttered sentence. So it is inaccurate to call the resulting proposition the explicit content of the utterance or an explicature. I will instead call it an *impliciture*.[6] I will also apply this term to completions of utterances of semantically underdeterminate sentences.

Implicitures go beyond what is said, but unlike implicatures, which are additional propositions external to what is said, implicitures are built out of what is said. Even when there is no figurative use of words or phrases, as in metaphor, in impliciture, because of sentence nonliterality or semantic underdetermination, what the sentence means does not fully determine, even after ambiguities are resolved and indexical references are fixed, what the speaker means. So far as I can tell, the only explanation for the fact that Grice's critics count implicitures as (fully) explicit contents of utterances, or identify them with what is said, is that they uncritically assume, along with Grice, that there is no middle ground between what is said and what is implicated. It is curious to note that Grice himself occasionally alluded to what I am calling impliciture, as when he remarked that it is often "unnecessary to put in É qualificatory words" (1967b/1989, p. 44). Although he did describe such cases as implicatures, he appeared to have something distinctive in mind: "strengthening one's meaning by achieving a superimposed implicature" (1967b/1989, p. 48). By "strengthening" he appears to have meant increasing the information content of what is said, not adding a whole separate proposition to what was said.[7]

What is involved in completion, which is required whenever the speaker uses a semantically underdeterminate sentence? In completion, what the meaning of the sentence determines is not even a minimal proposition but merely a propositional radical. This suggests that even if the speaker is using his words literally and directly, the hearer must engage in an extra inferential process in order to arrive at *any* proposition. Grice's critics, assuming that what is said must be a proposition, suppose that this extra inference is needed just to determine what is said.[8] They find this conclusion to be so obvious that they don't even consider the alternatives.

What are the alternatives? One could claim that *nothing* is said when a semantically underdeterminate sentence is used, because an impliciture is required to get to a proposition. Underlying such a claim is the idea that a fragment of a proposition, a propositional radical, cannot comprise the full content of what is said. The other alternative is to claim that even though an impliciture is required to get to a proposition, there is still something that qualifies as what is said, whose content is the propositional radical that forms the ground on which the impliciture is worked out.[9] We can reject the first view, according to which nothing is said with a semantically underdeterminate sentence, simply by showing that something *is* said in these cases, straightforwardly ascribable in the usual format of indirect quotation. For example, utterances (3) and (4) can be described as follows:

> (3-IQ) S said that steel isn't strong enough.

> (4-IQ) S said that Willie almost robbed a bank.

What happens in these cases is that the semantic underdetermination carries over to the *that*-clause in the indirect quotation. So I will opt for the second view. It could be objected that more specification is needed, but needed for what, for specifying what is said or specifying what is meant? I grant that some true utterances of *said-that*

sentences do not completely describe what is said,[10] but I deny that ones like (3-IQ) and (4-IQ) must specify more.[11] Perhaps the disagreement here is ultimately terminological: one person's explicature is another one's impliciture.

Be that as it may, impliciture is, on my restrictive notion of what is said, a matter of either fleshing out or filling in what is said. Expansion is the fleshing out of the minimal proposition expressible by an utterance, and completion is the filling in of a propositional radical. I agree with Grice's critics that neither is a case of *implicature,* although both involve essentially the same sort of pragmatic process as in implicature proper, but I see no reason, as they do, to extend the notion of explicit content, of what is said. For me there is inexplicit meaning but no inexplicit saying.

Conventional Implicature?

Grice also disallowed inexplicit saying, but he did recognize a category of explicit nonsaying. For there can be elements in what is meant that correspond directly to elements in the sentence uttered but do not enter into what is said. These are *conventional implicatures*, propositions which are merely "indicated." Grice's examples of "problematic elements" are connectives, notably *therefore* (1967a/1989, p. 25 and 1968/1989, p. 120) and *but* (1969/1989, p. 88). The connective makes a certain contribution, given by its conventional meaning, to what the speaker means. It indicates a certain relation between the two items it connects, e.g. that one is a consequence of the other or that there is a contrast between the two. What Grice denies is that this linguistically specified relation enters into what is said. The implicature that such a relation obtains is a conventional rather than conversational implicature because it is explained not pragmatically but by conventional meaning.

Grice's brief discussions of conventional implicature are intended to narrow down the sense of *say* that he favors because "I expect it to be of greate[st] theoretical utility" (1968/1989, p. 121). People often suppose (e.g. Carston 1988/1991, p. 39) that his theoretical motivation for the notion of conventional implicature is to provide for an element of literal content that is not truth-conditional. Grice does give this impression when, for example, he denies that an utterance of the sentence

(5) He is an Englishman; he is, therefore, brave.

"would be, strictly speaking, false should the consequence in question fail to hold" (1967a/1989, pp. 25-26). In fact, however, the issue in such cases is not truth-conditionality but truth-functionality. All Grice really shows is that the import of connectives like *therefore* and *but* is in a certain way not truth-functional. When an utterance of the form *p* CONJ *q* implies *p and q* but conveys more than the mere conjunction, there is no way to express its import as a truth function of *p* and *q*. After all, the only such truth function *is* conjunction. A truth-functional specification of the import of *p* CONJ *q* would require a third clause, an additional conjunct, e.g. to the effect that there is a relation of consequence or contrast between *p* and *q*. So, for example, a specification of what was said in above example would, according to Grice, take the form

(5-GIQ) S said that a certain male is an Englishman, that he is brave, and that being brave is a consequence of being English.

Now if the third conjunct is part of what is said, what is said would contain one more clause than is contained in the sentence used to say it. This further conjunct would not correspond to a clause in that sentence and could not count as part of what is said. For the elements of what is said (in Grice's favored sense) must correspond to elements in the sentence. The further conjunct, not being such an element, can count only as a conventional implicature.

The trouble with all this is that what is said in utterances of the form *p CONJ q,* even though they imply *p and q,* does not have to be specified by *p and q,* with or without a third clause. In the above case, for example, there is no reason why the word *therefore* cannot go directly into a two-clause specification of what is said:

(5-IQ) S said that a certain male is an Englishman [and] therefore he is brave.

What is said is true just in case the relevant male is an Englishman and is brave, and being brave is a consequence of being English, but of course what is said is not identical, though it is equivalent, to the explication of its truth condition. To appreciate this, consider an entirely different sort of case. Suppose Tom utters *I regret going home,* thereby saying that he regrets going home. Assume that regretting can be so analyzed that what Tom says is true just in case Tom went home, believes he did, and wishes he hadn't. Did he *say* that? I think not, and I think Grice would think not. A multi-clause analysis of what is said is not identical to what is said (see note 6). It is implied, i.e. entailed but not implicated,[12] by what is said.[13] Of course it is not (conventionally) implicated, since it is not conveyed by the act of saying.

I believe that in Grice's alleged examples of conventional implicature, which all involve non-truth-functional connectives, the specification of what is said can and should include the relevant connective. Grice is led to conventional implicature in each case only because he arbitrarily insists on forcing these specifications into the mold of truth-functional conjunction, whereupon the specification must either include one clause too many or omit the conventional force of the connective.[14] But perhaps the problem is Grice's limited choice of example. Just consider his general diagnosis of what gives rise to conventional implicatures: "The elements in the conventional meaning of an utterance which are not part of what has been said É are linked with certain [noncentral] speech acts" (1968/1989, p. 122). Here he gives the example of *moreover,* which is linked with the speech act of adding, an act that requires the performance of a central speech act, like reporting or predicting. Grice does not indicate which noncentral speech acts the words *but* and *therefore* are linked to; presumably these are acts of making a contrast and drawing a conclusion (or giving an explanation). However, *moreover* is relevantly different from the two other connectives: unlike *moreover*, *but* and *therefore* signify relationships between the propositions expressed by the clauses they connect. The same is true of various other conjunctions and adverbials not mentioned by Grice, such as *after all, although, anyway, because, despite, even so, for, however, nevertheless, since, so, still, thus,* and *yet.* Take the case of *because,* which is linked to the rather central speech act of explaining. In an utterance of

(6) Because the verdict was unjust, a riot broke out.

what is said is specified by

(6-IQ) He said that because the verdict was unjust, a riot broke out.

Because is used to express an explanatory relation of some sort between the facts described by the two clauses. But there is another use of *because* that does fit Grice's paradigm. Compare (6) with

(7) Because you'll find out anyway, your wife is having an affair.

In (7) *because* is not being used to express an explanatory relation between the facts described by the two clauses. Rather, the speaker is using the *because*-clause to explain his speech act of informing the hearer of the fact expressed by the second clause. Accordingly, the hearer cannot plausibly specify what is being said as a conjunction, as in

(7-IQ) S is saying that because I'll find out anyway, my wife is having an affair.

Grice's diagnosis is correct: specifications of noncentral speech acts do not fit comfortably into specifications of what is said. This holds for the following assortment of locutions, at least when used (as they generally are) to perform noncentral speech acts:

accordingly, after all, all in all, all things considered, although, anyway, as it were, at any rate, besides, be that as it may, by the way, considering that É, disregarding É, even so, finally, first of all, frankly, if I may say so, if you want my opinion, in contrast, in conclusion, in short, in view of the fact that É, leaving aside É, loosely speaking, never mind that É, nevertheless, not to interrupt but, not to mention that, now that you mention it, on the other hand, so to speak, speaking for myself, strictly speaking, taking into account that É, to be blunt about it, to begin with, to change the subject, to digress, to get back to the subject, to get to the point, to oversimplify, to put it mildly

There is a straightforward explanation of why these locutions do not fit comfortably into specifications of what is said: they are in construction syntactically but not semantically with the clauses they introduce. Syntactically they are sentence adverbials but they function as *illocutionary adverbials* (Bach and Harnish 1979, pp. 219-228), modifying not the main clause but its utterance. The result is as it were a split-level utterance.

I do not believe that we need to resort to the notion of conventional implicature to describe the conventional import of the above locutions, these illocutionary adverbials. Rather, as Grice himself points out, they are used to perform noncentral speech acts, such as simplifying, qualifying, and concluding. One is not conventionally implying anything in using such a locution; rather, one is providing some sort of gloss or running commentary on one's utterance, e.g., concerning its conversational role. So it seems that we can do without the notion of conventional implicature altogether: in Grice's examples of connectives with truth-conditional import, the conventional meaning of the "problematic element" does enter into what is said; and in the wide assortment of locutions used to perform noncentral speech acts, the problematic element does not enter into what is said, but it does not generate a conventional implicature either.

What is Said and No More

Ideally, the notion of saying that is of the greatest theoretical utility should also be intuitively natural. Grice's favored sense of *say* is too strong in that regard, for it blurs the intuitive distinction between saying something and meaning it. As I explained earlier, a weaker notion accommodates the apparent fact that something is said in the cases of nonliteral utterances, noncommunicative speech acts, and various sorts of verbal slips. Accordingly, there is much to gain theoretically by enforcing Austin's distinction between locutionary and illocutionary acts, and by reserving the word *say* for locutionary acts instead of using it as a generic illocutionary term. Still, I agree with Grice that on the most useful notion of saying what is said should be closely related to the conventional meaning of the uttered sentence.[15] In particular, what is said should be determined by the meanings of the elements of the sentence and their syntactic structure—as adjusted for any needed disambiguation or indexical reference fixing, as well as for any elements being used to make running commentary on the utterance. Earlier I argued that notion of what is said needs no further adjustments in order to handle sentence nonliterality or semantic underdetermination. What is needed, rather, is a notion of impliciture to mark the middle ground between what is said (explicit content) and what is implicated. Now I wish to explain and defend this minimalist position.

It should be evident by now that I have been relying on a simple, intuitive test: what is said is specifiable by a *that*-clause embedded in a matrix clause of the form *S said that* É.[16] It would be appropriate to adopt the concurrent perspective of the hearer and take as the canonical form *S is saying [to me] that* É. Then if, for example, the speaker says,

(8) I like your etchings.

from the hearer's point of view what is being said may be put into the "HIQ" (hearer's indirect quotation) format, as for example in

(8-HIQ) She is saying that she likes my etchings.

The HIQ format provides the ground on which the hearer, by exploiting mutual contextual information, constructs what the speaker means. In many cases the hearer may have to do some conceptual filling in or fleshing out of what is said before he can even work toward a figurative or oblique interpretation of the utterance. Filling in will be needed if the sentence is semantically underdeterminate, and fleshing out will be needed if the speaker can't plausibly be supposed to mean just what the sentence means. In fact, both processes can occur within a single utterance, such as *Everybody [in my class] is coming [to my party]*.

Let us start with the case of fleshing out, the expansion or qualification of the literally expressed proposition. Notice first that the literally expressed proposition, what Recanati calls the "minimal proposition expressible by an utterance" (1989/1991, p. 102), is not necessarily minimal in a logical or informational sense. It is minimal only in the sense that it is the proposition most closely related to the meaning of the sentence. In Recanati's examples,

(9) I have had breakfast.

(10) Everybody went to Paris.

the minimal proposition is either trivially true or wildly false. What a speaker would mean is yielded by "strengthening" this proposition, e.g.

(9-R) I have had breakfast *today*.

(10-R) Everybody *in our group* went to Paris.

In the case of (9), what is meant is a "richer proposition É that entails the [minimal] proposition," but this can't be true of (10) since there the entailment goes the other way. In general, when the minimal proposition is trivially (or otherwise obviously) true, what is meant is logically (or informationally) stronger, whereas when the so-called minimal proposition is wildly (or otherwise obviously) false, what is meant is logically weaker. It seems that what we need here, as illustrated by the above examples, is a notion not of logical strengthening but what might be called *lexical strengthening*: the result of inserting additional words into the sentence.[17]

Lexical strengthening may involve logical strengthening or logical weakening—or neither. In some cases, it doesn't affect truth conditions at all but simply rules out the impliciture of anything logically stronger or weaker, as in

(11) I have eaten chocolate *[before]*.

(12) I haven't *[ever]* had hives.

In a different kind of case, the lexical strengthening involved in the implementation of so-called scalar implicatures, such as

(13) I don't like you. (i.e. I love you)

(14) I don't believe it. (i.e. I know it)

(15) I don't have three cars. (i.e. I have four)

the implicature is achieved by the *negation* of something weaker. In these cases there is no entailment relation either way. In fact, what is implicated contradicts what is said. It seems that the implicature is mediated by an impliciture involving the insertion of the word *merely*.

Recanati claims on intuitive grounds that what is said when only a "minimal" proposition is literally expressed is the "richer" proposition, such as the ones expressed by (9R) and (10R) above. People's intuitions seem to favor reporting the richer propositions as what is said, as in

(9-RIQ) S is saying that he has had breakfast *today*.

(10-RIQ) S is saying that everybody *in his group* went to Paris.

even though material is included that does not correspond to anything in the utterance being reported. But these are untutored intuitions. For one thing, they are insensitive to the distinction between saying and stating (and to the distinction between sentence meaning and speaker meaning), especially in cases of standardization, where the inference from one to the other is short-circuited. People made cognizant of this distinction find that their intuitions change in the direction of Grice's requirement that anything that does not correspond to some element or feature of the uttered sentence is not part of what is said. Then they are in a position to appreciate the difference between what

is said , e.g., with (9), *I have had breakfast,* and with (9-R), *I have had breakfast today.* They can then understand the point of the question *Do you mean today?* and the nonredundancy of actually using the word *today,* as in (9-R).

Recanati also suggests that intuition resists reporting the minimal proposition as what is said in (9) and (10), purportedly given as follows:

> (9-MIQ) S is saying that he has had breakfast *before.*

> (10-MIQ) S is saying that everybody *in the world* went to Paris.

Here Recanati is right about the intuitions but wrong to suppose that (9-MIQ) and (10-MIQ) give minimalist reports of what is said in (9) and (10). Rather, they give lexical strengthenings of what is said, albeit ones that are logically equivalent. Besides, in some cases structurally similar to (9) and (10), intuitions favor the minimal propositions as what is said, for example in

> (16) I have had measles.

> (17) Everybody is going to die.

So Recanati's account appears to imply that relevant differences in what is said, as between (9) and (16) or between (10) and (17), can depend solely on nonlinguistic factors. Also, it is not at all clear how he would account for the possibility, however remote, that in cases like (9) or (10) what the speaker means *is* the minimal proposition, just that and no more. If what is said in that case were not the minimal proposition, what is meant would be *less* than what is said.

Finally, intuitions do not seem to favor Recanati's inflationary conception of what is said in cases where the literally expressed proposition is not all that minimal. In the following cases (adapted from Harnish 1976),

> (18) Jackson squirted the paint on the canvas *[intentionally].*

> (19) George squirted the grapefruit juice on the table *[unintentionally].*

> (20) Jack and Jill are married *[to each other].*

> (21) Mr. Jones and Mrs. Smith are married *[but not to each other].*

> (22) Mr. Jones and Mrs. Smith are in love *[with each other].*

even though the unuttered (bracketed) material is understood, people are disinclined to include it in the specification of what is said. They appreciate the fact although what is not uttered is inferable, it is not *there*. All in all, I doubt that there is as much intuitive support for Recanati's inflationary conception of what is said as he imagines. I suspect that what inclines him toward this conception is his assumption that "genuine cases of nonliterality" must be like metaphor (1989/1991, p. 108), i.e. be figurative, in which case he is arbitrarily excluding sentence nonliterality. Be that as it may, I am not disputing the idea that underlies his contention that "there are pragmatic aspects to what is said" as well as to what is implicated (1989/1991, p. 116), but in my view these aspects are properly regarded as pertaining to what is implicit in what is said. It is worth noting, by the way, that pragmatic processes are involved even in cases where one means *exactly* what one says. From the hearer's point of view, *not* to read anything into an utterance and to take the (literal) meaning as determining all the speaker means is a matter of contextual intepretation just like (except for being simpler) expanding the utterance.

Now let us take up the question of what is said in the case of semantically underdeterminate sentences. Even though such sentences can express only propositional radicals, their utterance can still be ascribed in the HIQ format without the insertion of additional lexical material (what is left unspecified is given in parentheses):

(23-HIQ) S is saying that she is too tired. (for what?)

(24-HIQ) S is saying that Anacin is better. (than what?)

(25-HIQ) S is saying that she is leaving. (from where?)

(26-HIQ) S is saying that she wants a taxi. (to do what with?)

Suitable *that*-clauses are readily available in these cases simply because they, like the sentences whose utterance they are used to report, do not need to express complete, determinate propositions. In these cases, the lexical insertions and other interpretative maneuvers needed to deliver a complete proposition do not correspond to anything in the meaning of the constituents of the sentence or in its syntactic structure.

For this reason it would be a mistake to assimilate uses of semantically underdeterminate sentences to the category of elliptical utterances.[18] Utterances are elliptical, strictly speaking, only if the suppressed material is recoverable, at least up to ambiguity, by grammatical means alone, as in tag questions and such reduced forms as conjunction reduction, VP-ellipsis, and gapping:

(27) Bill is happiest when working.

(28) Bill likes working and so does Bob.

(29) Bill wants pie for dessert and Bob pudding.

Notice that (27) unequivocally entails that Bob is happiest when Bob is working, (28) that Bob likes Bob working, not Bill working, and (29) that Bob wants pudding for dessert. No contextually salient substitutes are allowed. A sentence like (30) can be taken in more than one way,

(30) I know a richer man than Ross Perot. (is or knows?)

but that is because it is syntactically ambiguous—it is not semantically underdeterminate. In all of these cases paraphrases can be given in the HIQ format that spell out the suppressed material

(27-HIQ) Bill is happiest when *Bill is* working.

(28-HIQ) Bill likes working and *Bob likes* working.

(29-HIQ) Bill wants pie for dessert and Bob *wants* pudding *for dessert.*

and, if necessary, disambiguate, in the case of (30).

(30-HIQ) S is saying that he knows a richer man than Ross Perot *knows*.

Since the recovered material corresponds to something in the sentence, though not necessarily to something that is phonologically realized, there is no reason to deny that the paraphrase specifies what is said.[19] This is not the case with reports that include the completion of an utterance of a semantically underdeterminate sentence, for in that case the inserted material is not only unheard, it is not even there syntactically. Linguistically speaking, it is not there to be recovered. For this reason, there is no linguistic basis for including such material in what is said. There is also no

need to, since what is said, even if not fully propositional, can go straight into the standard HIQ format, since *that*-clauses can themselves be semantically underdeterminate.

Now it might be objected that if what is said is can be a propositional radical, then why should indexical reference be thought to enter into what is said? After all, indexical references, like completions, are determined pragmatically, not semantically.[20] Suppose one utters "She returned last week" and means that Leona returned to jail some time in the week before the utterance. Then, so the objection goes, in consistency the propositional radical that should count as what was said is not that Leona returned some time in the week before the utterance but that a certain female returned a week before a certain utterance. The use of *certain* turns an indefinite description into a "definite indefinite" description, indicating that a reference is in the offing. I do not deny that there is a sense in which what is said *is* that a certain female returned a week before a certain utterance, but this is weaker than the sense in question.[21] The objection is that either nothing pragmatic enters into what is said or, in the stronger sense that allows indexical reference to enter in, the filling in of syntactically unspecified but conceptually mandated semantic slots should enter in as well.

Intuitively, the basis for this objection is that indexicals do not *specify* their referents but merely are used to *indicate* their references. So, for example, in uttering "She returned last week," one doesn't really say who returned when. That is true but irrelevant, since *specify* is not the operative sense of *say*. This objection assumes that there is no relevant difference between indexical reference and filling in slots. But there is a relevant difference. Indexical reference fixes the interpretation of an element that occurs in the utterance, be it a pronoun, a demonstrative phrase, a temporal or locational adverb, a tense marker, or just an empty, phonologically null category like PRO. On the other hand, conceptually mandated "semantic" slots do not occur in semantically underdeterminate sentences at all, not even as empty syntactic categories. Not being sentence constituents, they enter in not at the linguistic level but at the conceptual level. An indexical is there in the sentence.

Moreover, the semantics of indexicals make essential reference to their utterance (hence Reichenbach's description of them as *token reflexives).* An indexical introduces a variable into the semantic representation of the sentence, and each one has its own semantically specified *referential constraint* on how, in a given context of utterance, it can be used to refer, i.e., on how the variable it introduces acquires a value in a given context of utterance (Bach 1987, pp. 186-192). So, for example, *I* is used to refer the speaker, *yesterday* to the day before the utterance, *she* to a contextually identifiable female, and *then* to a contextually identifiable time. Note that in most cases, such as the latter two, because of the essential role of the speaker's intention in determining reference, reference is not a well-defined function of context. It is context-relative but not strictly context-dependent (Bach 1987, pp. 186-192).

Still, it might be suggested, just as indexicals introduce variables needing values, so the gaps in propositional radicals introduce slots needing fillers. The trouble with this suggestion is not that it commits the category mistake of treating slots as variables—it could be argued that these slots are conceptual rather than objectual variables—but that it confuses the interpretations assigned to complete syntactic representations with the

propositional radicals containing slots generated by conceptual needs. One indication of the difference is the fact that certain transitive verbs can be used optionally without direct objects, whereas others similar in meaning must take objects. Compare *finish* with *complete or eat* with *devour*, for example. Despite their semantic similarity, they have distinct syntactic requirements.[22] There is simply no sense in which the slots in propositional radicals have counterparts (syntactic gaps) in the semantically underdeterminate sentences that yield them. For incomplete logical forms can be generated by complete syntactic forms.

All in all, it appears that Grice's linguistic constraint on what is said does not have to be relaxed on account of either sentence nonliterality or semantic underdetermination. The standard HIQ format works perfectly well without regard to expansion or completion. The impliciture goes beyond what is said, whether it involves expanding or completing the intended content.

Summing Up

We have seen that Grice's distinction between what is said and what is conversationally implicated needs to be modified in various ways. The need for an in-between notion of impliciture is demonstrated by the extensive variety of utterances that require either completing or expanding. For semantic reasons, utterances of semantically underdeterminate sentences require completing; and, for pragmatic reasons, sentence-nonliteral utterances, typically of sentences that express propositions that are too obviously true or too obviously false, require expanding. Both cases show the need for a middle ground between the notions of what is said and what is implicated, namely, that which is implicit in what is said. Also, Grice's distinction is not adequate to the case of utterances which contain elements that are not used literally. These should not be assimilated to implicatures, although, like implicitures, they are achieved by means of the same pragmatic processes. As for Grice's notion of saying, it neglects Austin's indispensable distinction between locutionary and illocutionary acts. The notion should be weakened so as not to entail that what is said be part of what is meant. Then, when characterizing nonliteral utterances, we can do without Grice's confusing phrase "making as if to say." Although not Grice's favored notion, our weaker, locutionary notion of saying does accord with Grice's sketchily formulated view that what is said should closely correspond to the meaning and form of the uttered sentence. It thereby rules out recent extensions of the notion of what is said or of what is explicit in an utterance. Morever, it is capable of absorbing some of the cases that Grice classified as conventional implicatures, the rest of which are better construed as collateral speech acts rather than implicatures.[23]

Enough said.

Notes

[1]The word "literal" appears in parentheses because "literal meaning of a sentence" is redundant (cp. "literal meaning of an utterance"). Accordingly, when I use the phrase "sentence nonliterality" I don't mean that the sentence itself has a nonliteral meaning but that the use of the sentence as a whole (in contrast to the use of any of its constituents) is nonliteral.

[2]When there is a specific form of words, as in many of the examples used later, that signals a sentence-nonliteral use, we have what may be called *standardized nonliterality* (Bach and Harnish 1979, pp. 224-32, and Bach 1987, pp. 77-85). Like the more commonly recognized phenomenon of *standardized indirection* (Bach and Harnish 1979, pp. 192-219), or what Grice called *generalized conversational implicature* (1967a/1988, 37-39)*, the hearer's inference to what the speaker means is short-circuited, compressed by precedent (though capable of being worked out if necessary), so that the literal content of the utterance may be bypassed. There are quite a few philosophically interesting cases of both standardized nonliterality and standardized indirection. In general, these notions facilitate the process demarcating (linguistic) meaning from use. Such a demarcation provides an effective antidote to the dread disease *semanticiasis:* multiplying meanings not just beyond necessity but beyond plausibility. Appealing to standardized nonliterality helps to defend Russell's theory of descriptions against the "incomplete description" objection (Bach 1987, 103-108); appealing to standardized indirection helps to show that performatives are ordinary indicative sentences (Bach 1975, Bach and Harnish 1979, pp. 203-209, and Bach and Harnish 1992) and that looking *F*/being possible/believing that *p* does not preclude being *F*/being actual/knowing that *p* (Grice 1961/1989, p. 237).

[3]Recanati's "availability" principle, that in what we count as what is said "we should always try to preserve our pre-theoretic intuitions" (1989/1991, p. 106) does not, in my view, recognize that our intuitions are insensitive to the distinction between the (locutionary) level of what is said and the illocutionary level of what is stated. The same point applies to his rejection (1993, ch. 13) of what Carston calls the "linguistic (or grammatical) direction" principle (1988/1991, pp. 38-39), which respects Grice's close correspondence constraint on what is said.

[4]Bach and Harnish 1979, pp. 165-172, argue that Grice's distinction, when generalized, is tantamount to the distinction between direct and indirect illocutionary acts. Our later discussion of impliciture, like Grice's implicature, will be limited to indicative cases. Taking up nonindicative cases would introduce some minor complications having to do with how to specify what is said and what is meant. See note 16.

[5]Perhaps I should say *structured* propositions, as read off of semantic representations. At any rate, what I have in mind are more finely individuated than truth conditions.

[6]This word is, of course, a cognate not of *implicate* but of *implicit*, whereas the word *explicature* is a cognate not of *explicit* but of *explicate.* Unfortunately, *implicit* has no cognate verb *implicite*.

[7]Why does Recanati maintain that this strengthening *is* what is said? Largely on inituitive grounds: the proposition most closely related to the conventional meaning of the sentence, in the cases he considers, is so patently false—or so obviously true—that it could not be what is said. Recanati doubts that anyone, at least anyone other than me,

would be willing to acknowledge this "minimal" proposition as what is said. To which I reply: of course, if your intuitions are insensitive to the distinction between what is said and what is stated or if, like Grice, you intuitively think that saying something requires meaning it, then naturally you won't regard the minimal proposition as the content of what is said. On the other hand, you will thereby be willing to include in what is said elements that do not correspond to elements in the uttered sentence.

[8]It is interesting to note that Grice himself, throughout his discussion of saying (1967a, pp. 24-25, 1968, pp. 118-122, 1969/1989, pp. 87-88), never commits himself to the position that what is said must be a complete proposition or have a determinate truth condition. Although he schematizes what is said with the notation '*p', where the asterisk is the "dummy mood indicator" used to take non-indicative utterances into account, nowhere does he stipulate that substitution instances of 'p' must be propositions. But perhaps that was implicated.

[9]Notice that there is an apparent problem for either view, at least on the assumption that *any* (grammatical) sentence can be used literally. For it seems that on either view the use of a semantically underdeterminate sentence cannot, strictly speaking, count as a literal utterance: the speaker cannot mean just what he says. This is vacuously true on the first view, since according to it nothing is said. And on the second view the speaker must mean more than what he says, since what he means must be a proposition, which a semantically underdeterminate sentence does not express (even with indexical references fixed, etc.). This circumstance suggests that the intuitive definition of literality as meaning what one says and no more ignores the case of semantically underdeterminate sentences. In order to avoid the paradoxical consequence that such sentences cannot be used literally, it must be modified to allow for meaning not just what one says but meaning a completion thereof. One doesn't mean two things in such a case; rather, a specification of what is meant in terms of what is said does not completely specify what is meant. See note 12.

[10]For example, if S uttered "Steel isn't strong enough not to be bent by Superman," an utterance of "S said that something isn't strong enough not to be bent by Superman" would incompletely report what S said.

[11]Andrew Woodfield points out to me that the mere fact that there are true indirect quotations like (3-IQ) and (4-IQ) does not show that what is said need not be a complete proposition. As he observes, a report of what S *meant* in a case like (3) could be made, on analogy with (3-IQ), using

> (3-MIQ) S meant that steel isn't strong enough.

(3-MIQ) could be true without completely specifying what S meant—S must have meant something for which steel isn't strong enough. So Woodfield wonders why, by parity of reasoning, the fact that there are true reports like (3-MIQ) doesn't show that what is meant need not be a complete proposition. However, I was not arguing that the availability of true reports like (3-IQ) shows that what is said need not be a complete proposition. That is a consequence of the requirement that what is said must closely correspond (in Grice's sense) with the words used. Rather, I was arguing against the view that *nothing* is said with a semantically underdeterminate sentence.

[12]No philosophical analysis, such as Russell's theory of descriptions, is refuted by the fact that the analysans cannot

be substituted for the analysandum in specifications of what is said.

[13]I don't mean to suggest here that what a speaker implicates is never implied by what is said.

[14]Larry Horn has reminded me of various sorts of expressions not taken up by Grice whose use has been thought to yield conventional implicatures: particles like *even* and *too,* implicative verbs like *manage* and *fail*, factive verbs like *forget* and *realize*, and cleft *(It was É who É)* and pseudocleft *(What X did was É).* I think that *even* and *too* enter into truth conditions in ways analogous to 'but'—some sort of contrast is part of the truth-conditional content, and the intended contrast is unspecified, as in a case like *Even Bill likes Mary.* Karttunen and Peters argue that the embedding *I just noticed that even Bill likes Mary* "does not mean that he has just noticed that other people like Mary or just noticed that Bill is the least likely person to do so" (1979, p. 13). But all this shows is that the relation of noticing is not distributive, as illustrated by *I noticed that Bill has three cars* (I may have already known that he has two). Horn points out that an implicative verb like *manage to* seems to add some sort of adverbial content while functioning syntactically like a main verb, but it's not clear to me why this should suggest that conventional implicature is involved. The adverbial content of such verbs can just enter straightforwardly into the whole truth-conditional content of the sentences in which they occur. For example, in *Bill managed to finish his homework,* the truth-conditional content includes both the finishing and the entailed difficulty. With factive verbs, as in *Bill forgot that he had an appointment,* that he had an appointment is part of the truth-conditional content of what is said—it is just not part of the content of the illocutionary act of assertion. An analogous point applies to cleft and pseudocleft constructions, although their form, like contrastive stress, marks a special, "illocutional" topic-comment relation (Atlas 1989, pp. 81-91). For a detailed, critical examination of conventional implicature and the related notion of semantic presupposition, see Harnish 1976.

[15]Recanati mentions a "quotational" notion of saying, which is "one factor among many that tend to make our intuitions fuzzy and conflicting" (1989/1991, p. 108), but of course this is not Grice's favored sense of saying.

[16]Although we are focussing on indicative cases, the editor has rightly reminded me that the *said-that* format does not work in certain other cases, such as exclamations, interrogatives, and some imperatives (there is in such cases a similar problem of how to specify what is meant). The issue of format for indirect quotation of interrogatives and imperatives is addressed briefly in Bach and Harnish 1979, p. 25. In any event, the problem with the *said-that* format in certain cases does not in itself show that the locutionary level of analysis does not apply. Indeed, we have seen that the locutionary level is needed to accommodate such phenomena as nonliterality and misspeaking. As for exclamations, like *Hello!, Wow!,* and *Egad!,* there doesn't seem to be any locutionary level, but since such utterances do not seem capable of generating implicitures, we have no reason to worry about them here.

[17]To deal with such examples, Recanati has developed the somewhat different notion of "local strengthening" (1993, ch. 14). I will not take up this notion here, but I believe that it leads to certain difficulties that lexical strengthening avoids.

[18]For the same reason it would be a mistake to regard John Perry's (1986) "unarticulated constituents" as

unarticulated constituents of what is said, as in his pet example *It is raining*. Unfortunately, Perry does not distinguish the (locutionary) level of what is said from the illocutionary level of what is stated.

[19]I haven't discussed the special case of utterances consisting of phrases rather than whole sentences, as in answers to questions. A direct answer to a WH-question is a phrase that would fit syntactically in the original site of the WH-word in the question. The practice of using just a phrase is so deeply entrenched that the only good reason for using a whole sentence is to make sure that one has understood the question correctly.

[20]It could even be objected that since disambiguation is a pragmatic process, what is said should include the propositions (or propositional radicals, as the case may be) determined by *each* of the readings of the sentence. It could be argued that it is only at the level of speaker meaning, i.e. attempting to communicate, that disambiguation enters in. However, this objection ignores the fact that saying something is possible without attempting to communicate anything at all. Saying something (performing a locutionary act) involves more than comprehendingly uttering a meaningful sentence, namely, presenting the hearer with a proposition or propositional radical (more precisely, a "moodified" one expressed in the form '*p'*) for his consideration, typically though not necessarily as the material on which to work out one's communicative intention. Since the speaker can intend one meaning of the sentence to be in play even if he has no communicative intention, it seems reasonable to restrict what is said to *operative meaning* (Bach and Harnish 1979, pp. 20-23) or what Grice called *applied timeless meaning* (1968/1989, p. 119).

[21]In Bach 1987, pp. 179-182, I opted for this weaker sense, thereby biting the bullet as far the present objection is concerned.

[22]It might be suggested that *finish* and *eat* either lose and then regain their complements during the course of syntactic derivation or that their complements exist all along but only as empty categories. Unfortunately, the first option entails a violation of the Projection Principle, and the second ignores the requirement that empty categories be syntactically licensed (Chomsky 1986, pp. 93-101).

[23]A version of this paper was presented on May 31, 1992 at the Paris Workshop on indexicality and semantic indeterminacy. For comments and suggestions provided there I am indebted to Stephen Neale, John Perry, John Searle, and especially Fran   ois Recanati. I am grateful to Andrew Woodfield for helping me clarify my views on (non-)literality.

Appendix: Further Examples

There is a greater variety of examples of both semantic underdetermination and of sentence nonliterality than was taken up in the text. What follows is an annotated, provisionally categorized list of examples with brief annotations in parentheses. The list could be extended considerably.

Semantic underdetermination
There are various ways in which semantic underdetermination can arise. In the following examples the source or the locus of underdetermination is, where possible, set in small caps. Some of the examples are controversial, being customarily viewed as cases of ambiguity rather than underdetermination, and are offered provisionally.

referential underdetermination
  indexical, demonstrative
   SHE will be here soon.(which female?)
   THIS guy is dangerous. (what demonstrated guy?)
   THAT is absurd. (what assertion?)
   John went to the store. (when?)
   Bill is STILL complaining. (since when?)
  anaphoric
      Bob told Bill to polish HIS shoes. (Bob's/Bill's)
      Jack and Jill rubbed/massaged THEIR feet. (each other's/respective)
   May I take you HOME? (your place or mine?)
  descriptive anaphors ("sloppy identity")
   The lizard lost his tail, but IT didn't care/grew back. (the lizard/its tail)
   Hillary loves her husband, and so does Tipper. (loves Tipper's/Hillary's husband).
  categorial
      type/token: There are two BEARS in Idaho/the yard.
      act/object: Bill made/accepted the STATEMENT.
       fact/proposition (that-clauses)**:** Bill regretted/imagined THAT he went.

lexical underdetermination (not ambiguity)
   LIFT, AGAINST, STRUCTURE, BEFORE, ROUGH, STUFF
   PINK Cadillac/dress/paint/grapefruit

phrasal underdetermination (not syntactic ambiguity)
   FAST car/track, HAPPY boy/face/days, HEALTHY body/diet
   The cat/the ant crawled UNDER the table. (to get under/while under)
   Burt kissed Dolly ON her left cheek/front porch. (where directed/where done)
   TONY'S TEAM is leading the league. (the team Tony owns/plays for/roots for)
   George ALMOST killed the goose. (he refrained/he missed/it survived)

scope underdetermination
   The NUMBER of planets may be EVEN .
   A FEW arsonists destroyed MANY buildings. (each/together).
   I do NOT BELIEVE that. (disbelieve/have no opinion)

argumental underdetermination
   Mary FINISHED (*COMPLETED)/ARRIVED (*REACHED)/ATE(*DEVOURED). (what?)
   The cow jumped OVER/THROUGH/*TO/*TOWARD. (what?)
   VISITOR, VIEWER, USER (of what?) [Cp. He VISITED/*VIEWED/*USED]
   Gentlemen PREFER blondes (to what?)
   Marilyn is TOO tall/not short ENOUGH. (for what?)
   Mutual knowledge is not RELEVANT. (to what?)
   John is READY/LATE/EAGER. (to or for what?)
   A mop is NEEDED to dry the floor. (for what?)

(implicit argument: A broom is needed [by x for PRO$_X$] to dry the floor.)

Gyro believes THAT the inventor of the Yo-Yo is rich. (Donald Duncan/whoever invented it)
  (in belief ascriptions modes of presentation need not be specified)

parametric underdetermination
  That lamp is SHORT/CHEAP/OLD. (relative to what?)
  That employee is GOOD/TALENTED/VALUABLE. (in what respect?)
  EVEN cowgirls sing the blues. (in addition to who?)
  Gregor was MERELY a bookkeeper. (as opposed to what?)
  John WANTS a car/a taxi/a sandwich/a woman/a massage/a bath. (to do what with?)
  Jack is IN FRONT OF Jill. (facing/ahead of/nearer than)

  counterfactuals (unspecified what is assumed fixed, i.e., most similar possible worlds)
      IF Lincoln hadn't gone to the theater, he wouldn't have been assassinated.
  explanations (when relevant contrast is unspecified):
      Ross demoted George (rather than Dan) BECAUSE he was responsible;
      Ross demoted George (rather than fire him) BECAUSE he was still needed.

Sentence Nonliterality
There are various sorts of sentences which, though they express complete propositions, are commonly used to express more specific or elaborate propositions. The difference between the two propositions is not attributable to any particular constituent of the sentence. Except for the last two categories (they seem to require different treatment), what is meant could be made explicit by inserting additional material, as indicated in brackets.by italics.

implicit quantifier domains
  Everyone *[in the class]* is going.
  She had nothing *[appropriate]* to wear.
  The cupboard *[in this house]* is bare.
  Only Bill *[among those in the class]* knows the answer.
  I have always *[since early childhood]* liked spinach.

implicit qualifications
  All birds can fly *[except ostriches, emus, and penguins]*.
  I will be there *[at the appointed time]*.
  George went to the store *[intentionally]*.
  Jack washed the car *[alone]*.
  Jack and Jill went up the hill *[together]*.
  Jack and Jill are married *[to each other]*.
  É or *[else]* É, É and *[then]* É , É if *[and only if]* É

approximation
  There are *[more or less]* 30 students per class.
  France is hexagonal *[roughly speaking]*.
  Berkeley is *[about]* 10 miles from San Francisco.

precisification
  He has *[exactly]* three cars.
  He weighs *[exactly]* 198 pounds. (cp. He weighs 200 poounds.)

scalar "implicatures"
  It doesn't *[only]* look expensive—it is.
  He didn't *[just]* try to climb Half Dome—he did it.
  The chef doesn't create *[mere]* meals but works of art.

metalinguistic negation (Horn 1989, ch. 6)
  I didn't trap two mongeese—I trapped two mongooses.
  He's not an animal doctor—he's a veterinarian.
  I'm not his brother—he's my brother.

scope shifts (Bach and Harnish 1979, p. 232)

I only read newspapers. (read newspapers only)
Bill also likes magazines. (likes magazines also)

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