

Penultimate version. Ultimate version appeared in: Mind and Language 26 (2011), 574-595.

Implicating Questions*

David Braun

University at Buffalo

Abstract: I modify Grice's theory of conversational implicature so as to accommodate acts of implicating propositions by asking questions, acts of implicating questions by asserting propositions, and acts of implicating questions by asking questions. I describe the relations between a declarative sentence's semantic content (the proposition it semantically expresses), on the one hand, and the propositions that a speaker locutes, asserts, and implicates by uttering that sentence, on the other. I discuss analogous relations between an interrogative sentence's semantic content (the question it semantically expresses), and the questions that a speaker locutes, asks, and implicates by uttering that sentence.

* Thanks to audiences at University of Sheffield and University at Buffalo for their comments. Thanks to Larry Horn for references. Thanks to Ralf Meerbote for correcting problems with previous versions of my German examples (all remaining errors are mine). Thanks to Jay Atlas, Kent Bach, John G. Bennett, Larry Horn, Gail Mauner, Michael McGlone, and Jennifer Saul for comments, discussions, suggestions, and reassurances. Special thanks to Christine Gunlogson for numerous references, copious comments, extended discussion, many suggestions, and yet more reassurance. I dedicate this paper, my first serious foray into pragmatics, to my former undergraduate teacher, Jay Atlas. I was fortunate to have Jay both as my first teacher in philosophy of language and as my supervisor for my senior thesis. I am now fortunate to have him as a friend and philosophical colleague. He finds much to disagree with in this paper, but I am sure that he will continue to do so with his usual generosity, tolerance, and humor. Address for correspondence: Department of Philosophy, 135 Park Hall, University at Buffalo, Buffalo, NY, 14260-4150, USA. E-mail: dbraun2@buffalo.edu

0. Introduction

Speakers sometimes ask a question and thereby imply a proposition. Suppose, for instance, that Alice observes Betty taking Carol's mobile phone from Carol's purse, and reading Carol's text messages. Suppose Alice then utters (1) while addressing Betty.

1. Do you really think that it's OK for you to do that?

Alice thereby implies (the proposition) that it is not OK for Betty to read Carol's text messages.

Speakers sometimes assert a proposition and thereby indirectly ask a question. Imagine that Diane and Eve are colleagues in a linguistics department. Diane appears at Eve's office door and utters (2).

2. I wanted to ask you whether you have read Jay Atlas's *Logic, Meaning, and Conversation*.

Diane asserts a proposition about her desires, and indirectly asks Eve whether she has read Atlas's book.

Speakers sometimes ask one question and thereby indirectly ask another. Suppose that Frances is working on a crossword puzzle while Greta is reading a newspaper.

3. Frances: Do you know what the 13th element in the periodic table is?
Greta: Yes.¹

Frances asks whether Greta knows what the 13th element in the periodic table is. Greta answers that question by uttering 'Yes'. But Frances clearly wants Greta to answer another question, namely the question of what the 13th element in the periodic table is. Frances asks that latter

¹ It's aluminum.

question indirectly, by directly asking a question about Greta's knowledge.

All of the above cases are examples of indirect speech acts.² But are they examples of *conversational implicatures*? Does Alice *conversationally implicate* a proposition by asking a question? Does Diane conversationally implicate a question by asserting a proposition? Does Frances conversationally implicate a question by asking a question? The examples seem rather similar to cases in which speakers implicate one proposition by asserting another. Yet they also differ significantly from standard examples of implicature. Moreover, current theories of implicature, such as Grice's (1975), seem ill-equipped to explain them.

In this paper, I explore how Grice's theory of conversational implicature might be modified so as to accommodate acts of implicating propositions with questions, acts of implicating questions with propositions, and acts of implicating questions with questions. I often focus on acts of the last sort, because they raise the most interesting theoretical issues (for reasons I give in section 6). I begin with some preliminary issues in the theory of speech acts and implicatures.³

² The speakers in these examples almost certainly perform indirect speech acts that I did not mention. For instance, Frances probably indirectly requests that Greta tell her what the 13th element is.

³ Little work has been done on integrating indirect interrogative acts into Grice's (1975) theory of conversational implicature. Searle (1975), Bach and Harnish (1979), and Asher and Lascarides (1998, 2001) discuss indirect speech acts, and describe how speakers' and hearers' reasoning in such cases resembles that involved in conversational implicature, but they do not mention examples of indirect asking. Moreover, Searle (1975) and Bach and Harnish (1979) seemingly assume that direct and indirect interrogative acts can be analyzed without mentioning semantic questions (see section 1 below for the notion of a semantic question). Levinson (1983), Groenedijk (1999), and Martinich (2001, pp. 127-128) discuss additions to Grice's maxims that are needed to accommodate questions, but do not discuss indirect asking. Gunlogson (2005) considers modifications of Grice's maxims so as to accommodate the pragmatics of asking questions, but she does not consider indirect asking, and she ultimately rejects her revised

There are, of course, alternatives to Grice's theory, including neo-Gricean descendants of Grice's theory (Levinson, 2000; Horn, 2004; Atlas 2005) and rivals to Grice's theory, such as relevance theory (Sperber and Wilson, 1986; Carston, 2002). I concentrate on modifying Grice's theory mainly because it is more widely known. Some of the preliminary issues I discuss below are framed in rather Gricean terms, but I hope that non-Griceans might nevertheless find my discussion useful.

1. Some Assumptions and Distinctions

I shall rely on a number of assumptions and distinctions, which I wish to make explicit. I start with familiar assumptions and distinctions concerning assertions. I then turn to questions.

Declarative sentences are linguistic expressions. Their *semantic contents*, with respect to *contexts*, are *propositions*.⁴ A declarative sentence *semantically expresses*, in a context, its

maxims in favor of a more radical alternative. Bach and Harnish (1979), in a discussion of Fraser's (1975) views on hedged performatives, mention examples like (3), but do not attempt to integrate them into a Gricean theory. Gordon and Lakoff (1975) mention cases of indirect querying in which speakers utter sentences that are frequently (even standardly) used for such purposes (such as ¹Do you know *Q*?). They propose "conversational postulates" similar to the revised maxims I propose below in section 7, but they do not mention non-standardized examples that are heavily context-dependent. See sections 5 and 6. Perrault and Allen (1980) discuss indirect interrogative acts, but (like Gordon and Lakoff) concentrate mainly on sentences standardly used for this purpose.

⁴ In section 3, I discuss declarative sentences whose semantic contents, in some contexts, may be something less than complete propositions. My notion of semantic content is more or less the same as David Kaplan's (1989), except that I do not assume that the semantic content of every declarative sentence, in a context, is a full proposition. Nearly all pragmatic theories assume that linguistic convention determines some sort of conventional meaning for linguistic expressions. Some say that the conventional meaning of a declarative sentence is often something that is less-than-fully-propositional, for instance, the theories of Atlas (1989), Recanati (2004), Bach (2005),

semantic content, in that context. Propositions are the objects of various linguistic relations and cognitive attitudes, such as assertion, belief, and doubt. Agents sometimes *assertively utter* a declarative sentence: that is, they sometimes utter a sentence while having certain sorts of thoughts, desires, and intentions, and they thereby *assert* the proposition that the sentence semantically expresses in the relevant context.⁵ They engage in a *speech act*, an *act of asserting*.

Parallel, but less familiar, points and distinctions hold for questions. The term ‘question’ itself is used for three distinct types of entity: sentences, semantic contents, and speech acts.⁶ The first type of question is an *interrogative sentence*, such as the sentence ‘Where is Cologne?’. Such an interrogative sentence is meaningful and so semantically expresses a semantic content, with respect to a context. The sentence’s semantic content is a question of another sort. This semantic content is distinct from the sentence, and can be semantically expressed by other interrogative sentences, such as ‘Wo ist Köln?’ in German. We can refer to this semantically expressed question with a definite description, ‘the question of where Cologne is’. I will often call questions of this second sort simply *questions*, but when there is danger of confusion, or when I wish to emphasize the non-linguistic nature of questions of this type, I shall call them

and Carston (2002, 2008). These theories differ from mine, and from each other, in ways that I do not have space to describe here. However, much of what I say below about semantic content, context, and speech acts could be easily modified to suit these theories.

⁵ There may be cases in which a speaker assertively utters a declarative sentence but does not assert its semantic content. See example (4) in section 3 below.

⁶ Groenendijk and Stokhof (1997, p. 1057) make the same three-way distinction. The term ‘question’ is not ambiguous. Rather, it is a general term whose extension includes entities of three significantly different types.

semantic questions.⁷ Semantic questions are among the objects of various linguistic relations and cognitive attitudes. An agent may, for example, ask, consider, wonder, remember, or know where Cologne is. A person who utters an interrogative sentence with the right intentions, thoughts, and desires *interrogatively utters* that sentence. By doing so, the agent *asks* the semantic question that the interrogative sentence semantically expresses in the relevant context.⁸ Such a *speech act* is also called a ‘question’. Questions in this sense are events that occur at particular times and locations, and can often be differentiated from one another on that basis. For example, we might count two children’s interrogative utterances of ‘Why is the sky blue?’ as distinct questions in this sense, though the same interrogative sentence is uttered both times and the same semantic question is asked both times. Let us say that these speech acts are *interrogative acts*.

⁷ We will consider later whether the semantic contents of some interrogative sentences, in some contexts, are something other than complete semantic questions. Many semanticists, such as Karttunen (1977) and Groenendijk and Stokhof (1997), think of the semantic content of an interrogative sentence as a function whose value at a possible world is (roughly) the proposition, or set of propositions, that completely and correctly answers the interrogative at that world. See Groenendijk and Stokhof (1997) for references, and descriptions of various theories. I think that such views have seriously distorted theorizing about questions, but in this paper I remain neutral about the nature of interrogative semantic contents, and everything I say in this paper is consistent with the ‘complete answer’ theory of semantic questions. Other theorists, such as Searle (1975), try to do without semantic questions, by (roughly speaking) analyzing interrogative acts as acts of standing in certain linguistic relations to propositions. See Karttunen (1977) and Groenendijk and Stokhof (1997) for criticisms of such views.

⁸ There may be cases in which a speaker interrogatively utters an interrogative sentence but does not ask its semantic content. See sentence (6) in section 4 below.

2. More Distinctions among Speech Acts

John Austin (1975) distinguished *locutionary* speech acts from *illocutionary* speech acts. A locutionary act is an act of uttering a sentence with a particular sense and reference. Performing such an act is necessary, but not sufficient, for performing an illocutionary act, such as asserting, warning, advising, or asking. The distinction is clear in cases of irony, hyperbole, and other figurative uses of language. A philosophy professor may utter ‘I graded a million exams this afternoon’. She uses ‘I’ to refer to herself, ‘this afternoon’ to refer to a certain afternoon, ‘grade’ for the relation of *grading* and so on. She thus performs a locutionary act, and thereby stands in a significant cognitive and linguistic relation to the proposition that she graded a million exams that afternoon. However, she does not *assert* the proposition that she graded a million exams that afternoon, because she does not express her belief in that proposition, or commit herself to its truth, in the way that she would if she genuinely asserted it.

A speaker can perform a locutionary act without performing any illocutionary act. Imagine that a German speaker and his translator visit Owen at his home. The German speaker may assertively utter ‘Sie haben ein schönes Haus’, while addressing Owen, thus asserting that Owen has a beautiful house. The translator may then utter ‘You have a beautiful house’ while addressing Owen. The translator utters these English words with a certain reference (he refers to Owen with ‘you’) and sense (he means *beautiful* by ‘beautiful’, and so on), and so he performs a locutionary act. But the translator does not *assert* that Owen has a beautiful house. He does not commit himself to the truth of the proposition in the same way that he would if he were to assert

it, and he cannot be justly condemned (or praised) for lying, if he thinks that Owen's house is not beautiful. It is doubtful that the translator performs any illocutionary act.

The distinction between locutionary and illocutionary acts is not always explicitly recognized.⁹ One reason is that it is sometimes confused with the distinction between merely uttering a sentence and asserting its semantic content. Another reason is that the verb 'say' is commonly used for both locutionary and illocutionary acts. A speaker observing the translator might report that he *said* that Owen's house is beautiful. Another observer might report that the professor *said* that she graded a million exams that afternoon. These observers are using 'say' as a verb for locutionary acts. However, another person observing the translator might instead report that *only* the German speaker *said* that Owen's house was beautiful; the translator did *not* really *say* this, because he was *just* translating. Such an observer might also insist that the professor did not really *say* that she graded a million exams that afternoon. Such an observer might be trying to use 'say' for the illocutionary relation of *asserting* or *stating*.

For this reason, using the phrase 'what is said' in pragmatic theorizing is very likely to cause confusion. Theorists should either avoid it or stipulate that they are using 'say' for a

⁹ An exception is Kent Bach (see especially his 2001 and 2005), who has for many years emphasized the importance of distinguishing between saying-in-the-locutionary-sense and saying-in-the-illocutionary-sense. But all pragmatic theorists assume that expressions have conventional linguistic meanings of some sort, though some assume that the conventional linguistic meanings of sentences are often less than fully propositional (Carston 2002, 2008; Recanati 2004). Furthermore, all pragmatic theorists at least implicitly assume that a speaker sometimes utters a sentence with the intention of using that sentence with its standard meaning in that speaker's language (as opposed to uttering the sentence with, for instance, the intention of presenting an example of a certain phonological sequence). Such theories do, in effect, recognize the existence of locutionary acts. See also notes 11 and 18 below.

particular speech act relation.¹⁰ I choose to avoid it. I shall instead introduce a new attitude verb for locutionary acts, *locute*. A speaker locutes a proposition iff she performs a locutionary act with that proposition as its content. More specifically, to locute proposition *P* is to utter (with the right *locutionary* intentions) a sentence that semantically expresses *P* (in the relevant context of utterance). Both the German speaker and his translator locute (the proposition) that Owen has a beautiful house, but only the German speaker asserts that proposition. The professor locutes that she graded a million exams that afternoon, but does not assert or state that she did so. While we are at it, we might as well introduce the verb *illocute* with the obvious meaning: To illocute a semantic content is to stand in some illocutionary relation to it. The translator locutes propositions, but illocutes nothing at all.¹¹

¹⁰ Levinson (2000, pp. 186-198) catalogs some of the ways in which theorists have used ‘what is said’ and other related terms, such as ‘explicature’, ‘semantic’, ‘pragmatic’, and ‘sentence meaning’. See also Wilson (1995), Carston (2002, pp. 182-3), and Atlas (2007).

¹¹ There are four sorts of utterance that raise theoretical issues about locuting and locutionary acts. First, speakers often utter sentences that contain other sentences as constituents (such as disjunctions and attitude ascriptions), and when they do so, they often utter those constituent sentences with a certain sense and reference. I shall assume here that such a speaker locutes the semantic content of the entire sentence but does not locute the semantic contents of the constituent sentences. This stipulation fits well with Austin’s notion of a locutionary act and allows me to present a simple formulation of the Maxim of Literalness in section 7 below. (We may want some verb other than ‘locute’ for acts of uttering a sentential constituent of a larger sentence with a sense and reference.) Second, some theorists (such as Bach, 1994, and Carston, 2002) claim that there are grammatically complete sentences whose semantic contents in some contexts are less-than-complete propositions. If there are such sentences and contexts, then they raise the issue of whether a speaker who utters one in such a context engages in a locutionary act and locutes a less-than-complete proposition. I shall assume that they do; thus a speaker may locute a semantic content that is less-than-a-complete proposition. Third, a similar issue arises if the semantic contents of some sentences, in some contexts, are non-propositional because they are non-specific about the scopes of the semantic contents of quantifiers and operators such as negation. Atlas (2005) holds this view about ‘The king of France is not bald’. (His use of ‘sentence token meaning’ is roughly like my ‘semantic content’.) I shall assume that speakers in such cases locute this non-specific semantic content. (No examples of this sort occur in this

We need a similar distinction for utterances of interrogative sentences. To locute a semantic question is to utter (with the right intentions) a sentence that semantically expresses that question (in the context of utterance).¹² The German speaker may utter ‘Wer hat Ihr Haus

paper.) Fourth, elliptical utterances present certain theoretical issues. Consider the following dialogue. A: ‘Who was President of the USA in 1996?’ B: ‘Bill Clinton.’ B clearly asserts that Bill Clinton was President of the USA in 1996, but he does not (fully) pronounce any sentence with that semantic content. Suppose (for the sake of argument) that there is a unique complete sentence that ‘underlies’ B’s utterance of ‘Bill Clinton’ (e.g., a sentence that resides in the right location in B’s ‘language processing module’). Then perhaps we should say that B locuted the proposition semantically expressed in B’s context by that complete sentence. Or perhaps we should instead restrict locuted propositions to those expressed by fully pronounced sentences, and introduce a new type of speech-act-relation that would include the propositions expressed by such unpronounced propositions in its range. Suppose instead that there is no unique complete sentence that ‘underlies’ B’s utterance of ‘Bill Clinton’. Then we should say that B does not locute a proposition. In that case, B would assert a proposition that he does not locute. Perhaps making further distinctions among speech acts, following some of Austin’s suggestions (1975, pp. 95-96), would be useful. I will not try to settle this issue here.

¹² Issues about locuting questions, similar to the issues about locuting propositions in the previous note, arise for (a) grammatically complete interrogative sentences whose contents, in certain contexts, are (perhaps) less-than-complete semantic questions, (b) interrogative sentences whose semantic contents are (perhaps) scope non-specific (e.g., perhaps ‘Isn’t the king of France bald?’), and (c) ellipsis. My use of ‘locute’ to describe a relation whose objects include semantic questions raises a grammatical issue. I want ‘locute’ to be a binary verb that can take either a noun phrase, or a ‘that’-clause, or an indirect interrogative sentence, as its object, as in the following examples.

- a. Jones locuted the proposition that some pigs live in Manhattan.
- b. Jones locuted the question of whether some pigs live in Manhattan.
- c. Jones locuted the question of why some pigs live in Manhattan.
- d. Jones locuted that some pigs live in Manhattan.
- e. Jones locuted whether some pigs live in Manhattan.
- f. Jones locuted why some pigs live in Manhattan.

Very few, if any, English verbs take complements of all these sorts. (Perhaps ‘consider’ and ‘understand’ do.) If none do, then the grammatical rules of English may forbid the existence of such a verb. If so, then the language I am using in this paper is not quite English. (Thanks to Christine Gunlogson for discussion.) Notice that (f) above is not synonymous with ‘Jones said why some pigs live in Manhattan’. The latter ascription is true iff Jones asserts a proposition that answers the question of why some pigs live in Manhattan, while sentence (f) is true iff (roughly) Jones utters a sentence that has the semantic content of ‘Why do some pigs live in Manhattan?’. (Thanks to Kent Bach for discussion.)

gebaut?’ and the translator may utter ‘Who built your house?’. Both locute (the question of) who built Owen’s house, but only the German speaker *asks* that question. A tourist viewing the U.S.S. *Constitution* may utter ‘When did it last plow the sea?’.¹³ The tourist locutes (the question of) when the *Constitution* last plowed the sea but does not ask that question.

3. Semantically Expressing, Locuting, Asserting, and Implicating

The relation of locuting tracks the relation of semantic expression, in a certain sense. If a declarative or interrogative sentence semantically expresses a semantic content *C* in a context, then a speaker who utters that sentence (and only that sentence) with standard locutionary intentions, in the relevant context, locutes *C*, and nothing but *C*, in that utterance.

Illocutionary relations typically do not track semantic content so closely. Consider assertion. A speaker who assertively utters a declarative sentence asserts the semantic content of the sentence, but often he asserts further propositions, that are not the semantic content of the sentence, in that same act of uttering. Assertive utterances of conjunctive declarative sentences provide obvious cases. If Jones assertively utters ‘Smith is in Los Angeles and Brown is in San Francisco’, then Jones asserts the semantic content of that sentence, namely the proposition that Smith is in Los Angeles and Brown is in San Francisco. But Jones also (typically) asserts at least two other propositions, namely the proposition that Smith is in Los Angeles and the

¹³ The U.S.S. *Constitution* (‘Old Ironsides’) is a sailing ship that was launched in 1797. According to the U.S. Navy (<http://www.usconstitution.navy.mil/>), she is the oldest commissioned warship afloat in the world. Since 1897, she has spent most of her time docked in Boston harbor, where she is a major tourist attraction. She last sailed in 1997.

proposition that Brown is in San Francisco.¹⁴ For another example of non-tracking, consider sentence (4). (This example, and much of the following reasoning about it, come from Bach 1994.)

4. I'm ready.

Assume that (4) is a complete grammatical sentence. The adjective 'ready' semantically expresses a two-place relation: when a person is ready, he or she is always ready *for something* (to leave, to eat lunch, for work, and so on).¹⁵ But (4) does not explicitly specify a second argument for the predicate 'ready'. On one semantic analysis of (4), its semantic content (in a context) is a less-than-complete proposition. (If propositions are structured, then perhaps it contains a gap where the second argument for the ready-relation can appear.) On another analysis, the semantic content of (4) is logically equivalent to an existentially generalized proposition, the same as that semantically expressed by 'I'm ready *for something*'.¹⁶ But a speaker who assertively utters (4) typically asserts a complete, and specific, proposition, for instance, the proposition that she is ready *to leave*. So she asserts something other than the semantic content of the expression she utters. (Whether she also asserts the semantic content may depend on whether the first or second analysis of the semantic content is correct.)

¹⁴ This is not a matter of logic. Rather, it has something to do with the nature of assertion, and so with Jones's thoughts, desires, and intentions as he utters the sentence. Perhaps if Jones were particularly ignorant of logic, or deranged, she could assert the conjunctive proposition without asserting its conjuncts.

¹⁵ Cappelen and Lepore (2005) maintain that 'ready' expresses a one-place property, *being ready* (period). For purposes of illustration, I shall here assume that they are incorrect.

¹⁶ On a third analysis, (4) contains an unpronounced indexical whose content in the context is a second argument for the *ready* relation. I assume here, for purposes of illustration, that this analysis is incorrect.

Speakers also conversationally implicate, or otherwise pragmatically convey, propositions that are distinct from both the semantic contents of the linguistic expressions they utter and the propositions that they assert. For instance, a person who utters (4) may, in the right circumstances, assert that she is ready to leave, and implicate to her addressee that he ought to hurry up. We can speak of the proposition that speakers *typically* or *standardly* implicate when they utter a certain sentence (as when Gricean theorists speak of generalized conversational implicature), but only a speaker can implicate a proposition.

Summarizing: when a speaker assertively utters a declarative sentence, we should distinguish among the proposition that the uttered sentence semantically expresses (in her context), and the propositions that she locutes, asserts, and implicates.¹⁷

Not all pragmatic theorists accept all of these distinctions. Some theorists may doubt that there is a useful distinction to be made between propositions locuted and propositions asserted.¹⁸ Some may admit that there is a useful distinction between semantic content and “everything else”, but doubt that any useful distinction can be drawn between propositions that are asserted

¹⁷ Here, as before, I am following Bach (see especially his 2001 and 2005), though I use different terminology: where I use ‘locute’, Bach uses ‘say’, and where I use ‘assert’ or ‘state’, Bach often uses ‘mean’. (However, Bach may allow merely implicated propositions to be among the things that a speaker means.) Atlas (2005, Chapter 3) makes similar distinctions.

¹⁸ But, as I also pointed out in note 9, nearly all theorists admit (a) that declarative sentences have some sort of conventional meaning (even if they think these meanings are often non-propositional), and (b) that speakers sometimes utter declarative sentences while intending to use them with their conventional meanings (as opposed, for instance, to just mentioning the sentence). If so, then their admissions entail that speakers do something very like what I call ‘locuting a semantic content’. Further, if those same theorists also admit (c) that speakers may utter a sentence and exploit its conventional meaning to communicate a content, while not intending to assert that content or one that is a completion or enrichment of it, then their admissions entail (d) that there is a difference between (something much like) locuting a content and (something much like) asserting that same content. See also note 19.

and propositions that are merely implicated.¹⁹ Some theorists might admit all of these distinctions, but think that some of the propositions that I claim are asserted are merely implicated (or vice versa).²⁰ I think that intuition strongly supports the above distinctions. But we cannot rely on our intuitions about ‘says’ ascriptions, or on our judgments about “what is said”, to make these distinctions. We must instead look for theoretically fruitful notions and distinctions, which will (often) regiment and precisify our ordinary notions and distinctions.

4. Questions Semantically Expressed and Asked

Analogous points and distinctions hold for questions. A speaker who interrogatively utters an interrogative sentence typically asks the semantic content that the sentence semantically

¹⁹ Levinson (2000, pp. 194-8) seems to fall into this camp. As I mentioned above, Bach (1994, 2001, 2005) advocates using the distinction between contents that are locuted and those that are asserted (and otherwise illocuted), though he uses a different vocabulary to do so. Relevance theorists (Sperber and Wilson 1986; Carston 2002, 2008) also make roughly the above distinction between things asserted and things implicatured, for they use the term ‘explicature’ in roughly the way that I would use ‘assertion’ or ‘thing asserted’ and they use ‘implicature’ as I use ‘implicature’ or ‘implicatum’. Recanati (2004) uses ‘what is said’ is roughly the way I use ‘what is asserted’ and ‘implicature’ in roughly the way I use ‘implicature’ and ‘implicatum’.

²⁰ Theorists who admit that asserted propositions differ from implicated propositions may disagree among themselves about the basis for the distinction. I am inclined, following Bach (2001, 2005) and Bach and Harnish (1979), to explain the distinction in terms of speaker intentions: Asserted propositions are (among) the propositions that speakers intend to communicate *directly*, whereas implicated propositions are propositions that speakers intend to communicate *indirectly*, by means of directly asserting, or otherwise directly illocuting, something else. Relevance theorists might make the distinction in terms of hearers’ cognitive processes: There are the processes that deliver the *explicature* (which at least roughly coincides with my notion of an asserted proposition) and processes that subsequently deliver implicata. See Carston, 2002, especially pp. 116-118, 148; and Carston, 2008, p. 323. Recanati (2004) thinks that the distinction between what is said (which coincides roughly with my notion of an asserted proposition) and what is implicated is based on differences in psychological processes, namely the difference between primary and secondary pragmatic processes.

expresses. Often that semantically expressed question is the only semantic question that the speaker asks, but sometimes he asks others. Consider interrogative sentence (5).

5. Where are Smith and Brown?

The semantic content of (5) is the question of where Smith and Brown are. A speaker who interrogatively utters (5) asks that semantic question, but typically he also asks two other semantic questions: the question of where Smith is and the question of where Brown is. So he asks at least three semantic questions, at least two of which are distinct from the semantic content of the sentence he utters.

A similar phenomenon often (but not always) occurs when speakers utter interrogative sentences containing ‘or’. Suppose a flight attendant, Fred, is serving beverages and asks a passenger, Patty, ‘Do you want coffee or tea?’.²¹ Fred thereby asks the semantic question that the interrogative sentence expresses (in his context), namely the question of whether Patty wants coffee or tea. But he also asks two further questions, namely the question of whether Patty wants coffee and the question of whether Patty wants tea. If Patty simply answers ‘no’, then she will assert an answer to the semantically expressed question, and implicate answers to the other two (namely, that she does not want coffee and that she does not want tea). If Patty simply answers ‘yes’, then she will assert an answer to the semantically expressed question, but will fail to assert, and probably fail to implicate, answers to the other two questions.

Consider next interrogative sentence (6).

6. Are you ready?

²¹ Imagine that Fred utters the sentence with a rising intonation throughout, and without a pause before ‘or’.

On one analysis, the semantic content of (6) (in a context) is a less-than-complete semantic question. On another analysis, its content is (or is logically equivalent to) an existentially generalized semantic question, the question of whether *A* (the addressee) is ready *for something*. But a speaker who utters (6) typically asks a complete and more specific semantic question, for instance, the question of whether *A* is ready *to leave*. Such a speaker asks a semantic question that is distinct from the semantic content of the expression he utters. (Whether he also asks the semantic question that (6) semantically expresses may depend on the correct semantic analysis of (6) and on the issue of whether speakers can ask less-than-complete semantic questions.)

A speaker who utters an interrogative sentence may conversationally implicate a proposition that is distinct from the semantic content of her interrogative sentence and the semantic question that she asks. Suppose that Sally interrogatively utters (6) while addressing Alfred. Sally may thereby ask a semantic question that is distinct from the semantic content of (6), for instance the question of whether Alfred is ready *to leave*. Sally may also implicate a proposition. Suppose, for instance, that Sally can see that Alfred is putting on his shoes, and so not yet ready to leave. Then she may implicate the proposition that Alfred should hurry up.

5. Questions Indirectly Asked

As I noted at the beginning of this paper, there are cases in which a speaker who asks one question thereby indirectly asks another question, one that is neither semantically expressed nor directly asked. Suppose that a wife displays her husband's shirt to him, points at a red mark on its collar that looks very much like a lipstick smudge, and utters (7).

7. Is this lipstick?

She asks the question of whether the mark is lipstick, and this is also the semantic question that her sentence semantically expresses. But she expects her husband to answer other questions, such as the question of why there is lipstick on his shirt collar and the question of whether he is having an affair, and she also expects her husband to realize that she has such expectations. She indirectly asks these latter questions by directly asking the question that (7) semantically expresses in her context.

Suppose that David and Earl have been colleagues in a philosophy department for over ten years, and during that time David has never seen Earl wear a tie. One day David sees Earl at work and is astonished to discover that he is wearing a tie. David utters (8).

8. Are you wearing a tie?

David asks the question of whether Earl is wearing a tie, which is also the question that his interrogative sentence semantically expresses. But David expects Earl to answer other questions, such as the question of *why* Earl is wearing a tie. David asks these further questions indirectly.

Suppose that Harold and Winifred are husband and wife. Their car is malfunctioning, and they suspect that it needs an expensive repair that they can ill afford. Winifred leaves the car at a mechanic's shop, and waits at work for the mechanic's call. That afternoon, when Harold is fairly confident that the mechanic has called Winifred, he phones her and asks 'Has the mechanic called yet?'. Harold would not be satisfied with a simple 'yes' from Winifred. In addition to asking the question that he locutes, he also indirectly asks other questions, such as the question of what is wrong with their car and how much the repairs will cost.

Finally, consider the second and third examples in the introduction to this paper. Diane

directly asserts that she wanted to ask whether Eve has read Atlas's book, and thereby indirectly asks the question of whether Eve has read Atlas's book. Frances directly asks whether Greta knows what the 13th element is, and also indirectly asks the question of what the 13th element is.²²

Some of these cases of indirect asking depend heavily on context. The wife who interrogatively utters 'Is this lipstick?' indirectly asks other questions because of her intentions and her thoughts about her husband. Her husband may grasp those indirectly asked questions because of his thoughts about her thoughts and intentions. But an employee at a dry-cleaning establishment might interrogatively utter the same sentence to the husband and yet not indirectly ask these further questions, because the employee has different thoughts and intentions. By contrast, a speaker who utters 'Do you know what the 13th element is?' almost always intends the hearer to tell her what the 13th element is, and almost always indirectly asks this latter question. Usually, a speaker who utters a sentence of the form 'Do you know *Q*?', where *Q* is an embedded interrogative sentence, indirectly asks the question expressed by *Q*. Speakers know this, and hearers can reasonably assume, when they hear such a sentence, that the speaker is using the interrogative sentence in this way, unless there is evidence to the contrary.²³ The same holds for 'Can you tell me *Q*?', as in 'Can you tell me what the 13th element is?', and for declarative

²² The speakers in all of the preceding examples may also perform indirect illocutionary acts other than indirect interrogative acts. They may, for instance, indirectly assert propositions, indirectly issue commands (see section 9), or indirectly issue requests.

²³ In the right sort of context, a speaker can directly ask the semantic question expressed by 'Do you know *Q*?', without indirectly asking the question expressed by *Q*. For instance, Perrault and Allen (1980) point out that a parent leaving a child at a train station may ask the child 'Do you know when the train leaves?', expecting only a yes/no answer. This sort of use of 'Do you know *Q*?', is less frequent than the sort I describe above, and requires special contextual support if the speaker is to avoid being misleading. (Thanks to Christine Gunlogson for discussion.)

sentences of the form ‘I wanted to ask you *Q*’, as in ‘I wanted to ask you whether you have read Atlas’s *Logic, Meaning, and Conversation*’. Similarly, a speaker who asks ‘Are you meeting a woman this evening?’ thereby almost always asks the addressee whether he is meeting a woman other than his wife, mother, or sister, that evening.

6. Grice, Questions, and Implicating

Can Grice’s theory of implicature be extended to speech acts in which a speaker utters an interrogative or declarative sentence, and thereby implicates a proposition or indirectly asks a semantic question?²⁴

There are reasons to think that it cannot, or should not, be so extended. In all of Grice’s examples of implicature, the implicata are propositions. In most of them, the speaker implicates a proposition by asserting a proposition; in others, the speaker implicates a proposition by merely locuting a proposition. In none does the implicating speaker utter an interrogative sentence, and in none is the implicatum a semantic question. Furthermore, the verb ‘implicate’ is a verb of *propositional attitude*. It can take ‘that’-clause complements, which refer to propositions. It can also take noun phrase complements, but in most uses of sentences in which it does, the relevant noun phrase refers to a proposition (for instance, ‘the proposition that Alfred should hurry up’). ‘Implicate’ seemingly cannot take indirect interrogative sentence complements, such as ‘whether Eve read Atlas’s book’ and ‘what the 13th element is’, which refer to semantic questions.

²⁴ As I mentioned earlier, many theories of implicature depart from Grice’s to various degrees. We could similarly ask whether those other theories can be extended to the sorts of speech acts I have described. I concentrate on Grice’s theory here because it is familiar.

Relatedly, Grice uses the verb ‘implicate’ as a rough synonym for the verbs ‘suggest’ and ‘imply’. These are propositional attitude verbs that can be used to report certain sorts of indirect *constative* illocutionary acts.²⁵ But a speaker cannot indirectly constate a semantic question. Finally, Grice’s maxims, and his analysis of conversational implicature, do not mention acts of asking questions. I suspect that these are the main reasons why theorists have not tried to integrate acts of indirectly asking questions into Gricean theories of implicature.

But there are strong countervailing reasons to think that we should extend theories of implicature to acts of indirectly asking questions. The speakers and hearers in the earlier examples may engage in reasoning that strongly resembles what Grice calls ‘calculating implicatures’; if so, then these speakers and hearers sometimes use tacit knowledge of maxim-like principles concerning conversation when they engage in this reasoning. Even when hearers do not engage in such reasoning, it is plausible to suppose that they could have used reasoning that is much like Gricean calculation of implicatures to discover which indirect speech acts the speaker was performing. Further, there is a distinction among these indirect speech acts that bears an interesting similarity to a Gricean distinction among implicatures. In some cases, indirectly conveying a semantic question successfully seems to depend heavily on details of the particular context in which it occurs; in other cases, it does not. This is the sort of phenomenon that led Grice to distinguish between particularized and generalized conversational

²⁵ The term ‘constative’ comes from Austin (1975). I use it in roughly the same way that Bach and Harnish (1979) do, and in roughly the same way that Searle (1979) uses ‘assertive’. Some examples of constative illocutionary acts are acts of asserting, describing, predicting, denying, reporting, implying, conjecturing, and concluding. The objects of constative acts are propositions. A speaker who performs a constative illocutionary act expresses some degree of belief in, or commitment to, the constated proposition (or in the proposition’s negation, in the case of constative acts like denying).

implicatures.²⁶ As for the maxims, Grice (1975) himself says concerning them, “. . .the scheme needs to be generalized to allow for such general purposes as influencing or directing the actions of others”.

These similarities make it reasonable to seek a revision of Grice’s theory that allows semantic questions to be implicated in acts of locuting propositions and questions, and in acts of asserting propositions and asking questions. The revision will require a significant amount of work. I will do only a small portion of it here. Part of the project will be to generalize the notion of implicature so that it applies to both indirect *constative* illocutionary acts and to indirect *interrogative* illocutionary acts. Thus I will no longer restrict the use of ‘implicate’ to constative acts, and I will feel free to use ‘implicate’ in sentences containing a complement noun phrase referring to a semantic question, as in ‘John implicated the question of who kissed Mary’.²⁷

²⁶ Some theorists, such as Carston (1995; 2004, p. 111) and Hirschberg (1991) argue that the distinction between particularized and generalized implicature is not sharp, and not theoretically useful. Carston (2002, p. 111) says there is a continuum of implicatures, from those that depend heavily on particular contexts to those that occur in nearly all cases. At the same time (2002, p. 111), she admits that cases that have been called ‘generalized conversational implicatures’ have interesting distinctive properties. See Levinson (2000) and Horn (2004) for further discussion of the distinction. I need not take a stance on the theoretical importance of the distinction here. I merely claim that a parallel distinction (whatever its nature) between particularized and generalized conversational implicature seems to hold for indirect speech acts involving questions, and this indicates that the phenomena involving questions is of the same type as the phenomena that Grice attempted to describe using ‘particularized conversational implicature’ and ‘generalized conversational implicature’.

²⁷ I will also feel free to use sentences in which ‘implicates’ takes an indirect interrogative sentence as a complement, for instance, ‘John implicated who kissed Mary’, though this may (in fact) be ungrammatical in English. See note 12.

7. Allowing Implication of Questions

I shall start with Grice's original maxims, revising them as needed to allow speakers to implicate questions. Many Gricean theorists have proposed revisions or additions to Grice's maxims; some pragmatic theorists have proposed rejecting the use of Gricean maxims to explain implicatures. I ignore all such revisions here, not because I think that all of these successor theories are inferior to Grice's original, but rather because Grice's theory is familiar, and I am merely trying to illustrate the sorts of revision that must be made to theories of implicature so as to allow implication of questions.

Speakers can implicate propositions and questions by locuting propositions and questions, without asking, asserting, or otherwise illocuting those latter propositions and questions. To accommodate this, I shall add a *Maxim of Literalness* to Grice's maxims.²⁸

Maxim of Literalness

Be literal.

- a. If *P* is a proposition, locute *P* only if you wish to assert *P*.
- b. If *Q* is a question, locute *Q* only if you wish to ask *Q*.

Here is the idea behind adding this maxim. Speakers presume that if a speaker locutes a proposition (by uttering a declarative sentence), then she is asserting that proposition. They presume that if a speaker locutes a semantic question (by uttering an interrogative sentence), then she is asking that question. Exceptions occur when, for instance, the speaker is merely

²⁸ Bach and Harnish (1979, p. 35) formulate a similar principle, though they do not describe it as a conversational maxim.

translating, or obviously being ironic, hyperbolic, or metaphorical. In such cases, the hearer infers that the speaker is not asserting the relevant proposition or asking the relevant question. This allows the hearer to infer either that the speaker is merely locuting that content or that the speaker stands in some other illocutionary relation to the relevant semantic content. This may also allow the hearer to infer (using the other Maxims) that the speaker is implicating something other than the semantic content of the uttered sentence.²⁹

Grice's Cooperative Principle, and his Maxims of Relation, Manner, and Quantity need no revision (at least not immediately).

Cooperative Principle

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

Relation

Be relevant.

²⁹ In his discussions of metaphor and irony, Grice himself seems to recognize the need to distinguish locuting from asserting. Grice (1975, Examples, Group C) discusses a case of irony in which *A* utters '*X* is a fine friend'. Grice says of this case "what *A* says or made as if to say is something he does not believe." Here Grice seems to be using 'say' to mean (roughly) *assert* and 'made as if to say' to mean *locute*.

Manner

Be perspicuous.

- a. Avoid obscurity of expression.
- b. Avoid ambiguity.
- c. Be brief (avoid unnecessary prolixity).
- d. Be orderly.

Quantity

- a. Make your contribution as informative as is required (for the current purposes of the exchange).
- b. Do not make your contribution more informative than is required.

These Maxims entail nothing one way or the other about asking semantic questions: They allow such acts, but do not require them. The Maxim of Quality is a different story.

Quality

Try to make your contribution one that is true.

- a. Do not say what you believe to be false.
- b. Do not say that for which you lack sufficient evidence.

Quality positively forbids acts of asking semantic questions, or at least acts of asking wh-semantic-questions, since these are never true. Another problem with Quality is that it uses the verb 'say', which for the sake of clarity should be replaced with either 'locute' or 'assert'.

Stephen Levinson (1983, 103 and 105) briefly suggests that Quality be reformulated as a more general Maxim of Sincerity. (He does not present such a reformulation.) He suggests that

sincerity in asserting propositions requires (roughly) that one assert only truths and that sincerity in asking semantic questions requires (roughly) that one lack an answer to the question and want such an answer. These are constraints on asserting and asking, rather than locuting. Following Levinson's lead (more or less), I will reformulate the Maxim of Quality as a Maxim of Sincerity. There are many ways of formulating such a maxim, and the differences among them may be important. The following is a reasonable starting point.³⁰

³⁰ I assume here that only propositions answer semantic questions, and that both true and false propositions can answer questions. My proposed revisions resemble those of some previous theorists. Gordon and Lakoff (1975) add 'conversational postulates' to Grice's theory so as to cover interrogative acts, but unlike me, they assume that interrogative acts are requests (imperative acts). Moreover, their conversational postulates cannot easily be used to explain cases of indirect questioning that depend heavily on context. Bach and Harnish (1979, 63-4) present revisions to Grice's maxims ('conversational presumptions', in their terms) so as to describe non-constative illocutionary acts, but their revisions are divided into distinct maxims of sincerity and quality. Gunlogson (2005) presents several Levinsonian reformulations of Quality. My reformulation most closely resembles Gunlogson's final formulation (which she ultimately rejects), though there are important differences.

Maxim of Sincerity

Be sincere.

1. If P is a proposition, then assert P only if P is true.
 - a. Do not assert P if you believe P to be false.
 - b. Do not assert P if you lack sufficient evidence for believing P .
2. If Q is a semantic question, then ask Q only if there is a type of answer to Q such that you want your addressee to tell you a true answer of that type.
 - a. Do not ask Q if you believe that there is no P such that: P is true, and P answers Q , and P is an answer to Q of the type that you want to be told.
 - b. Do not ask Q if you believe that there is no P such that: P answers Q , and the addressee believes P to be true.
 - c. Do not ask Q if you believe that there is no P such that: P answers Q , and the addressee has sufficient evidence for believing P .

Some might wonder why the consequent of (2) is so elaborate. Why not just ‘you want your addressee to tell you the true answer to Q ’? There are two reasons. First, wh-questions do not have unique true answers, so there is no such thing as *the* true answer to a wh-question. Second, speakers who ask a question may believe a proposition that they think answers Q , but may ask Q anyway because they want *another* type of answer, for instance, a more informative or precise answer. Some might want the consequent of (2) to say ‘you want to *know* a true answer of that type’ rather than ‘you want your addressee to tell you a true answer of that type’. (Levinson’s description of sincerity suggests that it should be so formulated.) This formulation is unduly

restrictive. Perhaps the most common motivation for asking a question is the desire to know an answer to the question, but there are other rather common motivations. For example, teachers often ask their students questions when they already know an answer to that question, and have no desire to know a further answer. Nonetheless, they want their students to tell them answers to their questions. Hearers who tacitly know the above Maxim presume that a person who asks a question wants to be told an answer. They often infer (through commonsense psychological reasoning) that the speaker wants to be told an answer *because* he wants to *know* an answer (of a certain sort).

I suspect that the Maxim of Quantity should also be revised, so that it entails (for instance) that a speaker should not ask questions whose answers would be more (or less) informative than needed for the purposes of the exchange. But I shall not attempt the reformulation here.³¹

Grice's analysis of conversational implicature also needs to be generalized. I use the variable 'C' below to range over semantic contents, including both propositions and semantic questions.

³¹ See Groenendijk 1999 for relevant discussion.

Analysis of Conversational Implicature

S conversationally implicates *C* by locuting *C'* iff:

0. *S* implicates *C* by locuting *C'*.
1. *S*'s audience presumes that *S* is observing the maxims, or at least the cooperative principle.
2. The supposition that *S* is aware that *C*, or that *S* thinks *C*, or that *S* wonders *C*, or that *S* wants to be told a true answer to *C*, is required in order to make *S*'s locuting *C'* (with the words *S* used) consistent with (1).
3. *S* thinks (and expects the audience to think that the speaker thinks) that it is within the competence of the audience to work out, or grasp intuitively, that the supposition in (2) is required.

8. Analyzing Some Examples

Using these revised Maxims, and the revised analysis of conversational implicature, we can explain in Gricean fashion how a speaker may implicate a proposition or question by locuting or asserting a proposition, or by locuting or asking a question. I provide a few (rough and sketchy) Gricean calculations of the implicatures involved in some of my previous examples.

Consider the earlier case of Sally's uttering 'Are you ready?' and thereby implicating the proposition that Alfred ought to hurry up. Sally locutes the semantic content of 'Are you ready?' in her context. The locuted semantic content is either an incomplete question or a very general

question (whether Alfred is ready *for something*).³² Alfred can infer from circumstances and the Maxims that Sally is asking the question of whether Alfred is ready *to leave*.³³ In the situation we imagined, Sally clearly already knows that Alfred is not ready to leave (for Sally can see that Alfred is still putting on his shoes). Alfred knows this, and so can infer that Sally does not want to be told the answer to this question. (She has violated the Maxim of Sincerity, and so her interrogative act is, technically speaking, insincere.) He infers that there was some other point to Sally's asking the question, and infers that Sally wants him to hurry up.

Consider next the case of the philosopher colleagues. David locutes the question of whether Earl is wearing a tie. Earl presumes that David is asking this question, but also knows that David already knows that Earl *is* wearing a tie. So Earl can infer that David does not really want an answer to this question, or at least that he had another purpose in asking the question. Earl may conclude that David wants some other information, such as an answer to why Earl is wearing a tie. So David implicates the question of why Earl is wearing a tie.

The preceding examples rely on (2a) of the Maxim of Sincerity. (2c) may be at work in the following sort of case. Imagine that I am lecturing in a philosophy course, and see a student who was absent from my last lecture. I ask him an elementary question about my last lecture. I realize that he will be unable to give me an answer for which he has sufficient evidence, and that

³² I assume here that a speaker can locute a less-than-complete semantic question by uttering certain grammatically complete sentences in certain contexts. See notes 9-12.

³³ Some theorists might claim that if Alfred must rely on the maxims to infer that Sally is asking whether he is ready to leave, then that latter semantic question is implicated, and not directly asked. This claim is mistaken. As Bach (1994, 2001, 2005) has frequently emphasized, even in those cases in which a speaker implicates nothing and communicates nothing more than the semantic content of his uttered sentence, a hearer must rely on the maxims to infer that this is what the speaker is doing.

he will realize this, and he will realize that I realize this. I flout (2c) of the Maxim of Sincerity. I thus implicate that he should have attended the last lecture.

The Maxim of Literalness most obviously comes into play in non-literal uses of sentences. Suppose that Professor Able, while addressing Professor Baker, utters ‘Did you grade a million exams last night?’. Professor Able locutes the semantic question of whether Baker graded a million exams that (previous) night. Since Baker tacitly knows the Maxim of Literalness, he initially presumes that Able is asking that question. But Baker knows that Able already knows that Baker did not grade a million exams, and does not want to be told so. Thus Baker can infer that Able is flouting the Maxim of Sincerity. Baker can then infer that Able is not asking the question, thus flouting the Maxim of Literalness. But if Able is obeying the Cooperative Principle, then he must be trying to make some contribution to their conversation, so Able is implicating something (a proposition or question). Baker then infers that Able is asking (roughly) whether Baker graded a lot of exams the previous night.

9. Further Implications

This completes my proposed extension of Grice’s theory so as to allow acts of locuting and asserting propositions to implicate semantic questions, and to allow acts of locuting and asking questions to implicate propositions and semantic questions. This extension has two importantly different aspects. It includes an extension in the *objects* of implicating (*implicata*), so that not only propositions, but also semantic questions, can be implicated. It also includes an extension in the illocutionary *force* of implicatures, so that acts of indirect asking count as acts of

implicating. On this revised theory, there are two different types of implicating, interrogative implicating and the more familiar sort of implicating, implying. We can imagine additional revisions that further generalize Grice's theory in only one of these preceding ways, or in both ways.

Some revisions of Grice's theory would generalize the implicating relation so as to include a variety of indirect constating relations (other than implying), but would add no further implicata. For instance, consider the constating relation of *conjecturing*. The objects of this relation are propositions. It seems entirely possible to conjecture one proposition, and thereby indirectly conjecture another proposition. As we might put it, a speaker might conjecture P_1 , but also communicate conjecture P_2 . But what would be communicated would be (in some sense) not only the conjecture itself, namely proposition P_2 , but also the speaker's illocutionary relation to it: the hearer would realize that the speaker is not *implying* P_2 , but rather indirectly *conjecturing* P_2 . We can imagine a revision of Grice's theory that would count such an act of indirect conjecturing as an act of implicating. Such a theory would include new maxims that would allow hearers to calculate the indirect illocutionary force of an indirect constative act whose object is a proposition, but which is not an act of implying. This sort of revision would generalize the implicating relation so as to include an indirect constating relation other than implying, namely indirect conjecturing. It would hypothesize different types of constative implicating relations. But this revision would not extend the objects of implicating beyond Grice's original implicata, for the objects of conjectural constative implication are propositions.

Other revisions may add new implicata. Consider, for instance, the semantic contents of imperatival sentences. Let us say that the content of an imperatival sentence is a *command*, and

let us say that speakers *issue* commands (just as they *ask* questions and *assert* propositions) and let us say that acts of issuing commands are *imperative acts*. A speaker can ask a question, and thereby indirectly issue a command (as in typical utterances of ‘Can you pass the salt?’). A speaker can assert a proposition and thereby indirectly issue a command: I might say ‘There is the door’ and thereby indirectly issue a command that I might express directly by uttering ‘Leave’ (Bach and Harnish 1979, 70). It may also be possible to issue a command, and thereby indirectly issue a distinct command. Given this, we should generalize Grice’s theory so as to comprehend such indirect imperative acts. This revision would require an extension of the implication relation so as to include the relation of indirectly issuing, and so would require recognition of another type of conversational implication, imperative implication. The revision may or may not require an extension in the objects of implication. If commands are simply propositions, then no extension in implicata is needed. However, if commands are a distinct kind of semantic content, then the revision would add new implicata.³⁴

Speakers have an enormous tacit knowledge of language use, which enables them to recognize a huge range of indirect illocutionary acts. Their knowledge can be formulated using principles that strikingly resemble Grice’s maxims, and their recognition of indirect speech acts can be rationally reconstructed in ways that strongly resemble Gricean calculation of implicatures. Thus, distinguishing between such indirect speech acts and implicatures is artificial. It is motivated (if at all) by the restrictive use of ‘implicate’ for linguistic acts whose objects are propositions. I suggest that we drop this restriction and try to extend the richly

³⁴ Many theorists have discussed indirect imperative acts (especially those performed by uttering ‘Can you pass the salt?’), including Searle (1975), Gordon and Lakoff (1975), Bach and Harnish (1979), Perrault and Allen (1980), and Asher and Lascares (2001).

developed theory of implicature to other, much less studied, indirect speech acts. Perhaps something interesting will happen.

References

- Asher, Nicholas and Lascarides, Alex. 1998: Questions in dialogue. *Linguistics and Philosophy*, 21, 237-309.
- Asher, Nicholas and Lascarides, Alex. 2001: Indirect speech acts. *Synthese*, 128, 183-228.
- Atlas, Jay David. 2005: *Logic, Meaning, and Conversation: Semantical Underdeterminacy, Implicature, and Their Interface*. New York: Oxford University Press.
- Atlas, Jay David. 2007: How insensitive can you be?: Meanings, propositions, context, and semantical underdeterminacy. In G. Preyer (ed.), *Context-Sensitivity and Semantic Minimalism: New Essays on Semantics and Pragmatics*, 217-239. New York: Oxford University Press.
- Austin, J.L. 1975: *How to Do Things with Words*, Second Edition. Cambridge, MA: Harvard University Press.
- Bach, Kent. 1994: Conversational implicature. *Mind and Language*, 9, 124-162.
- Bach, Kent. 2001: You don't say? *Synthese*, 128, 15-44.
- Bach, Kent. 2005. Context *ex machina*. In Zoltan Gendler Szabo (ed.), *Semantics versus Pragmatics*, 15-42. Oxford: Oxford University Press.

Bach, Kent and Harnish, Michael. 1979: *Linguistic Communication and Speech Acts*.

Cambridge, MA: MIT Press.

Cappelen, Herman and Lepore, Ernie. 2005: *Insensitive Semantics: A Defense of Semantic Minimalism and Speech Act Pluralism*. Oxford: Blackwell.

Carston, Robyn. 1995: Quantity maxims and generalized implicature. *Lingua*, 96, 213-44.

Carston, Robyn. 2002: *Thoughts and Utterances*. Oxford: Blackwell.

Carston, Robyn. 2008: Linguistic communication and the semantics/pragmatics distinction. *Synthese* 135, 321-345.

Cole, Peter and Morgan, Jerry L. (eds.). 1975: *Syntax and Semantics*, Volume 3. New York: Academic Press.

Fraser, Bruce. 1975: Hedged performatives. In Cole and Morgan (1975), 187-210.

Gordon, David and Lakoff, George. 1975: "Conversational postulates." In Cole and Morgan (1975), 83-106. Originally published in D. Adams, M.A. Campbell, V. Cohen, J. Lovins, E. Maxwell, C. Nygreen, and J. Reighard (eds.), *Papers From the Seventh Regional Meeting of the*

Chicago Linguistics Society, 63-84, 1971, Chicago: University of Chicago Department of Linguistics.

Grice, H.P. 1975: Logic and conversation. In Cole and Morgan (1975), 41-58. Reprinted in Paul Grice, *Studies in the Way of Words* (1989), 22-40. Cambridge, MA: Harvard University Press.

Groenendijk, Jeroen. 1999: The logic of interrogatives: Classical version. In Tanya Matthews and Devon Strolovitch (eds.), *Semantics and Linguistic Theory (SALT) IX*, 109-126. Ithaca, NY: Cornell University Press.

Groenendijk, Jeroen and Stokhof, Martin. 1997: Questions. In Johan van Benthem and Alice ter Meulen (eds.), *Handbook of Logic and Language*, 1055-1124. Cambridge, MA: MIT Press.

Gunlogson, Christine. 2005: Pragmatics for questions. Colloquium at University of Massachusetts, Amherst, March 2005.

Kaplan, David. 1989: Demonstratives. In Joseph Almog, John Perry, and Howard Wettstein (Eds.), *Themes from Kaplan*, 481-564. New York: Oxford University Press.

Karttunen, Lauri. 1977: Syntax and semantics of questions. *Linguistics and Philosophy*, 1, 3-44.

Levinson, Stephen. 1983: *Pragmatics*. Cambridge: Cambridge University Press.

Levinson, Stephen. 2000: *Presumptive Meanings: The Theory of Generalized Conversational Implicature*. Cambridge, MA: MIT Press.

Martinich, A.P. 2001. *The Philosophy of Language*, Fourth Edition. New York: Oxford University Press.

Recanati, François. 2004: *Literal Meaning*. Cambridge: Cambridge University Press.

Perrault, C. Raymond and Allen, James. 1980: A plan-based analysis of indirect speech acts. *American Journal of Computational Linguistics*, 6, 167-182.

Searle, John. 1975: Indirect speech acts. In Cole and Morgan (1975), 59-82. Reprinted in Searle (1979), 30-57.

Searle, John. 1979: *Expression and Meaning*. Cambridge: Cambridge University Press.

Sperber, Dan and Wilson, Deirdre. 1986: *Relevance*. Cambridge, MA: Blackwell.

Wilson, Deirdre. 1995: Is there a maxim of truthfulness? *UCL Working Papers in Linguistics*, 7, 197-212.

Department of Philosophy

University at Buffalo

Word count: 10, 483 (includes abstract, notes, and bibliography)