

SYNTAX and SEMANTICS

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CONTENTS

List of Contributors
Preface

viii
ix

On the Origins of Referential Opacity

1

PETER COLE

Introduction	1
Attributive and Referential Descriptions	2
Referential Opacity	4
The Etiology of Opacity	5
The Relative Scope Hypothesis	7
Cardinality of Readings	10
Quotational Complements and Propositional Complements	13
Evidence for a Quotational Analysis	14
The Fall of the Scope Hypothesis	18
Conclusions and Unresolved Issues	19
References	21

Negative Scope and Rules of Conversation: Evidence from an OV Language

23

ALICE DAVISON

NP Specification	30
Permutation	32
Emphatic Particles	33
Context	35
Multiple Clause Relationships	35
Semantic Representation	38
Conclusion	41
References	45

v

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ON TESTING FOR CONVERSATIONAL IMPLICATURE

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H. P. Grice's (1975) suggestions concerning the relationship between natural language and logic provide the outline of a system for explaining certain aspects of what utterances convey without claiming that they are part of the conventional force of the uttered sentence. The notion of conversational implicature makes it possible to claim that a sentence with two quite distinct effects is nevertheless unambiguous from the point of view of its conventional content, and that two sentences that can convey practically the same thing are nevertheless not logically or linguistically equivalent.

There is, then, a serious methodological problem that confronts the advocate of linguistic pragmatics. Given some aspect of what a sentence conveys in a particular context, is that aspect part of what the sentence conveys in virtue of its meaning (in the generative semanticist's sense) or should it be "worked out" on the basis of Gricean principles of conversation from the rest of the meaning of the sentence and relevant facts of the context of utterance? Obviously, the problem of deciding whether a certain bit of conveyed information is attributable to the grammar or to pragmatics can be attacked from either direction. Either we can try to decide how one recognizes essentially grammatical facts and establish a rigorous methodology leading from surface structure down to meaning, or we could establish a pragmatic methodology that leads from what is conveyed in contexts up to meaning. The first approach has been followed fairly extensively, e.g. in Zwicky and Sadock 1975. But at present a rigorous pragmatic methodology is lacking. This chapter examines the problems pervading the methodology of linguistic pragmatics.

According to Grice's much-followed precepts, what an utterance conveys in context falls into two parts: what is SAID is the logical content, the minimum necessary to specify the truth conditions of the sentence. For the remainder, Grice coined the term IMPLICATURE. Thus the class of implicatures is defined negatively as what is conveyed less what is said. It is often the case that negatively defined classes are not uniform classes; their only common defining property is that none of the members of the class has one particular property. I suspect this is also true of Grice's class of implicatures.

Implicatures themselves come in two varieties, conventional and conversational. Conventional implicatures include all non-truth-conditional aspects of what is conveyed by an utterance solely due to the words or forms the sentence contains. These include, then, most of what have been called by linguists the presuppositions of a sentence; they are closely allied to what is said in the strict sense, at least in that the same clause can determine either the truth conditions of a sentence or a set of conventional implicatures. In (1), the clause *that Bill is a linguist* enters into the evaluation of the truth of the sentence, but in (2) it does not. In Grice's system, example (2) would be considered true in case the proposition that Bill is a linguist is surprising, regardless of whether that proposition is true or false:

- (1) *It is true that Bill is a linguist.*
- (2) *It is surprising that Bill is a linguist.*

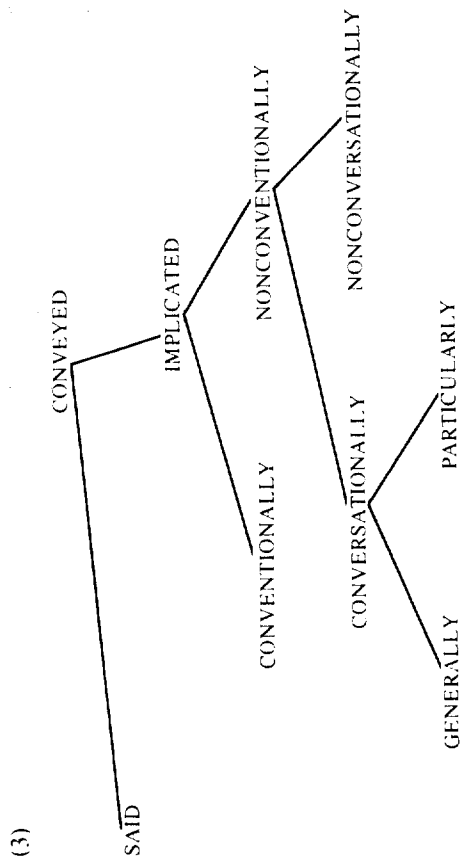
Conventional implicatures thus should be and have been handled in a way that closely parallels the treatment of semantic content (see, for example, Karttunen and Peters 1975).

In contrast, however, conversational implicatures are only indirectly associated with the linguistic content of utterances. They are derived from the content of the sentences used and owe their existence, according to Grice, to the fact that participants in a conversation are constrained by the common goal of communication to be cooperative. Nonconventional implicatures come in two varieties: first the important class of conversational implicatures that involve the Cooperative Principle and its maxims, and then a poorly described class of nonconventional, nonconversational implicatures that are calculated in context on the basis of the conventional meaning, knowledge of the context of utterance, and background knowledge, but which depend crucially for their existence on nonconversational maxims that are "aesthetic, social, or moral in character" (Grice 1975:47). Grice gives as an example the maxim *Be polite*. I have some trouble understanding exactly why it is that such maxims differ from those that fall under the Cooperative Principle, for, on the one hand, it would be uncooperative to be

gratuitously impolite, antisocial, or unpleasant, and, on the other, the requirement that we make our contributions true and that we tell the whole truth could easily be construed as moral principles as well as, or instead of, cooperative principles. At any rate, for our purposes the class of nonconversational, nonconventional implicatures belongs with conversational implicatures rather than with conventional implicatures. In the case of either kind, what is conveyed is conveyed nonconventionally. I will speak only of conversational implicatures in what follows, but because my remarks are addressed to the problem of discriminating between information that is conventionally conveyed and that which is not, what I say should carry over to implicatures based on maxims such as *Be polite*.

Conversational implicatures themselves divide into two classes, particularized and generalized. The former are crucially dependent not only on the content of the utterance and the Cooperative Principle, but also on the context of utterance. The latter are relatively independent of context and therefore can rather easily be confused with conventional implicatures since they are constantly associated with particular linguistic forms.

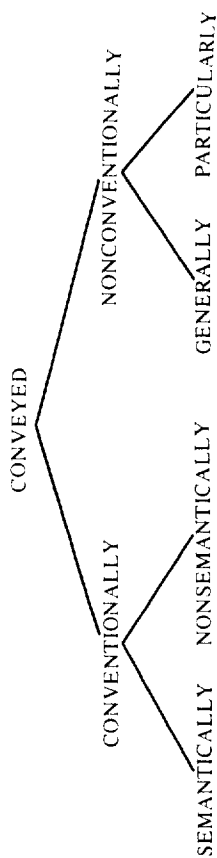
The various ways in which, according to Grice, utterances can convey information are represented schematically in (3). Because of the close simi-



larity between what is said and what is conventionally implicated, and because of the similarity between conversational and nonconversational, nonconventional implicature, I would prefer a schematization such as that in (4) on page 284. For the purposes of this paper, however, the difference may be considered merely terminological.

Regardless of which of these categorizations gives the more accurate picture of the ways in which utterances can convey messages, it appears that

(4)



there is an important distinction between the conventional and the nonconventional aspects of the import of what we say. This dichotomy concerns the grammarian in a fundamental way, for it is the grammar of a language that is the repository of the conventional aspects of language use. The nonconventional, while surely of interest to students of language, does not need to be, and indeed should not be, mentioned in the description of the language, which is the conventional sign system. Rather, the account of conversational implicature is best understood as a partial description of the USERS of the language, and hence truly deserves the name "pragmatics." Therefore, given the fact that the utterance of a particular linguistic form on a particular occasion conveys some particular submessage, the grammarian must be able to decide whether that submessage is conveyed conventionally or nonconventionally.

But how can we make this decision in a reasoned and reasonable way? Grice provides some guidelines which it is my purpose to examine here. Let us assume for the moment that we know in a particular case what is said (in the special sense of Grice). Then our job consists of separating the conventional implicatures in the residue from the conversational implicatures. Grice (1975) provides six characteristics of conversational implicature, the first on p. 50, and the remainder, in a block, at the end of the chapter. Briefly stated:

- (a) *Conversational implicata are capable of being "worked out" on the basis, inter alia, of the Cooperative Principle. That is, they are CALCULABLE.*
- (b) *Conversational implicata are CANCELLABLE.*
- (c) *Conversational implicata are NONDETACHABLE.*
- (d) *Conversational implicata are not part of the meaning of the uttered forms. They are NONCONVENTIONAL.*
- (e) *Conversational implicata are not carried by what is said, but by the saying of it.*
- (f) *Conversational implicata may be INDETERMINATE.*

Of these, only the first three are reasonable candidates for practical tests that could be used in settling the matter in particular instances. The fourth, (d), is completely circular. Conversational implicata are by definition nonconven-

tional and if it were possible to tell in some intuitive way what is and what is not conventional, then there would be no need for other criteria. But of course it is not possible. Characteristic (e), if coherent at all, seems to me to be a version of (d). What is conventional is the meaning of the utterance ("what is said"), but nonconventional effects can be triggered only by uttering something with a particular form and a particular meaning on a particular occasion. Thus to use (e) as a practical criterion, it would be necessary to know the solution to the problem in advance, which would, of course, make tests irrelevant. The last test is seriously weakened by the modal. Some conversational implicata are fully determinate. I take it. Furthermore, if reference is part of meaning, then what is said in using a definite pronoun or a demonstrative is also indeterminate.

Characteristics (a-c), however, do deserve closer scrutiny. First let us consider (a). It certainly makes sense that, if a particular piece of conveyed information is conveyed pragmatically rather than purely linguistically, there is some available scheme that allows the addressee to figure out what is being conveyed and allows the speaker to figure out that the addressee might figure it out. I think that some version of (a) must surely be a necessary characteristic of conversational implicatures. But I think that two separate considerations indicate that (a) criterion of derivability is not a sufficient condition. First of all, the Cooperative Principle with its maxims of Quality, Quantity, Relation, and Manner is so vague that almost anything can be "worked out" on the basis of almost any meaning. Let me briefly rehash the maxims in an effort to prove my point:

1. The maxim of Quantity has two parts that require the cooperative speaker to say as much but no more than is required for his particular purposes in the "talk exchange":
2. The maxim of Quality also has two parts, and demands that the speaker say only what he believes to be true and on that for which he has sufficient evidence:
3. The maxim of Relation urges the speaker to make his contribution relevant; and
4. The maxim of Manner cautions the speaker to be methodical and to avoid ambiguity, prolixity, and obscurity.

So powerful is each of the maxims that at times they vie for the privilege of explaining the same facts. It is not clear to me, for example, how one could both be relevant and say either less or more than is required. In what way is the avoidance of prolixity different from saying only as much as is required? If a particular contribution is obscure does it not also lack relevance? While it is perhaps possible to eliminate some of the redundancy in the maxims, I feel that the extreme power of the system is in fact an unavoidable characteristic. Grice says that metaphor, for example, is partially explained by the

Cooperative Principle since metaphors are often literally and patently false. If someone tells me that Bill is the Rock of Gibraltar, and if, as seems reasonable, I don't believe that Bill actually is the Rock of Gibraltar, but if I believe that the speaker is not being deliberately uncooperative, and in particular that he is not violating the maxim of Quality, then I am forced to search for a communicative intent, other than the literal meaning of what has been said, that can eliminate the clash. Now the literal meaning of metaphors and what they are intended to communicate can differ fairly widely. In fact, I believe it is the case that the conceptual distance between the literal meaning of a metaphorical expression and the meaning it is intended to convey might actually convey can be as large as one chooses. Metaphor might lack aptness if the communicative intent is far-fetched but then it is simply a poor metaphor and not no metaphor at all. If the cooperative principle is to handle this discrepancy between literal meaning and metaphorical intent, as I believe it should, it is going to have to be pretty powerful.

Indirect speech acts provide another example with the same force. The Cooperative Principle has been very believably invoked, e.g. by Searle (1975), to account for the fact that an utterance of *It's cold in here* can convey a request to close a door. But it can also convey a request to open a door, or to bring a blanket, or to pay a gas bill. In fact it's difficult to think of a request that the utterance could NOT convey in the right context. My point is that if the Cooperative Principle is strong enough to do this, then it is going to have to be strong enough to do certain things it shouldn't.

Consider the following fairly improbable example. Suppose someone says to me, *Bernstein studies hard*. Under fairly ordinary circumstances, the communicated import of the utterance could be that of an exhortation to me to study hard, too. Similarly, *Wright letters well* could be an exhortation to reproduce the alphabet neatly. Since well-motivated conversational principles are available to explain the contextual force of the utterance, there is no need to postulate that this sentence is ambiguous between a meaning that only conversationally implicates an exhortation to letter well and one that is an exhortation to letter well. But we know, of course, that the *Wright* example is ambiguous while the *Bernstein* example is not, for while one can say, *I shall [rajit] letters*, saying *I shall [bernstein] letters* would cause a bit of consternation. The Cooperative Principle must therefore be strong enough to work out certain implicatures where in fact what is conveyed is conveyed directly by meaning. Thus the mere fact that something conveyed by an utterance CAN be worked out according to pragmatic principles is not enough to guarantee that it is in fact a conversational implicature.

There is, as I indicated earlier, a second consideration which leads to the conclusion that calculability is not a sufficient condition for conversational implicature. I have argued at length elsewhere (Sadock 1972 and 1975a) that conversational implicatures can become conventionalized by stages. That is,

what starts life as a metaphor can grow into an idiom. Euphemisms fairly rapidly come to MEAN what they were originally intended to circumlocute and so cease to be euphemisms, and indirect speech acts can in time metamorphose into direct forms. But except for the limiting case in which the original meaning is entirely lost, conversational principles can always be called upon to explain the force of an originally indirect form, since those principles were indeed important in the history of the reanalyzed forms. An idiom such as *spill the beans* displays its idiomacity in the form of peculiar syntax. One can say without oddity, *Dean spilled the beans to Congress*. Similarly, the fact that the expression *go to the bathroom* no longer means just what one would suspect from the words in the expression is reflected by the fact (pointed out to me by Jerry Morgan) that the sentence *My dog went to the bathroom on the living room carpet* is not contradictory. But if these phrases had just been coined there would still be the possibility of understanding them in the way we do with the assistance of the rules of conversation. The rules don't cease to exist when their work is taken over by the grammar. Rather, through something like a principle of least resistance, a direct route is taken to a conventionalized, idiomatic sense of an expression in order to spare unnecessary pragmatic calculation. There is no need to figure out anew what is intended by *spill the beans* or *go to the bathroom* since they have come to mean (roughly) 'divulge the secret' and 'perform a bodily function', respectively. Yet the principles that ORIGINALLY allowed these expressions to have metaphorical senses are still vital and therefore these conventionalized implicatures are also cases where the Cooperative Principle could be invoked, but where it should not be.

Therefore the fact that conversational implicatures are calculable with the aid of the Cooperative Principle is a necessary but not sufficient characterization. And in fact it is not even a very interesting necessary condition since, as we have seen, the maxims need to have such great power that nearly anything can be worked out with them on the basis of nearly any meaning. If nearly anything that is conveyed is calculable, it is not especially tantalizing to find calculability in some particular instance.

I turn next to Grice's claim that conversational implicatures are not detachable. What this means is the following: If *X* is an expression with meaning *M* and *C_K* is a conversational implicature based on an utterance of *X* in context *K*, then it should not be possible to find an expression *X'* that shares meaning *M* with *X* but is not associated with the conversational implicature *C_K*. The rationale for the doctrine of nondetachability is that, as defined, conversational implicatures are worked out on the basis of meaning. In other words, the Cooperative Principle is supposed to be blind to form, and preservation of meaning should imply the preservation of conversational implicature.

An important exception that Grice mentions and that already severely

diminishes the value of this test arises from the fact that certain conversational implicatures are in fact based on the way what is said is said—on how it is put. Such implicatures make use of the maxim of Manner for their effect and will, of course, be detachable. For such cases, the nondetachability test will be useless. But how good is nondetachability as a criterion for other examples of conversational implicature? Is it necessary? Or both? I shall argue that it is neither.

It should be plain that nondetachability is not a sufficient test for conversational implicature. For one thing, nondetachability is not strict enough to distinguish between entailment and conversational implicature, as Grice himself points out (Grice 1969). It is not possible to paraphrase *Bill and Harry left* without conveying *Harry left*. Yet this is clearly not an example of conversational implicature, but of logical inference.

In this example, it might be argued, no confusion can arise, for the inference in question is based upon what is said (in Grice's sense) and I have assumed that we somehow know in advance what a particular expression says and that our task is simply to distinguish between conventional and conversational implicature. Perhaps the doctrine of nondetachability could be brought one step closer to being a sufficient test for conversational implicature in something like the following way: If C_K is conveyed by an utterance of X in context K and C_K is not entailed by what is said in uttering X , then C_K is a conversational implicature. But this will not work either because, as I claimed earlier, conventional implicature is so very like what is said. Consider a sentence like *Since birds have hair, most politicians are dishonest*. I think it is reasonable to suppose that this sentence is true just in case most politicians are dishonest. In other words, all that the clause *since birds have hair* contributes to the sentence is a set of conventional implicatures; that clause is not part of the semantic content of the sentence, not part of what is said. Now consider the sentence *Since Bill and Harry left, most politicians are dishonest*. Let us consider in particular the relationship between an utterance of this sentence and the conveyed information that the utterer believes Harry to have left. I think it is clear that we do not want to claim to be dealing with a conversational implicature here, but rather with a logical deduction based on nonsemantic content or, in Gricean terms, conventional implicature. But the conveyed proposition is totally nondetachable. Anything that means (taking meaning to be the sum of what is said and what is conventionally implicated) what the original sentence means will have to convey the speaker's belief that Harry left. The only noncircular way of saving nondetachability as a sufficient distinguishing feature between conventional and conversational implicature would be to exclude conventional implicature from the meaning that is substituted for in the test. In the present example, then, detachability would be demonstrated by adducing a simple sentence like *Most politicians are dishonest*, a sentence that means

(excluding conventional implicature) what the more complex example means but does not (ordinarily) convey the speaker's belief that Harry left, and thereby demonstrates that the original example conventionally implicates it. But excluding conventional implicature from what is substituted for in the nondetachability test is tantamount to claiming that conversational implicatures can be based only on semantic content and not on conventional implicatures, a claim that can easily be shown to be false. Consider the sentence *Since it's cold in here, there must be a north wind*. An uttering of this sentence could easily, if sneakily, conversationally implicate something on the order of *Close the door*, BECAUSE IT CONVENTIONALLY IMPLICATES *It's cold in here*. Therefore conventional implicature cannot be excluded from what is kept constant in the nondetachability test, and nondetachability fails to distinguish conversational implicature and cases of entailments of conventional implicatures. Both are quite reasonably nondetachable.

As a further demonstration of the nonsufficiency of nondetachability as a test for conversational implicature, consider the fact that there are bound to be expressions in any natural language that cannot be paraphrased, expressions whose supposed synonyms actually differ in meaning in significant ways. In fact it has been suggested that no two expressions have precisely the same meaning. At any rate, in the clear case of a lexical *hapax*, EVERYTHING conveyed by the expression is trivially nondetachable since there are no paraphrases at all.

Whether there are absolutely equivalent paraphrases or not, the fact that it is difficult to tell if two expressions have the same meaning makes the nondetachability test less useful in practice. Suppose the claim is made that a sentence such as *Can you open the door?* does not conversationally implicate a request to open the door but rather conversationally implicates it and that this claim is backed up by the observation that the implicature fails to go through if the synonymous periphrastic modal *be able* is substituted for *can*. Since the paraphrase detaches the implicature, the argument goes, it cannot be conversational. This claim can all too easily be countered with the claim that *can* and *be able* are not synonymous and that in fact this example proves that they are not.

This vicious circle really shows that the nondetachability test, as stated, does not make sense. It is supposed to bring out the difference between the case where the meaning of an expression X includes C_K as a conventional implicature and the case where C_K is related to the uttering of X through the Cooperative Principle. But if C_K is part of the meaning of X , then any expression X' that means the same thing as X will also mean C_K (among other things), and uttering X' will therefore convey C_K . On the other hand, if uttering X' does not convey C_K then X' cannot include C_K as part of its meaning and therefore X' does not mean what X means and detachability has not been shown.

Thus, strictly speaking, detachability and nondetachability don't show anything at all. Nevertheless, the test is a pretty good one, at least in extreme cases. Detachability in the absence of obvious meaning differences of the right kind is a suspicious fact, and the more apparent paraphrases there are that succeed in detaching an implicature, the more it looks as if the implicature must be conventional. On the other hand, the more apparently synonymous expressions there are that fail to detach an implicature, the less the situation looks accidental and the more it looks as if some principle, such as the Cooperative Principle, is in force.

Another practical problem with nondetachability as a touchstone for conversational implicature relates to the foregoing discussion of calculability. The Cooperative Principle is potent enough to allow almost any, and perhaps all, requests (to choose one sort of example) to be worked out on the basis of almost any utterance. Since this is so, how could ANY implicated request, conventional or conversational, be detached by a reasonable facsimile of a synonym? Take the last example I discussed. *Are you able to close the door?* does not in fact succeed in detaching the implicated request. It is quite easy to imagine circumstances under which the uttering of that sentence would convey a request. But this is not particularly surprising in view of the fact that practically any question can convey this request under the right circumstances. I am led to wonder whether anything is detachable from anything. Surprisingly, this very serious difficulty has not caused much anguish. The claim that the *be able* sentence does not carry the implicature that the *can* sentence does, while strictly speaking false, has for the most part been taken in the right spirit. While *Are you able to open the door?* can convey a request to open the door, it does so in a much less direct manner than the supposed near synonym *Can you open the door?* But this notion of directness is very vague and not at all serviceable as a litmus for conventional versus conversational implicature.

As if the inconsistencies mentioned above were not enough to eliminate nondetachability as an important test for conversational implicature, there is another extremely serious contradiction that appears when we consider the doctrine of cancellability. As I will explain shortly, this principle assumes that it is possible to deny a conversational implicature without contradiction, whereas denial of a conventional implicature, or part of what is said in making an utterance, results in infelicity or contradiction. But if this is so, why should it not be possible to find two expressions that differ just in that one contains the denial of what the other conversationally implicates? It has been claimed, for example in Horn 1973 that my saying *I ate some of the cake* conversationally implicates that I did not eat all of the cake. Now the doctrine of nondetachability claims that if this is a bona fide case of conversational implicature, then there should not be a lexical item that means just what *some* does but which, when substituted for *some* in the sentence

above, detaches the implicature. This happens to be true for English, but the cancellability doctrine would seem to indicate that it does not need to be true. Why could there not be a word that happened to mean 'some and perhaps all'? Admittedly, such a lexical item would be redundant in that *some* in the theory under discussion MEANS just 'some and perhaps all'. But we can say things like *Bill ate some, and perhaps all of the cake* without being guilty of any egregious redundancy. As a matter of fact, that is just what the doctrine of cancellability predicts. What principle, then, prevents a lexical item IN A NATURAL LANGUAGE from having a partially redundant literal sense? I know of none and doubt that any such principle would turn out to be tenable. Here are two examples where such an analysis seems reasonable.

It frequently occurs in the law that a word is given a more specific definition than it usually has, just so that it will not drag along with it any unwanted implicatures. For example, meals eaten while doing business away from home are tax deductible. Now *home* is a very vague word in English. To people abroad, the United States is my home. I call Chicago home when I am speaking to people from Boston. The Lakeview neighborhood is my home to other Chicagoans and for some purposes 1140 West George, Apartment 2, is home. I think it is reasonable to claim that each of these more specific understandings of *home* is only conversationally implicated by the demand for relevance. But am I allowed to claim as a deduction the cheese sandwich that I bought in the Classics Building? No, because, 'For traveling purposes, your HOME is your place of business, employment, or post of duty. . . .' (Greisman 1975:17). This definition cancels certain implicatures that I would like to have been able to draw.

As a second example, consider the well-known property of English *or* that it can, but need not, be used in an exclusive understanding. Now McCawley (1973) has shown that binary exclusive disjunction does not correspond to the exclusive understanding of its natural language counterpart. Rather, *or* is taken as 'exactly one of . . .' when it is used exclusively. Furthermore, McCawley suggested the assimilation of *or* to the existential quantifier. Since the existential quantifiers can be used in an apparently exclusive sense (e.g. *some but not all*), whatever treatment suffices for them can also suffice for disjunction. In other words, *or* need not be treated as an ambiguous lexical item but may be assigned a conventional meaning exactly like logical (inclusive) disjunction. The fact that it often suggests the exclusion of conjunction would then be a conversational implicature generated on the basis of (among other things) the maxim of Relation.

But in English we have a form *and/or*. Logically speaking, this has just the same meaning as *or*, but, because of a redundancy it contains, it has the property of cancelling the implicature from $P \vee Q$ to $\sim (P \wedge Q)$. The Latin disjunctions *aut*, which is supposedly an exclusive disjunction, and *vel*,

which is supposedly an inclusive disjunction, could be handled in a parallel fashion. *Att* would be a simple, logical disjunction, and *ye/* would differ from it in containing material that cancels an otherwise frequent conversational implicature. These analyses are very much in the spirit of Grice's program, since they claim that the logical basis of language is very much like classical logic. But adopting them involves giving up the claim that nondetachability is a necessary characteristic of conversational implicature.

Last on Grice's list of earmarks of conversational implicature is cancellability, and it is the best of the tests. The test is based on the notion that conversational implicatures are not part of the conventional force of utterances but are figured out in context. It ought to be the case, therefore, that a speaker may freely include, or append to his utterance, material that indicates that the implicature in question is not to be drawn. Contradicting any part of the conventional meaning of an utterance, on the other hand, will amount to logical contradiction (in the case of semantic content) or to internal infelicity (in the case of nonsemantic content). There are no circumstances under which the sentence *It's odd that dogs eat cheese even though they don't* is not bizarre. The reason is this: Conventional implicatures are felicitous only if their propositions are "part of the context." The factive predicate *be odd* conventionally implicates the truth of its complement and therefore requires for its felicitous use that the complement be presumed true in the context in which it is uttered. But in the example above the complement is denied and therefore cannot be presumed true, so that the uttering of the sentence would be invariably infelicitous. In an indubitable case of conversational implicature, cancellation does not produce oddity. One can perfectly well say, *I don't want you to close the door, but it is cold in here*.

The cancellability test, good as it is in the clear cases, is not perfect. There is one large fly in the ointment, and a gnat. Before putting these insects under glass I would like to make a small caveat as to applying the test of cancellability. It is not a problem with the test itself but simply a confusion that I have observed. As Horn (1972) has pointed out, cancellability is not the same thing as suspendibility. Certain conventional implicatures can be called into question without producing infelicity, but none can be denied. While there is nothing wrong with saying, *It's odd that dogs eat cheese if in fact they do*, thus calling the conventional implicature associated with the factive predicate into question, this implicature may not be contradicted openly. It is not proper to conclude, then, that the sentence *Only Muriel voted for Humphrey, if even she did* shows the cancellability of an implicature and therefore confirms its conversational status. This is an instance of suspension. The implicature in question is not cancellable and therefore must be conventional: **Only Muriel voted for Humphrey and even she didn't*.

Now for the above-mentioned gnat. Grice states explicitly that generalized conversational implicatures, those that have little to do with context, are cancellable. But is it not possible that some conversational implicatures are so little dependent on context that cancellation of them will result in something approaching invariable infelicity? In a paper in preparation, I argue that sentences of the form *almost P* only conversationally entail *not P*, contrary to the claim made by Karttunen and Peters (1975). The implicature is straightforwardly calculable and highly nondetachable but, unfortunately for my thesis, just about uncancellable. The sentence *Gertrude not only almost swam the English Channel, in fact she swam it* is, I admit, pretty strange. The reason that this particular dipteran is merely a gnat is that an obviously conventional implicature of the same kind is much less cancellable: *Gertrude not only just barely failed to swim the English Channel, in fact she swam it* is close to being contradictory. The discrepancy can be explained, I think, by claiming that *not P* is a highly generalized conversational implicature based on the uttering of *almost P*. Under all ordinary circumstances the implicature will go through, and it takes pretty unusual contexts to block it. Conventional implicatures, in contrast, reside in the conventional meaning of the utterance and just can't be blocked.

Here is the bigger bug in the theory of cancellability: The test does not distinguish cases of ambiguity from cases of univocality plus possible conversational implicature. One of the senses of a grammatically ambiguous sentence may always be contradicted. This would merely disambiguate the utterance. Let us take as an example the familiar sentence *Everyone speaks one language*. It is usually said that such a sentence is ambiguous (see, for example, Reichenbach 1947:98-99). But it can be, and even has been, perversely claimed (Sadock 1975b) that the sentence is univocal and that one of the apparent senses is, in fact, a conversational implicature. The claim would be that the only meaning the sentence has solely in virtue of its form is 'For each person, there is a language that he/she speaks'. The more specific reading under which it is the same language that everyone speaks is claimed to be a conversational implicature based on the first meaning and the maximum of Quantity. Now I do not believe this treatment for reasons that need not concern us here. All that is important for the methodological purposes at hand is to realize that the cancellability test could be used to strengthen the apparently bogus claim that the reading of the sentence where the existential quantifier has wide scope is a conversational implicature, since it is, in fact, cancellable. That is, one can say without contradiction or oddity, *Everyone speaks one language although no one language is spoken by everyone*. But it shouldn't come as a surprise that the example sentence gives the impression of allowing a more specific interpretation to be cancelled since the more specific interpretation is one pole of an ambiguity.

In Searle 1975 we find an instance of just this sort of misapplication of the

principle of cancellability. Searle is at pains to argue that sentences such as *Can you pass the salt?* are not ambiguous between a question sense and an imperative sense. He argues instead that they always and only have the sense of a question and that any requests that they may convey are conversational implicatures. In order to prove his point he says (p. 67): "This point is sometimes denied by philosophers and linguists, but very powerful evidence for it is provided by the fact that it is possible without inconsistency to connect the literal utterance of one of these forms with the denial of any imperative intent." But of course this is exactly what we should expect if the disputed examples were ambiguous.

The sad fact is that in the very cases where argument is likely to arise as to whether something conveyed by an utterance is conversationally implicated, the competing claim would be that the utterance is ambiguous. But since one sense of a grammatically ambiguous sentence can be denied or contradicted, these are exactly the cases where the cancellability test is of no use whatever.

These two problems with the doctrine of cancellability indicate that it is not a sufficient test, and may not be a necessary test, for conversational implicature.

Cancellability is related to another possible test, not mentioned by Grice. Since conversational implicatures are not part of the conventional import of utterances, it should be possible to make them explicit without being guilty of redundancy. Conversational implicatures, that is, ought to be reinforceable, whereas conversational implicatures should not. In the clear cases, this test accords well with intuition. Thus the second clause of *It's odd that dogs eat cheese and they do* is redundant because it restates what is conventionally implicated by the first clause. But no redundancy shows up when a clearly conversational implicature is made explicit, as in *Maggie ate some, but not all, of the cheddar*.

Just as it was the case with the cancellability test, though, reinforceability will not distinguish conversational additions from privative ambiguities. The fact that the following sentence is unobjectionable is not sufficient evidence to warrant the conclusion that a conversational implicature is involved in the stronger understanding of the unadorned first clause: *Everyone speaks one language and it is the same language*.

For reasons that I do not understand, reinforceability seems to be a more sensitive test in the borderline cases than is cancellability. What I have claimed to be a generalized conversational implicature associated with *almost* is easily reinforceable in *Gertrude almost, but didn't quite, swim the English Channel*, but it is not, as we have seen, so readily cancelled.

Another difference is that the reinforcement test is sensitive to the order of the reinforcing expression and the implicature-bearing expression. A cancelling expression may either precede or follow an implicature-bearing expres-

sion without affecting the validity of the test. Because of the pragmatic function of conversational implicatures, these may quite freely be preceded by an expression that establishes the implicature, as in *Dogs eat cheese and it's odd that they do*. Conversational implicatures must, as Karttunen and Peters (1975) have shown, already be part of (i.e. be entailed by) the common ground (roughly, the background information available to both speaker and hearer) to be used appropriately. Therefore, no expression that asserts a proposition *P* may appropriately follow one that conversationally implicates *P* without redundantly restating part of the common ground. On the other hand, asserting *P* BEFORE conversationally implicating *P* makes *P* part of the common ground and thus legitimizes the succeeding conversational implicature. It follows also that only assertions are valid test expressions for the reinforcement test while any expression that unequivocally indicates that a speaker holds a certain belief, whether it does so by conventional implicature or assertion, can function properly in testing for cancellability.

Aside from these two caveats, however, reinforceability ought to be about as good—and about as poor—a test for conversational implicature as cancellability.

SUMMARY

Grice (1975) gave six characteristics of conversational implicature that were supposed to distinguish examples of this phenomenon from examples of conversational implicature. Of these, only three seem to merit serious consideration as practical tests in unclear cases.

Only one feature, calculability, is clearly a necessary property of conversational implicature. But calculability is trivially necessary since nearly anything can be "worked out" with the aid of the Cooperative Principle on the basis of nearly any meaning in some context. Nondetachability fails to be a necessary feature of conversational implicature since there does not seem to be any principled reason why two lexical items could not differ just in that one includes a cancellation of a conversational implicature that might be associated with the other. In such a case, substitution of the more specific lexical item for the less specific one would amount to detaching a conversational implicature. Cancellability is probably a necessary feature of conversational implicature, but it gets progressively harder to cancel an implicature the more generalized it is.

There are no sufficient tests for conversational implicature and no group of tests that together are sufficient. Because of the necessarily great power of Grice's pragmatic calculus, many things can be calculated that are not conversational implicatures. Nondetachability cannot be a sufficient test because, for one thing, certain meanings can probably be rendered in only

one way. Everything that the application of such a meaning could implicate would be trivially nondetachable since there are no precise paraphrases for it at all. Worse, everything that is entailed by the logical form and by the conventional implicatures of a sentence is nondetachable. Cancellability and reinforceability fail to be sufficient for recognizing conversational implicature because, in the very important case of grammatical ambiguity, any one sense is obviously cancellable or reinforceable.

There is, then, given the existing methodology, no way of knowing for sure whether an implicature is conversational. In the extreme cases a particular implicature will either pass all three tests with flying colors or fail all three miserably. But there is rarely any argument in these cases and the tests are more or less superfluous. To solve the problem of the thorny cases and shore up the foundations of linguistic pragmatics, more powerful tools will have to be developed.

We encountered all of the difficulties above even though it was assumed that we knew where to make the first cut—that we knew what is semantic content and what is not. But that assumption is false. There are arguments as to whether a certain bit of what is conveyed is semantically contained or not. Karttunen and Peters and I agree, at least, that whatever the relation between *almost P* and *not P*, the latter is not part of the semantic content of the former. We agree that *Gertrude almost swam the English Channel* is not false, in the strict sense, if Gertrude made it all the way to Calais. But Grice (personal communication) holds the opposite view. Whether one considers the sentence *Maggie went to the bathroom* false if Maggie didn't even come near the little room with the ceramic fixtures in it, but happened to soil the living room rug, depends on whether one considers the semantic content of the sentence always to include a reference to bathrooms. But at present this seems to be a matter of preference. Even if reliable criteria could be found that tell us what is and what is not part of semantic content, the problems that I have sketched would still remain to haunt the practitioner of linguistic pragmatics.

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This is a revised and expanded version of Sadock 1976. Subsequent to writing that paper, I discovered that many of the points I made are also made in Walker 1975.

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