

Seminar II

Grice's Material Conditional Account of Indicative Conditionals Barry Loewer and Jason Stanley

Argument for the Material Conditional Analysis of Indicative Conditionals (Bennett).

(Important note: I use ' \rightarrow ' rather than the horseshoe for the material conditional throughout)

' $A \vee C$ ' entails 'If $\sim A$ then C '

Substitute ' $\sim A$ ' for ' A '.

' $\sim A \vee C$ ' entails 'if A then C '

i.e. ' $A \rightarrow C$ ' entails 'if A then C '.

'If A then C ' entails ' $A \rightarrow C$ '

(As we will later see, most theories of conditionals deny the first premise)

Worry for the Material Conditional Analysis of Indicative Conditionals: Paradoxes of Material Implication

Some concepts from Grice's Theory of Implicature (compendium of quotes from "Logic and Conversation"):

What is Said:

In the sense in which I am using the word "say", I intend what someone has said to be closely related to the conventional meaning of the words (the sentence) he has uttered. Suppose someone to have uttered the sentence "He is in the grip of a vice". Given a knowledge of the English language, but no knowledge of the circumstances of the utterance, one would know something about what the speaker had said, on the assumption that he was speaking standard English, and speaking literally. One would know that he had said, about some particular male person or animal x , that at the time of the utterance (whatever that was), either (1) x was unable to rid himself of a certain kind of bad character trait or (2) some part of x 's person was caught in a certain kind of tool or instrument (approximate account, of course). But for a full identification of what the speaker had said, one would need to know (a) the identity of x , (b) the time of utterance, and (c) the meaning, on the particular occasion of utterance, of the phrase "in the grip of a vice".

The *implicatures* generated by an utterance of a sentence are propositions that are intentionally communicated by the utterance, but not part of what is said by the sentence relative to the context of use at issue.

Conversational Implicature: Propositions communicated by an utterance in virtue of the what is said together with general facts about the context and conversational norms. Conversational Implicatures are *cancelable* and *non-detachable*.

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

Four Maxims:

Quantity

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

Quality

1. Do not say what you believe to be false.
2. Do not say that for which you lack adequate evidence.

(Perhaps Quality should be reformulated as “Say only what you know”).

Manner

1. Avoid obscurity of expression.
2. Avoid ambiguity
3. Be brief (avoid unnecessary prolixity)
4. Be orderly.

Relation

1. Make your contribution relevant to the conversational purposes at hand

Ways in which someone can violate a maxim:

1. He may quietly and unostentatiously *violate* a maxim; if so, in some cases he will be liable to mislead.
2. He may *opt out* from the operation both of the maxim and of the Cooperative Principle; he may say, indicate, or allow it to become plain that he is unwilling to cooperate in the way the maxim requires. He may say, for example, “I cannot say more; my lips are sealed.”
3. He may be faced by a *clash*: He may be unable, for example, to fulfill the firm maxim of Quantity without violating the second maxim of Quality.
4. He may *flout* a maxim; that is, he may blatantly fail to fulfill it. On the assumption that the speaker is able to fulfill the maxim and to do so without violating another maxim, is not opting out, and is not, in view of the blatancy of his performance, trying to mislead, the hearer is faced with a minor problem: How can his saying what he did say be reconciled with the supposition that he is observing the overall Cooperative Principle? This situation is one that characteristically gives rise to a

conversational implicature; and when a conversational implicature is generated in this way, I shall say that a maxim is being *exploited*.

Definition of Conversational Implicature:

A man who, by (in when) saying (or making as if to say) that p has implicated that q, may be said to have conversationally implicated that q, provided that (1) he is presumed to be observing the conversational maxims, or at least the Cooperative Principle; (2) the supposition that he is aware that, or thinks that, q is required in order to make his saying or making as if to say p (or doing so in those terms) consistent with this presumption; and (3) the speaker thinks (and would expect the hearer to think that the speaker thinks) that it is within the competence of the hearer to work out, or grasp intuitively, that the supposition mentioned in (2) is required. (p. 31)

Particularized versus Generalized Conversational Implicature (e.g. “He has good handwriting” vs. “He has three children”).

The two primary features of Conversational Implicature:

- (1) Cancelability (either explicit or contextual)
- (2) Nondetachability (“it will not be possible to find another way of saying the same thing, which simply lacks the implicature in question”).

A conventional implicature is a propositions implicated by an utterance in virtue solely of the meanings of some of the terms in the sentence being uttered. Conventional implicatures don't have anything to do with conversational norms. They are not cancelable and clearly do not satisfy nondetachability (e.g. what is said by utterances of “A but B” and “A and B” is the same, but they have different conventional implicatures). The notion of a conventional implicature will be important for Frank Jackson's defense of the Material Conditional Account of Indicative Conditionals.

Grice's Defense of the Material Conditional Account of Indicative Conditionals

The Indirectness Condition (see Strawson):

“that p would, in the circumstances, be a good reason for q”

“that q is inferable from p”

“that there are non-truth-functional grounds for accepting the material conditional”

Thesis to be examined: “in standard cases to say ‘if p then q’ is to be conventionally committed to (to assert or imply in virtue of the meaning of “if”) both the proposition $p \rightarrow q$ and the Indirectness Condition.

In contrast, Grice will argue that to say “if p then q” is just to say that $p \rightarrow q$, and the indirectness condition is a generalized conversational implicature.

Argument that the Indirectness Conditional is a conversational implicature, rather than what is said:

It has the features of a conversational implicature; it is nondetachable and cancelable.

- (1) Either Smith is not in London, or he is attending the meeting.
- (2) It is not the case that Smith is both in London and not attending the meeting.

To say “If Smith is in the library, he is working” would normally carry the implication of the Indirectness Condition; but I might say (opting out) “I know just where Smith is and what he is doing, but all I will tell you is that if he is in the library he is working.”

Cases in which the Indirectness condition is absent:

- (1) Perhaps if he comes, he will be in a good mood.
- (2) See that, if he comes, he gets his money.

(also biscuit conditionals are an obvious counterexample to the Indirectness Condition)

How, with the use of the maxims, can we calculate the generalized implicature of the Indirectness Condition?

There is a general presumption that in the case of ‘ $p \rightarrow q$ ’ a more informative statement would be of interest. No one would be interested in knowing that a particular relation (truth-functional or otherwise) holds between two propositions without being interested in the truth-value of at least of the propositions concerned...An infringement of the first maxim of Quantity, given the assumption that the principle of conversational helpfulness is being observed, is most naturally explained by the supposition of a clash with the same maxim of Quality (“Have adequate evidence for what you say”), so it is natural to assume that the speaker regards himself as having evidence only for the less informative statement (that $p \rightarrow q$) – that is, non truth-functional evidence. (pp. 61-62)

So the basic idea is very simple. The material conditional assertion is very weak, and will almost always violate the Maxim of Quantity – it will almost always give one’s interlocutor less information than she desires. So it is clear to one’s interlocutor that one is not complying with the Maxim of Quantity, and the simplest explanation of why one is not complying with the Maxim of Quantity is that one only has evidence for the very weak claim that $p \rightarrow q$. Having evidence for this weak claim is having evidence that there is a connection between the truth of the antecedent and the truth of the consequent. So that is Grice’s idea.

How does Grice deal with the Paradoxes of Material Implication?

(1) If God exists, then everything is permissible.

According to Grice, (1) is true but unassertible. Our intuition that it is false is due, not to its falsity, but to its lack of assertibility. Suppose I am an atheist. Then I should just assert the negation of the antecedent (by the Maxim of Quantity).

(2) The butler did it. So if the butler didn't do it, the gardener did.

After asserting that the butler did it, the conditional is unassertible, since the negation of the antecedent is known. Our sense that the inference is invalid is due to our sense that the conditional that is the conclusion of the argument is not assertible.

(3) I have three children.

This is true if I have four children (according to Grice), but it seems false to us. In the case of constructions that generate generalized conversational implicatures, unassertibility and falsity can be confused.

Problems for Grice's Theory:

Problem #1: Contraposition

Bennett's example:

- (1) Even if the Bible was divinely inspired, it is still not literally true.
- (2) If the Bible is literally true, then it is not divinely inspired.

Certainly, (1) and (2) have intuitively different truth-conditions. But Grice's strategy is hopeless to explain the difference in assertibility.

Curiously, all counterexamples to contraposition seem to involve conditionals containing "even" and "still". As Stalnaker writes (Inquiry, p. 124):

One might reject the counterexample on the grounds that the conditional contraposed is an "even if" conditional – a semifactual which should receive an analysis different from the one given to ordinary counterfactual conditionals. But it seems reasonable to assume, at least to begin with, that "even if" conditionals should be explained in terms of the interaction of "even" with the ordinary "if". If we look to nonconditional uses of "even" it seems plausible to conclude that this word has a purely pragmatic function... "Even Abe Lincoln lied to the American people" seems to assert exactly what is asserted by "Abe Lincoln lied to the American people"...

Still, one might worry that "even" has some semantic function here that obscures our intuitions, and not a straightforward indicative conditional. It is most curious that all

examples of the failure of contraposition I know of in the literature either involve “even if” conditionals, or relatively dodgy examples.

Other examples (p. 48 of Frank Jackson, Conditionals):

- (3) If it rains, it will not rain heavily.
- (4) If he works he will still not pass.

But I hear (3) and (4) as ‘even if’ conditionals (especially (4)).

Problem #2: Disanalogies in assertibility between “if...then” and “or” (Grice, p. 63)

According to Grice’s account, “If P, then Q” has the same truth conditions as “ \sim P or Q”. So similar puzzles about assertibility should plague us with disjunctions. As Jackson elegantly puts the point (Frank Jackson, Conditionals, p. 21):

My final objection is that if the standard way of trying to explain away the paradoxes is right, ‘or’ and ‘if..then’ are on a par in the relevant respect. It would, for instance, be just as wrong, and just as right, to assert ‘A or B’ merely on the basis of knowing A as to assert ‘If A, then B’ merely on the basis of knowing ‘not-A’. And, more generally, ‘A; therefore, A or B’ should strike us as just as much of a problem for the thesis that ‘A or B’ is equivalent to $(A \vee B)$ as do the paradoxes of material implication for the equivalence thesis. It is a plain fact that they do not....the thesis that ‘A or B’ is equivalent to $(A \vee B)$ is relatively uncontroversial, the thesis that ‘If A, then B’ is equivalent to ‘ $A \rightarrow B$ ’ is highly controversial.

Of course, as you saw in your reading, Grice was well aware of this, and attempts to find a solution by appeal to the different discourse functions of “or” and “if...then”. The problem with this is that these different discourse functions don’t seem to come from the semantic content of sentences containing “if...then” together with conversational norms (since the semantic content of such sentences is the same as the semantic content of certain “or” sentences). The worry here is that the different discourse functions end up being due to semantic features of the words that are independent of contributions to what is said, i.e. conventional implicatures. If so, then Grice’s theory ends up being a version of Jackson’s theory, to which we now turn.