

論文

Implicature and the Cooperative Principle

Rory Davies

要旨

含意の定義とは、意味論と文法の規則に従った発言通りの意味と、話者の意図する意味の相違であると言える。

本論文では、含意の理論と H. P. Grice がどのようにその理論を生み出したのかについて考察する。はじめに、グライスの協調原理について述べ、彼の唱える効率的なコミュニケーションに必要な四つの会話の格率について解説する。加えて、含意の誘因—四つの格率の違反—意味に対してのそれらの効果について述べる。最後には、いくつかのグライスの意味論に対する批判や、これまでに提唱されたそのほかの意味論について述べる。

キーワード：implicature（含意）、cooperative principle（協調原理）、implicature triggers（含意の誘因）、conversational maxims（会話の格率）、differentiation（識別）、relevance（関連性）

Introduction

Implicature can be defined as the difference between what the words in an utterance mean according to the rules of semantics and grammar, and what the speaker's intended meaning is.

This paper looks at the theory of implicature and how H. P. Grice developed it. It sets out his cooperative principle and describes the four conversational maxims that he believed were necessary for efficient communication. It also looks at implicature triggers — the flouting of any

of the four maxims — and their effects on meaning. In the final part of the paper I will set out a number of criticisms of Grice’s theory, and some of the alternatives that have been suggested.

The Cooperative Principle

Grice believed that when people communicated they acted rationally and followed a cooperative principle (CP). He did not think that this CP was specific to communication, but that it applied to other cooperative activities, for example baking a cake, or mending a car (Grice, 1989). Grice’s CP stated “[M]ake 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” (1975: 45). Grice set out four conversational maxims that he asserted people generally follow when communicating efficiently (1975: 45–46)

“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:

Supermaxim: Try to make your contribution one that is true.

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

Relation:

1. Be relevant.

Manner:

Supermaxim: Be perspicuous

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

Grice believed that speakers obeying the CP should be truthful, informative, relevant, and clear. He did not claim that speakers are always cooperative; nor did he claim that speakers always follow the maxims. Speakers may deliberately or accidentally violate one of the maxims for a number of effects, including lying — a covert violation of the maxim of quality (1), or metaphor — an overt violation of the maxim of quality (1).

Implicature and the Cooperative Principle

Speakers may also flout a maxim when they are unable to conform to all of the maxims at once (Green, 1989).

Grice's belief was that hearers assume that speakers are conforming to the CP, and interpret utterances under this assumption. If a speaker's utterance appears to fail to satisfy the CP, then the hearer will look for another interpretation, one that does satisfy the CP. The difference between what the words in an utterance mean according to the rules of semantics and grammar, and what the speaker's intending meaning was, Grice labeled *implicature*.

1. A: Did you get me any stamps?

B: The post office was closed.

In dialogue 1, B's response to A's question would seem to violate the maxim of relation. However, if A assumes that B is abiding by the CP, then A assumes that B's response is relevant (as well as truthful, informative and clear), and will search for an interpretation of the response that follows these assumptions. A will interpret the sentence to mean that since the post office was closed, B was unable to buy any stamps for A. B has not explicitly stated whether or not she has bought stamps, but has implied (or implicated) that she has not. The extra information is implicature—in this case conversational implicature.

Grice (1975) differentiated between *conventional* implicature and *conversational* implicature.

Conventional implicature is generated by the standard meaning of certain linguistic terms. It is therefore "a semantic rather than pragmatic phenomenon" (Davis, 2005).

Grice provided the following example of conventional implicature:

2. "He is an Englishman; he is, therefore, brave." (Grice 1975: 44)

In this sentence, the meaning of *therefore* implicates causality. The hearer does not need to assume that the CP is being followed in order to correctly interpret the utterance.

Conversational implicature on the other hand is not part of the conventional meaning of an utterance, and depends on the assumption that the speaker is following the maxims of the CP (for example, dialogue 1). Grice (1975) set out a number of characteristics of conversational implicatures. They should be:

- non-conventional
- calculable—i.e. the hearer can deduce the implicated meaning from the utterance, assuming that the conversation follows the CP.
- non-detachable—i.e. if the message was expressed in another way, the same implicature would apply.
- cancellable—i.e. the speaker can deny a particular meaning, for example in dialogue 1,

speaker B could add “but I bought some at the machine” to the utterance which would cancel the implicated meaning of “No, I didn’t”.

Grice (1989) provided a theoretical model for conversational implicature (S is the speaker, H is the hearer):

S conversationally implicates p if S implicates p when:

- (i) S is presumed to be following the CP.
- (ii) the supposition that S believes p is required to make S’s utterance consistent with the CP.
- (iii) S believes and expects H to believe that S believes, that H is able to determine that (ii) is true.

Implicature triggers

Green (1989) writes that the most common form of implicature derives from a flouting of the maxim of relation. An utterance that, semantically and grammatically, may appear irrelevant such as in dialogue 1, can only be correctly interpreted if the hearer assumes that the speaker is in fact being relevant. This results in a search for a relevant interpretation of the utterance.

3.



In (3), Dilbert’s colleague responds to Dilbert’s request for information with an apparently irrelevant comment. His response does not seem to satisfy all of the maxims of the CP. However, if we assume that he is following the CP we can infer that he actually means that he has ordered the plastic casings, but they have yet to arrive. His response implicates “yes”. In fact this is not the interpretation that Dilbert makes. He assumes that his colleague is deliberately using the ambiguity of his response to avoid answering the initial question, and that the true response is in fact “no”.

Implicature and the Cooperative Principle

4. Asked if he would make a special effort to help Mr. Blair in return for his support over Iraq, Mr. Bush replied: “I really don’t view our relationship as one of *quid pro quo*.”

(<http://www.guardian.co.uk/g8/story/0,13365,1520827,00.html>)

In (4) an extract from the Guardian Unlimited website, Mr. Bush’s response to the question appears to be irrelevant. However, if we assume he is adhering to the CP, then we can infer that his response conversationally implicates “no, probably not”. Politicians (amongst others) often use implicature as it allows them to avoid directly answering a question and it is cancellable, i.e. they can deny a particular interpretation of it.

Relation is not the only maxim that can be flouted. In (3) Dilbert’s colleague also flouts the maxim of quantity (1) since Dilbert has asked for information and he has not provided it. Green (1989) cites another example of the maxim of quantity (1) being flouted—in response to a request for a letter of recommendation about a student, A writes

5. Mr. X’s command of English is excellent, and he always attended class regularly.

The recipient has to work out why the writer has not conformed to all of the maxims of CP. “This generally induces a metalinguistic comment about the discourse” (Green, 1989: 98). The reader of A’s recommendation knows that A is able to conform to the four maxims should he or she choose to. That A hasn’t, will lead the recipient to try to interpret the recommendation in a different way. Green suggests that the metalinguistic comment is “What I am not saying is significant” (1989: 99), and that the reader interprets the recommendation as being negative. Conformity to the maxim of manner may have prevented A from writing an explicitly negative comment, since it is not considered good form to write this type of letter.

An overt violation of the maxim of quality can trigger implicature as in the case of sarcasm or metaphor.

6. Nice shot! (*said to someone who has just missed an easy putt*)

7. He was a rock in defence.

In (6) and (7) the speaker blatantly flouts the maxim of quality (1). In (6) the speaker does not really believe it was a good shot, and in (7) the speaker does not really think that the defender was a rock. This blatant violation of the CP triggers the search for the true and intended meaning. The implicature may result in the following interpretations:

8. Terrible shot!

9. He was like a rock in defence.

Green (1989) says that implicature can also be triggered by blatant violations of the maxim of quantity (1), implicating that the speaker is “unwilling to say more” (Grice (1989: 99)).

Last week, while chatting on MSNMessenger a friend told me that he wouldn't be able to play football at the weekend:

10. Pete: I'm not gonna make it on Saturday.

Rory: How come?

Pete: I'm on antibiotics.

Rory: What for?

Pete: I'm sick.

Pete must have known that I would assume he was sick, as he had already told me he was on antibiotics. He must have known that I was seeking further information. If we assume that Pete was being cooperative, then the fact that he did not provide me with further information implicates that he wanted me to infer that the information I sought was none of my business, or that he was not willing to provide this information for whatever reason.

A blatant violation of the maxim of manner also provides an implicature that is a "metalinguistic comment about the discourse in progress" Green (1989: 99).

In the following joke (11), remembered from my childhood, a young boy's father violates the maxim of manner ("Be perspicuous") in order to prevent his son from understanding what is being said.

11. Father (to wife): I found a C-O-N-D-O-M on the P-A-T-I-O.

Unfortunately the ploy backfires as the son interrupts, saying

12. Son (to father): What's a patio?

Problems

Universality of the Maxims

There are a number of problems with theories on implicature that critics have raised. Keenan (1976) claimed that the cooperative principle and the maxims are not universal. She studied Malagasy speakers and noted that they often appeared to flout the maxim of quantity (1).

13. A: Where is your mother?

B: She is either in the house or at the market.

In (13), speaker B is able to give a more precise answer but chooses to withhold some information. Keenan claimed that this happened often and showed that Malagasy speakers must lack the maxim of quantity (1). However, as Prince (1982) notes, just because a maxim is flouted,

this does not mean that it does not exist. Furthermore, it is the flouting of maxims that actually gives rise to implicature. Prince claims that as long as it can be shown that when the maxim of quantity (1) is flouted Malagasy speakers draw inferences from it, then the maxim is present.

In (13) speaker B withholds a certain amount of information from speaker A. If the maxim of quantity (1) exists then what is the implicature of the utterance? What should speaker A infer from the response. Prince (1982) cites Keenan's own data to show that information is highly prized in Malagasy society, especially 'new' information. The possession of 'new' knowledge gives the holder a certain amount of prestige over those who do not have it. Prince claims that "the inference drawn, is that B is, temporarily at least, superior in some way to A. If A had no Maxim of Quantity and were therefore unable to recognize the flouting of it, it is hard to see how B could accrue prestige in his eyes from such an exchange. Thus it seems that, in this case too, Malagasy speakers indeed have a Maxim of Quantity and use it to derive understandings that cannot be logically deduced" (1982: 5).

Differentiation

Davis (2005) uses the example of scalar implicature to show that Gricean theory can overgenerate implicatures. He claims that "[T]he schema used to "work out" observed implicatures can usually be used just as well to work out nonexistent implicatures" (part 4).

14. *Some* athletes smoke
15. *No* athletes smoke
16. *All* athletes smoke
17. *Less than 5%* of athletes smoke

(14) is an example of scalar implicature since weaker and stronger statements can be formed by substituting other words or expressions for *some* as in (15–17). In this example a weaker form is used to implicate that a stronger form is false.

According to Gricean theory the implicature is one of quantity (1). Since the speaker's contribution is as informative as is required, then if the speaker were able to state (15), he would have chosen to do so. The fact that he did not must lead us to infer that sentence (15) is not true. Davis notes that the importance of this case is that the implicature is derived from what is *not* said. Since the implication of (14) is that the stronger statement (16) is not true, Davis argues that other statements could also be implicated to not be true. He lists a number of these, including:

18. "Some athletes smoke regularly
19. Some athletes smoke Marlboros

20. Some athletes and maids smoke” (Part 4)

The problem is how to differentiate between these different implicatures.

Other differentiation problems arise with sentences such as

21. John cut someone

22. John broke an arm

Sentence (21) implicates “John did not cut himself”. Using the same argument as for sentence (14), Gricean logic would claim that the speaker would be flouting the maxim of quantity (1) if she were to state (21) knowing that John had cut himself. However sentence (22) does not implicate “John did not break his own arm”, in fact it implicates that John did break his own arm.

A further differentiation problem that has yet to be addressed is the role played by stress (Davis, 2005).

23. McCartney wrote some wonderful tunes

Sentence (23) if unstressed would be unlikely to generate any implicature (depending on the context). However, if the word *some* were stressed, the implicature would be that not all of McCartney’s tunes were wonderful. If the word *tunes* were stressed, it might implicate that though he wrote wonderful tunes, his lyric writing was not up to much.

Relevance

Sperber & Wilson (1986) produced one of the most influential alternatives to Grice’s theory. They developed a theory of relevance based on a number of assumptions about communication:

1. Every utterance has a variety of **linguistically possible** interpretations, all compatible with the decoded sentence meaning.
2. Not all these interpretations are equally **accessible** to the hearer (i.e. equally likely to come to the hearer’s mind) on a given occasion.
3. Hearers are equipped with a single, very general **criterion** for evaluating interpretations as they occur to them, and accepting or rejecting them as hypotheses about the speaker’s meaning.
4. This criterion is powerful enough to exclude all but at most a **single** interpretation (or a few closely similar interpretations), so that the hearer is entitled to assume that the first hypothesis that satisfies it (if any) is the only plausible one (Sperber & Wilson, 1986).

Sperber and Wilson argued that all of Grice’s maxims could be replaced by a single principle of relevance — that the speaker tries to be as relevant as possible in the circumstances (1986).

Davis (2005) argues that Sperber and Wilson’s theory suffers from some of the same problems

Implicature and the Cooperative Principle

as Grice's, including:

- overgeneralization of implicatures
- a clash with the principle of style
- a clash with the principle of politeness

Conclusion

Grice provided an alternative to code-based interpretation of utterances. His cooperative principle allowed an inferential-based system of utterance-interpretation to develop. It is clear that the message people intend to convey is not wholly contained within the words they use, but depends on hearers interpreting the message taking into account context and implicated meaning.

References

- Brown, G. & Yule, G. 1983, *Discourse Analysis*, CUP, UK
- Davis, W. 2005, *Implicature*, The Stanford Encyclopedia of Philosophy (Summer 2005 Edition), Edward N. Zalta (ed.), retrieved June 21st 2005 from: <http://plato.stanford.edu/archives/sum2005/entries/implicature/>
- Green, G. 1989, *Implicature*. In *Pragmatics and natural language understanding* (pp. 87–106) Hillsdale, New Jersey: Lawrence Erlbaum Associates
- Grice, H. 1975, *Logic and conversation*. In P. Cole & J. Morgan (Eds.), *Syntax and semantics 3: Speech acts* (pp. 41–58) New York: Academic Press.
- Grice, H. P. (editor) 1989, *Studies in the Way of Words*. Cambridge, MA: Harvard University Press
- Hancher, M. 1978, *Grice's "implicature" and literary interpretation: background and preface*, Twentieth Annual Meeting, Midwest Modern Language Association, Minneapolis, Minnesota, retrieved June 24th 2005 from: <http://mh.cla.umn.edu/grice.html>
- Hatch, E. 1992, *Discourse and Language Education*, CUP, UK
- Keenan, E. O. 1974, *The Universality of Conversational Postulates* Studies in Linguistic Variation, ed. R. W. Fasold & R. W. Shuy, Washington, D. C., Georgetown Univ. Press, pp. 255–68
- Prince E. F. 1982, *Grice and Universality: a Reappraisal*, University of Pennsylvania Retrieved June 17th 2005 from: <http://www.ling.upenn.edu/~smalamud/grice.pdf>
- Sperber, D. & Wilson, D. 1986, *Relevance: Communication and cognition*. Blackwell, Oxford and Harvard UP, Cambridge MA