Boundaries Between Meaning and Pragmatics: Gricean and Neo-Gricean Pragmatics

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Lee, Heechul. 1999. **Boundaries Between Meaning and Pragmatics:** **Gricean and Neo-Gricean Pragmatics.** *Linguistics* 7-3, 257-273. Grice (1975) claims that the formal devices used in logic are useful for systematic treatment by the logician, but that there are very many inferences, expressed in natural language and not in terms of the formal devices, that are nevertheless valid. Accordingly, he claims that there must be a place for an unsimplified logic of the natural counterparts of these devices. In this vein, he discusses implicatures in terms of the Cooperative Principle and conversational maxims.

Horn (1984) boils down the Gricean maxims to two fundamental principles, such as the Q Principle and the R Principle, and deals with implicatures in those terms. He also discusses implicature from the perspective of Quantity vs. Informativeness, which are useful concepts in dealing with Q vs. R clashes. (cf. Atlas and Levinson 1981) This paper discusses Gricean maxims, detachability related directly to conventional implicatures vs. conversational implicatures, and the inferential process leading to the implicatures, with illuminating English examples. (cf. Lee 1994) (Chonbuk National University)

1. Introduction

This section provides a general introduction to the Gricean maxims and Horn's (1984) Q Principle vs. R Principle.

1.1. Gricean Maxims

According to Grice (1975: 45), the Cooperative Principle (CP, henceforth) is: "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." There are four categories of the CP, such as Quantity, Quality, Relation, and Manner.

The category of Quantity concerns the quantity of information to be conveyed. It contains two maxims:

i) Be as informative as is required.
ii) Don't be more informative than is required. (Grice 1975: 45)

The category of Quality[1] has a supermaxim: "Try to make your contribution one that is true." Under the supermaxim are two maxims:

i) "Do not say what you believe to be false."
ii) Do not say anything for which you lack evidence. (Grice 1975: 46)

The category of Relation contains a maxim: "Be relevant." (Grice 1975: 46) The category of Manner has a supermaxim: "Be perspicuous." It has several maxims:

i) Avoid obscurity of expression.
ii) Avoid ambiguity.
iii) Be brief.
iv) Be orderly. (Grice 1975: 46)

A participant in a talk exchange may fail to fulfill a maxim in various ways. If a participant in a talk exchange violates a maxim, he will be liable to mislead. A participant in a talk exchange may opt out from a maxim by showing that he is unwilling to cooperate in the way the maxim requires. A participant in a talk exchange may be unable to fulfill a maxim of Quantity without violating a maxim of Quality (Have

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1) Quality corresponds to Lewis's (1969) Convention of Truthfulness.

adequate evidence for what you say). In other words, he may be faced
by a clash. A participant in a talk exchange may blatantly fail to fulfill
a maxim. In other words, he may flout a maxim.

A participant who by saying that p has implicated that q may be
said to have conversationally implicated that q. A general pattern for
calculating a conversational implicature[2] may be shown as follows:

A participant in a talk exchange has said that p; there is no reason
to suppose that he is not observing the maxims; he could not be doing
this unless he thought that q; he knows (and knows that I know that
he knows) that I can see that the supposition that he thinks that q is
required; he has done nothing to stop me thinking that q; he intends
me to think, or is at least willing to allow me to think that q; and so
he has implicated that q. (Grice 1975: 50)

1.2 Horn's (1984) Q Principle vs. R Principle

Horn (1984: 13) reduces the Gricean maxims except Quality to two
fundamental principles, such as the Q Principle and the R Principle. The
two principles are as follows:

1) The Q Principle (Hearer-based): Make your contribution sufficient
(cf. Quantity$_1$[3]); Say as much as you can (Given R).
2) The R Principle (Speaker-based): Make your contribution necessary
(cf. Relation, Quantity$_2$[4], Manner); Say no more than you must (Given
Q)

The hearer-based Q principle is essentially a sufficiency condition. It is
a lower-bounding principle and may be used to generate upper-bounding

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2) *Implicature* (cf. implying) and *implicatum* (cf. what is implied) are the related
   nouns of the verb *implicate*. (Grice 1975: 43-44)
3) The first maxim of Quantity is referred to by the subscript.
4) The second maxim of Quantity is referred to by the subscript.

conversational implicata[5]: a speaker who says '---p---' implicates that (for all he knows) '---at most p---.' (Grice 1975; Horn 1972; Gazdar 1979)

One of the primary examples of Q-based implicata comes from Scalar predications as follows (cf. Koenig 1991; Frawley 1992):

3) S: Some of my friends are Buddhists --->
      Not all my friends are Buddhists (Horn 1984)

The assumption that S obeys Quantity allows you to infer that not all his friends are Buddhists.

The speaker-based R principle is an upper-bounding principle which may be used to produce lower-bounding conversational implicata: a speaker who says '---p---' may license the R inference that he meant '---more than p---.'

One of the basic examples of R-based implicata is as follows:

4) S: Can you pass me the salt?

In a context where your abilities to pass the salt are not in doubt, S licenses you to infer that he is doing something more than asking you whether you can pass the salt. S is, in fact, asking you to do it. The assumption that S is obeying the Relation maxim allows you to infer that S means something more than what he says.

2. Example Scenarios

To make some concepts of the Gricean maxims clear, let us give example scenarios for such cases as a violation of a maxim, opting out of a maxim, mediating a clash between two maxims, and exploiting

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5) Conversational implicata, according to Horn (1984: 12), are "conveyed messages which are meant without being said."

(flouting) a maxim.

2.1. Violation of a maxim:

A speaker, in some cases, is liable to mislead through a violation of a maxim as follows:

A daughter bought some notebooks and some CD's of popular songs. She knows that her mother does not like her listening to music when she should study. Let us consider an example mini-dialogue as follows:

5) Mother: What did you buy at the store?
   Daughter: I bought some notebooks.

In the foregoing dialogue, Daughter is not as informative as is required to meet her mother's inquiry. In this case, she is misleading through a violation of Quantity 1.

2.2 Opting out of a maxim

Opting out of a maxim is to say, indicate, allow it to become plain that a speaker is unwilling to cooperate in the way the maxim requires. (Grice 1975: 49) The following serves as an example:

A friend asks his friend, an FBI agent, what he is working on nowadays. The agent knows that he should keep it secret and answers by saying, "I'm investigating a case, but I can't say more. My lips are sealed."

2.3 Mediating a clash between two maxims

Mediating a clash between two maxims is a situation in which a maxim is violated, but its violation is to be explained by the supposition

of the clash with another maxim. (Grice 1975: 51) In a clash, for example, a speaker is unable to fulfill the first maxim of quantity (Be as informative as required) without violating the second maxim of quantity (Have adequate evidence for what you say). (Grice 1975: 49) Let us take an example of a situation which shows mediating a clash between two maxims as follows:

Before a son leaves for his college far away from home, a parent, knowing that the average time it takes to achieve a Ph.D. is five years, asks his son as below:

6) Parent to Son: When do you expect to get a Ph.D.?
   Son: In somewhere between three and five years. (Gloss: There is no reason to suppose that Son is opting out: his answer is, as he well knows, less informative than is required to meet Parent's needs. This infringement of the first maxim of quantity can be explained only by the supposition that Son is aware that to be more informative would be to say something that infringes the maxim of quality, 'Don't say what you lack adequate evidence for,' so Son implicates that he does not know exactly when he will achieve a Ph.D.

2.4 Exploiting (flouting) a maxim

Exploitation is a procedure by which a maxim is flouted for the purpose of getting a conversational implicature across. Though some maxim is violated at the level of what is said in the examples of exploitation, the hearer is entitled to assume that the maxim, or at least, the overall CP is observed at the level of what is implicated. (Grice 1975: 52) On the assumption that the speaker is able to fulfill the maxim and that in the examples of exploitation, the speaker is not 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 CP? This situation is one that characteristically

gives rise to a conversational implicature; and when a conversational implicature is generated in this way, Grice (1975: 49) says that a maxim is exploited. An example situation showing the exploitation of a maxim is as follows:

A wife wants to discuss with her husband something which is bothersome to him. Her husband does not want to talk about it. He does not want to even think about it. Here goes a mini-dialogue as below:

7) Wife: What do you think about it?
   Husband: It's late at night and I'm tired. Let's go to bed.

3. Detachability

Grice (1975) suggests that the difference between conventional implicature and generalized conversational implicature is that the latter can be "detached" from specific linguistic material (word, construction...); the former cannot. Let us discuss this distinction with reference to the following sentence pairs:

8) a. Rich is Jewish, but he's a devout Buddhist.
   b. Rich is Jewish and he's a devout Buddhist.

To assume the presence of a conversational implicature, we have to assume that at least the CP is being observed. Since it is possible to opt out of the observation of this principle, it follows that a generalized conversational implicature can be canceled in a particular case. It may be explicitly canceled, by the addition of a clause that states or implies that the speaker has opted out, or it may be contextually canceled. (Grice 1975: 56)

Detachability is a property of conventional implicatures whereas non-detachability is a property of conversational implicatures.

Conventional implicatures are "detachable" (i.e. can be taken out of utterances), by simply substituting for a given word or construction a word or construction of the same syntactic category and the same literal, truth-conditional meaning. Since the implicature is conventionally associated with the original word or construction, the substitution will typically remove (or "detach") the implicature from the utterance of the resulting sentence.

Conversely, non-detachability is a property of conversational implicatures. Conversational implicatures arise from a reasoning process based on three kinds of information: (i) the meaning of the sentence; (ii) the assumption that the speaker obeys the conversational principle, and Grice's maxims; (iii) particular information provided by the context of the utterance. Computing conversational implicatures does not depend upon the choice of a particular word or construction. The implicature cannot therefore be "detached" from the utterance of the sentence by substituting another word or construction of the same syntactic category and identical truth-conditions. Conversational implicatures remain constant under substitution of (roughly) truth-conditionally equivalent words or constructions. The only apparent exception to this claim is of course implicatures that arise out of the maxim of manner, where the use of a specific word or expression might, for example, lead the addressee to derive certain implicatures. But note that even in that case the implicature does not arise automatically from the use of a particular word. The conversational implicature is "computed" from what is literally said, by asking oneself something like: why did the speaker choose this specific word or expression?6) Let us consider some examples as follows:

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6) Conversational implicatures are always pseudo-inferences drawn by the hearer. So it does not make sense to ask yourself what the conversational implicature is from the point of view of the speaker, by opposition to the hearer. Conversational implicatures are always hearer-centered.

9) a. Mary even beat Joe.

  b. Mary only beat Joe.

In (9 a), it is implicated that Joe is (one of) the best player(s). Sentence (9 b) does not implicate that. Since the implicature in sentence (9 a) is detached from sentence (9 b) or since an implicature disappears, both sentences show a conventional implicature. If an implicature is non-detachable, a conversational implicature is shown.

In this line, sentence (8 a) implicates that being Jewish and being a devout Buddhist is unusual whereas sentence (8 b) does not implicate that being Jewish and being a devout Buddhist is unusual. In sentence (8 a), there is an implicature that the assertion which precedes *but*, that Rich is Jewish is somehow incompatible with the assertion which follows *but*, that Rich is a devout Buddhist. In other words, when one utters *p, but q*, one is implicating that it is generally believed or expected that ~(p and q). Sentence (8 b), where *and* has been substituted for *but*, does not carry the same implicature. Now because the two sentences *Rich is Jewish* and *he's a devout Buddhist* inherently conflict with each other (given our cognitive models), sentence (8 b) might be seen as carrying the same implicature as (8 a). But, in fact, it does not carry it in the same way.

First, there is something funny about (8 b), without the addition of a special intonation. The oddity of (8 b) can easily be accounted for if we assume that *and* does not carry any implicature of incompatibility, which *but* does, and the two sentences are incompatible given our cognitive models: the sentence is odd, because *but* would be a less marked choice, since it explicitly codes the notion of "incompatibility" inherent in the propositions expressed in each of the conjuncts.

Second, one can imagine contexts where (8 b) is uttered and no implicature exists; the same is not true of (8 a). Compare:

10) A: Can one be both Jewish and a devout Buddhist?

  B: Sure. Rich is Jewish and/*but he is a devout Buddhist.

Third, conjuncts which are not inherently in conflict given our cognitive models illustrate further the fact that *and* does not carry the implicature which *but* carries. Compare:

11) a. Joe is happy and is going to Switzerland next week.
    b. Joe is happy but is going to Switzerland next week.

Whereas (11a) does not relate Joe's happiness with his trip to Switzerland, (11b) suggests that having to make a trip to Switzerland is somehow incompatible with Joe's happiness.

Since the implicature carried by *but* disappears when one substitutes for it the truth-conditionally equivalent *and*, the implicature is conventional. In other words, since the implicature in sentence (8a) is detachable or disappears, sentence (8a) shows a conventional implicature. Sentence (8b) does not have any clear implicature. So the question of its conventionality does not arise in (8b). Let us consider some examples as follows:

12) a. If you are good, God will love you.
       (Implicature: God will love you ONLY if you are good. This is
         not the all-forgiving God.)
    b. Provided that you're good, God will love you.
    c. Be good and God will love you.
    d. All good people will be loved by God.

The implicature in (12a) is conversational. All four sentences in (12) carry the same implicature that God loves only good people. The strength of the implicature may vary, but it is present, at least in some contexts, for all four sentences. The implicature is therefore not tied specifically to *if* or *if... then...* It is carried by any expression that carries a similar meaning (i.e. any expression of conditionality). Since the implicature is constant under substitutions of (approximately)

truth-conditionally equivalent words and phrases, it must be a conversational implicature.

Sentences (12b)-(12d) implicate that God will love you ONLY if you are good as sentence (12a) does. I suspect, according to a native speaker's intuition, that the implicature in sentences (12c) and (12d) is weaker than that in sentences (12a) and (12b). Even though words are changed around, the same implicature still obtains. Since the implicature is non-detachable or does not disappear, the four sentences contain a conversational implicature.

4. Quantity vs. Relevance

Let us consider how Quantity and Relevance interact with each other. Say one needs a Master's Degree to compete for a certain job. You have a Ph.D. as well as an M.A. Does your response in (13) violate the quantity maxim?[7]

13) Interviewer: Do you fulfill the minimum qualifications for this job?
    You: Well, I do have a Master's Degree.

Grice's (1975: 45) quantity maxims are as follows: i) Be as informative as is required. ii) Do not be more informative than is required. The interviewee in the above mini-dialogue is as informative as is required and is not more informative than is required. If we interpret the interviewer's question as meaning "Do you have an M.A.?" since an M.A. is a minimum requirement for the job, we can assume that the interviewer asked if the interviewee had an M.A. The

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7) This question reminds me of a conversation which I had with one of my friends. His friend wanted to have a teaching position at a secondary school. The requirement for qualification was a Master's degree. He had a Ph.D. He did, however, not have a Master's degree. This situation is possible in an American educational system. He could not get the job even though in a sense, he was more than qualified.

interviewee answered the question by saying that he has it. Therefore, the interviewee's response does not violate the quantity maxims. The maxim of quantity is closely related to the category of relation, a single maxim of which is "Be relevant." The interviewee's response is also relevant. Horn (1984; 13), in the discussion of Q's and R's, says that the Q Principle (hearer-based) is "Make your contribution sufficient; Say as much as you can." The Q Principle takes into consideration Gricean quantity I and other relevant maxims. The Q principle is a lower-bounding principle and induces upper-bounding implicata.

If the interviewee had answered by saying that he had a Ph.D., he would have violated Relevance and Manner as well as Quantity. For having a Ph.D. does not necessarily mean that he also has an M.A. in an American educational system. In some majors of some universities in the U.S.A., it is possible to achieve a Ph.D. without necessarily having a Master's degree.

5. Inferential Process Leading to Implicature

Considering some conversations, let us give a step-by-step description of the inferential process leading to the implicature and try to specify which information, rules, etc. each step is based on.

14) A: Did you eat the apples and bananas I left?
   B: I ate a few apples.

The hearer-based Q principle is essentially a sufficiency condition. As a lower-bounding law in terms of information to be provided, it may be exploited to generate upper-bounding conversational implicata: a speaker, in saying "---p---," implicates that (for all he knows) "---at most p---." (Horn 1984: 13) A speaker obeying only Q would tend to say everything he knows on the off-chance that it might prove informative, while a speaker obeying only R would probably, to be on the safe side, not open her mouth. (Grice 1984: 15) Speaker B's response, "I ate a few

apples," which is an example of exploitation of the Quantity 1 maxim, licenses us to draw the inference that speaker B ate not all the apples and that speaker B did not eat bananas at all. If speaker B had eaten more than a few apples among the apples and bananas which speaker A left and this knowledge had been relevant to speaker A's interest, it would have been incumbent on speaker B to obey the Q principle and say so; the assumption that speaker B is obeying Quantity allows speaker A to infer that speaker B did not eat more than a few apples among the apples and bananas which speaker A left.

Grice (1975) notes that a speaker may 'quietly and unostentatiously violate a maxim' as well as exploit it to generate an implicature. Speaker B exploited a maxim of Quantity 1 and generated a Q implicature. Clark and Haviland (1977: 2) have suggested that intentional covert maxim violations result in lies, while unintentional violations are simply misleading. In fact, what is crucial is just which sort of maxim is violated: intentional quality violations result in lies; intentional violations of the Q-based sufficiency principle result in a speaker's misleading the addressee; and intentional violations of the R-based Least Effort principle are often simply unhelpful. In the case where speaker B ate his own apples, speaker B's utterance misleads speaker A through intentional violations of the Q-based sufficiency principle.

First, speaker B is presumed to observe the conversational maxims or at least the CP; second, the supposition that he is aware or thinks that he did not eat all the apples which speaker A left and that he did not even touch the bananas is required in order to make what he said consistent with this presumption; third, 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 above is required. In a suitable setting, speaker A might reason as follows: i) Speaker B has apparently violated the maxim, "Be as informative as is required" and may be regarded as having flouted one of the maxims of Manner, yet speaker A has no reason to suppose that he is opting out from the operation of CP; ii)

Given the circumstances, speaker A can regard speaker B's irrelevance as only apparent if and only if speaker A supposes that speaker B did not eat all the apples that speaker A left and that he did not eat the bananas at all; iii) Speaker B knows that speaker A is capable of working out step ii) above. So speaker B implicates that he did not eat all the apples speaker A left and that he did not eat the bananas at all. Let us consider some more examples as follows:

15) A: Did you eat the bananas?
    B: I ate some cake.

B's answer in (15) apparently violates Grice's maxim of relevance: B does not answer A's question. A does not have any reason to believe that B is opting out or violating the CP. His contribution must therefore obey Relevance, contrary to what B actually did. Given the assumption that B obeys the CP, and, in particular, the Quantity maxims, if B had eaten both some cake and any of the bananas or all of the cake and any of the bananas, he should have said it. If he didn't, it's because he couldn't fail the other maxims (in particular, Quality), for example, because, in fact, he didn't eat all of the cake and any of the bananas. If we add this implicature to B's statement, his answer obeys the CP, and, in particular, Relevance. Hence B has implicated that he didn't eat all of the cake or any of the bananas, under the assumption he obeys the CP. Let us consider one more example as follows:

16) I lost a book yesterday.

The R Principle (speaker-based) is: Make your contribution necessary and say no more than you must (given Q). It is an upper-bounding principle and induces lower-bounding implicata. (Horn 1984: 13) If the Q Principle corresponds to Quantity 1, the countervailing R principle has something to do with not only Relation, but Quantity 2, and possibly all the Manner maxims. A speaker who says '---p---' may license the R

inference that he meant '---more than p---.' (Horn 1984: 13)

An R-based inference renders the indefinite noun phrases more informative than its logical form suggests. (Horn 1984) Atlas and Levinson (1981) point out that there is a substantial class of cases for which Quantity gives exactly the wrong results. For these cases, they invoke Principle of Informativeness as follows:

The Principle of Informativeness: 'Read as much into an utterance as is consistent with what you know about the world.' (Levinson 1983: 146-7; Horn 1984)

Sentence (16) implicates through informativeness in force that the book was mine. The use of the genitive, *my*, in the sentence might suggest wrongly that I have but one book. In contrast, sentence "I slept on a boat yesterday" implicates through quantity in force[8] that the boat was not mine. The speaker could have chosen the more precise genitive form (I slept on my boat) but did not do so. The same indefinite article implicates two contrasting things. A number of factors are involved in determining which principle takes precedence when Quantity and Informativeness are at odds. The implicature of "I lost a book yesterday" follows Atlas and Levinson's (1981) Conventions of Noncontroversiality.

In conclusion, there are some obvious generalized implicature in all three sentences. B's answer in (14) implicates that he didn't eat all the apples and any of the bananas. B's answer in (15) implicates that he didn't eat all of the cake or any of the bananas. B's answer in (16) implicates in many, but not all contexts, that the speaker lost *his* book yesterday.

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8) The principle of Quantity: "Given that there is available an expression of roughly equal length that is logically stronger and/or more informative, the failure to employ the stronger expression conveys that the speaker is not in a position to employ it." (Atlas and Levinson 1981: 38)

6. Conclusion

Section 1 provides a general introduction to the Gricean maxims and Horn's (1984) Q Principle vs. R Principle. Section 2 gives example scenarios for such cases related to the conversational maxims as a violation of a maxim, opting out of a maxim, mediating a clash between two maxims, and exploiting (flouting) a maxim. Section 3 discusses the distinction between conventional implicature and generalized conversational implicature in terms of detachability. Section 4 focuses on the issue of Quantity vs. Relevance. Finally, section 5 gives a step-by-step description of the inferential process leading to the implicature and specifies which information, rules, etc. each step is based on. As mentioned at the beginning of this paper, in conclusion, there are very many inferences that are valid even though they are expressed in natural language, but not in terms of the formal devices. It is shown in the paper that an unsimplified logic of the natural counterpart of the formal devices is needed.

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