### Grice and Universality: a Reappraisal<sup>\*</sup> Ellen F. Prince University of Pennsylvania 1982

# 1.Background.

Since its underground circulation in the late 1960s and partial publication in 1975, Grice's Logic and Conversation has had a massive impact on linguistic thought and theory. In particular, it has become the basis of a new way of accounting for the relationship between linguistic form and understanding, an age-old problem for linguistics. That is, Grice's ideas have effected the articulation of a new division of labor in the business of language description, that between semantics and pragmatics. Thus it behooves us to reckon seriously with criticisms of Grice, lest we build too high on soft ground.

In a nutshell, what Grice has contributed can be understood as follows. Given that no formal logic has yet been devised or discovered which, by itself, accounts for the way people understand one another's utterances, formal logic is thus either irrelevant to natural language or else insufficient for its description. The first alternative, that logic is irrelevant, has not led to any fruitful results, prompting us to explore the second alternative, that logic by itself is insufficient. If it is relevant but not sufficient, what else is needed? Grice, taking this second tack, proposes that what is needed in addition to logic is something based on what he calls the Cooperative Principle:

(1) Cooperative Principle: Make your 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.

Under this general principle, Grice lists four main Maxims:

- (2)a. Maxim of 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.
  - b. Maxim of Quality: 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.
  - c. Maxim of Relation: Be relevant.
  - d. Maxim of Manner: Be perspicuous.
    - 1. Avoid obscurity of expression.
    - 2. Avoid ambiguity.
    - 3. Be brief. (Avoid unnecessary prolixity.)
    - 4. Be orderly.

Grice then goes on to describe informally how hearers make use of, first, the literal meanings of utterances—taken to be some propositions associated with utterances following some variety of standard logic—and, second, various parts of the Cooperative Principle, in order to arrive at understandings of those utterances. In particular, it is relevant to what follows that he distinguishes implication from implicature, an implication being an inference drawn logically and an implicature being an inference that relies on some part of the Cooperative Principle. Put crudely, semantics then can be seen as the part of the linguistic model that accounts for the implicatures.

To my knowledge, there have been two major criticisms of Grice. The first, made in Kroch 1972, accuses the Cooperative Principle of vacuity. That is, following from the vagueness of Grice's terms, it can be shown that just about any proposition can be derived as an implicature from any other proposition. Since language-users are generally not idiosyncratic and entirely unpredictable in their understanding of an utterance, such a situation is devastating. The criticism of vacuity has not, to my knowledge, been refuted; quite the opposite: it has been taken seriously and has been dealt with by a recognition that Grice's lecture notes do not constitute a theory but merely the basis for one. Thus, work in linguistic pragmatics has in the main been occupied with the construction of a formal, nonvacuous pragmatic theory based on Gricean principles. See, for example, Kempson 1975, Wilson 1975, Gazdar 1977, 1979a,b, Wilson and Sperber 1979, inter alia.

The second criticism of Grice, in contrast, has not to my knowledge ever been reckoned with. This is the criticism, made in Keenan 1976, that at least one of the four Maxims is not universal, in particular, that the Maxim of Quantity does not play a role in how Malagasy speakers understand one another.<sup>1</sup>

Now, although Grice has certainly never claimed universality for his Cooperative Principle or its parts, it is obviously an issue of some importance to linguists attempting to build a part of a theory of language based on it. Thus, in what follows, I shall address Keenan's criticism. First, I shall show that the evidence Keenan presents in no way supports her claim that Malagasy speakers lack a Maxim of Quantity. Then I shall show that the situation she describes in Malagasy actually seems to require a Maxim of Quantity to explain the inferences drawn. Third, I shall describe briefly, for each of the four Maxims, what sort of linguistic situation one must find in order to show that that Maxim is not universal.

### 2.Keenan's Malagasy data.

In answer to the question of whether the Maxim of Quantity holds for Malagasy speakers, Keenan states the following: 'No. Interlocutors regularly violate this maxim. They regularly provide less information than is required by their conversational partner, even though they have access to the necessary information' (p. 70). Of course, it is immediately apparent that the regular violation of a Maxim in no way entails that the Maxim does not hold. In fact, if this and other Maxims were

not regularly violated in English, it is hard to see why Grice would have posited them in the first place, since it is the apparent violation of them that does the bulk of the work that they were posited to do. The question then is not whether Malagasy speakers violate the Maxim of Quantity, regularly or infrequently, but whether they draw inferences on the basis of its violation. Let us consider an example Keenan gives

- (3) A: How does one open this door?
  - B: If one doesn't open it from the inside, the door won't open.

Keenan goes on to say: '...speaker B tells speaker A that if he doesn't do X, then Y will not take place. He is not making the stronger statement that if A does do X, then Y will take place: If you open it from the inside, the door will open.'

Several questions arise immediately concerning 3. First, does B in fact have more information than his literal response conveys, i.e. does he believe that the door will open if one opens it from the inside? Keenan never explicitly answers this question, but (by the Maxim of Relation) we can infer that B does believe the additional proposition. That is, if B in fact knew no more about opening the door than his response directly conveys, the datum in 3 would in no way bear on the issue of his having or not having a Maxim of Quantity. Thus I infer that Keenan infers that B has some idea that the door will open if opened from the inside.

The next question is: Does A make the same inference? That is, does A leave the exchange with any more positive information than he had when he arrived? The author does not explicitly give us the answer to this, and it is crucial. If A has no idea of any positive tack to take to open the door after hearing B's response, then we must agree with Keenan that the Maxim of Quantity looks dubious for Malagasy. However, since Keenan does not mention what would be a truly noteworthy cultural difference, I shall assume that it is not the case, that is, that A, inferring as much as Keenan and we can, leaves the exchange believing that, for all B knows, 4 is true:

(4) If one tries to open it from the inside, the door will open.<sup>2</sup>

The next question then is the following: How does A infer 4 from 3B? It is crucial to note that the inference from 3B to 4 is not a logical one. That is, from  $\sim p \not E \sim q$ , we cannot logically deduce p  $\not E q$ . Thus 3B is just as true in the case where the door is permanently and immutably sealed shut, when there is no way to open the door, as it is in the case where it can be opened from the inside. Thus a hearer, hearing 3B and having only logical deduction to go by, should infer 5 as quickly as 4:

(5) If one tries to open it from the inside, the door won't open,

in which case he would leave the exchange with no positive information about how to open the door. So how can we account for A's coming to believe 4 and not 5? It is

precisely this sort of question that Grice's Cooperative Principle is designed to answer, and 6 outlines how this might work following a Gazdar-type formalization of the Maxim of Quantity:

- (6) p = one tries to open the door from the insideq = the door will open
  - a. K(~p  $\rightarrow$  ~q): 'B knows that, if one doesn't try to open it from the inside, the door won't open.'
  - b. K(~q  $\lor$  ~~p): 'B knows that the door won't open or one doesn't not try to open it from the inside.' (by logical equivalence)
  - c. K(~q  $\lor$  p): 'B knows that the door won't open or one tries to open it from the inside.' (by logical equivalence)
  - d. K(p  $\vee \neg$ q): 'B knows that one tries to open it from the inside or it won't open.' (by logical equivalence)
  - e.  $P(\sim(p \land \sim q))$ : 'For all B knows, it is not the case that one tries to open it from the inside and it won't open.' (by Maxim of Quantity implicature)
  - [= f.  $P(p \rightarrow q)$ : 'For all B knows, if one tries to open it from the inside, it will open.' (by logical equivalence)]

In the chain of reasoning illustrated in 6, steps b through d arise via logical deduction and represent information B is taken to know, i.e. be fully committed to. Step e is arrived at not logically but pragmatically, as an implicature generated by the apparent violation of the Maxim of Quantity, needed independently (in English, at least) to account for exclusive-or understandings, given a semantics that allows only for inclusive-or.<sup>3</sup>

Of course, the ability to infer 6f from 6a does not prove that Malagasy speakers have a Maxim of Quantity, any more than it proves that English speakers do. What it does demonstrate is that Malagasy speakers appear to make the same sort of inferences as English speakers and that the Maxim of Quantity can account for both in the same way. The burden of proof then, for one who wishes to claim that Malagasy speakers lack this Maxim, is to show that 6f is arrived at by Malagasy speakers in some other way.

A second type of Malagasy datum that Keenan gives in support of her claim is exemplified in 7:

(7) A: Where is your mother?

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

Keenan (p. 70) says of 7: 'B's utterance is not usually taken to imply that B is unable to provide more specific information...The implicature is not made, because the expectation that speakers will satisfy informational needs is not a basic norm.' At first blush, this example looks compelling: A presumably leaves with no thought that B could have (or could not have) made a stronger statement. However, this turns out not to be the case, from what Keenan says: 'Information that is not already available to the public is highly sought after. If one manages to gain access to 'new' information, one is reluctant to reveal it. As long as it is known that one has that information and the others do not, one has some prestige over them. [Emphasis EFP.] Thus it seems that A leaves believing that B could have made a stronger statement and chose not to in an obvious way. That is, A believes that B is either flouting or 'opting out of' the Maxim of Quantity. The implicature made, or 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.

In fact, Keenan later goes on to say (p. 76) that the Maxim of Quantity is followed when the information is readily available and that it is 'disregarded' only when the information is not, i.e. when the obvious withholding of it is capable of accruing prestige for the withholder in the interlocutor's eyes. Clearly, there is a confusion here between, on the one hand, not having or 'disregarding' a Maxim and, on the other hand, having it and exploiting it by obviously violating it to convey nonlogical inferences. In fact, it is theoretically possible that, in some culture, a given Maxim is always violated, generating implicatures. In such a situation, the Maxim is still of course alive and well, the status of a Gricean Maxim being dependent not on the statistical likelihood of its being straightforwardly followed but rather on its ability to be exploited in order to generate nonlogical inferences.<sup>4</sup>

In this section, I have examined Keenan's data and I have shown that the Maxim of Quantity is necessary to account for the understandings that obtain, at least as necessary as it is in English. I should now like to turn to a brief description of what sorts of languages one must find in order to demonstrate that the four Maxims do not hold universally.

# 3.What to look for.

# 3.1.Maxim of Quantity.

From the data given in Keenan 1976, it is clear that Malagasy is not the right language to prove that the Maxim of Quantity is not universal. What sort of language would be right? Obviously, it would be a language whose speakers drew no inferences based on the Maxim. First, someone hearing the a-sentences of 8, 9, and 10 would infer the b-sentences, but not the c-sentences:

- (8) a. John has one leg.
  - b. John has at least one leg.
  - c. John has not more than one leg.
  - d. John has more than one leg.
- (9) a. Some people left early.
  - b. At least two people left early.
  - c. Not everyone left early.

d. Everyone left early.

(10)a. John may die tomorrow.

- b. It is possible/permitted that John will die tomorrow.
- c. It is not the case that John must die tomorrow.
- d. John must die tomorrow.

In 8a, 9a, and 10a, some scalar term is mentioned (one, some, may). Logically, these sentences entail the b-sentences but not the c-sentences; that is, the a-sentences are true when the d-sentences are true. In an unmarked context, however, English speakers infer the c-sentences from the a-sentences, via the Maxim of Quantity. That is, upon hearing a scalar term in an unmarked context, English speakers infer that term marks the highest point on the scale that the assertion can be true of, for the speaker. (See Horn 1972, Gazdar 1979a,b for discussion.) Speakers who lacked this Maxim, then, could not draw such inferences and would, for example, infer from 8a simply that the set of John's legs is not null.

Second, a speaker lacking the Maxim of Quantity could not infer 11b,c from 11a:

- (11)a. I'll give you five dollars if you mow the lawn.
  - b. I won't give you five dollars if you don't mow the lawn.
  - c. I'll give you five dollars if and only if you mow the lawn.

This is the 'invited' inference (Geis and Zwicky 1971) from conditional to biconditional discussed above and is derivable via the Maxim of Quantity.

Third, upon hearing inclusive-or, a speaker lacking the Maxim of Quantity has no basis for inferring exclusive-or, i.e. will not infer 12b from 12a:

- (12)a. You'll shovel the snow or I'll hit you.
  - b. You'll shovel the snow or I'll hit you, but not both.

Thus, to prove that the Maxim of Quantity is not universal, one must find a culture in which are drawn none of the sorts of inferences exemplified in 8 through 12.

#### **3.2.Maxim of Quality.**

A culture lacking the Maxim of Quality would be easy to find, if one existed. Briefly, there could be no exchange of information, no learning through language. That is, if there were no expectation that some relation held between one's beliefs and one's utterances, no notion of truth or lie, one would never assume that any utterance reflected any belief whatsoever, any more than we assume that a nonarbitrary relation holds between, for example, a parrot's utterances and its beliefs.<sup>5</sup> More specifically, such a culture would have no standard use for question-answer sequences, and of course there could be no inferences based on the Maxim of Quality. Thus, such a culture could not have metaphor or sarcasm, since both are generally understood as such via the perceived flouting of this Maxim. As an example, consider 13, where A, looking at the rain, says to copresent B:

(13) What beautiful weather!

If B infers that this is sarcasm, it is because, first, B assumes that the weather is not beautiful, that A assumes this also, and that A assumes the knowledge is mutual, and then B, 'explaining' this obvious violation of the Maxim of Quality on A's part as a flouting of the Maxim, infers that the flouting is intended to implicate sarcasm. With no notion that there should be any predictable relation between A's beliefs and his utterances, i.e. with no Maxim of Quality, there is no reason for B to ascribe sarcasm to it.

### **3.3.Maxim of Relation.**

As in the previous case, a culture lacking the Maxim of Relation would be easy to identify, if one existed. For one thing, there could be no (or very little) anaphora, e.g. no understanding that either he in 14a is coreferential with John, or that the door in 14b is related to the house mentioned, or that Most people in 14c refers to most of the people at the party or that it was at the location of the party that they stayed:

(14)a. John called yesterday. He said that he was getting sick.

- b. I went to a neighbor's house and knocked at the door.
- c. That was some party! Most people stayed until dawn!

Furthermore, question-answer sequences would once again be of little use, not because there could be no assumption that the answer was thought to be true, as in the case of the Maxim of Quality, but because there could be no assumption that an utterance following a question was intended as an answer to that question. Thus, if B's utterances in 15 were truthful but not assumed to be relevant to A's questions, A could not draw the inferences in A' and therefore could not have any answers to his questions:

- (15) a. A: How can I get to Penn?
  - B: There's a bus that stops in front of City Hall.

A': The bus that stops in front of City Hall goes to Penn.

- b. A: You want to go to the movies tonight?
  - B: I have to study.
  - A': B has to study tonight and can't both study and go to the movies, so B does not want to go to the movies tonight.
- c. A: What do you like about that car?
  - B: It gets great mileage.
  - A': What B likes about that car is that it gets great mileage.

More significantly, a culture whose members fail to assume that utterances are intended to be relevant to their context lacks far more than question-answer sequences: it lacks texts of any kind, since it is largely the presumption of relevance that distinguishes a text from a random list of sentences. (See Kempson 1975, Wilson and Sperber 1979, Bruce 1978, among others.) The linguistic competence of the members of such a culture would then be describable by a sentence-grammar, for they would have no ability to produce or understand texts and therefore no discourse competence.

# 3.4. Maxim of Manner.

The members of a culture lacking a Maxim of Manner would simply be very hard to understand, as they would not be concerned with presenting their linguistic productions so as to be comprehensible to their hearers. They might thus speak inaudibly (perhaps even silently) to one another, in the wrong language, or in the wrong place. More interesting from a linguistic point of view, their patterns of reference would not reflect their hypotheses (if any) about their hearers' beliefs and needs, and we would thus expect no constraints on the use of pronouns, proper names, definite vs. indefinite NPs, etc., of the type that one finds, for example, in English. See, among others, Chafe 1976, Hawkins 1978, Prince 1981a,b, etc. As a rather crude example, we would expect to find no difference in felicity between 16a and 16b, uttered discourse-initially by someone having just knocked at a stranger's door:

- (16)a. Someone has just had an accident. May I use your phone to call an ambulance?
  - b. Sam just had one. May someone use it to do so?

Furthermore, in a culture lacking a Maxim of Manner, there could be no implicating of deference and no special ways of talking to children or foreigners, since such phenomena pertain to manner rather than content. In a similar vein, the culture would largely lack the notion of obscenity and hence of euphemism, and punning—along with much verbal humor—would of course be absent. Finally, there could be no evaluation of something as well said or poorly said. The members of such a culture could, in the end, draw no inferences from or about other speakers based on the way they spoke, and whatever linguistic variation they manifested would be simply random.

# 4.Conclusion.

In this paper, I have addressed the issue of the universality of the Gricean Maxims in two ways. First, I showed that the claim that one of the Maxims does not hold for Malagasy speakers is contradicted by the very data that was meant to illustrate it. Second, I briefly described, for each Maxim, what a language would have to look like if its speakers lacked that Maxim. Of course, neither of these steps proves that the Gricean Maxims are universal, but it is hoped that one will henceforth have a clearer idea of what sort of situation one must find to prove that they are not. Finally, and most importantly, I have tried to clarify the nature of the Maxims posited by Grice. If we take them to be ethnographic descriptions of how some culture, e.g. Anglo-Saxons, appears to behave, as Keenan seems to, they are silly indeed, for Anglo-Saxons as well as for Malagasy speakers. However, if we take them as hypotheses, or 'Maxims', that language-users have and exploit in regular and predictable ways in order to impart and infer understandings that are not logically deducible, they turn out to be an extraordinarily useful piece of equipment within a theory of language use. $^6$ 

### Notes

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<sup>1</sup>Note, parenthetically, that the two criticisms are incompatible: if some theory can be shown not to hold in some instance, it follows that it can be shown not to hold and it therefore has content, i.e. is not vacuous.

<sup>2</sup>I am assuming that *open it from the inside* here is a loose English translation of the Malagasy correlate of 'try to open it from the inside'. The basis for my assumption is the following: Keenan says that the statement *If A does open it from the inside, the door will open* is a 'stronger' statement. However, if we take *open* here literally, and not as 'try to open', this statement is a tautology and hence certainly not stronger.

<sup>3</sup>Consider i:

- (i) a. You'll eat your spinach or I'll hit you.
  - b. You'll eat your spinach or I'll hit you, but not both.
  - c. You'll eat your spinach or I'll hit you, or both.

Note that, in ia, we generally understand or to be exclusive, as in ib, and the addressee would presumably be quite surprised if he ate his spinach and got hit, as in ic. On the other hand, ii shows that English or is in fact understood inclusively when the Maxim of Quantity is not involved:

(ii) Q: Have you ever read Aspects or Syntactic structures? A: #No, I've read both. A': Yes, I've read both.

<sup>4</sup>Such a culture would perhaps pose an interesting problem for acquisition. In the same vein, it would be interesting to know how Malagasy speakers talk to children and how children understand, e.g. at what age a child (a)hypothesizes that information is being withheld, and (b)infers that the withholding is intended to confer prestige on the withholder.

<sup>5</sup>Note that this is markedly different from the situation in the well-known riddle of the truth-tellers and the liars, all of whom obviously have the Maxim of Quality.

<sup>6</sup>One possible reason for misunderstandings such as Keenan's is Grice's unfortunate choice of the word conversation in his title. For linguists, conversation is a technical term, denoting a certain genre which has certain properties and in which the participants follow certain principles, different at least in part from what obtains in other genres, and which is susceptible of conversational analysis. (Cf. Sacks,

Schegeloff, and Jefferson 1977, etc.) It is clear from the discussion in Keenan 1976:79 that she is taking conversation in this way. But Grice is using conversation here as an admittedly sloppy synonym for language or language in use; cf. the example from a letter, Grice 1975:52; the example from a poem, Grice 1975:54; the example from a telegram-type message, Grice 1975:54-55. (Note that we may describe this situation by saying that Grice is here totally ignoring the Maxim of Quantity but that many linguists are using it to infer that, if something is said to hold for conversation, then it is to be understood to hold only for—or in a special way for—conversation.) In a similar vein, and compounding the confusion, are Grice's conversational implicatures and Gordon and Lakoff's (1971) conversational postulates.

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