Ambiguity, Humor, and Grice’s Cooperative Principle

Several modern humor theorists share the hypothesis that humor can be created through the violation of a maxim associated with Grice’s Cooperative Principle (CP). While it is clear that the violation of a Gricean maxim often accompanies linguistic humor, there are many instances where violations of Grice’s maxims do not result in humor. So, in order to investigate a possible relationship between linguistic humor and the CP, this paper conducts a comparative study of humorous and non-humorous violations of Grice’s sub-maxim, “Avoid ambiguity.” To this end, Section 1 outlines Grice’s CP and its associated maxims. Section 2 recounts Grice’s analysis of the different ways in which the CP can fail to be satisfied, and discusses the production of a conversational implicature. Sections 3.1-3.3 perform comparative analyses of humorous and non-humorous violations of the maxim of manner involving lexical, referential, and structural ambiguity respectively. In conclusion, Section 4, motivated by the contrastive observations derived from the comparative analyses of sections 3.1-3.3, proposes a necessary condition for humor to arise from an ambiguity violation:

Discourse circumstances and the assumption of the cooperative principle allow a listener to simultaneously entertain significantly different multiple interpretations (which are syntactically well formed, and semantically compatible) of a linguistic phrase.

1. The Cooperative Principle

In “Logic and Conversation”, Paul Grice (1989) offers an explanation for the derivation of meanings commonly attributed to utterances found in natural conversation
which are not derivable from a semantic principle of composition, a set of lexical meanings, and the syntax of a language alone. For instance, if the human language faculty contained only systems of semantic composition, lexical entries, and syntax, the declarative utterance “It is cold in here,” should have only one possible derivable meaning, granted we fix the context so there is only one possible interpretation of “cold” and the deictic expression “here”. However, depending on the conversation that is taking place it is easy to imagine “It is cold in here,” to indicate that someone should turn up the heat, or that someone should have paid the power bill. Of course, with a greater exercise of imagination innumerable other interpretations are possible.

In forging his explanation for the disparity between theories of meaning creation and linguistic facts, Grice pioneered a theory of cooperative communication which has a continuing impact on the field of Pragmatics. Key to his theory was the observation that conversations “do not normally consist of a succession of disconnected remarks”, but in fact have a common purpose or mutually accepted direction (26). Grice proposed that due to this cooperative nature of conversations, meanings are generated which go beyond the literal meanings of the sentences which are the constituents of a conversation. He further proposed that this extra tier of meaning is generated from the assumption made by discourse participants that their fellow interlocutors are doing their best to follow the Cooperative Principle below.

**The Cooperative Principle:** 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. (Grice, 26)
The meanings in a conversation dependent on factors of discourse beyond those determining deixis are called *conversational implicatures* by Grice. A conversational implicature cannot be derived from the sentence meaning of an utterance alone but is calculable from the sentence meaning along with the discourse circumstances and the assumption that discourse participants are following the cooperative principle. Grice mentions several maxims which are related to the satisfaction of the cooperative principle with the caveat that his list may not be exhaustive, and that the formulations he presents for the included maxims are preliminary and subject to future refinements.

**Quality:**

a. Don’t say what you believe to be false.

b. Do not say that for which you lack adequate evidence.

**Quantity:**

a. Make your contribution as informative as is required (for the current purposes of the exchange).

b. Do not make your contribution more informative than is required.

**Relevance:** Be relevant.

**Manner:**

a. Avoid obscurity of expression.

b. Avoid ambiguity.

c. Be brief.

d. Be orderly.  

(Grice, 26-28)

2. Unfulfilled maxims

In his paper, Grice outlined several ways in which cooperative maxims may fail to be fulfilled. In Grice’s words:

A participant in a talk exchange may fail to fulfill a maxim in various ways, which include the following:

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.

3. He may be faced by a clash: He may be unable, for example, to fulfil the first maxim of Quantity (Be as informative as is required) without violating the second maxim of Quality (Have adequate evidence for what you say).

4. He may flout a maxim; that is, he may blatantly fail to fulfill it. This situation is one that characteristically gives rise to conversational implicature. (Grice, 30)

To illustrate how a conversational implicature is generated through the maxims and the cooperative principle consider the utterance (i) “It is true that Smith is happy,” as said in the initiation of a conversation. Ostensibly (i) has the same statement meaning as (ii) “Smith is happy,” (Grice). If a speaker wants to say to someone that Smith is happy then (i) is an unnecessarily verbose and redundant way of doing so. So, in the present situation (i) flouts the sub-maxim of manner “Be brief.” The hearer, assuming that the speaker is obeying the cooperative principle, searches for some implication for (i). Since (i) is a natural statement if someone had already uttered (ii), the hearer can infer the conversational implicature that someone might say that Smith is happy.

3. Ambiguity and the Maxim of Manner

The phenomenon of utterances which are on the surface in a syntactically declarative form, but which are nevertheless interpreted as beyond the mere delivery of information content which may be considered true or false is pervasive in natural language. As Grice’s provisional theory addressed a widespread phenomenon, subsequent linguists have productively employed this theory to analyze a wider range of domains than those which initially motivated his theory. For instance, the production of
interpretations of ironic statements has been productively analyzed by utilizing Grice’s insights into the nature of discourse (Dynel, 2013).

Linguistic humor often fits the paradigm of employing language which is delivered in a declarative form but which is not interpreted, or intended to be interpreted as the simple delivery of information which may be considered true or false. And so it is a natural line of inquiry to conduct an analysis of linguistic humor in the framework of Grice’s cooperative principle. Several recent (Ahmed 2007, Lili 2012, Pan 2012) and not so recent (Attardo 1994, Raskin 1985) scholars have presented the idea that a Gricean maxim violation is a factor in the production of humor. However, for any utterance which commits a maxim violation and produces humor there is a corresponding utterance which commits the same maxim violation and does not produce humor. So, in order to investigate the relationship between maxim violations and humor it is necessary to conduct a comparative study between those which produce humor and those which do not.

It is important, in order to limit extraneous factors which could influence this analysis, to compare examples of humorous and nonhumorous maxim violations which are on the surface as structurally similar as possible. To this end, this paper examines sets of utterances which violate the same maxim in the same fashion at a level of specificity beyond what is captured by the general pronouncements of Grice’s provisional theory. So, to explore humorous versus non-humorous violations of the sub-maxim “avoid ambiguity” I will employ comparisons between humorous and non-humorous examples of particular types of ambiguity.
In a first attempt to abide by the methodological considerations above it is convenient to look at puns, the simplest form of linguistic humor which has been correlated with a Gricean Maxim violation. Puns have often been cited as examples of violations of the maxim of manner in the production of humor (Ahmed 2007, Lili 2012, Pan 2012). The thought is that puns intentionally manipulate ambiguous language. In the following sections I will examine non-humorous utterances which exhibit the different types of ambiguity found in puns, along with puns themselves, in order to assess the features of puns which distinguish them from ambiguous utterances which are not humorous.

3.1 Lexical Ambiguity Violations

The type of ambiguity which is most immediately transparent to analysis is lexical ambiguity. Consider this example of a non-humorous maxim of manner violation employing lexical ambiguity. In a classic demonstration of political doublespeak, while employing an arcane lexical ambiguity, in 2013 Chicago Mayor Rham Emanuel announced plans to close over 50 schools because they were “underutilized”, which taken in its ordinary sense would imply that the schools were inefficient artifacts. However this word is also attached to an esoteric sense, based on a Chicago Public Schools space utilization formula. In this sense, “underutilization” means: less than 36 children per classroom (NC).

In contrast with the above example, some puns which also manipulate the lexical ambiguity of a single phrase are shown in (1-3) below.

(1) Seven dwarves went to college. They were geology minors. (DEE)

(2) A broken pencil is pointless. (Punography)
Why does Waldo wear stripes? He doesn’t want to get spotted. (DEE)

In both the doublespeak example and (1-3) it is clear that the speaker is capitalizing on different senses of a word in order to realize a communicative goal. However, in (1-3) there are equally salient disambiguations of “minors”, “pointless”, and “spotted” respectively whereas “underutilized” when employed by the mayor of Chicago had only one salient sense and the alternative meaning was obscure.

Puns (1-3) are instances in which ambiguous language is employed in a context where of two alternative disambiguations, neither is preferred. Grice remarks that often such violations are flouted in order to implicate that the utterance is to be construed with both interpretations. Such flouting appears to be the case in (1-3). Grice himself, offers the lines adapted from a poem by William Blake in (4) below as an illustration of such flouting.

(4) I sought to tell my love, love that never told can be. (Grice, 35)

In (4) “my love” may refer to a person or an emotion. Also, “love that never told can be” bears some kind of structural ambiguity which leads to alternate interpretations of love that cannot be told (inexpressible love), and love that if told will cease to exist (love that can’t survive expression). In a double interpretation, the alternate disambiguations of (4) serve to emphasize each other as opposed to introducing some new but related comment as in (1-3) above. This can be seen in (4') below.

(4') I sought to tell my lover of my love, love that is inexpressible and cannot survive expression.

Non-humorous (4) flouts the maxim of manner in a similar fashion as
However, the near synonymy of the alternate disambiguations for (4) is in contrast to the significantly different meanings derived from the alternate disambiguations of (1-3).

### 3.2 Referential Ambiguity Violations

In cases of referential ambiguity it may be the case that on the one hand as in utterances (1-4), one disambiguation is not preferred over another, and on the other hand a multiple interpretation is blocked. In such cases a listener will generally prompt a speaker for the correct disambiguation. Some examples of maxim violations using referential ambiguity are given in (5-6) and (7-9) below. For non-humorous utterances (5-6) a double interpretation is blocked, whereas in humorous utterances (7-9) a double interpretation is successfully implicated.

(5) John returned Mark’s five dollars and he said thanks. (Inman)

(6) The director fired the worker. He was known to be aggressive. (Inman)

For both (5) and (6) a double interpretation is untenable. For these utterances, the encyclopedic knowledge used in determining the correct antecedent gives no preference to either of the two possible antecedents and does prefer that there be a single antecedent. More concretely, in the situation described by (5) it would be appropriate for either John or Mark to say thank you, although perhaps strange if both thank yous occurred. As well, for (6), random firings happening due to either a director or a worker’s aggressiveness seem equally likely and a random firing due to the aggressiveness of both parties seems a little fantastic. So, a double interpretation is blocked for (5) and (6), and a listener who cared about the story told by either (5) or (6) would prompt the speaker for more information. This doesn’t appear to be the case for the humorous utterances (8-10) below:
(7) If I said you had a beautiful body, would you hold it against me?
(Groucho Marx)

(8) I wondered why the baseball was getting bigger and then it hit me.
(Punography)

(9) I stayed up all night to see where the sun went and then it dawned on me.

Just as in the case of (5) and (6), due to referential ambiguity and the equivalent salience of alternative disambiguations, two interpretations must be entertained in parsing (7-9). In (7-9) however, a double interpretation is not blocked. We can see upon examination that the encyclopedic knowledge conflicts which arise in (5) and (6) do not surface in parsing (7-9).

In utterances (7-9) “it” may take as antecedent either a noun or a previous clause. This is due to the fact that the sentences are ambiguous as to whether a figurative or literal interpretation is to be given to the rightmost clause of the each sentence. In the case of (7), the antecedent of “it” may be either “a beautiful body” or “I said you had a beautiful body”. Both of these are equally salient elements in the antecedent clause due to alternative figurative and literal interpretations of “hold it against me”. Interestingly, as a further complication, due to an assumption that a speaker’s comments are relevant to the conversation the hearer can derive the implicatures that (i) the speaker wishes to compliment the hearer from the clausal antecedent interpretation and (ii) that the speaker has some interest in the prospect of physical contact from the noun phrase antecedent interpretation. So, (7) receives simultaneous readings as questions which lead respectively to the two compatible implicatures of an indirect compliment and a physical overture.
In a similar fashion (8) has “baseball” and “why the baseball was getting bigger” as alternative antecedents. A double interpretation is allowed as “it hit me” receives both literal and figurative interpretations. Of course in order to entertain both meanings one must consider some event such as the speaker misconstruing sensory data perhaps as a child who hasn’t learned the physical connection between visual and tactile stimuli or as a person who has uncommon exposure to high definition graphics which make it impossible to tell if the baseball is an actual baseball or a visual representation of it.

In (9), following the same paradigm, “the sun” and “where the sun went” are alternative antecedents with “it dawned on me” as the ambiguous phrase which allows multiple interpretations. In this case in order to entertain both interpretations one has to imagine the speaker as having an epiphany related to a physical experience which is a common enough occurrence.

3.3 Structural Ambiguity Violations

Humorous utterances such as (10) below involve some ambiguity in the structural position occupied by a phrase.

(10) I once shot an elephant in my pajamas. How he got in my pajamas, I’ll never know. (Groucho Marx)

The occurrence of “in my pajamas” in the first sentence of (10) is ambiguous but unnoticed at first because the interpretation in which “in my pajamas” modifies the subject “I” is the most salient interpretation. However, the occurrence of “in my pajamas” in the second sentence unambiguously refers to an elephant in the speaker’s pajamas, which leads the listener to reinterpret “in my pajamas” in the first sentence as modifying the object “elephant” of the first sentence.
A similar reappraisal due to syntactic ambiguity is evident in the garden path sentence (11) below:

(11) The president believed the report about the attack had been forged.
(Brown Univ.)

Before the listener has heard the introduction of the verb construction “had been”, “the report” is interpreted as the object of “believe”, and then after the second verb in the sentence is introduced, “the report” is interpreted as the subject of the subordinate clause.

The most notable difference between (11) and (12) is that the earlier syntactic interpretation of (12) is no longer grammatical by the completion of the utterance whereas in (11) both the earlier and later interpretations are still acceptable upon the completion of the utterance; they are neither syntactically blocked nor semantically contradictory. In fact, the humor or (11) seems to derive from the picture of shooting an elephant inside a person’s pajamas while the person is wearing them, which is derived from entertaining both interpretations. In contrast the multiple interpretation of (11) produces a contradiction (the president believes and doesn’t believe the report) and is syntactically ill-formed.

4 Conclusion

In the sections above I have implicitly assumed that a hearer, whenever faced with some unresolvable ambiguity will at first assume that the speaker has violated the maxim of manner with some communicative intent to implicate something beyond a basic statement meaning. Assuming from the cooperative principle that the speaker’s implication is recoverable the hearer will entertain the possibility that the speaker intends both readings of the ambiguous statement. In the first example a hearer was intended not to notice the violation and so as long as the violation goes unnoticed no implicature is
produced. In the other examples a hearer would most likely notice and be incapable of resolving the ambiguity without resort to the implicature of entertaining multiple readings of a single statement.

This comparative analysis has reaped several contrastive observations differentiating humorous and non-humorous uses of ambiguity. For all of the non-humorous readings but (4), for reasons of semantic incompatibility or malformed syntax, a multiple reading was not feasible. In (4) the distinct readings are nearly synonymous and the multiple reading produces an effect of poetic emphasis. For the humorous examples a multiple reading was not blocked and the separate readings exhibited an appreciable semantic distance (were not nearly synonymous).

From these observations, I propose the following necessary condition for humor produced by ambiguity:

Discourse circumstances and the assumption of the cooperative principle allow a listener to simultaneously entertain significantly different multiple interpretations (which are syntactically well formed, and semantically compatible) of a linguistic phrase.

Future research is in order to test this condition, and refine the vague denotation of “significantly different multiple interpretations”. A confirmation of the necessary condition above would validate the view that Grice’s cooperative principle and associated maxims have a role in the production of humor. Whatever future research may determine, the above survey suggests that an assumption of some form of pragmatic principles analogous to Grice’s CP on the part of the hearer is necessary to explain why not all ambiguous language prompts a question from the listener, and why sometimes ambiguous language is humorous.
References


