1 Challenges to the regimentation of meaning

• Stable and precise conventional meanings

Natural languages are effective mediums for conveying information, across users who differ considerably from one another.

It seems difficult to explain this, without assuming that the expressions of a natural language have a relatively stable and small set of meanings, fixed to them by convention and independently of context.

Beyond this, theorists might hope that these meanings can be given very precise explication, in terms of logical and scientific concepts that are well understood.

• Unruliness of messages conveyed in language use

But quite regularly, the message conveyed by the use of an expression goes beyond any meaning we would want to associate with the expression, by convention and independently of context.

And in particular, expressions in natural languages rarely seem to match up perfectly with expressions in the logical calculus.

(1) a. Families with three children are the most stable.
   b. Families with three children will receive a tax credit.

(2) a. Can you pass the salt?
   b. Can you benchpress 400 pounds?

(3) a. Nice alligators do not eat their children.
   b. Nice boys do not yell at their mother.

(4) a. The rose is red.
   b. The rose is yellow.
   c. The rose is red and yellow.
Grice

The evident unruliness is not as great a threat as feared.
In large part, it is the result of ad hoc inferences made by the audience in explaining why the speaker said what he did, given the apparent purposes of the conversation.
The purposes of a particular conversations vary without limit. And so the inferences made to explain the speakers contribution will vary correspondingly.
But this gives us no reason to conclude that the expressions of the languages lack stable conventional meanings.

Thus Grice wants to make use of a distinction between:

1. “What is said” (in a “favored sense” of the term)
   - Roughly, the propositional (truth-conditional) content determined by the conventional/literal meaning of the disambiguated expression signaled by the utterance, with values for referring expressions fixed by context.

2. “What is conversationally implicated”
   - Roughly, additional inferences we make about the beliefs of the speaker, in order to explain why he said what he did, given the purposes of the conversation.

In addition, Grice introduces a third category, of what is conventionally implicated—which is utterly unlike what is conversationally implicated, despite the similar name. We will discuss this briefly below.

2 Conversation as rational, goal-directed cooperation

2.1 The Cooperative Principle

“Our talk exchanges […] are characteristically […] cooperative efforts; and each participant recognizes in them, to some extent, a common purpose […] or at least a mutually accepted direction […] At each stage, some possible conversational moves would be excluded as conversationally unsuitable.”

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.”
• The CP is not specific to language: “[O]ne of my avowed aims is to see talking as a special case or variety of purposive, indeed rational, behavior […]”

• “I would like to be able to show that observance of the CP and maxims is reasonable (rational) along the following lines: that any one who cares about the goals that are central to conversation/communication . . . must be expected to have an interest, given suitable circumstances, in participation in talk exchanges that will be profitable only on the assumption that they are conducted in general accordance with the CP and the maxims.”

2.2 The maxims

• What is rational in cooperative enterprise depends on what its goal is.

Grice concentrates on one goal of language use, which is perhaps central: the exchange of information.

Frankly excluded from discussion are other possible purposes of talk, particularly social purposes like “influencing or directing the actions of others” (consider also flattery, soothing, . . . ).

• What guidelines make a conversation directed at the exchange of information “profitable”?

(5) Quality
   a. Do not say what you believe to be false.
   b. Do not say that for which you lack adequate evidence.

(6) Quantity
   a. Make your contribution as informative as is required for the current purpose of the exchange.
   b. Do not make your contribution more informative than is required.

(7) Relation [aka Relevance]: Be relevant.

(8) Manner
   a. Avoid obscurity of expression.
   b. Avoid ambiguity.
   c. Be brief (avoid unnecessary prolixity).
   d. Be orderly.
3 Conversational implicature

• Unless the speaker has given reason to think otherwise, we interpret his contributions to a conversation against the assumption that he is acting in accord with the CP and the maxims.

So if the speaker's contribution of "what is said" is not itself in evident compliance with the maxims, we make inferences about the speaker's beliefs that reconcile his actions with our assumption.

These inferences are "conversational implicatures":

– Inferences about the speaker’s beliefs, made to reconcile his saying of what was said with the supposition that he is participating rationally in the conversation.

"[T]o calculate a conversational implicature is to calculate what has to be supposed in order to preserve the supposition that the Cooperative Principle is being observed [...]"

• This excludes inferences we might make about the speaker for purposes other than making putting his behavior in compliance with the CP.

For example, are the possible inferences in the following scenario made in order to make B seem cooperative? I don’t think so.

(9) a. A: Do you like my new boyfriend?
   b. B: No: he’s the most repulsive idiot I have ever met.
   c. Reasonable inferences for A to make:
      i. B is a jerk.
      ii. B would prefer for me to leave my boyfriend.

• Grice also adds a vague condition on the intentions of the speaker.

Though it is the hearer that supplies the implicated proposition, he talks about the speaker as conversationally implicating a proposition.

And in defining this, he says that speaker S implicates that q only if S:

– "intends [the audience] to think, or is at least willing to allow me to think, that q."
– "is aware that, or thinks that, q is required in order to make his saying [...] p [...] consistent with [the] presumption [that he is observing the CP and the maxims]."
But Grice does not make important use of this, in distinguishing implicatures from any other kind of understood content.

What does it mean to be “willing to allow [the hearer] to think that q”? Isn’t any speaker who does not explicitly deny q therefore “willing to allow [the hearer] to think that q.”

And if a speaker is unhappy with an inference, q, that his statement invites, should we say (following Grice) that he has not conversationally implicated that q? Or just that he was either unwise or uncooperative?

(10)  a. A. Some popes were male.
   b. B. You don’t think all popes were male?
   c. A. Actually, yes, I do think that.

4 Calculating implicatures

• “The presence of a conversational implicature must be capable of being worked out; for even if it can in fact be intuitively grasped, unless the intuition is replaceable by an argument, the implicature [. . .] will not count as a conversational implicature.”

• Hearer’s scheme for calculating the implicature that q:

   1. Assume the speaker S observes the CP.
   2. Assume S is aware of the conversational goals.
   3. Assuming that S thinks that q is necessary to make sense of his statement, given assumptions 1 and 2.
   4. I conclude that S thinks that q.

We can furthermore say that S conversationally implicates that q if S:

   “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; [and] he intends me to think, or is at least willing to allow me to think, that q; . . . ”
• Examples, sorted by how flagrantly or purposefully a maxim is infringed

1. Modest and non-purposeful infringement on a maxim

(11)  a. A. I am out of gas.
     b. B. There’s a gas station around the corner.

(12)  Possible implicature:
      The gas station may be open, and have gas to sell.

(13)  Calculation:
      a. I assume that B is a rational and cooperative participant in this conversation.
      b. I assume that my goal in this conversation (namely to get information that will help me refill my gas tank) is clear to B.
      c. B has said that there’s a gas station around the corner.
      d. B’s statement of this proposition violates RELATION, unless B thinks that q, namely that this gas station is open and has gas that it will sell me.
      e. I see no reason to think that B does not want me to think that he thinks that q.
      f. I conclude that B thinks that q.

Question:

Why shouldn’t A infer that B thinks that the gas station does not have gas to sell?

After all, if B thinks that it does have gas to sell, doesn’t the maxim of Quantity compel him to say so? And consequently, doesn’t B’s silence on this relevant issue implicate that he doesn’t think the station has gas to sell? If not, why not?

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Grice describes the ‘petrol’ example as one where “no maxim is violated, or at least in which it is not clear that any maxim is violated.” But it is only by virtue of the hearer trying to put the speaker’s comment in compliance with RELATION that any implicature is generated. And the hearer would not need to do this if the relevance of what is said were perfectly direct. But in this example it is not perfectly direct, and thus RELATION is violated to some degree, if only a small degree.
2. Nonpurposeful infringement on a maxim, motivated by a “clash”

(14) a. A. What town does John live in?
   b. B. He lives somewhere in the south of France.

(15) Possible implicature:
   B does not know which town John lives in.

(16) Calculation:
   a. I assume that B is a rational and cooperative participant in this conversa-
      tion.
   b. I assume that my goal in this conversation (namely, to find out what town
      John lives in) is clear to B.
   c. Thus John’s response fails to be as informative as is required for current
      purposes, in violation of Quantity.
   d. On the other hand, I assume that B is observing Quality as well, hence
      will not say anything without sufficient evidence.
   e. I can explain B’s violation of Quantity by assuming that he could not
      claim that John lives in town X without violating Quality.
   f. B has given no reason for me not to think that he doesn’t know what town
      John lives in.
   g. I conclude that B doesn’t know what town John lives in.

Question:

Why not sacrifice Quality for Quantity, rather than conversely? Why not just guess
which town John lives in, randomly?

It must be that the maxims are ranked. We expect a speaker to obey Quality above
all else.

Grice himself observes that Manner is evidently ranked lowest: one would not assume
that a speaker will say something irrelevant in order to be perspicuous!

The relative status of Quantity and Relation is not perfectly clear, however.

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\(^2\)See Harnish 1976, ‘Logical form and implicature.’
3. Purposeful and flagrant violation of a maxim (flouting)
   “a maxim is violated for the purpose of getting a conversational implicature by means of something of the nature of a figure of speech.”

(17) Professor to potential employer of his pupil:
   “Dear Sir, Mr. X’s command of English is excellent, and his attendance at tutorials has been regular. Yours, etc.”

(18) Implicature: Mr. X is no good at philosophy.

(19) Calculation:
   a. The professor must be observing the CP and the maxims, “since if he wished to be uncooperative, why write at all?”
   b. The professor knows what sort of information is required for the purposes of a recommendation, and knows that attendance and fluency in English are not among them.
   c. The prof. must know more than he has said, since Mr. X was his pupil.
   d. Thus the professor is flagrantly violating Quantity, and perhaps also Relevance. – Why?
   e. The violation can perhaps be explained by supposing that the professor does not want to say more. – Why?
   f. Perhaps the professor does not want to say more, because what he can say is hurtful.
   g. One comment that might be particularly hurtful, in the given context, is that Mr. X is no good at philosophy.
   h. I conclude that the professor does indeed think that Mr. X is no good at philosophy—and he has given me no reason to doubt this conclusion.

Observation

What Grice actually writes that the professor’s reluctance to say more is:
   “tenable only if he thinks Mr. X is no good at philosophy.”

But this is too strong. He should only have written “if.” For there are innumerable other reasons that the professor might have been reluctant: e.g. he might hate the very talented Mr. X, and want to sabotage his career.

Examples like this in particular make clear that any number of implicatures can be calculated—or at least, can be proposed by the hearer as potential implicatures.

Perhaps Grice would like to say that the only implicatures, from among the potential implicature, are those that the speaker intends, or allows the hearer to believe? Again, it’s not clear.
Other examples to discuss
In each of these cases, Grice’s discussion is not, and has not being, very persuasive.

(20) War is war.

(21) a. A: Mrs. X is an old bag.
    b. B: The weather has been quite delightful this summer, hasn’t it?

(22) Would you like to share with me a refreshing glass of fermented barley malt?

(23) Miss X produced a series of sounds that corresponded closely with the score of ‘Home Sweet Home.’

5 Generalized conversational implicature

- So far we have discussed only particularized conversational implicatures, which are intimately dependent on the particular conversational situation.
  “cases in which an implicature is carried by saying that \( p \) on a particular occasion in virtue of special features of the context, cases in which there is no room for the idea that an implicature of this sort is normally carried by saying that \( p \).”

- Grice also conjectures that there are also generalized conversational implicatures:
  “a certain form of words in an utterance would normally […] carry such-and-such type of implicature.”

- As conversational implicatures, these are not part of the expressions conventional meaning, and they must in principle be calculable. What distinguishes them is, they arise more or less by default.

- Grice’s examples are not very convincing.
  He suggests that indefinites carry a generalized conversational implicature, to the effect that the referent does not stand in an intimate relation to some topical individual.

(24) a. X is meeting a woman this evening
    (not X’s wife, mother, sister, good friend)
b. X went into a house yesterday . . .

But not always:

(25) a. I have been sitting in a car all morning.
b. I broke a finger yesterday.

• Better examples are thus discussed by Horn 1972 and Gazdar 1979:

1. Scalar implicatures

  – If S says that \( \Phi \), he conversationally implicates that he thinks that \( \neg \Psi \), where \( \Psi \) is the stronger statement than \( \Phi \) on a certain *scale*

(26) a. Some popes have been male.
b. Possible implicature: Not all popes have been male.

(27) a. Martians are either green or aggressive.
b. Possible implicature: Martians are never both green and aggressive.

(28) a. The soup is warm.
b. Possible implicature: The soup is not hot.

  – (Horn) Scale: \( \langle \ldots, x_i, x_j, \ldots \rangle \)

The members of the scale are expressions of similar complexity, and with similar meanings

\[ \langle \ldots \text{some, all} \rangle \]
\[ \langle \ldots \text{warm, hot,} \ldots \rangle \]

For each adjacent pair, \( \langle x_i, x_j \rangle \) in the scale, \( x_j \) is the ‘stronger’ expression

Simplifying greatly: if \( \Phi \) is a simple affirmative clause including \( x_i \), and \( \Psi \) is the same clause, except that \( x_j \) replaces \( x_i \): \( \Phi \Rightarrow \Psi \), but not conversely

(29) a. All popes were male \( \Rightarrow \) Some popes were male
b. Some popes were male \( \not\Rightarrow \) All popes were male

  – We’ll talk more about scalar implicature in the coming weeks.
2. Clausal implicature (Gazdar 1979)

A matrix disjunction carries the generalized conversational implicature that the speaker does not know which of the two conjuncts is true.

(30) a. John is either at home or at the supermarket.
    b. Possible implicature: Speaker does not know exactly where John is.

6 Conventional implicatures

• Grice posits a further aspect of meaning that he calls conventional implicature:

  1. Conventionally (hence always) associated with the expression
  2. Not produced by inferences aimed explaining the actions of conversational agents
  3. Not in-principle dependent on calculation
  4. But nevertheless not part of “what is said in the favored sense”

• Grice’s example:

(31) He is an Englishman; he is, therefore, brave.

  “I do not want to say that my utterance of this sentence would be, strictly speaking, false should the consequence in question fail to hold.”

(32) Al is short but handsome.

• As Grice defines this category, it would seem to include everything we call presuppositions, which are usually ‘defined’ as propositions which must be taken for granted, before the truth or falsity of the statement can come into question.

(33) The present king of Canada is (not) a moose.

Many linguists have assumed further that Grice’s category contains nothing but presuppositions.

• Recently, however, Chris Potts and others have defended conventional implicatures as a category distinct both from presuppositional and asserted content. For Potts, featured members of this category are appositives and epithets:
Dad said that John, who is of course a moron, said about Dad’s car that the lousy piece of junk was the finest ride he had ever seen.

These express judgments of the speaker, which are neither presupposed as background information, nor entered into the asserted content of the local clause. And yet they do so in virtue of their conventional meaning (and syntactic position)—not by virtue of Gricean reasoning.

7 General concerns

1. Can the system of maxims be simplified, made less redundant? (Horn, Sperber & Wilson)

2. Is there anything to say about the source of the inference that yields the implicature? (Sperber & Wilson)

3. How can you tell when a certain implication is a conversational implicature, rather than a bit of conventional meaning? (Sadock)

8 Distinguishing conversational implicatures

- Sadock isolates these proposed criteria for conversational implicatures from conventional implications:

  1. Calculability
     "Conversational implicata are capable of being ‘worked out’ on the basis, inter alia, of the Cooperative Principle."

  2. Nondetachability
     Synonyms have the same conversational implicatures.

     (35)  a. Some popes were male.
            b. At least one pope was male.

  3. Cancellability
     A conversational implicature can always be immediately denied by the speaker.

     (36)  a. Some popes were male.
            b. In fact all popes were male.

  4. Nonconventionality
5. Not part of what is said

6. Indeterminacy

- Problems with the latter 3 properties, as criteria of distinguishing implicatures from conventional implications

3. Cannot be used to distinguish implicature from conventional meaning.
4. Likewise, cannot be used to distinguish implicature from conventional meaning, which largely determines ‘what is said’
5. Some generalized implicatures seem quite determinate. Inversely, “if reference is part of meaning, then what is said in using a definite pronoun or a demonstrative is also indeterminate.”

- Problems with the other three requirements, which at least have content

1. Calculability
   - Not a sufficient condition for being a conversational implicature, since e.g. one can sometimes arrive at the conventional meaning of an idiom by reasoning.
   - Besides, given how unconstrained and powerful the scheme of calculation is, we have to worry that “nearly anything can be worked out with [the maxims] on the basis of nearly any meaning.

2. Nondetachability
   - MANNER-based implicatures are detachable.
   - Both asserted and presupposed content are also nondetachable, at least if being synonymous means preserving asserted and presupposed content.
   - How can you be certain of synonymy?
   - Is MANNER so important that it trumps nondetachability in examples like this:
     (37)  
   a. Some popes were male. \(\leadsto\) not all popes were male
   b. Some and perhaps all popes were male. \(\not\leadsto\) not all popes were male
3. Cancellability
   
   – In general this is a good test—if our only goal is to distinguish conversational implicatures from entailments and presuppositions of what we presume to be an unambiguous expression.

   – But by itself, it does not allow us to distinguish an implicature-hypothesis from an ambiguity-hypothesis:

   (38) Martians are either green or aggressive, but not both.

       a. or means ‘\( \lor \).’
          The second clause cancels the implicature that only one of the two disjuncts is true

       b. or means either ‘\( \lor \)’ or ‘\( \lor \)’
          The second clause disambiguates

   • Sadock contributes his own test: **nonredundant reinforcement**

   (39) Some popes were male, but not all.

   (40) ?? The present king of Canada is a moose, and Canada presently has a king.