

# Mind, Matter, and Language

## Lecture 15: Implicature

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18 October 2019

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## A problem

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## A problem

Let's say we want to give a systematic account of a wide range of speech acts, many of which involve conveying information.

Part of our account is a compositional semantics that specifies truth-conditions for complex expressions based on their parts and syntactic structure.

We predict that when a declarative sentence is uttered, the conveyed information is given by the compositional truth-conditions of the sentence.

**Problem:** In fact, what is conveyed is often more, or altogether different.

## A problem

- ‘Bob is going out with a woman tonight.’
- ‘Jenny is a great philosopher.’ — ‘Year, she’s, er, very well-read.’
- ‘Oh, I love roses!’
- ‘Can you pass me the salt?’

# Entailments

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## Entailments

An easy case:

A: 'Is there any beer left?'

B: 'I just drank the last bottle.'

Conveys: There is no beer left.

This is **entailed** by what B said.

If  $P$  (obviously) entails  $Q$ , a hearer who learns  $P$  can be expected to figure out  $Q$ .

So it is no mystery that an assertion of  $P$  can (also) convey  $Q$ .

Another easy case:

A: 'Is anyone here?'

B: 'The electricity is out.'

Conveys: Someone/B is here.

This is not entailed by what B said.

But it is entailed by the fact that B said something.

One more easy case:

A: 'Will C be at the meeting today?'

B: 'She is still in Rome.'

Conveys: C won't be at the meeting.

This is not entailed by what B said.

But it is entailed by what B said in combination with assumptions that are taken for granted in the utterance context.



## A general pattern:

- A speaker utters a sentence  $S$  with literal meaning  $P$ .
- The hearer can infer more than  $P$  by drawing on other information she has about the utterance situation.
- The speaker can predict that the hearer would draw these further inferences; so she can use an utterance of  $S$  to convey more than  $P$ .

# Conversational implicature

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# Conversational implicature

Paul Grice (1975) distinguished

- **what is said**: determined by general compositional rules
- **what is implicated**: what is conveyed in addition to (or instead of) what is said.

## Conversational implicature

*Suppose that A and B are talking about a mutual friend, C, who is now working in a bank. A asks B how C is getting on in his job, and B replies, 'Oh quite well, I think; he likes his colleagues, and he hasn't been to prison yet.' At this point, A might well inquire what B was implying, what he was suggesting, or even what he meant by saying that C had not yet been to prison. [...] It is clear that whatever B implied, suggested, meant in this example, is distinct from what B said, which was simply that C had not been to prison yet.*

Grice, "Logic and Conversation" (1975)



## Conversational implicature

An important class of implicatures are **conversational implicatures**.

These are inferred from an utterance based on the background assumption that the speaker is trying to make a useful contribution to the current conversation.

## Conversational implicature

The overarching norm for utterances is **The Cooperative Principle**:

*Make your contribution such as it 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, "Logic and Conversation" (1975)



Grice breaks down the Cooperative Principle into four sub-norms:

- **Quality:** Contribute only what you know to be true.
- **Quantity:** Make your contribution as informative as is required, and no more informative.
- **Relevance:** Make your contribution relevant.
- **Manner:** Avoid obscurity; avoid ambiguity; be brief; be orderly.

## Conversational implicature

An utterance **con conversationally implicates**  $Q$  iff (roughly)  $Q$  follows from the utterance together with the assumption that the speaker is cooperative.

More precisely, a speaker **con conversationally implicates**  $Q$  by an utterance iff:

- (i) It is assumed that the speaker is observing the Cooperative Principle.
- (ii) In order to maintain this assumption it must be supposed that the speaker believes  $Q$ .
- (iii) The speaker expects the hearer to notice (ii).



## Conversational implicature

A: 'In which city does C live?'

B: 'He lives somewhere in the South of France.'

Implicature: B doesn't know where in the South of France C lives.

- B didn't say in which city C lives.
- If B knew in which city C lives but didn't say it, she would not be cooperative.
- B is cooperative.
- So: B doesn't know where in the South of France C lives.

## Conversational implicature

A: 'Where did you go yesterday?'

B: 'To Glasgow.'

Implicature: B didn't go to other noteworthy places.

- If B had gone to other noteworthy places but only mentioned Glasgow, she would not be cooperative.
- B is cooperative.
- So: B didn't go to other noteworthy places.

## Conversational implicature

A: 'How is C getting on in his new job?'

B: 'Quite well. He likes his colleagues, and he hasn't been to prison yet.'

Implicature: [B thinks that] there is a significant risk or expectation that C would go to prison.

- It is not worth saying (relevant) that C hasn't been to prison yet unless there is a significant risk or expectation that C would go to prison.
- B is cooperative.
- So there is a significant risk or expectation that C would go to prison.

## Conversational implicature

A: 'Did they stay together?'

B: 'Yes. They married and had a child.'

Implicature: The marriage came before the child.

- B would violate the rule to “be orderly” if she described the two events in reverse chronological order.
- B is cooperative.
- So the two events occurred in the order in which they are described.

## Conversational implicature

A: 'Where is Bob?'

B: 'He's either in the basement or in his room.'

Implicature: B doesn't know whether Bob is in the basement or in his room.

- If B knew that Bob is in the basement, it would have been more informative and relevant to say so.
- B is cooperative.
- So B doesn't know whether Bob is in the basement.

## Conversational implicature

A: 'I'm looking for a petrol station.'

B: 'There's one just around the corner.'

Implicature: [B believes that] the petrol station around the corner is open.

- If B didn't believe that the station is open, her utterance would not be cooperative (relevant).
- B is a cooperative speaker.
- So [B believes that] the station is open.

## Conversational implicature

A: 'The tickets are £10.'

B: 'I have £9.'

Literal meaning: B has £9 or more.

Implicature: B does not have more than £9.

- If B had more than £9, it would have been informative and relevant to say so.
- B is a cooperative speaker.
- So B does not have more than £9.

## Conversational implicature

A: 'The tickets are £9.'

B: 'I have £9.'

Literal meaning: B has £9 or more.

~~Implicature: B does not have more than £9.~~

- ~~• If B had more than £9, it would have been more informative and relevant to say so.~~
- B is a cooperative speaker.
- ~~• So B does not have more than £9.~~



## Conversational implicature

A. How did the students do on the exam?

B. Some of them passed.

Implicature: Not all students passed.

- If B knew that all (or most) students passed, it would have been more informative and relevant to say so.
- B is a cooperative and well-informed speaker.
- So it is not the case that all (or most) students passed.

## Conversational implicature

Implicatures can typically be **cancelled**.

A. How did the students do on the exam?

B. Some of them passed. In fact all of them passed.

Compare:

A. How did the students do on the exam?

B. None of them passed. In fact all of them passed.

## Conversational implicature

Implicatures can typically be **cancelled**.

A: 'Where is Bob?'

B: 'He's either in the basement or in his room. I'm not saying more.'

A: 'I'm looking for a petrol station.'

B: 'There's one just around the corner. But I'm not sure if it's open.'

## Conversational implicature

Some conversational implicatures arise through blatant flouting of a maxim, relying on the speaker to guess why the maxim was flouted.

A: 'Mrs. X is an old bag.'

B: 'The weather has been quite delightful this summer hasn't it?'

Implicature: A's remark was inappropriate and should not be discussed.

- B flouted the maxim of Relevance, abruptly changing the topic.
- But B is cooperative.
- So he probably thought it would have been inappropriate to continue the topic.
- So A's remark was inappropriate.

## Conversational implicature

B: 'Miss Singer produced a series of sounds corresponding closely to the score of an aria from 'Rigoletto''

Implicature: Miss Singer did not sing well.

- B flouted the maxim of Manner, giving an unusually roundabout and technical description.
- But B is cooperative.
- So she probably thought Miss Singer's performance was unusual, that it does not deserve to be called 'singing'.
- So Miss Singer did not sing well.

## Conversational implicature

Irony might arise in this way.

A: You could win the lottery.

B: Win the lottery? That's a *really helpful* suggestion.

Implicature: A's suggestion is not helpful.

- Since A's suggestion is clearly not *really helpful*, B flouted the maxim of Quality: she said something that's clearly false.
- But B is cooperative.
- So she probably wanted to draw attention to the fact that A's suggestion was unhelpful.

**Problem:** How exactly is the hearer supposed to derive the implicature?

- Why does a speaker who says something blatantly false “probably want to draw attention to that falsehood”?

## Conversational implicature

Similar problems arise for other examples:

A. How did the students do on the exam?

B. Some of them passed.

Implicature: Not all students passed.

- If B knew that all students passed, it would have been more informative and relevant to say 'all students passed'.
- B is a cooperative and well-informed speaker.
- So it is not the case that all students passed.



## Conversational implicature

Similar problems arise for other examples:

A. How did the students do on the exam?

B. Some of them passed.

Implicature: It is not the case that 25% of the students passed??

- If B knew that 25% of the students passed, it would have been more informative and relevant to say '25% passed'.
- B is a cooperative and well-informed speaker.
- So it is not the case that 25% passed.

## Current view:

- Many implicatures cannot be derived from general cooperativeness assumptions alone.
- We also need rules for what counts as a relevant alternative a speaker might have uttered.
- We might need further rules like: if a speaker says something obviously false, they probably mean the opposite.
- Several authors have suggested a semantic mechanism for deriving (certain) implicatures that does not draw on cooperativeness assumptions at all.