Conversational implicature derivations and tests

Chris Potts, Ling 130a/230a: Introduction to semantics and pragmatics, Winter 2024

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1 Derivations

(1) A: How was Sue's work this quarter.

B: Sue's work was good.

Conversational implicature: Sue's work was not excellent this quarter.

Contextual assumptions and calculation:

a. B has complete knowledge of the quality of Sue's work for the quarter.

b. B is cooperative at least insofar as they are obeying Quantity and Quality.

c. By (b), B will assert what is maximally relevant, informative, and true.

d. By the assumption that *excellent* entails *good* (but not the reverse), the proposition that Sue's work was excellent is more informative than the proposition that Sue's work was good.

e. Given A's question, the proposition that Sue's work was excellent is relevant.

f. Thus, B must lack sufficient evidence to assert that Sue's work was excellent.

g. By (a), B must lack evidence for this proposition because it is false.

What happens if we drop assumption (a), say, because B doesn't have the grade sheet handy and remembers only that everyone did fine?

(2) A: Do you have any dogs?

B: I have three dogs.

Conversational implicature: the speaker does not have more than three dogs.

Assumed semantics:

- $[\![\textit{four dogs}]\!] = \lambda Y(\mathsf{T} \text{ if } |[\![\textit{dog}]\!] \cap Y| \geqslant 4, \text{ else } \mathsf{F})$
- $[\![\textit{three dogs}]\!] = \lambda Y(\mathsf{T} \text{ if } |[\![\textit{dog}]\!] \cap Y| \geqslant 3, \text{ else } \mathsf{F})$
- Thus, $[\![\textit{four dogs}]\!]$ entails $[\![\textit{three dogs}]\!]$

Contextual assumptions and calculation:

a. B has complete knowledge of number of dogs they have.

b. B is cooperative at least insofar as they are obeying Quantity and Quality.

c. By (b), B will assert what is maximally relevant, informative, and true.

d. By the semantic assumptions for $[\![\textit{four dogs}]\!]$ and $[\![\textit{three dogs}]\!]$, it would be more informative to say "I have four dogs".

e. Given A's question, the proposition that B has four dogs is relevant.

f. Thus, B must lack sufficient evidence to assert that they have four dogs.

g. By (a), B must lack evidence for this proposition because it is false.

h. It follows by entailment from (g) that the speaker doesn't have n dogs for $n > 3$.

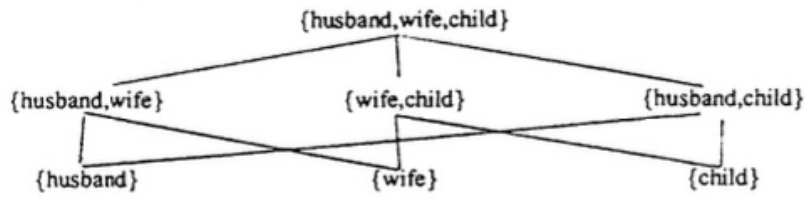
What happens if we drop assumption (b), say, because B's building allows a maximum of three dogs and B doesn't want to get in trouble.

(3) A: Do you speak: Portuguese?

B: My husband does.

Conversational implicature: no one in the speaker's family except their husband speaker Portuguese

This example is from Hirschberg's (1985) corpus, and Hirschberg offers the following ordering as a framework for thinking about informativity/relevance in this context:



Contextual assumptions and calculation:

a. B has complete knowledge of which languages they and their family members speak.

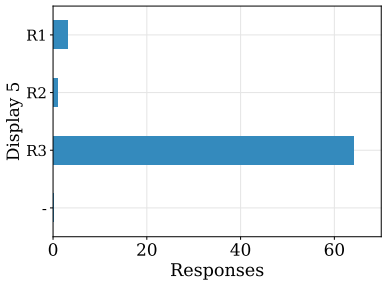
b. B is cooperative at least insofar as they are obeying Relevance, Quantity, Quality.

c. By (b), B will go as high as they can in the informativity/relevance ordering above without violating quality.

d. Thus, since B chose the {husband} node, all the nodes above it are blocked by quality.

e. It follows from this pragmatic inference that the nodes {wife} and {child} are also blocked by quality.

(4)



Conversational implicature: in the listener condition, the speaker is referring to R3.

Contextual assumptions and calculation:

a. *Contextual premise*: The speaker has a single intended referent in {R1,R2,R3}, which she can identify, and the listener knows this.

b. *Contextual premise*: The speaker is cooperative: she would like to convey to the listener which referent she has in mind.

c. *Contextual premise*: The only messages the speaker can produce are “glasses”, “hat”, and “mustache”.

d. Suppose the speaker intended R2. This is a quality violation, contradicting (b).

e. Suppose the speaker intended R1. The message “hat” is more informative in this context, in that it identifies a unique referent. By (b), the speaker will be as informative as is required. Thus, had the speaker intended R1, she would have said “hat”.

f. This leaves R3 as the speaker’s intended referent, by (a).

2 Testing

(5) **Example:** The food was palatable.

a. **Target meaning**: *the food was not delicious*

b. **Cancellation:** The food was palatable – in fact, delicious!

c. **Suspension:**
The food was palatable, maybe even delicious.
The food was palatable, but maybe not delicious.

d. **Reinforcement:** The food was palatable but not delicious.

(6) **Example:** Most students attended the review session.

a. **Target meaning**: *Not all students attended the review session.*

b. **Cancellation:** Most (in fact all) students attended the review session.

c. **Suspension:**
Most (and possibly all) students attended the review session.
Most (but probably not all) students attended the review session

d. **Reinforcement:** Most (but not all) students attended the review session.

(7) **Example:** Carol managed to win the race

a. **Target meaning**: *Carol won the race*

b. **Cancellation:** #Carol managed to win the race, but she didn't win it.

c. **Suspension:**
#Carol managed to win the race, and maybe she did win it.
#Carol managed to win the race, but maybe she did not win it.

d. **Reinforcement:** #Carol managed to win the race, and she won it.

(8) **Example:** Sam refuted the hypothesis that Jesse stole the cookies.

a. **Target meaning**: *Jesse didn't steal the cookies*

b. **Cancellation:** ??Sam refuted the hypothesis that Jesse stole the cookies, but Jesse did steal the cookies

c. **Suspension:**
??Sam refuted the hypothesis that Jesse stole the cookies, but maybe Jesse did steal them.
??Sam refuted the hypothesis that Jesse stole the cookies, and maybe Jesse did not steal them.

d. **Reinforcement:** ??Sam refuted the hypothesis that Jesse stole the cookies, and Jesse did not steal them.