# Interfaces (cont'd)

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## 1 Grice on implicature

## 1.1 Cooperative communication

Utterances often (always) convey meanings that differ from what the utterance conventionally encodes, sometimes substantially (e.g. ugly dogs).

The gulf between literal and non-literal meaning is Grice's distinction between what is said and what is meant.

Rather than throwing up our hands, Grice says we can chalk many such cases up to the Cooperative principle (CP):

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.

Maxims that flow from CP: Quantity (give the amount of information you should), Quality (proscribes lying, bullshitting), Relation (be relevant), Manner (e.g. be brief).

Grice argues the maxims to have reflexes in non-linguistic domains. For instance, "[I]f I need a spoon, I do not expect a trick spoon made of rubber" (p.47), cf. Quality.

That's important. The maxims (and CP) are *non-linguistic*, i.e. reflect general facts about social interaction rather than something domain-specific to language. Certainly not a part of semantics proper.

## 1.2 Examples

People behave in accordance with CP and assume their interlocutors are behaving in accordance with it (and this iterates). This can give rise to inferences beyond literal meaning.

#### Relevance:

(1) Q: Does Donnie have an interview coming up? A: He just got a haircut.

Maxim clash (Quantity vs. Quality):

(2) Q: Where does Philippe live? I need to mail him something. A: Somewhere in the south of France.

## 1.3 Scalar implicature

Case study: scalar implicatures.

At the beginning of L&C, Grice mentions that a proper understanding of how things end up being implicated helps us reconcile the slipperiness of linguistic meaning with the sorts of meanings exploited in formal enterprises like logic.

- (3) a. Jessica or John will come to the party.
  - b. If Jessica or John comes, the party will be great.
- (4) a. I have two kids.
  - b. If you have two kids, you can claim this deduction.

Hypothesis: meaning of *or* is logical disjunction:

$$[X \text{ or } Y] = 1 \text{ iff } [X] = 1, [Y] = 1, \text{ or } both.$$

## Reasoning:

- i. The speaker (S) said p.
- ii. S could have uttered some stronger, relevant  $p^+$  but didn't.
- iii. Therefore (given Quantity, Quality), S must not believe  $p^+$ .
- iv. Assuming S is "opinionated", S must believe not  $p^+$

Problem 1: symmetry. Why isn't *at least one but not both*  $(or^*)$  an alternative to or? X or Y is certainly more informative than X or Y. Would deprive us of the very inference we thought we'd secured. (Exercise: what is the implicature generated if  $or^*$  is a real alternative to or?)

Seems to turn on what is relevant. This has Grice quite exercised throughout.

Problem 2: embedded implicatures. Grice predicts: not everyone bought both. But seems stronger: nobody bought both.

(5) Everyone either bought a sandwich or a soda.

So there might be more work to do for scalar items. Still, Grice's basic argument is powerful and undoubtedly correct: pragmatics, in particular the CP, helps bridge the gap between what is said and what is meant.

## 2 Stalnaker on presupposition

#### 2.1 Intro

Some examples of "presupposition triggers":

- (6) The queen of England is bald.
  - --→ There is a (unique) queen of England.
- (7) Sam regrets that he voted for Nixon.
  - --→ Sam voted for Nixon.
- (8) Ted Kennedy is the only person who could have defeated Nixon.
  - --→ Ted Kennedy could have defeated Nixon.
- (9) Chris just quit smoking.
  - --→ Chris used to smoke.

Worth recalling our tests: negation, questions, ....

Semantic analyses presuppositions impose meaningfulness conditions on their sentences. A presupposition has to hold for a sentence to mean *anything* (notice that this follows from the definition of presupposition mooted on Tuesday).

Background notion: common ground. Very roughly: what speakers take for granted in a conversation, assume is being taken for granted by their interlocutor(s). The common ground is, in other words, everything *presupposed by speakers*.

Stalnaker How far can we get just using a notion of *pragmatic presupposition*, i.e. one on which presuppositions are *something speakers do* with reference to the common ground, rather than things sentences have?

My point is to make it plausible that, in some cases at least, such explanations might be given, and to argue that where they can be given, there is no reason to build specific rules about presuppositions into the semantics.

In other words, where are the fault lines where linguistic convention ends and pragmatics begins?

### 2.2 Arguments

Benefit 1: presuppositions vary based on context and other factors without needing to change what is said. Relatedly, can make some sense of gradability/strength of presupposition:

(10) Did you recently just quit smoking or something?

Benefit 2(?): on the semantic account of presupposition, presupposition and entailment are "incompatible". (Only so if you take *entailment* as synonymous with *assertion*.)

Benefit 4: Prospects of Gricean *explanation* for certain facts in terms of general strategies for/features of communication.

Case study 1: factives versus semi-factives. Different *projective behavior* in suppositional contexts.

Karttunen has to stipulate a semantic distinction and different projection rules.

Stalnaker points out a subtlety in the data. Projection depends in part on person features:

(12) If 
$$\underline{John}$$
  $\begin{cases} realizes \\ discovers \end{cases}$  later that he didn't tell the truth, he'll confess.

(13) Did 
$$\underline{\text{you}}$$
 { realize discover you hadn't told the truth?

Case study 2: complex sentences (conjunction and conditionals).

- (14) Anna's  $\begin{cases} \text{vegan} \\ \text{married} \end{cases}$  and her husband's a great cook.
- (15) If Anna's  $\begin{cases} \text{vegan} \\ \text{married} \end{cases}$  her husband's a great cook.

Karttunen stipulates that second sentence's presuppositions bubble up unless entailed by first. (Notice that this requires some outdated assumptions about how marriage works..)

Stalnaker replies: once you successfully assert something, it's in the common ground (therefore, presupposed). Conditionals just involve doing that suppositionally, i.e. temporarily.

Not all projective phenomena are obviously amenable to this strategy:

- (16) John's a scuba instructor, and his wetsuit is really nice.
  - --→ If someone's a scuba instructor, they have a wetsuit.
- (17) Either there's no bathroom here, or the bathroom is in the basement.
  - --→ If there's a bathroom, it's in the basement.
- (18) Each of those boys $_i$  should leave his $_i$  camera at the front desk.
  - --→ Each of those boys has a (unique) camera.

General moral: some things you're tempted to treat as semantic aren't. Plausibly, the factive/semi-factive distinction vis à vis presupposition is such a case.

However: why are some sequence of words conventionally associated with speakers presupposing certain things? Also known as the *triggering problem*.

Stalnaker sees a role for lexical specifications for presuppositions that aren't part of the semantics (facts about usage). I.e. people can only use *X* if they presuppose so and so (cf. *X* presupposes so and so).

Even if presupposition is in the end best analyzed as a semantic phenomenon (as seems likely, at least in part), it is valuable and advisable to not hoover *everything* up into the theory. The factive/semi-factive case seems pretty compelling.

## 3 For next week (intro'd today if time)

Sets, key concepts: intersection, union, complementation.

Ordered pairs, relations and functions: relations are sets of ordered pairs, functions are relations which only have one of each first member

Types of relations (injective, surjective, bijective). Characteristic functions on sets.

Types of binary relations on sets: reflexive, irreflexive, symmetric, antisymmetric, transitive, total.

### Reading:

- i. Heim & Kratzer Ch. 2
- ii. You should start working through Allwood et al. Chs. 1-5. Try to get at least as far as the end of Chapter 3.

No homework this week.