

# Stalnaker (1974), (1998) and (2002)

## 8th Session

Elena Castroviejo Miró

June 3 2009

Goal: discuss a pragmatic account of presupposition and the notion of *common ground*, and elaborate on the effect that assertions have on context.

## 1 Papers

### 1.1 Reference

Stalnaker, Robert C. (1974) Pragmatic presuppositions. M. Munitz and P. Unger, eds., *Semantics and Philosophy*. New York: New York University Press.

Stalnaker, Robert C. (1998) On the Representation of Context. *Journal of Logic, Language and Information*, **7**.

Stalnaker, Robert C. (2002) Common Ground. *Linguistics & Philosophy*, **25**.

### 1.2 Guidelines

- What are the main claims of the pragmatic approach to presupposition?
- What are the examples that seem to show that presupposition may be context dependent?
- What are factive verbs? And semi-factive verbs? What is the difference between Karttunen's account and Stalnaker's?
- What is the common ground? And the context set?
- How does an assertion affect discourse?
- What is accommodation?

## 2 Goals

- Present a pragmatic approach to presupposition.
- Provide the sketch of an account of the effect assertions have in discourse under a possible worlds semantics perspective.

### 3 Pragmatic presuppositions

Distinction between assertion and presupposition:

- (1) The king of France is wise.
  - a. I presuppose that France has a unique king.
  - b. I assert that he is wise.

First approximation to presupposition: “ $Q$  is presupposed by an assertion that  $P$  just in case under normal conditions one can reasonably infer that a speaker believes that  $Q$  from either his assertion or his denial that  $P$ .”

#### 3.1 Two approaches to presuppositions

What exactly determines that there is a unique king of France?

- Semantic presupposition: A sentence  $S$  presupposes that  $\phi$  if and only if  $S$  is either true or false only if it is true that  $\phi$ . (Relation between the truth conditions of two sentences, such that  $\phi$  needs to be true in order for  $S$  to have a truth value. When a presupposition is false, the sentence lacks a truth value.)
  - (2)
    - a. The king of France is wise.  $\Rightarrow$  France has a unique king.
    - b. John does not regret voting for Nader.  $\Rightarrow$  John voted for Nader.
    - c. It was Harry who solved the problem.  $\Rightarrow$  someone solved the problem.
- Tests for presupposition:
  - (3)
    - a. Negation: The king of France is not wise.
    - b. Question: Is the king of France wise?
    - c. Modals: Possibly the king of France is not wise.
    - d. Antecedent of a conditional: If the king of France is wise, then the country will be successful.
  - (4) Wait a minute!
    - a. A: You know, the king of France is really wise.
    - b. B1: Wait a minute! I didn't know that France had a king.
    - c. B2: # Wait a minute! I didn't know he was wise.
- Pragmatic presupposition: background beliefs of the speaker, propositions s/he takes for granted, or seems to take for granted, in making his/her statement.
  - (5)
    - a. Sentence  $A$  pragmatically presupposes  $B$  iff it is felicitous to utter  $A$  in order to increment a common ground  $C$  only in case  $B$  is already entailed by  $C$ . (Karttunen and Peters 1975, p.268)
    - b. Sentence  $x$  presupposes that  $Q$  just in case the use of  $x$  to make a statement is appropriate (or normal, or conversationally acceptable) only in contexts where  $Q$  is presupposed by the speaker. (Stalnaker 1974, p.50)

Goal and claim:

- Argue against the claim that the semantic account is the one relevant to giving rigorous theoretical explanation to linguistic phenomena.
- The pragmatic account can provide intuitively natural explanations to facts that would be puzzling under the semantic account.

## 3.2 Presuppositions in discourse

- Truisms about communication:
  - Communication (linguistic or not) takes place against a background of beliefs and assumptions that are shared by the speaker and the audience (the common ground).
  - The more information we take for granted, the more efficient communication is, and if some of these facts could not be taken for granted, we might not be able to communicate at all (e.g., the purpose of conversation is to exchange information, we speak the same language, etc.).
- The common ground determines what is said:
  - In order to avoid being redundant (because I am a cooperative speaker, as Grice would put it), I won't say things that are taken for granted.
  - I won't say things that are incompatible with the common ground. That would be self defeating.
- My aim in making assertions: “[...] to distinguish among the possible situations which are compatible with all the beliefs or assumptions that I assume that we share.”
- Definition of “common *background*”: “[...] the possible situations which I intend to distinguish among with my assertions, and other speech acts. Propositions true in all of them are propositions whose truth is taken for granted.”
- Increment of information: if the asserted proposition is accepted by the addressee, then it becomes part of the set of shared assumptions, which is increased in the course of conversation.

## 3.3 The notion of pragmatic (speaker) presupposition

- A first approximation very much related to the notion of common belief: “A proposition  $P$  is a pragmatic presupposition of the speaker in a given context just in case the speaker believes or assumes that  $P$ , assumes or believes that his addressee assumes or believes that  $P$ , and assumes or believes that his addressee recognizes that he is making these assumptions, or has these beliefs.”
  - Speaker presupposition is a propositional attitude of the speaker (i.e., a relation between the speaker and a proposition such that the speaker believes this proposition is taken for granted).

- “To presuppose something is to take it for granted, or at least to act as if one takes it for granted, as background information - as *common ground* among the participants in the conversation.” (Stalnaker 2002)
  - A public attitude: one presupposes that  $\phi$  only if one presupposes that others presuppose it as well.
- Remark 1: It is persons (not propositions or speech acts) that have or make presuppositions.
- (6) Possible definitions of pragmatic presupposition.
- a. A sentence  $x$  presupposes  $Q$  just in case the use of  $x$  to make a statement is appropriate (or normal, or conversationally acceptable) only in contexts where  $Q$  is presupposed by the speaker.
  - b. The statement that  $P$  (made in a given context) presupposes that  $Q$  just in case one can reasonably infer that the speaker is presupposing  $Q$  from the fact that the statement was made.
  - c. The statement that  $P$  (made in a given context) presupposes that  $Q$  just in case it is necessary to assume that the speaker is presupposing that  $Q$  in order to understand or interpret correctly the statement.

They are facts about the constraints imposed by what is said on what is appropriately presupposed by the speaker according to various standards of appropriateness.

All the facts can be explained directly in terms of the underlying notion of speaker presupposition, without introducing the intermediate notion of a presupposition holding between sentences and propositions.

- Remark 2: We need to qualify the first approximation. It is problematic in cases where other interests besides communication are being served by the conversation; presuppositions don't necessarily coincide with shared beliefs.
- If one is talking for some other purpose than communication, being diplomatic, polite, discreet, kind, etc. If we are just killing the time (e.g., conversation with your barber), we can pretend the common ground is smaller than it actually is, and say such things as “Cold, isn't it?”. “We are pretending to communicate, and our pretense can be explained in terms of the same categories as serious exchange of information.”
  - The speaker may act as if certain propositions were part of the common ground even if s/he knows they are not, so the proposition is communicated indirectly. These are situations where it would be indiscreet, insulting, tedious or rhetorically less effective to assert openly a proposition. Presuppositions become thus informative (see section 4.3.).
- Conclusion: Presupposition is not a mental attitude like believing, but rather a linguistic disposition “[...] to behave in one's use of language as if one had certain beliefs, or were making certain assumptions.”

### 3.4 Advantages of the approach

1. If presuppositions are independent of truth values, then it can be explained that they vary from context to context, or depending on word order, without it having an effect on the truth conditions of the sentence.

- (7) My cousin isn't a boy anymore.
- a. (Context A) assertion: He is a grown-up; presupposition: he is a male.
  - b. (Context B) assertion: She has changed sexes; presupposition: she is young.

2. One can separate entailment relations from presupposition. On the semantic account, entailment and presupposition are parallel and incompatible.

- $A$  presupposes that  $B$  iff  $B$  is necessitated by both  $A$  and its denial.
- $A$  entails  $B$  iff  $B$  is necessitated by  $A$  but not by its denial.

- (8) Sam realizes that  $P$ .

Does (8) entail that  $P$  or presuppose that  $P$ ? Under the pragmatic account, one may say that when a presupposition is required in the making of a statement, what is presupposed is also entailed. (8) entails  $P$  (the claim is false unless  $P$  is true), but its negation does not (in uttering *Sam doesn't realize that  $P$* ,  $P$  doesn't need to be true to make the claim true.). This is compatible with the idea that one is supposed to presuppose  $P$  whenever one asserts or denies that Sam realizes it.

3. Constraints imposed by a statement are a matter of degree. In (9-a) we are forced to presuppose that Nixon won the election. In (9-b) there is a suggestion that the speaker presupposes that Nixon didn't win, but the right context and intonation may overrule this suggestion.

- (9)
- a. Sam was surprised that Nixon won the election.
  - b. If Eagleton hadn't been dropped from the Democratic ticket, Nixon would have won the election.

4. It allows us to explain the facts in terms of general assumptions about rational strategy of information exchange. We don't need to hypothesize that presupposition requirement in certain words should be included in the dictionary, and hence we avoid complicating the semantics or the lexicon.

- (10)  $x$  knows that  $P$ .

In most cases, when one asserts or denies that (10), s/he presupposes that  $P$ . Can we explain this without building it into the semantics of the verb? Imagine the following cases, where the truth of  $P$  is disputed, and assume that the speaker is cooperative and communicates in an orderly way.

- To utter (10) would be misleading, since we wouldn't know whether the speaker wants to make a claim about the truth of  $P$  or about the epistemic

situation of  $x$ , and we wouldn't understand what his/her purposes in discourse would be.

- If the speaker negates (10) to convey that s/he believes  $P$  is false or that  $x$  doesn't believe that  $P$ , then this statement would be "gratuitously weak".

### 3.5 Example 1: Factive verbs

(Based on Karttunen (1971))

- Among verbs that take *that*-complements (i.e., *believe*, *know*, *intend*, *see*) we can distinguish a subclass known as *factive predicates* (e.g., *know*, *regret*, *discover*, *see*, to be contrasted with *believe*, *intend*, *assert*, *claim*).

- If  $V$  is a factive verb,  $x V$ 's *that*  $P$  presupposes (and entails) that  $P$ .

(11) Jones regrets/realizes/discovered or doesn't regret/realize/ didn't discover that Obama won the election.  $\Rightarrow$  Obama won the election.

- Karttunen's classification of factive verbs: semi factives (e.g., *know*, *realize*) vs. full factives (e.g., *regret*, *forget*, *resent*). Full factives presuppose that  $P$  even when  $P$  is introduced in the antecedent of a conditional or within a claim that *might* be true, whereas semi factives presuppose that  $P$  only under assertion and denial.

(12) a. Sam may regret that he voted for Nixon.  
b. If Sam regrets that he voted for Nixon, then he's a fool.

(13) If I regret/realize/discover that I have not told the truth, I will confess it to everyone.

- Karttunen's claim: there is weak and strong semantic presupposition. If  $P$  is necessitated by *Possibly*  $Q$ , and by *Possibly not*  $Q$ , then  $Q$  strongly presupposes that  $P$ .

- Challenge of both data and claim.

– In some examples, *realize* and *discover* seem to behave like *regret*:

(14) a. If Harry discovers that his wife is playing around, he'll be upset.  
b. If Harry had discovered that his wife was playing around, he would have been upset.  
c. If Harry had realized that his wife was playing around, he would have been upset.  
d. Harry may never discover that his wife has been playing around.  
e. Harry may never discover that his wife has been playing around.

– There is an alternative explanation for Karttunen's facts: if the speaker manifestly supposes something, then s/he is not presupposing it at the same time. Supposing that later s/he will realize that  $P$  means that it is still an open question whether  $P$ , which implies that the speaker does not know that  $P$ . If s/he cannot be assuming that s/he knows that  $P$ , then s/he cannot assume that  $P$ .

- Other data where *realize* patterns with *regret* rather than *discover*

(15) Did you regret/realize/discover that you had not told the truth?

With *discover* the speaker can't make the presupposition without assuming an affirmative answer to the question s/he's asking. This depends on the particular semantics of *discover* and the use of a 2-person pronoun.

### 3.6 Example 2: Presuppositions of compound sentences

(From Karttunen (1973))

- How do the presuppositions required by a conditional or conjunctive statement relate to the presuppositions that would be required by the component parts, stated alone?
- Karttunen's claim: "Let  $S$  be a sentence of the form  $A$  and  $B$  or  $If A, then B$ .  $S$  presupposes that  $C$  iff either  $A$  presupposes that  $C$ , or  $B$  presupposes that  $C$  and  $A$  does not semantically entail that  $C$ ." That is . . .

- The presuppositions of a conjunction are either the presuppositions of the antecedent or the consequent, minus any required by the second conjunct which are entailed by the first.
- The presuppositions of a conditional are the presuppositions of either the consequent or the antecedent minus those required by the consequent and entailed by the antecedent.

(16) Harry is married and Harry's wife is a great cook.  $\Rightarrow$  I assert (not presuppose) that Harry is married.

(17) Harry's wife is a great cook.  $\Rightarrow$  I presuppose that Harry is married.

(18) #Harry's wife is a great cook and Harry is married.

- Problem of a semantic account: the semantics of *and* is not truth-functional any more, since its denotation may depend on the entailments between the conjuncts, and it stops being symmetric, since  $A$  and  $B$  may be true whereas  $B$  and  $A$  lacks a truth value.
- Pragmatic account: standard truth-functional semantics for *and* and no *ad hoc* semantic or pragmatic rules. In uttering  $A$  and  $B$ , the content of  $A$  becomes part of the common ground once  $A$  has been uttered. If the expression of  $B$  requires the presupposition of  $A$  or some proposition entailed by  $A$ , this will be fulfilled in the situation.

Summary of what we have needed to explain these facts:

- A simple pragmatic assumption of how presuppositions shift in the course of conversation.
- Ordinary semantics for factive verbs or conjunctions.

## 4 On the representation of context

Goals:

- Provide an analysis of the dynamics of discourse.
- Model the intuitive notion of context under a possible worlds semantics perspective, and explain how it affects and is affected by speech acts.
- Discuss the notion of common ground as common belief, and the effect of accommodation.

### 4.1 Context and content

- 2 properties of speech acts
  - Speech is action, and a speech act is intended to affect the situation in which it is performed.
  - Speech acts are context-dependent, i.e., their content depends not only on their syntax and semantics, but also on the context they are going to modify (the facts about the situation in which the expressions are used).
- 2 roles of context
  - The object on which speech acts act.
  - Source of information relative to which speech acts are interpreted.
- Concept of context (first approximation): body of information at a certain point that is presumed to be common at this point to the participants in discourse.
- Dynamics of conversation
  - The point of discourse: exchange of information.
  - Participants begin with an amount of presumed information in common.
  - This common information is going to be affected by speech acts.
  - An assertion provides a piece of information which, if successful, is going to be part of the presumed common information.
- Kinds of common information
  - Information about what the participants in the conversation are talking about (if politics, then who is the president, etc.).
  - Facts about the discourse that is taking place (e.g., speakers and hearers are aware that the conversation is taking place, that speakers are saying what they are saying, etc.).
- 2 ways in which this body of information has been represented in semantics: the common ground and the context set.

- Common ground: set of propositions that are presumed to be shared by the participants in discourse.
  - Context set: set of live possibilities (possible situations or possible worlds) that are compatible with what the audience takes for granted in a given situation.
  - The presumed common information is what all the possible worlds in the context set have in common.
  - In the course of a conversation, where assertions introduce new propositions in the context, the common ground increases and the context set is reduced.
- Under this view, what is an assertion? “[...] a proposal to alter the context by adding the information that is the content of the assertion to the body of information that defines the context, or equivalently, by eliminating from the context set – the set of possible worlds available for speakers to distinguish between – those possible worlds in which the proposition expressed in the assertion is false.”
  - 2 ways in which a statement changes the context
    - The fact that the statement was made is added to the context “[...] as a result of the fact that it is a manifestly observable event that it was made.”
    - The content of the assertion will be added to the context, provided that it is accepted by the rest of the discourse participants.

## 4.2 Common ground and common belief

- Simplifying assumption: common ground is equivalent to mutual beliefs of the discourse participants.
- Properties of beliefs of the discourse participants
  - Each subject’s beliefs are transparent to the subject: a believer has introspective access to his/her own beliefs.
    - Positive introspection: if Alice believes that  $\phi$ , then she believes that she believes that  $\phi$ .
    - Negative introspection: if she does not believe that  $\phi$ , she believes that she does not believe that  $\phi$ .
  - They may be false.
  - Believers have consistent beliefs.
- Definition of *common belief*: it is common belief that  $\phi$  among a group of believers iff all believe that  $\phi$ , all believe that all believe that  $\phi$ , all believe that all believe that all believe that  $\phi$ , etc.
- Difference from individual belief: negative introspection is not preserved. If it is common belief that  $\phi$ , it will be common belief that it is common belief that  $\phi$ , but the fact that it is not common belief that  $\phi$  does not imply that it is common belief that it is not common belief that  $\phi$ .

- Common belief is defined in terms of individual beliefs of the group, whereas speaker presupposition is a propositional attitude of the individual speaker. “If the common ground of a conversation is identified (on our simplifying assumption) with the common belief of the participants, then the presuppositions of an individual speaker can be identified with what the speaker believes to be common belief.”
  - Presuppositions of each member of the group may be different from each other.
  - Presuppositions of each member may be different from what is considered to be common belief.
  - Any difference requires that at least one member has a false belief.
  - If someone is mistaken about the common ground, s/he can presuppose things that are not common belief.
 

“[...] different participants in the same conversation may not in fact agree in what they presuppose. But even if actual presuppositions of speaker and addressee diverge, it is part of the idea of speaker presupposition that the presuppositions of the different participants in the discourse are the same. To presuppose something is to presuppose that it is common ground, so if what is presupposed is not in fact common ground, then something false is being presupposed.”
  - Everything that is common belief will be considered common belief by the members of the group.
- The logics of presupposition in this sense has the same logics as common belief: negative introspection is not preserved. If Alice does not presuppose that  $\phi$ , this does not imply that she presupposes that she doesn't presuppose  $\phi$ .
- The common ground that defines the context where conversation takes place may diverge from the members' actual beliefs. The notion of *acceptance* rather than *belief* may be more appropriate for a more sophisticated definition of *common ground*.
  - Acceptance includes belief but also other attitudes such as presumption, assumption, acceptance for the purposes of an inquiry.
  - To accept a proposition is to treat it as true for some reason (i.e., one ignores that it may be false).

(19)    a.    How old is he? [Pointing at a baby girl.]  
           b.    The man drinking martini is a philosopher. [The man is drinking water]

We can either correct, or accept the false belief to be common ground for the purpose of facilitating communication.

- New formulation: It is common ground that  $\phi$  in a group if all members accept (for the purpose of the conversation) that  $\phi$ , and all believe that all accept that  $\phi$ , and all believe that all believe that all accept that  $\phi$ , etc.

### 4.3 Accommodation

- The following utterance is only appropriate if it is presupposed (and thus part of the common beliefs) that the speaker (Alice) has a sister.

(20) I can't come to the meeting - I have to pick up my sister at the airport.

Alice need not assume that her interlocutor knew about her sister before she made the utterance. It does not matter, because she believes the interlocutor can infer that she has a sister, and that she is presupposing that she has a sister.

- Definition 1: "If at time  $t$  something is said that requires presupposition  $P$  to be acceptable, and if  $P$  is not presupposed just before  $t$ , then - *ceteris paribus* and within certain limits - presupposition  $P$  comes into existence at  $t$ ." (Lewis 1979, p.340)
- Definition 2: "[...] the process by which something becomes common ground in virtue of one party recognizing that the other takes it to be common ground." (Stalnaker 2002, p.711)
- What kind of information can be accommodated? "[...] assumptions to be accommodated are supposed to be uncontroversial or unsurprising. One may explicitly assert controversial and surprising things (in fact one should) but to expect one's audience to accept them by way of accommodation is not good conversational practice." (Heim 1992, p.212)
- "Informative presuppositions": a daughter wants to tell her father that she is engaged to be married, but she does not do it by using an assertion (example from (von Fintel 2000, p.9)).

(21) Oh, Dad, I forgot to tell you that my fiancé and I are moving to Seattle next week.

Rhetorical effect: the father might not want to dispute the information that the girl is engaged, but he might want to comment on it, which is less easy if we include it to the common ground.

- Is accommodation a problem to the pragmatic account? Well, in principle it contradicts the idea that presuppositions have to be backgrounded, that they are taken for granted and considered to be common belief in order for the sentence to be appropriate.

(22) a. A: I have to pick up my sister at the airport. [She knows the addressee doesn't know she has a sister.]  
b. B1: You don't have to pick her up - she can take a bus. This is an important meeting.

That the speaker has a sister becomes shared knowledge *after* the utterance. Even if the statement is rejected, the presupposition isn't.

Statements where the sentence is negated or embedded still result in the shared knowledge that the speaker has a sister.

- (23) a. I may not be able to come to the meeting, I might have to pick up my sister at the airport.  
b. I can come to the meeting after all - I just learned that I don't have to pick up my sister at the airport.
- o Derivation of the presupposition "Alice has a sister" (on Gricean grounds, considering cooperativity and hence observation of maxims):
- It is common belief prior to the utterance that Alice knows whether she has a sister or not.
  - It is common belief that she is being honest.
  - The fact that she says something that entails her having a sister is enough for it becoming shared information that she does, even if the statement itself is rejected.
- (24) [An indulgent grandson] I shouldn't complain - I may someday bore *my* grandchildren with the kind of stories my grandfather bores me with today.

By conversational means, we can derive that the boy doesn't have any grandchildren, yet.

## References

- Heim, I.: 1992, Presupposition projection and the semantics of attitude verbs, *Journal of Semantics* **9**, 183–221.
- Karttunen, L.: 1971, Some observations on factivity, *Papers in Linguistics* **4**, 55–69.
- Karttunen, L.: 1973, Presuppositions of compound sentences, *Linguistic Inquiry* **4**, 169–93.
- Karttunen, L. and Peters, S.: 1975, Conventional Implicature in Montague grammar, *Proceedings of the First Annual Meeting of the Berkeley Linguistics Society*, pp. 266–278.
- Lewis, D.: 1979, Scorekeeping in a language game, *Journal of Philosophical Logic* **8**, 339–59.
- Stalnaker, R.: 1974, Pragmatic presuppositions, in M. Munitz and P. Unger (eds), *Semantics and philosophy*, New York University Press, New York, pp. 197–213.
- Stalnaker, R.: 2002, Common ground, *Linguistics & Philosophy* **25**, 701–721.
- von Fintel, K.: 2000, What is presupposition accommodation? Manuscript, MIT.