Notes on Presupposition

Jean Mark Gawron

San Diego State

March 11, 2018
Table of contents

1 Presupposition
2 Philosophers
3 Pragmatic presupposition
4 accommodation
5 Accommodation
6 Bibliography
Base case

1. The king of France is a great Go player. ⇒ There is a king of France.
2. The king of France is not a great Go player. ⇒ There is a king of France.
Presupposition triggers (pp. 181-184)

1. Definite descriptions (*the man with two heads, ...*)
2. Factive verbs, adjectives (*regret, know, be aware of, notice, be odd that, be sad/happy that, ...*)
3. Implicative verbs (*manage, forget, happened to, avoided Ving, ...*)
4. Change of state verbs (*stop, start, continue,...*)
5. Iteratives (*again, anymore, too*)
6. Temporal clauses (*before, while, after, ...*)
7. Cleft sentences (*It was Marie who first added coconut milk*), questions,
Definition

Classic: Negation

1. The king of France is bald \(\Rightarrow\) There is a king of France.
2. The king of France is not bald \(\Rightarrow\) There is a king of France.
3. Fido is a dog \(\Rightarrow\) Fido is a mammal.
4. Fido isn’t a dog \(\not\Rightarrow\) Fido is a mammal.

Karttunen

1. If the king of France is bald he wears a wig \(\Rightarrow\) There is a king of France.
2. If Fido is a dog, then he barks \(\not\Rightarrow\) Fido is a mammal.
Defeasibility (like implicatures?)


1. I don’t know that the King if France is wise. There is no King of France!
2. I don’t know that Reynaldo is the culprit.
3. At least John won’t have to regret that he didn’t finish his dissertation.
4. She died before she finished her thesis.
5. If the Vice-Chancellor invites the U.S. president to dinner, he’ll regret having invited a feminist to his table.
Philosophical background

1. Russell: *On Denoting*: What is presupposed is (always) part of what is being asserted. Negation is more complicated than we think.

2. Strawson, Frege: When presuppositions fail, no assertion has been made. Truth-value gaps.

3. Stalnaker: Presuppositions are requirements on the common ground of conversations: **Pragmatic presuppositions**. Can presupposition phenomena be explained by pragmatic principles?

Presupposition and dynamic context

Sentences change context (Stalnaker and Lewis)

- All Fred’s children are asleep. ≠ (And) Fred has children.
- Fred has children. (And) All Fred’s children are asleep.

The conclusion is that as the context is updated utterance by utterance, the presuppositions of later assertions may be satisfied because of information added by earlier assertions. This is an insight into why and is a filter (discussed below).
Stalnaker’s common ground


*The common ground of a conversation at any given time is the set of propositions that the participants in that conversation mutually assume to be taken for granted … The common ground describes a set of worlds, the context set, which are those worlds in which all the propositions in the common ground are true.*

von Fintel (2006)
Common ground and presupposition

If a sentence $S$ presupposes $p$

All contexts that admit $S$ entail $p$. 

\[
\begin{array}{c}
p \\
c \\
S \\
W
\end{array}
\]
Proper names are indexicals

- Sentences express \textit{(partial)} functions from contexts to contexts (\textit{Context Change Potentials}); these functions impose requirements on the contexts.

- A proper name places a requirement on the context: that the referent be unique, and identifiable, and a \textit{rigid designator} across worlds.

- In different contexts, nevertheless, the name may rigidly designate different entities.

- This makes proper names “sorta” like indexicals, like \textit{I}, and \textit{that}, but Stalnaker actually doesn’t subscribe to that term.
Sherlock Holmes (Stalnaker 1978)

_Sherlock Holmes does not exist_ expresses a necessarily true proposition

<table>
<thead>
<tr>
<th>i</th>
<th>j</th>
<th>k</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>SH is a fictional detective ACD</td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>writes up</td>
<td></td>
</tr>
<tr>
<td>j</td>
<td>SH is a real life detective ACD</td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>writes up</td>
<td></td>
</tr>
<tr>
<td>k</td>
<td>ACD is a detective named SH</td>
<td>F</td>
</tr>
</tbody>
</table>

Stalnaker applies the idea that the context determines the proposition expressed (Kaplan 1978) to a true negative existential statement with a name, adopting an analysis that makes proper names indexical-like. Nevertheless, both Stalnaker and Kaplan endorse Kripke’s (Kripke 1980) causal theory of names (this is an explanation of the cognitive significance of names, not necessarily their linguistic meaning).
### Pragmatic presupposition

#### Descriptive preliminaries: Filters, plugs, holes

**Karttunen (1973)**

**Operator** $P, (Q)$

<table>
<thead>
<tr>
<th>Filters</th>
<th>Inherit some presuppositions of $P$, suspend others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holes</td>
<td>Inherit the presuppositions of $P$</td>
</tr>
<tr>
<td>Plugs</td>
<td>Suspend presuppositions of $P$</td>
</tr>
</tbody>
</table>

- Negation, Conditional antecedent clause
- Verbs of saying, belief, imagination
- and, or, if ... then, ..
The Projection problem

How are the presuppositions of complex sentences inherited from the presuppositions of their parts?

a. If the King of France does linguistics, he will regret doing it.

b. Either John will not do linguistics or he will regret doing it.

c. John studied linguistics and he regretted studying it.

If John studied linguistics and he regretted studying it, that would be a tragedy.
The inherited presuppositions in conditional clauses are **conditional presuppositions**. If the presupposition of $q$ is $r$, then the presuppositions of $p \Rightarrow q$ is $p \Rightarrow r$.

If John gets married, his spouse will soon leave him. This sentence presupposes

If John gets married, he will have a spouse.

Can the fact that the sentence as a whole does not presuppose that John has a spouse be explained by a Stalnakerian theory?
Summarizing the conditional filter

If A then B uttered in context c

- The presuppositions of A must be satisfied by c.
- The presuppositions of B must be satisfied by c + A
- *If . . . then* is a **filter** because if B presupposes p and A entails p, then *If A then B* does not presuppose p.
Three semantic properties for an item I (Karttunen and Peters 1979), as summarized in presupposition Heim (1983).

<table>
<thead>
<tr>
<th>property</th>
<th>content</th>
<th>presupposition</th>
<th>heritage</th>
</tr>
</thead>
<tbody>
<tr>
<td>content</td>
<td>purely truth conditional content of I, e.g., material conditional for <em>if . . . then</em></td>
<td>what I contributes as a presupposition, e.g., for <em>the</em> the noun it combines with must have a non-empty extension.</td>
<td>I’s permeability for the presuppositions of its arguments. E.g., for <em>if . . . then</em>, the information that <em>if</em> lets through the full presupposition of its left argument, as well as as much of the presupposition of its right argument as doesn’t follow from the left argument.</td>
</tr>
</tbody>
</table>
Gazdar and Heim

- **Gazdar (1979)** tries to construct a theory in which the heritage property is **derived from** the content and presupposition properties.
- **Heim (1983)** acknowledges Gazdar’s contribution, but cites a number of issues with his account discussed in the literature.
- Proposes an account based on Stalnaker’s and Lewis’s view of context, and Karttunen’s (Karttunen 1974) “linguistic context” account of presupposition.
- Shows how a Stalnakerian approach **can** account for the complex properties of filters.
Sentence meanings are context (= Common Ground) updates

1. If “A, B” is uttered in context c, then the local context of B is c + A (c incremented with the information in A).

2. A context entails a proposition p if and only if p is true in all worlds in p.
The update of a simple sentence

A sentence meaning for “A” has a set of worlds we’ll just call A and in addition, requirements on the contexts that admit it, call them P. Let A be the CCP of “The king of France has a son”. Then P is the requirement that there be a King of France, and \( c + A \) is defined only if \( c \) entails P, namely there is a king of France (in all worlds in \( c \) there is a king of France).
The update of a negated sentence

\[ C + \text{Not } S = c \setminus c + S \]

c + Not S is defined only when c + S is defined.

Negation as a hole explained

All the presuppositions of S must be satisfied by c
The update of a conditional

Conditional update

\[ c + \text{If } A, B = c \setminus (c + A \setminus c + A + B) \]

Take away the worlds in \( c \) in which the truth of \( A \) is compatible with \( B \) not being true.

\( c + \text{If } A,B \) is defined only when both \( c + A \) is defined, and when \( c + A + B \) is defined.
Conditional Update; If A then B

equiv to update with $A \& \sim B$

update with $\sim (A \& \sim B)$

Note that in the updated $c$, $A$ can be true or false, as can $B$. But any world that makes $A$ true also makes $B$ true.
Pragmatic presupposition

Presupposition projection for Heim

c + If A,B is defined only when both c + A and c + A + B is defined.

So c will have to satisfy the presuppositions of A. ("antecedent of conditional is a hole" explained)

But notice that the only context in which B has to be evaluated is c + A. So if A has an entailment which satisfies a presupposition of B, c does not need to have that entailment. ("If B presupposes p, If A,B presupposes If A, p" explained)

Conditionals as a filter explained
Presupposition accommodation is the process by which the context is adjusted quietly and without fuss to accept the utterance of a sentence that puts certain requirements on the context in which it is processed.

Bicycles, sisters, pronouns, etc.

1. The thief jumped on his bicycle and rode away.
2. I’d like you to meet my sister, Evelyn.
3. He entered the storage locker by breaking the padlock.
4. It was Margaret who broke the keyboard.
Lewis’s (Lewis 1979) view

(1)  
   a. Fred has children. All Fred’s children are asleep.  
   b. All Fred’s children are asleep. # Fred has children.  
   c. [The cat]₁ is in the carton. [He]₁ will never meet our other cat, who lives in New Zealand. Our New Zealand cat lives with the Cresswells. And there he’ll stay because Miriam would be sad if [the cat]₂ went away.  
   d. [The cat]₁ is going to pounce on you!

Conclusion

Both the saliency rankings and the common ground (which is the resource that satisfies presuppositions) are part of the conversational score (conversational state) and change throughout the conversation.
### The conversational score is the context

<table>
<thead>
<tr>
<th>Anchor for <em>come</em></th>
<th>When the beggars ([\text{came}]_1) to town, the rich folks went to the shore. But soon the beggars ([\text{came}]_2) after them, so they went home.</th>
</tr>
</thead>
</table>
| standards of precision | France is hexagonal.  
The pavement is flat.  
That my hand is there is certain. |
| Relevant possibilities | You can put the public interest first for once! |
| Performatives | [are a kind of accomodation, e.g. to the relation that airs names with referents] |
Local/global accommodation

What happens in the case of an impossible update? c fails to entail p, a presupposition of S. Fix c. But how?

The King of France doesn’t wear a wig.

Global \[ c \land p \setminus (c \land p + S) \] The context now entails that there is a King of France.

Local \[ c \setminus (c \land p + S) \] The context entails that there isn’t. (...because there is no King of France).
Universal quantification

(2) a. Every nation cherishes its king.
b. Every nation has a king.

SKH predicted (local) accommodation
Every nation has a king.
If Theo hates sonnets, so does his wife.

According to SKH, sentence as a whole places the following requirement on the CG:

*If Theo hates sonnets, he has a wife.*

Is this good enough? (The proviso problem). No, says Geurts (1996). Theo has a wife is what gets accommodated!
What gets added to the common ground?

von Fintel (accepting the SKH approach): Not the weakest proposition that satisfies the presuppositions as a whole. But then what?

1. The common ground does not contain the proposition that Theo has a wife.

2. *If Theo hates sonnets, he has a wife* is asserted, and is only “legal” if *Theo hates sonnets but doesn’t have a wife* is ruled out. So we need to adjust the CG to rule that out. Two salient possibilities, and we ask which is more likely to be the speaker’s intention:
   
   1. Add $HS \rightarrow W$ [local accommodation]
   2. Add $W$ [Global accommodation]

Which is it more likely that the speaker knows?
Other examples

Various CG updates

a. If John gets married, his spouse will soon leave him.
   Local: If John gets married, he will have a spouse.
   Global: John has a spouse.

b. If John gets married, his spouse will find his loud chewing annoying.
   Local: If John gets married, he will chew loudly.
   Global: John chews loudly.

c. Every man loves his wife.
   Every man in C loves his wife. (what is said)
   Every man in C has a wife. (intermediate?)
   Every man with a wife loves his wife. (local)
Gazdar, Gerald. 1979. 
*Pragmatics: Implicature, Presupposition, and Logical Form.*

Geurts, Bart. 1996.
Local satisfaction guaranteed: A presupposition theory and its problems.

Heim, Irene. 1983.
On the projection problem for presuppositions.

Kaplan, David. 1978.
*Dthat.*
Bibliography II


Bibliography III

Levinson, Stephen C. 1983.  
*Pragmatics.*  
New York: Cambridge University Press.

Lewis, David. 1979.  
Scorekeeping in a language game.  

Presuppositions.  

Stalnaker, Robert. 1978.  
Assertion.  
Bibliography IV


