

# LSA.311: Lecture 6

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## Where We Are

- Two properties of presupposition
  - "Taken for granted"
  - Generally inherited by complex containing structures
- Stalnaker's Proposal
  - Presuppositions as requirements on the common ground
  - Inheritance happens because of the way that the common ground evolves in complex discourses

## What We Started on Monday

- Integrating Stalnaker's proposal within a compositional semantics
- Find and explain the sources of presuppositional requirements on the common ground.
- Establish how independent the truth-conditional content is from the presuppositional pragmatics. Can the truth-conditional content of complex constructions work in ignorance of presuppositional ingredients especially if the latter are conventional/semantic?

## Two Roads Not Taken

- Presuppositions derived as conversational implicatures
- Syntactic Theories of Presupposition
  - Wide scope (Russell)
  - DRT-based accounts (van der Sandt, Geurts)

### Partiality as a source

- *The King of France is bald.*
- The sentence expresses a partial presupposition that is
  - true of worlds in which the unique KoF is bald
  - false of worlds in which the unique KoF is not bald
  - not defined for worlds in which there isn't a unique KoF
- Possible Alternative: three-valued semantics

### Stalnaker's Bridge

- A proposition being presupposed by a sentence in the technical semantic sense provides a reason for requiring that it be presupposed in the pragmatic sense whenever the sentence is used.

### Another Look at Conjunction

- $c + (\phi \text{ and } \psi) = (c + \phi) + \psi$
- Question: Suppose that  $\psi$  has a presupposition that is induced by partiality in its semantics. Then what proposition does  $\phi$  and  $\psi$  express?
- $\Rightarrow$  The need for a compositional semantics for complex constructions containing partial propositions.
- Question: Should this compositional calculation mirror the asymmetry of the way the context gets changed?
- If so, what is the resulting picture? What explains what? What depends on what?
- Prediction of Heim & Kratzer system: accumulation of partiality.
- Alternative: three-valued semantics. [Truth-table on blackboard!]

### Two Strategies

- The "Semantic Strategy"
  - Compute the semantic value of the complex construction.
  - This will involve semantic presuppositions of the preferred kind (Fregean, 3-valued, 2-dimensional).
  - Via bridging principles à la Stalnaker predict the empirically observed pragmatic presuppositions of the whole complex construction.
- The "Pragmatic Strategy"

- Compute semantic presupposition only for the simple sentence.
- Analyze the pragmatic use of the complex construction as involving assertion of the simple sentence inside it in an “auxiliary” context.
- The dynamic relation between the input context and the auxiliary context in which the simple sentence is asserted determines the pragmatic presuppositions of the whole complex construction.

### A Third Strategy

- Heim’s Project
  - “[A] compositional assignment of CCPs to the sentences of a language can fully replace a compositional assignment of truthconditions of the sort normally envisaged by semanticists, without any loss of empirical coverage.”
  - Of course, this will only work if in general, “the truthconditional aspect of the meaning of any expression is predictable on the basis of its CCP.”

### What We Will Do Next

- A Look at Negation
- A Look at Disjunction
- Evaluating the Three Strategies of integrating Stalnaker’s proposal within a compositional semantics

### Negation

- The King of France isn’t bald.
- John isn’t going to drop out of school again.
- It wasn’t Sam who broke the typewriter.

### Semantics of Negation

- Fregean negation
  - $\llbracket \text{not} \rrbracket = \lambda t. t = 0$
- 3-valued negation
  - $\llbracket \text{not}_1 \rrbracket = \lambda t. \left\{ \begin{array}{l} 1 \text{ if } t=0 \\ 0 \text{ otherwise} \end{array} \right\}$
- CCP
  - $c + \text{not } \phi = c - (c + \phi)$

### Cancellation

- There is no King of France. Therefore, the King of France is not hiding in this room.
- I don't know whether there is a King of France. But at least, the King of France is not in this room.

### 3-valued P-cancelling negation

- $\llbracket \text{not}_1 \rrbracket = \lambda t. \left\{ \begin{array}{l} 1 \text{ if } t=0 \\ 0 \text{ otherwise} \end{array} \right\}$

### Fregean P-cancelling negation

- $\llbracket \text{not}_1 \rrbracket^w = \lambda p. (\lambda w. w \in (W - \{w \in \text{dom}(p) : p(w) = 1\}))$ .

### Local Accommodation

- $c - (c' + \phi)$ , where  $c'$  is the result of adding to  $c$  a salient proposition that entails the presuppositions of  $\phi$ .

### Disjunction

- Either the King of France is out of town or the Queen of France is unhappy.
- $c + (\phi \text{ or } \psi) = (c + \phi) \cup (c + \psi)$ [12pt]
- Either there is no King of France or the King of France is out of town.
- $c + (\phi \text{ or } \psi) = (c + \phi) \cup ((c - (c + \phi)) + \psi)$

### Asymmetry the Other Way

- Either the King of France is out of town or there is no King of France.
- $c + (\phi \text{ or } \psi) = ((c - (c + \psi)) + \phi) \cup (c + \psi)$

### Conflicting Presuppositions

- Either John just started smoking or John just stopped smoking.
- $c + (\phi \text{ or } \psi) = ((c - (c + \psi)) + \phi) \cup ((c - (c + \phi)) + \psi)$

### The Three Pictures

- Picture F: partial/3-valued semantics + pragmatics of assertion
  - Note: even when  $\phi$  is complex, all the complexity happens in the recursive semantics.
- Picture S: some kind of semantics + structured pragmatics
  - The two steps are independent of each other. Compositional interpretation happens twice.
- Picture H: compositional calculation of context change potentials
  - Because of accommodation, we know that there is more to the pragmatics of assertion than just applying  $\lambda c.(c + \phi) + \psi$  to the incoming context.
  - I had to take my daughter to the doctor and the roads were wet.

### More on Picture H

- Because of local accommodation (e.g. in the case of *The King of France is not bald* – *There is no King of France.*), we see that the proposal is to be read procedurally and not really as applying a ccp computed compositionally to the incoming context.
- Exercise: Convince yourself that one couldn't do some adjustment to the incoming context to get the same effect as one gets through local accommodation. Give a proof of some sort of some theorem in that direction?

### Review

- Three pictures of how Stalnaker's project embeds in compositional semantics

### What We'll Do on Monday

- Kinds of Presupposition Triggers
- Ease of Accommodation