LIN241

Introduction to Semantics

Lecture 5

The presuppositions of the definite article

The presuppositions of the definite article

- In certain situations, it is odd to use a definite description:
  1. **I will talk about this in Friday's lecture.**
  2. **I will send a message to the student in this zoom session.**
     - 1 is odd because we don't have a lecture on Friday.
     - 2 is odd because there is more than one student in the current zoom session.
- 1 illustrates the existence inference of DefDs.
- 2 illustrates the uniqueness inference of DefDs.

The presuppositions of the definite article

- Question:
  - What kinds of inference are the uniqueness and existence inferences of definite descriptions (DefDs)?
- Frege (1884, 1892): presuppositions.
- In Fregean analyses, the presuppositions of a DefD are conditions that must be satisfied for this DefD to be successfully interpreted.

The presuppositions of the definite article

- Preliminary assumption:
  - the semantic value of a referential expression like **Jess** or **the student** is the individual to which it refers.
- Illustration:
  - the semantic value of **Jess** is Jess, the individual to whom we are referring with that name.

The presuppositions of the definite article

- Here is the sketch of a Fregean analysis of **the**:
  - **the NP** has a semantic value only if there is one and exactly one individual that matches the description **NP** in the context of utterance.
  - If **the NP** has a semantic value, its semantic value is the unique individual that matches the description **NP** in the context of utterance.

The presuppositions of the definite article

- Example:
  - **the student** has a semantic value only if there is one and exactly one student in the context of utterance.
  - If **the student** has a semantic value, its semantic value is the unique student in the context of utterance.

The presuppositions of the definite article

- What happens when the presuppositions of a DefD are not satisfied?

    1. **I will talk about this in Friday's lecture.**

    2. **I will send a message to the student in this zoom session.**

- Because the DefDs have no semantic value, we cannot determine the truth-conditions of 1 and 2.

- Therefore, 1 and 2 are neither true nor false in this analysis.

- 1 and 2 have no truth-value at all.

The presuppositions of the definite article

- A nice feature of the analysis is that the same problem will arise with the negation of these sentences:

  1'. **I will not talk about this in Friday's lecture.**

  2'. **I not will send a message to the student in this zoom session.**

- These negated sentences also lack a truth-value because we can't compute their truth-conditions!

- This predicts that the presupposition survives negation and similar operations.

Semantic presuppositions

- According to this analysis, the presuppositions of definite descriptions are **semantic presuppositions**.
- They are encoded in the meaning of **the**.
- They matter for the calculation of the semantic value of expressions where **the** occurs.

Semantic presuppositions

- Semantic presuppositions can be defined as follows:

Semantic Presupposition:
A sentence S presupposes a proposition P iff* S is neither true nor false unless P is true.

* remember that **iff** means **if and only if**.

Presupposition and Assertion

Pragmatic presuppositions

- Instead of defining presuppositions of DefDs in **semantic** terms, we could define them in **pragmatic** terms, like this:
    - When a speaker uses a DefD **the NP**, they present it as common ground that there is only one individual that matches the description **NP** in the context of utterance.
- More generally, pragmatic presuppositions are propositions that a speaker presents as common ground when they utter a sentence.
- For now, let us assume that by 'common ground' we mean something like shared knowledge.

Pragmatic presuppositions

- Let us consider another example of pragmatic presupposition.
- When I utter the following sentence, I behave as if it were common ground that Drew used to smoke:
  - **Drew stopped smoking**.
- In a series of papers, the philosopher Robert Stalnaker has explored the notion of **common ground** and its relation to language use.

Pragmatic presuppositions

- Stalnaker defined the concept of **Common Ground** (CG):

> In the simple picture, the common ground is just common or mutual belief, and what a speaker presupposes is what she believes to be common or mutual belief. The common beliefs of the parties to a conversation are the beliefs they share, and that they recognize that they share: a proposition P is common belief of a group of believers if and only if all in the group believe that P, all believe that all believe it, all believe that all believe that all believe it, etc.*

* Stalnaker (2002), "Common Ground."

Pragmatic presuppositions

- This notion lets us define what it means for a speaker to presuppose a proposition.
- This is what Stalnaker calls a speaker presupposition:

> Speaker presupposition is a propositional attitude of the speaker (...). 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.*

- A speaker presupposition is something that the speaker does.
- Pragmatic presuppositions are speaker presuppositions.

* Stalnaker (2002), "Common Ground."

Presupposition and Assertion

- Presuppositions can be contrasted with assertions.
- Assertions are a kind of speech act.
- When a speaker asserts a proposition P, she presents P to the discourse participants as a true proposition that should be added to the CG.
- The point of making an assertion is to add information to the common ground by adding a new proposition to it.

Presupposition and Assertion

- For instance, you might not believe that there will be a test next Thursday.
- In that case, the proposition that there will be a test next Thursday is not part of our CG.
- If I assert the following sentence, I propose that we add this proposition to our CG.
    - **There will be a test next Thursday**.

Presupposition and Assertion

- By contrast, propositions that are presupposed are presented as being already part of the CG.
- For instance, I might assume that it is CG that there will be a midterm test in this course.
- By asserting the following sentence, I do as if the proposition that there will be a midterm test were already part of our CG:
    - **I will send more information about the midterm test**.

Presupposition and Assertion

- We can now think about the meaning of declarative sentences both in terms of assertion and presupposition:
  - **Drew stopped smoking.**
- When I utter this sentence, I make the following assertions and presuppositions:
  - Presupposition: Drew used to smoke.
  - Assertion: Drew does not currently smoke.

From Semantic to Pragmatic Presuppositions

- The point of making an assertion is to increase shared information, i.e. to add a true proposition to the CG.
- Therefore, there would be no point in asserting a sentence if its semantic presuppositions were not satisfied by the CG:
    - A sentence asserted by a speaker cannot express a true proposition unless its semantic presuppositions are satisfied.
    - Since there would be no point in asserting a sentence that cannot express a true proposition, a speaker who asserts a sentence with a semantic presupposition P presumably takes it for granted that P is already part of the CG.

Presupposition Accommodation

Presupposition Accommodation

- The urge to interpret a speaker's assertion as a reasonable contribution to the conversation sometimes leads to a phenomenon known as presupposition accommodation.
- Consider for instance this discourse:

  A: **Why are you so late?**

  B: **My car broke down.**

Presupposition Accommodation

- The sentence **my car broke down** semantically presupposes that the speaker has a car.
- Indeed, this proposition is also implied by the negation of the sentence:
    - **My car didn't break down.**

Presupposition Accommodation

- What is interesting is that the conversation will go on smoothly even if A was not previously aware of the fact that B had a car:

  A: **Why are you so late?**

  B: **My car broke down.**

  A: **Oh, I'm sorry to hear that.**

- In that case, we say that A accommodates B's presupposition by doing as if it were common ground that B had a car.

Presupposition Accommodation

- Sometimes, presupposition accommodation doesn't work:

  A: **What are you doing tonight?**

  B: **I'm going to the movies too.**

  A: **What do you mean? Who's also going to the movies?**

- By uttering this sentence, B made a presupposition about someone else, namely that this person went to the movies.

- But if A doesn't know who that person is, she will have a hard time accommodating this presupposition.

Testing for presuppositions

Presuppositions and truth-value gaps

- Semantic presuppositions are conditions that must be satisfied for a sentence to have a truth-value.
- However, it can be difficult to decide whether a sentence is false or lacks a truth-value.

Presuppositions and truth-value gaps

- Consider the following sentence, which presupposes that there is a king of France:
  - **The king of France is bald.**
- Since this sentence has a semantic presupposition that is not satisfied, we may want to say that it has no truth-value.
- But does it really lack a truth-value, or is it false?

Testing for presuppositions

- Since judgments about whether a sentence is false or has no truth-value are so fragile, we should not use them as evidence that we are dealing with presuppositions.
- We will now discuss two better tests:
  - The "Hey, wait a minute" test (HWM test)
  - The projection test

Testing for presuppositions

- The "Hey, wait a minute" test is a diagnostic of pragmatic presuppositions.
- The next slide gives a recipe for applying the test.

The "Hey, wait a minute!" test

- Let S be a sentence that was asserted by a speaker A and that implies the proposition P.
- Let S' be the sentence:

  Hey, wait a minute, I didn't know that P.
- If it is felicitous for the addressee B of A to respond to S by saying S', then this fact supports the analysis of P as a presupposition.
- Conversely, if it is not felicitous for the addressee B of A to respond to S by saying S', then this fact challenges the analysis of P as a presupposition.

The "Hey, wait a minute!" test: example

- Illustration*:

  A: **The mathematician who proved Goldbach's Conjecture** is a woman.**

  B: **Hey, wait a minute. I didn't know that someone proved Goldbach's Conjecture.**

- The test supports the conclusion that:
  - By uttering this sentence, A presupposed that someone proved Goldbach's Conjecture.

* Example from von Fintel (2004).

** Every even integer greater than 2 can be expressed as the sum of two primes. It remains unproven.

The "Hey, wait a minute!" test: example

- Illustration*:

  A: **The mathematician who proved Goldbach's Conjecture** is a woman.**

  B': **#Hey, wait a minute. I didn't know that that was a woman.**

- The test supports the conclusion that:
  - When uttering this sentence, A did not presuppose that whoever solved Goldbach's Conjecture was a woman.

* Example from von Fintel (2004).

** Every even integer greater than 2 can be expressed as the sum of two primes. It remains unproven.

The "Hey, wait a minute!" test

- Why is this a test of pragmatic presuppositions?
- Because B's reaction is understood as a rejection of A's assumption that P was common ground, and therefore that B knew that P was true.
- If A presented P as new information, B should not be able to complain by accusing A of assuming that B knew P.
- This test is best used in conjunction with projection tests, which we will discuss now.

Presupposition Projection

- Another property of presuppositions is that they survive being embedded in non-veridical environments.
- In this respect, presuppositions differ from at-issue entailments.
- When you put a clause in a non-veridical environment, its at-issue entailments are 'trapped' in there.
- They are not entailments of the whole sentence.

Presupposition Projection

- Negation is non-veridical:

  (a) **Jess likes every fruit.**

  (b) **Jess does not like every fruit.**

  (c) **Jess likes bananas.**

- (a) entails (c).
- (b) does not entail (c).
- If you negate a sentence, you lose its at-issue entailments.

Presupposition Projection

- Not so with presuppositions:

  (a) **Jess stopped smoking.**

  (b) **Jess did not stop smoking.**

  (c) **Jess used to smoke.**

- (a) presupposes (c).
- (b) also presupposes (c).
- Presuppositions are 'projected over the scope of negation.'

Presupposition Projection

- Some other non-veridical environments are:
  - the antecedent of conditional clauses:

    If Jess stopped smoking, she must be nervous.

  - certain modal expressions like 'may'

    Jess may have stopped smoking.

  - questions:

    Did Jess stop smoking?

Presupposition Projection

- In the literature on presupposition projection, operators that allow presuppositions to project are called **presupposition holes**.
- The projection test asks whether some implication P of a sentence S is preserved when we embed S under a presupposition hole.
- If it is, this supports the claim that P is a presupposition of S.

A note on projection tests

- Since judgments about presupposition projection can be fragile, it is best to test projection under as many presupposition holes as possible:
  - negation
  - antecedents of conditionals
  - questions
  - modal expressions like **maybe** and **unlikely**
- If a proposition projects from all these environments, or most of them, we have good support for the claim that it is a presupposition.

Conventional Implicatures again

- Conventional Implicatures also tend to project from non-veridical environments.
- How do we tell the difference between presuppositions and conventional implicatures then?

Conventional Implicatures again

- As we argued last week, conventional implicatures are speaker oriented.
- Presuppositions, by contrast, are presented as already part of the common ground.
- Therefore, in order to show that an inference is a presupposition rather than a conventional implicature, we must argue that it is presented as already part of the common ground.

A short list of presupposition triggers

Presupposition triggers

- Expressions or constructions that are generally associated with presuppositions are called **presupposition triggers**.
- The following slides introduce different types of presupposition triggers, and illustrate how projection tests can be applied to them.

Presupposition triggers

- Clefts:
  - **It was Sam who broke the typewriter.**
  - Presupposition: someone broke the typewriter.
- Factive verbs (like **be aware**, **regret**, **know**, ...):
  - **Laurence is aware that Jess kissed Chris.**
  - Presupposition: Jess kissed Chris.

Source: von Fintel (2003)

Presupposition triggers

- Additive particles (**too**, **again**):
  - **Jess is going to read the poem again.**
  - Presupposition: Jess has read the poem before.
- Change-of-phase predicates (**stop**, **quit**, …):
  - **Jess quit smoking.**
  - Presupposition: Jess used to smoke.

Source: von Fintel (2003)

Examples of Presupposition Projection

- Clefts:

  1. **It was Sam who broke the typewriter.**
  2. **It wasn't Sam who broke the typewriter.**
  3. **Maybe it was Sam who broke the typewriter.**
  4. **It is unlikely that it was Sam who broke the typewriter.**
  5. **If it was Sam who broke the typewriter, then he will have to fix it.**

Source: von Fintel (2003)

Examples of Presupposition Projection

- Factive verbs (aware, know, realize, regret):

  1. **Alex is aware that Jess kissed Chris.**
  2. **Alex is not aware that Jess kissed Chris.**
  3. **Maybe Alex is aware that Jess kissed Chris.**
  4. **It is unlikely that Alex is aware that Jess kissed Chris.**
  5. **If Alex is aware that Jess kissed Chris, then she will not talk to Chris tonight.**

Source: von Fintel (2003)

Examples of Presupposition Projection

- Additive particles (again, too):

1. **Jordan is going to drop out of school again.**
2. **Jordan isn't going to drop out of school again.**
3. **Maybe Jordan is going to drop out of school again.**
4. **It is unlikely that Jordan is going to drop out of school again.**
5. **If Jordan is going to drop out of school again, Drew will be upset.**

Source: von Fintel (2003)

The landscape of meaning

The landscape of meaning

	Conventional Meaning	Contextual Enrichment
At-issue	At-issue entailment	Conversational implicature
Not at-issue and taken for granted	Presupposition	
Not at issue and speaker oriented	Conventional implicature	

Source: Chris Potts (2015); Todor Koev (2019)