LIN6049
Advanced semantics: puzzles in meaning

2024-2025

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Week 3

Definites, part 2

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Last week: two uses of *the*, languages with two definite articles

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This week: what our semantic theory should say about this

Recap on *the* from Intro to Semantics

(1) **A student of physics** came to office hours

(2) **The student of physics** came to office hours

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Suppose: there is 1 student of physics in my class

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Suppose: there are 2 students of physics in my class

Recap on *the* from Intro to Semantics

(1) **A student of physics** came to office hours ✖

(2) **The student of physics** came to office hours ✖

Suppose: there are no physics students in my class

Recap on *the* from Intro to Semantics

(1) **A student of physics** came to office hours

{x: x is a student of physics} ∩ {x: x came to office hours} ≠ ∅

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|{x: x is a student of physics}| = 1

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uniqueness requirement

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Innovation 1: context dependence

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- when we say (1), we don't usually have the entire set of physics students in the world in mind
- we usually have a smaller set of physics students in mind
- for example, the set of physics students in my class

Innovation 1: context dependence

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$\{x: x \text{ is a student of physics}\} \cap \{x: x \text{ came to office hours}\} \neq \emptyset$ and $|\{x: x \text{ is a student of physics}\}| = 1$

Innovation 1: context dependence

(2) **The student of physics** came to office hours

{x: x is a student of physics} ∩ {x: x came to office hours} ≠ ∅
and |{x: x is a student of physics}| = 1

- likewise, when we say (2), we don't usually have the entire set of physics students in the world in mind

Innovation 1: context dependence

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$\{x: x \text{ is a student of physics}\} \cap \{x: x \text{ came to office hours}\} \neq \emptyset$
and $|\{x: x \text{ is a student of physics}\}| = 1$

- likewise, when we say (2), we don't usually have the entire set of physics students in the world in mind
- it would be hard to meet the requirement that $|\{x: x \text{ is a student of physics}\}| = 1$ in that case

Innovation 1: context dependence

and we know from last week that we can talk about contextual domains of different sizes with *the*:

(3) Never look at **the sun** during a solar eclipse
(4) I attended a speech by **the Prime Minister**
(5) **The mayor** visited a hospital
(6) **The cat** is on **the mat**

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- we can talk about the domain as a **situation**, e.g., **the situation or context in which the sentence is uttered**
- we will call that situation s
- situations can be bigger (the world!) or smaller (the classroom)

Innovation 1: context dependence

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{x: x is a student of physics <u>in s</u>} ∩ {x: x came to office hours} ≠ ∅

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- so, the two bits of information have different status

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PRESUPPOSITION: |{x: x is a student of physics in s}| = 1

ASSERTION: {x: x is a student of physics in s} ∩ {x: x came to office hours} = ∅

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Innovation 2: the status of the extra requirement

presupposition failures

(8) #**The king of France** is bald

(9) #**The London bus stop** is on fire

(10) [Context description: Jess tells me she has read three books in the last week. I say:]

#Is **the book** interesting?

(11) [Context description: several students came to Fred's office hours. I know that. I say:]

#**The student who came to Fred's office hours** asked some questions about the assignment.

Summary of innovations so far

- sentences are interpreted with reference to a situation
- the uniqueness requirement of *the* is a presupposition

Back to weak and strong *the*

(11) [Context description: several students came to Fred's office hours. I know that. I say:]
#**The student who came to Fred's office hours** asked some questions about the assignment.

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(12) *A student* came to Fred's office hours. **The student** asked some questions about the assignment. **The student/she** was one of many students to come to Fred's office hours today with questions about the assignment. I guess his assignment instructions were unclear

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What we have about *the* so far (innovations included):

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by allowing s to be big or small, we can account for the domain size effect we saw before

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(3) Never look at **the sun** during a solar eclipse (s is the world)

(4) I attended a speech by **the Prime Minister** (s is the UK)

(5) **The mayor** visited a hospital (s is London)

(6) **The cat** is on **the mat** (s is my house)

'The$_W$ NP VP' presupposes that |{x: x is an NP in s}| = 1. If that's true, then 'the$_W$ NP VP' asserts that {x: x is an NP in s} ∩ {x: x VPs} ≠ ∅ (with s allowed to be of different sizes)

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the discourse situation is a special situation, separate from the non-linguistic situation

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The presupposition that there has to be a unique student who came to Fred's office hours in the discourse situation (one in which a student came to Fred's office hours) can be met even if there are many students who came to Fred's office hours who are not in the discourse situation (i.e., who have not been mentioned already) → **not** a presupposition failure

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- by considering two types of situations, linguistic and non-linguistic ones, we can account for the two uses of *the*
- strong *the* contributes the formula that is sensitive to linguistic situations/the discourse/what has been mentioned before
- in languages with two definite articles, one contributes the weak formula and the other, the strong formula

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- this is flexible enough to account for weak and strong definites
- when a situation is described linguistically, the strong form is used
- the weak form is used for non-linguistically described situations