Ling 263/663: Semantics I (QR, So)

Fall 2016, Mondays & Wednesdays, 1:00–2:15pm, DOW 112

Teaching staff

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Teaching Fellow:	Joshua Phillips (joshua.phillips@yale.edu)
Office hours:	TBD
Review section:	A weekly review section will be offered for this course starting week 3. Time TBD based on participants' availability.

Description

> "It is perhaps worth while saying that semantics as it is conceived in this paper (and in former papers of the author) is a sober and modest discipline which has no pretensions of being a universal patent-medicine for all the ills and diseases of mankind, whether imaginary or real. You will not find in semantics any remedy for decayed teeth or illusions of grandeur or class conflicts. Nor is semantics a device for establishing that everyone except the speaker and his friends is speaking nonsense." Tarski (1944)

Semantics is the study of *meaning* in natural language. How can we formalize the meaning of a linguistic utterance? How does the meaning of a sentence relate to its structure? How do we understand sentences which we have never heard before? How is the interpretation of an utterance related to the conversational context? These are basic questions which this course will attempt to answer, using primarily examples from English as data.

We will develop a concrete proposal for the mapping between linguistic expressions and their interpreted meaning for a fragment of English, based on the Principle of Compositionality. Particular emphasis will be placed on precise descriptions and computations of meanings, using notation from mathematical logic which will be covered in the class. Students will complete the class with both the technical expertise and theoretical foundation to comfortably approach a range of work in contemporary semantic literature.

Requirements

In this class we will take a hands-on approach to semantics, with equal emphasis on practical tools and theory. The course requirements are therefore designed to incentivize active practice and engagement with the material. Your grade will be determined by your performance on the following:

1. **Attendance and participation (4%):** Active attendance, participation in class and the review section, and preparation (doing the readings) are crucial for success in the class.
2. **Problem sets ($8 \times 7\% = 56\%$):** Problem sets are an opportunity to use the tools and ideas from class and the readings, in order to better understand them.
3. **Midterm (20%):** This will be an in-class exam on **October 17**.
4. **Final exam (20%):** The final exam will be a take-home exam and involve application of the concepts of the class to new data and puzzles. Problems will be modeled after those in the problem sets. (Graduate students will write an 8-10 page paper on one of a small set of topics that I will determine towards the beginning of November.)

Problem sets

There will be a problem set most weeks. **Problem sets will be posted online Wednesday afternoons and will be due (physical copy) in class the following Wednesday**.

We will not accept emailed or electronically submitted homework except in extreme circumstances. Nor will we accept late homework except in extreme circumstances. The lowest problem set score will be dropped from your final grade. You may use this as an opportunity not to submit one of the assignments, no questions asked, but note that you will still be responsible for the material for the midterm and final.

Office hours and sections are organized around the homework schedule. We ask that you take a look at the problem sets over the weekend so that you can then make use of your instructor and TF to understand the concepts involved. Please organize your time accordingly.

Website

Lecture notes and additional readings and materials will be posted on Canvas. Please make sure you have access to the course on Canvas.

We will be using Piazza for class discussion. The system is highly catered to getting you help fast and efficiently from classmates, the TA, and myself. Rather than emailing questions to the teaching staff, I encourage you to post your questions on Piazza.

Find our class page at: `https://piazza.com/yale/fall2016/ling263663/home`

Textbook

There is no textbook for this class, so it will be very important that you attend lecture. Supplemental readings and lecture notes will be posted on the course website..

Suggested additional readings

Although there is no required textbook, here are two references that you may use for further reading and elaboration:

AAD: Allwood, Jens, Lars-Gunner Anderson, and Osten Dahl. 1977. Logic in Linguistics. Cambridge: Cambridge University Press.

PTW: Partee, Barbara, Alice ter Meulen, and Robert Wall. 1990. Mathematical Methods in Linguistics. Dordrecht: Kluwer Academic Publishers.

Rules of note

- **Cooperation:** You may discuss homework assignments with other students. However, you must always submit your own write-up, and you must list the students who you worked with on your assignment.
- **Integrity:** The use of others' ideas or expressions without citation is plagiarism. You must declare all sources in submitted work. Citations don't need to be in any particular format, but they have to be there. Click here for more information.
- **Disabilities:** Any student who feels they may need an accommodation based on the impact of a disability should contact me privately to discuss their specific needs and to discuss potential accommodations. I rely on the Resource Office on Disabilities for assistance in verifying the need for accommodations and developing accommodation strategies. Please see here for more information.
- **Talk to me:** I want you to succeed in this class. If any material or requirement is unclear, let me know. In extreme cases, alternative arrangements can be made for some of the course requirements, but only by talking to me first.
- **Participation:** As the instructor, I will be doing a large portion of the talking in class, but the course will be vastly improved by you, the students, sharing your ideas and asking your questions. If you have a question, there is probably at least one other person with the same question. Ask it; others will be grateful you did. If what I've said is hard to follow, or if you think I've made a mistake, let me know right away. It's easiest to fix problems as they come. Moreover, when I ask questions, I typically expect answers. Don't be shy! I will wait.

Schedule

This plan is ambitious and subject to change. The semester will be split roughly into three units. We begin by introducing tools for describing relations between words and sentences. We then discuss how the compositional system we develop builds up the meaning of utterances. This includes discussion of verbs, nouns, and adjectives. We then turn our attention to more advanced topics such as plurals, tense and aspect, modality, and ellipsis, with the goal of showing how the system we developed can model a variety of phenomena in natural language.

The schedule is subject to change. Consult the website.

Week	Date	Topic
1	8/31	Introduction to formal semantics: studying meaning
		Reading: Semantics (Partee's entry in MITECS)
	9/2	Compositionality, meaning as truth-conditions
		Reading: Compositionality (Krifka's entry in MITECS)
	9/5	**No class: Labor Day**
	9/7	**No class: Hadas is out of town (makeup class TBD)**
2	9/12	Relations between words, set theory
		Reading: PTW ch. 1
	9/14	Properties of relations, functions
		Reading: PTW ch. 2–3
		PS1 posted
3	9/19	Relations between sentences: Logical connectives
		Reading: Kearns (2000) §2.2–2.3
	9/21	Propositional logic
		Reading: PTW ch. 6 (99–118)
		PS2 posted
4	9/26	The syntax and semantics of simple languages: L_0 and L_{0E}
	9/28	The syntax and semantics of simple languages: L_0 and L_{0E} continued
		Reading: DWP ch. 2
		PS3 posted
5	10/3	Predicate logic: basics and quantified statements
	10/5	Predicate logic: assignment functions, the language L_1
		Reading: AAD ch. 5
		PS4 posted
6	10/10	Basic composition: the typed λ-calculus
	10/12	λ-calculus continued, midterm review
		Reading: Heim & Kratzer (1998), ch. 2–3 pp. 26–49 (optional: 49–60)
		PS5 posted

7	10/17	**Midterm**
	10/19	**No class: October recess**
8	10/24	Entailments, implicatures, and presuppositions
	10/26	Modification and definite descriptions
		Reading: Heim & Kratzer (1998), ch. 4 pp. 61–75
		PS6 posted
9	10/31	Variables and pronouns
		Reading: Heim & Kratzer (1998), ch. 5 pp. 86–95
	11/2	Movement and relative clauses
		Reading: Heim & Kratzer (1998), ch. 5 pp. 96–115
10	11/7	Quantification and scope
		Reading: Heim & Kratzer (1998), ch. 6 pp. 131–151
	11/9	Quantifiers in object position, Logical Form
		Reading: Heim & Kratzer (1998), ch. 7 pp. 178–204
		PS7 posted
11	11/14	Catching up: finishing quantifiers, movement, and variables
	11/16	Ellipsis
		Reading: Heim & Kratzer (1998), ch. 9
	11/21	**No class: November recess**
	11/23	**No class: November recess**
12	11/28	Focus
	11/30	Intensional semantics
		Reading: von Fintel and Heim (2011) pp. 1–15, 29–38
		PS8 posted
13	12/5	Questions
	12/7	Degrees and scales
		PS9 posted

A makeup class for the missed 9/7 lecture will take place during reading week, time TBD. This class will serve as a review session for the final exam.