

Welcome to HG2002

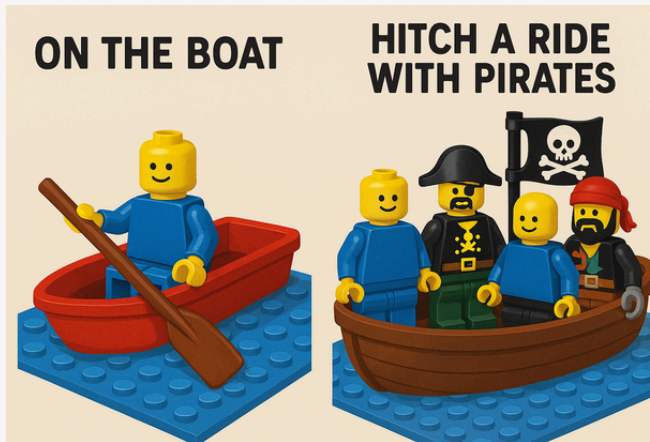
Semantics & Pragmatics



Goal of this session

Welcome you 😊

You are officially on the boat now! (or ... hitched a ride with pirates ?)



Friendship upgrade – Meet some new people you can complain about deadlines with.

Course logistics – How can I get off the boat safely?

Course content – A sneak peek at the brain snacks we will be serving on this journey.

Teaching team

LI Haoze

Instructor

Lectures on Tuesdays

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LAI Yun Sxin

TA

Tutorial 2, 4

laiyunsxin@gmail.com

ZHANG Shiyu

TA

Tutorial 1, 3, 5

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Two course platforms

Course website:

<https://github.com/haozeli-ling/Semantics001/tree/main>

- Learning Goals
- Course schedule
- References
- Slides

NTULearn

- Announcement
- Assignments
- Take-home tests

Assessment

Component	Weight	Type
Participation	10%	Individual
Assignment x 10	50%	Individual
Take-home Midterm Test	15%	Individual
Take-home Final Test	25%	Individual

Participation

You will be evaluated on your participation, engagement, and conduct in class. This makes for **10%** of your overall grade.

- For each lecture, I will provide a QR code linking to a Google Form for attendance. The QR code will typically be displayed **twice** — once in the middle of the lecture and once at the end.
- **Attendance at tutorials is also required.** These sessions provide additional exercises that will help you complete assignments and prepare for the take-home tests.

Lectures & Tutorials

Sessions	Time	Location
Lecture	Tue: 12:30--14:20	HSSAUDIT
Tutorial-1	Wed: 9:30--10:20	LHS-TR+26
Tutorial-2	Wed: 9:30--10:20	LHS-TR+45
Tutorial-3	Wed: 10:30--11:20	LHS-TR+26
Tutorial-4	Wed: 10:30--11:20	LHS-TR+45
Tutorial-5	Wed: 11:30--12:20	LHS-TR+26

Several special sessions

One-time Venue Change:

The lecture on **16 Sep** will be held in **ABS LT10** [Location: ABS-03-LT10, GAIA, Level 3], as HSSADT will be in use for a public conference that day.

Online teaching session (HBL):

The week of 20 Oct is designated for HBL. So, our class on **21 Oct** will be held online.

To be confirmed: We may also have an online session on **23 Sep**, as I will be presenting at a conference that week.

Assignments

There will be **10** homework assignments in this course, to be completed individually and submitted through NTULearn.

- Each assignment is worth **5** points
- You will have **one week** to complete each assignment.
- There will be **NO essays or open-ended** questions — every question has a single, precise answer.
- The symbols in your answers must **match** those taught in class.

What the assignments look like

Using the tools learned in class, represent the meaning of the following sentence:

(1) Anna is smart.

Then, construct a model in which this sentence is true.

Take-home tests

There will be **2** take-home tests in this course, to be completed individually and submitted to **an One-Drive folder**.

The format of these tests is the same as assignments. Of course, they will be much longer.

Mid-term take-home test (15%)

- Assigned: 23 Sep
- Deadline: **Midnight on 5 Oct**

Final take-home test (25%)

- Assigned: 11 Nov
- Deadline: **Midnight on 23 Nov**

AI policies

This course treats AI tools like ChatGPT, DeepSeek, Gemini as an online resource to assist your learning. Any information obtained from AI and used in your assignments must be properly acknowledged.

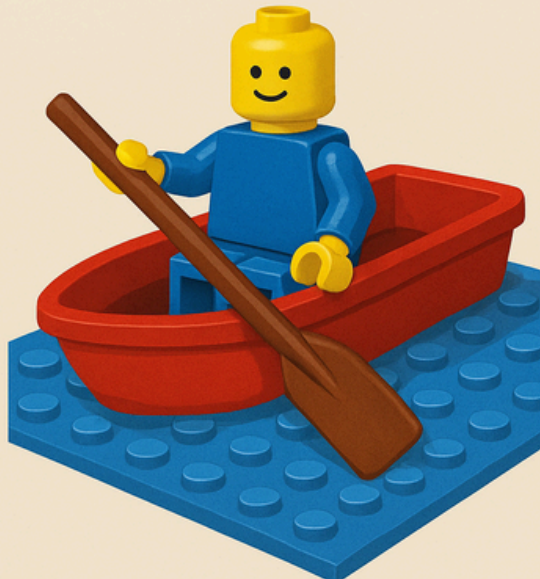
You may use AI tools to support your learning, but you are **NOT** permitted to have AI complete assignments or tests on your behalf.

After each assignment submission, we will set aside a short segment in the following week's lecture for one student to **present their answers**. This helps ensure that the work is genuinely their own and not simply copied from AI.

Do not use AI prompts to answer assignment questions. We will be using **custom symbols** that AI systems may not have been trained to recognize.

Let's get the ball rolling!

ON THE BOAT



**HITCH A RIDE
WITH PIRATES**



What is meaning? I

We effortlessly understand the humor made by Jimmy O. Yang.



What is meaning? II

Your very first task:

Draw a square with three lines

This sentence is ambiguous:

- Using three lines to draw a square
- Draw a square that has three lines inside it.

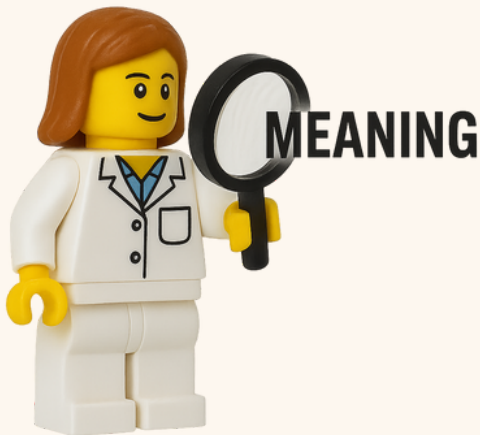
We have the ability to interpret a single sentence in multiple ways. But how does this happen — and why?

Our mission

Studying meaning like Physics studies nature

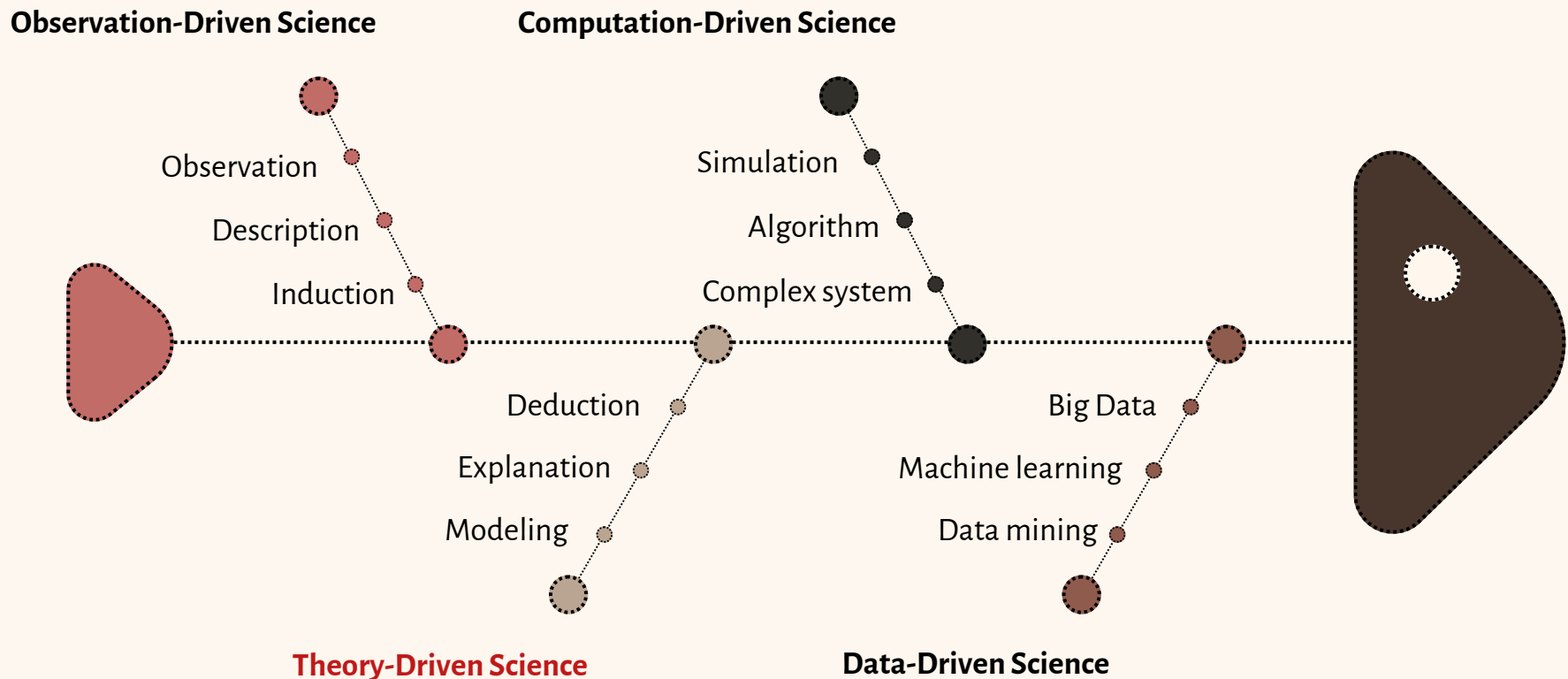
A scientific approach to natural language meaning, treating it as a natural object to be understood with precision.

Meaning is NOT JUST subjective or cultural---it has **structure**. This course will give you a new lens to **see** the hidden structure of meaning.



- Like physics, semantics aims to capture regularities in how language conveys meaning.
- This allows precise, testable insights into language understanding.

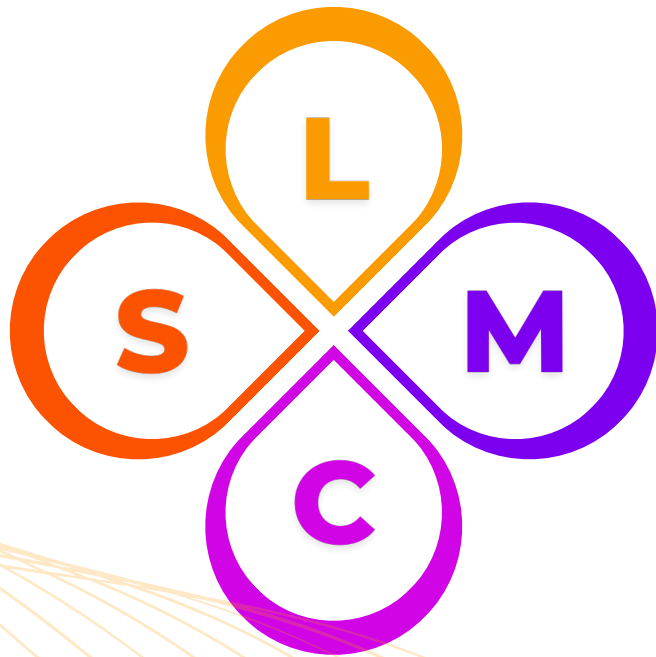
Science meets Linguistics



HG2002



SEMANTICS PRAGMATICS



LOGIC

S&P use logic to represent sentence meanings and reasoning patterns



MATHMATICS

S&P rely on math concepts like sets and functions to model meaning



COMPUTER SCIENCE

Ideas from computer science, like lambda calculus, help build meanings



STRUCTURE

Semantics builds on syntactic structure to determine how sentence parts combine in meaning



Semantics & Pragmatics

1. Truth

Meaning of sentences:
Uncovering when sentences are true

2. Models

Meanings of nouns:
How nouns paint situations

3. Eventualities

Meaning of verbs:
Events, states & roles in sentences

4. Times

Meaning of tense:
Navigating past, present & future

5. Quantifiers

Meaning of Every, Most, Some:
Math and Logic made fun

10. Rational Speech Acts

Language Games:
Guessing what your partner means

9. Implicatures

Say more with less:
Decode hidden meanings

8. presuppositions

What is already assumed:
Uncover assumptions

7. Connections

Meaning of and, or, if, not:
Logic games

6. Compositionality

The Lego of Language:
Building meaning from pieces