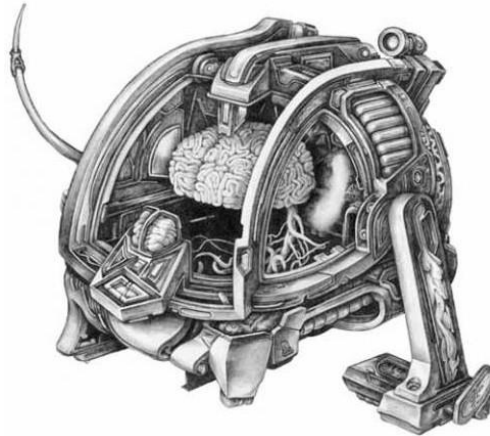


Philosophical Applications of Cognitive Science

PHIL-UA 93
New York University –Spring 2015
M/W 12:30-1:45



Instructor

Eli Alshanetsky

Email: alshanetsky@nyu.edu

Phone: 408-8910094

Office Hours: TBA, or by appointment

Course Description

We will explore topics in the boundary between philosophy and cognitive science. Questions will include: To what extent is knowledge innate or acquired? What are concepts? Is human conceptual development continuous or are there discontinuities in the process of conceptual change? How do we put our thoughts into words? What roles do imagination and emotion play in thinking? How do psychological findings about how we reason bear on philosophical accounts of the nature of reasoning? Can creativity be automated? [*Prerequisite: one introductory course.*]

Text

Readings will be available on NYU Classes

Course Requirements

The coursework will consist in two short (3-4 page) papers, worth 25% each, and one longer (7-8 page) paper, worth 40%. The papers must be word-processed, spell-checked, double-spaced, and formatted in 12-point font. There will be no exams. The remaining 10% of the grade will be based on participation. You can get a perfect participation grade just by coming to class everyday and showing that you make an honest attempt to understand the material.

It's crucial that you come to class every day. Much of the material that we will talk about is not easy to extract from the readings on their own. The readings vary in length, but they all require close study. You should read them carefully before we discuss them in class, and you may need to read them more than once. Some of the readings will be challenging and include unfamiliar technical terms. Don't get frustrated if you don't understand something right away. Other people are likely to be confused too. If after re-reading, you still have trouble understanding, bring it up in discussion or email me about it.

I highly encourage you to talk and ask questions in class. Don't worry about asking a confused/mistaken/silly question. Chances are that it isn't. And even if it is, it's much better to ask and learn why.

Policy for Late Work

Unless a legitimate reason is provided in advance, one increment of grade (for example: A to A-) will be taken off for each day a written assignment is late.

Tentative Schedule

Part I: Cognitive Architecture

Week 1 (1/26 – 1/28) – Innateness

Pinker, *The Blank Slate: The Modern Denial of Human Nature*, Part I Samet and Zaitchik, "Innateness and Contemporary Theories of Cognition"

Week 2 (2/2 – 2/4) – Mental structure, the nature of cognitive faculties: Fodor, *The Modularity of Mind*, Chapters 1, 2 and 4.

Part II: Concepts

Week 3 (2/9 – 2/11) – What are concepts? What basic kinds of concepts are there?

Schiffer, "The Mode-of-Presentation Problem"

Laurence and Margolis, "The Ontology of Concepts—Abstract Objects or Mental Representations?"

Fodor, "Having Concepts"

Week 4 (2/16 – 2/18) – Conceptual development

Carey, *The Origins of Concepts*, Chapters 1 and 2 2/16:

Presidents' Day (No Class)

Week 5 (2/23 – 2/25) – Relations between theories of conceptual development and theories of concepts

Carey, *The Origins of Concepts*, Chapters 11 and 13

Keil, *Concepts, Kinds and Conceptual Development*, 183-194, 307-309

Part III: Language

Week 6 (3/2 – 3/4) – Accounts of language production

Dennett, *Consciousness Explained*, Chapter 8

Levelt, "Spoken Word Production: A Theory of Lexical Access"

*First paper due Monday 3/2 in Class.

Week7 (3/9 – 3/11) – To what extent do we rely on language in coming to know our thoughts?

Byrne, “Knowing that I am Thinking”

Lind et al “Speakers’ Acceptance of Real-Time Speech Exchange Indicates That We Use Auditory Feedback to Specify the Meaning of What We Say”

Optional: Alshanetsky, “Articulating a Thought: A Puzzle”

Week 8 (3/16 – 3/18) – No Class (Spring Recess)

Part IV Imagination

Week 9 (3/23 – 3/25) – What does the cognitive science of imagination reveal about cognition in general? What is the role of imagination in thinking? Are there systematic pitfalls associated with using imagination to gain knowledge, e.g. of possibility and necessity?

Block, “Mental Pictures and Cognitive Science”

Kosslyn and Moulton, “Mental Imagery and Implicit Memory”

Stokes, “The Role of Imagination in Creativity”

Sartre, *The Imaginary*, selections

Part V Emotion

Week 10 (3/30 – 4/1) – What are emotions?

William James, “What is an Emotion?”

Prinz, *Gut Reactions: a Perceptual Theory of Emotion*, Chapters 1 and 2.

*Second Paper Due Monday 3/30 in class.

Week 11 (4/6 – 4/8) – What is the role of emotion in thinking?

Damasio, *Descartes’ Error: Emotion, Reason, and the Human Brain*, Chapters 8 and 11

Optional: Cosmides and Tooby, “Evolutionary Psychology and the Emotions”

Part VI Reasoning

Week 12 (4/13 – 4/15) – Psychological Accounts of Reasoning: Models vs. Rules

Philip Johnson-Laird, “Mental Models and Reasoning”

O’Brien, “Mental-Logic Theory: What It Proposes, and Reasons to Take This Proposal Seriously”

Sternberg, “What do We Know about the Nature of Reasoning?”

Week 13 (4/20 – 4/22) – Philosophical Accounts of Reasoning, relation to Psychological Accounts.

Boghossian, “What is Inference?”

Boghossian, “Inference and Rules”

Broome, *Rationality Through Reasoning*, Chapter 15

Part VII Creativity

Week 14 (4/27 – 4/29) – Origins, mathematical creativity, the role of trial-and-error

Picciuto and Carruthers, “The Origins of Creativity”

Poincaré, “Mathematical Discovery”

Dennett, “Why the Law of Effect will not Go Away”

Week 15 (5/4 – 5/6) – Creativity and Artificial Intelligence.

Boden, “Creativity and Artificial Intelligence: A Contradiction in Terms?”

Avi Wigderson, “Knowledge, Creativity and P versus NP”

Week 16 (5/11) – Wrap up.

*Final paper due Monday 5/11 in class.