Philosophy 150: Philosophy of Cognitive Science

Spring 2012

When: Tuesdays and Thursdays, 2-3:20

Where: Solis 111

Office hours: Tuesdays 10-11:30, in H&SS 8072 (and by appointment)



Overview

This course is an introduction to the philosophy of cognitive science. So what the heck is the philosophy of cognitive science? It is the field of philosophy that is concerned with foundational questions that arise in cognitive science --- the contemporary, interdisciplinary, scientific study of the mind. (Analogy: philosophy of cognitive science is to cognitive science as philosophy of physics/biology/chemistry is to physics/biology/chemistry). Our project, then, will be to grapple with some of the foundational questions that arise in the course of cognitive science. Slightly more specifically, we'll be asking about what kinds of explanations cognitive sciences give, and what kinds of states and processes they enlist to give those kinds of explanation. In the final section of the course we'll take up a more specific issue about explanation in one of the cognitive sciences in particular (linguistics): here we'll turn to the question of how much (if any) knowledge of language is innate as opposed to learned.

Though the topics chosen here by no means exhaust the subject, they connect quite widely to other issues in surrounding areas in both philosophy and the cognitive sciences. Consequently, I believe that focusing on these issues will permit a reasonably extensive view of the landscape.

Course Requirements

There will be two assigned papers for the course and a take home final exam. There will be no midterm.

Books

All of the readings for the course are available by electronic reserve at Giesel Library.

Grading

In grading I will assign equal weight to each of the two papers and the take home exam, and will use class participation as a way of deciding between borderline cases.

Academic Integrity

Violations of academic integrity will not be tolerated in this course; violators will receive an F on at least the

relevant assignment and possibly the course, and will be subjected to UCSD's disciplinary procedures (which could result in penalties including permanent explusion from the university).

You are responsible for knowing and adhering to the <u>UCSD Policy on Integrity</u> in all respects. In particular, you may not cause or allow your work for this course to resemble that of any other person, and all use of the ideas or words of anyone other than a paper's author must be acknowledged properly. I don't care a huge amount about specific citation formats; I do care a huge amount that sources are acknowledged. As far as collaboration goes, it's fine (it's encouraged) to talk about the philosophical issues with other students or anyone else you like; but when it is time to write up an essay you should do so entirely by yourself. If you have any questions about the Policy on Integrity or how to follow it (e.g., if you are unsure how to cite ideas from other sources) *please ask me!* I am very happy to help prevent real or apparent violations of academic integrity before they occur, and very unhappy to discover that they have occured. (As you may have noticed, I feel very strongly about this issue.)

To ensure standards of academic integrity are met, I'll ask you, as a condition on taking this course, to run all of your assigned work for the course through <u>Turnitin.com</u>, which checks your paper for textual similarity to all of the other papers in its databases. (Your submitted papers will also be included as source documents in the Turnitin.com reference database, solely for the purpose of detecting plagiarism, going forward.)

To get started with the system, please see the instructions at http://turnitin.com/resources/documentation/turnitin/training/en-us/Student Manual en-us.pdf. You'll need the class ID and the password.

Tentative Schedule

I note that this list is tentative, both in its content and the parenthetically indicated planned timing. My plan is to proceed in our discussion, allowing as much time as necessary for treating the topics responsibly, even if this means we fall behind the optimistically normative schedule.

Segment 1 (weeks 1-2): Intentional Explanation?

Chomsky, "A Review of B. F. Skinner's Verbal Behavior" Language, 35:1 (1959), 26-58.

Fodor, Psychosemantics: The Problem of Meaning in the Philosophy of Mind, MIT Press, 1987.

Chapter 1 -- "Introduction: The Persistence of the Attitudes", pp1-26.

Churchland and Churchland, "Stalking the Wild Epistemic Engine" Nous 17(1): 5-18, 1983.

Segment 2 (weeks 3-4): Concepts

Katz, "On The General Character of Semantic Theory" in Margolis and Laurence (ed.) Concepts: Core Readings (MIT Press, 1999), ch4.

Rosch, E. 1978, "Principles of Categorization", pp. 27-48 in Rosch, E. & Lloyd, B.B. (eds),

Cognition and Categorization, Lawrence Erlbaum Associates, Publishers, (Hillsdale).

Rey, G. 1983, "Concepts and Stereotypes" Cognition 15:237-62.

Carey, S. 1991, "Knowledge Acquisition: Enrichment or Conceptual Change?" in S. Carey and R. Gelman (ed.), *The Epigenesis of Mind: Essays in Biology and Cognition*. Hillsdale, NJ: Erlbaum, 257-291.

Segment 3 (weeks 5-7): Computationalism and its Critics

Pylyshyn, Z. 1984. *Computation and Cognition: Toward a Foundation for Cognitive Science*. MIT Press. Chapter 9. pp257-272.

Rumelhart, D.E. 1989. "The architecture of mind: A connectionist approach." In M.I. Posner (ed.), 1989, *Foundations of Cognitive Science*, pp133-160.

Fodor, J. & Pylyshyn, Z. 1988. "Connectionism and cognitive architecture: A critical analysis." *Cognition* 28: 3-71.

Van Gelder, T. 1992. "What might cognition be, if not computation." *The Journal of Philosophy* 92: 345-381.

Segment 4 (weeks 8-10): Linguistics and Linguistic Knowledge

Chomsky 1965, Chapter 1 -- "Methodological Preliminaries" in *Aspects of the Theory of Syntax*. MIT Press. pp1-62.

Cowie. F. 1999. What's Within?: Nativism Reconsidered. Oxford University Press. Chapters 8-9 (i.e., pp176-237).

Laurence, S., & Margolis, E. 2001. "The poverty of the stimulus argument". *British Journal for the Philosophy of Science* 52: 217-276.

Pullum, G.K. and Scholz, B.C. 2002. "Empirical assessment of stimulus poverty arguments". *Linguistic Review* 19(1/2): 9-51.