

Philosophy of Cognitive Science Tutorials

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General Instructions: essays should not exceed 2500 words, and must be emailed in .doc format to all tutorial participants no later than 24 hours before the tutorial. Each week one essay will receive written feedback, and the other will be discussed in tutorial. Students will be expected to read submitted essays, as well as any core readings, and arrive in tutorial ready to discuss them.

I have included some suggested essay topics. You are also welcome to devise your own topics, though you must seek approval for such a topic in advance.

WEEK 2: PSYCHOLOGICAL EXPLANATION AND REDUCTION

Essay Questions:

1. Does multiple realization undermine reductionism? Why or why not?
2. Mechanists cannot be reductionists. Discuss.

Core Readings:

- Bechtel, W and J Mundale, (1999). 'Multiple Realizability Revisited: Linking Cognitive and Neural States' [A sophisticated attack on MR-based arguments against reductionism; classic versions of those arguments appear in Fodor 1974 ('Special Sciences')]
- P. Machamer, L. Darden and C. Craver. (2000) 'Thinking about Mechanisms' [This is perhaps the seminal paper on explanation in philosophy of science from the past twenty years, and is worth reading closely]
- Churchland, P. and P. Churchland, 'Intertheoretic Reduction: A Neuroscientist's Field Guide' [This paper is quite breezy, but has some influential and important arguments]
- Marr, D. *Vision* (Chapter 1) [There is a very good chance that you'll have a question about Marr's 'levels' during examinations, if the past is any guide]

WEEK 4: NEUROIMAGING AND DOUBLE DISSOCIATION

Essay Questions:

1. Can neuroimaging data provide strong support for functional localization? When answering this question, make sure to discuss the relevance of cognitive ontology.
2. Under what conditions can double dissociations reveal cognitive architecture?

Core Readings:

- Davies, M. (2010) 'Double Dissociation: Understanding its Role in Cognitive Neuropsychology'
- Poldrack, R. (2006) 'Can Cognitive Processes be Inferred from Neuroimaging Data?' [Short but seminal paper that introduces the 'Problem of Reverse Inference']
- Klein, C. (2012) 'Cognitive Ontology and Region- versus Network-Oriented Analyses'
- Hutzler, F. (2014) 'Reverse Inference not a Fallacy Per Se' [Some have thought this paper a decisive answer to Poldrack 2006; decide for yourselves.]

WEEK 6: REPRESENTATION

Essay Questions:

1. Can appeals to function solve Fodor's disjunction problem?
2. Millikan motivates her view by appeal to relatively simple representational systems. Can her account be extended to cover more complex cognitive states (e.g. beliefs, desires, and intentions)?

Core Readings:

- Millikan, R. (1989) 'Biosemantics' [seminal paper: read closely]
- Dretske, F. (1986) 'Misrepresentation'
- Fodor, J. (1990) 'A Theory of Content' [read Part I; try Part II only if you have time]

WEEK 8: EXPLANATORY ROLE OF REPRESENTATIONAL CONTENT

Reading Week: come prepared to discuss the core readings. No essay assigned.

Core Readings:

- Searle, J. (1980) 'Minds, Brains and Programs' [intro. of the 'Chinese Room']
- Piccinini, G. (2008) 'Computation without Representation'
- Egan, F. (1995) 'Computation and Content'
- Fodor, J. (1987) *Psychosemantics* [appendix]

HILARY TERM

WEEK 4: ACCESS AND PHENOMENAL CONSCIOUSNESS

Essay Questions:

1. How good are arguments purporting to show that phenomenal and access consciousness do not always co-occur?
2. Is mere access consciousness really a type of consciousness?

Core Readings:

- Block, N. (1995) 'On a Confusion About a Function of Consciousness' [This is Block's first and most famous treatment of the access/phenomenal consciousness distinction; skip the many replies]
- Block, N. (2007) 'Consciousness, Accessibility, and the Mesh Between Psychology and Neuroscience' [Block's updated treatment of access/phenomenal consciousness... if you read his 1995, you need not read this paper in great detail]
- Smithies, D. (2011) 'Attention is Rational-Access Consciousness'

Supplementary Readings:

- Phillips, I. (2018) 'Unconscious Perception Reconsidered'
- Phillips, I. (2016) 'Consciousness and Criterion: On Block's Case for Unconscious Seeing'

WEEK 6: DELUSION

Essay Questions:

1. Does making sense of delusions require us to postulate abnormalities in how beliefs are formed and maintained, or does it suffice to appeal to abnormalities in perception or experience?
2. Is it plausible that a single explanatory framework could account for the wide variety of delusions?

Core Readings:

- Campbell, J. (2001) 'Rationality, Meaning, and the Analysis of Delusion'
- Davies, M., et al. (2001) 'Monothematic Delusions: Towards a Two-Factor Account.'
- Colheart, M., et al. (2011) 'Delusional Belief'

Supplementary Readings

- Stone, T. and Young, A. (1997) 'Delusions and Brain Injury: The Philosophy and Psychology of Belief'
- Colheart, M. (2007) 'The 33rd Sir Frederick Bartlett Lecture: Cognitive Neuropsychiatry and Delusional Belief'

- Parrott, M. and Koralus, P. (2015) ‘The Erotetic Theory of Delusional Thinking’
- Parrott, M. (forthcoming) ‘Bayesian Models, Delusional Beliefs, and Epistemic Possibilities’

WEEK 7: CONSCIOUSNESS

Reading Week: No essay assigned.

Core Readings:

- Nagel, T. (1974) ‘What is it like to be a bat?’
- Akins, K. (1993) ‘What is it like to be boring and myopic?’ [see also: Akins (1993) ‘A Bat Without Qualities?’]
- Chalmers, D. (2004) ‘How Can We Construct a Science of Consciousness?’
- Dretske (2006) ‘Perception Without Awareness’ [see also: Phillips supplementary readings from Week 4]

WEEK 8: CONNECTIONISM AND COMPUTATIONALISM

Essay Questions:

1. Is it possible to explain the productivity and systematicity of thought without appealing to syntactically structured representations?
2. Is connectionism incompatible with folk psychology?

Core Readings:

- Fodor, J and Pylyshyn, Z (1988) ‘Connectionism and Cognitive Architecture: A Critical Analysis’ [This is long, but seminal]
- Ramsey, W., Stich, S. and Garon, J. (1990) ‘Connectionism, eliminativism and the future of folk psychology’

Supplementary Readings:

- Smolensky, P. (1988) ‘On the Proper Treatment of Connectionism’
- Fodor, J (1987) *Psychosemantics* [esp. appendix]