

## Philosophy of Mind, Second Essay topics.

Papers should be no longer than 1,000 words, double spaced with normal margins. They are **due in class** (at the beginning of class) on **March 12th**. An electronic copy should be emailed to me on the same day (please write "3180 paper" in the subject line of your email).

Papers will be graded according to three criteria. First, how clearly does the author express the ideas and arguments under consideration. Be careful not to rely on jargon. It is okay to use technical terms as long as you to explain what they mean (in your own words). Short clear sentences are preferable to long convoluted ones. Examples are often helpful. Second, how well does the author respond to the argument(s) under consideration. Your responses should address the argument under consideration. Ideally they will be sensible and creative. Finally, does the author consider potential replies to his or her response? If you agree with the focal argument, how might someone disagree with you. If you are taking on the focal argument, how might the author of that argument respond to your objections.? How would you in turn reply to those responses? Such philosophical back-and-forth makes for an engaging paper. I do not encourage you to do any background reading. For these topics there is an immense amount of material available, not all of it good. There is a danger that you will waste your time searching when you could be thinking and refining your ideas.

1. In Chapter 7, Section 3, Clark asks: if the mind is at bottom a PDP network, then "How can we do science mathematics, logic, etc.? How can we do logic if the basic operations are not logical at all?" He goes on to develop a speculative answer based on a suggestion by Rumelhart, Smolensky et. al. On this view, the human mind achieves the functionality of a Von Neumann machine by manipulating physical symbols in the external world. "The picture may be captured in a metaphor: Thought parasitizes the world and then returns , nourished and enlarged, to the head" (134). In your paper, first do your best to unpack this metaphor as clearly as possible. What exactly is this suggestion? What steps would be involved in developing such a system? How would it function? Second, offer a critique of this suggestion drawing on the sorts of arguments that Clark has raised throughout the book. For example, would the system that you have imagined function like the human mind? Is such a system biologically plausible, given the sorts of biological constraints Clark describes in Chapter 4? Or, perhaps you think that such a system simply does not make adequate sense to even evaluate on these grounds.
2. Fodor and Pylyshyn criticize connectionists for confusing the level of psychological explanation with the level of implementation (See Chapter 8, Section 4). . They concede that the brain is, at some fundamental level, a PDP network. However, they claim that at a higher level this network is implementing a Classical, Von Neumann architecture. Thus, they conclude that the appropriate level at which one should explain how the mind works is at the "higher" level of a Von Neumann machine executing cognitive functions (Marr's levels 2 and 3). Put differently, the objection is that details about how a Von Neumann machine is implemented in hardware are neither necessary nor sufficient for explaining how that machine performs familiar psychological functions. Clark responds to this line of argument by suggesting that Fodor and Pylyshyn (along with many members of the cognitive science community) have confused two different kinds of cognitive science. In your paper, explain as clearly as possible the difference between what Clark calls 'descriptive' and 'causal' cognitive science. Do you think that recognizing this distinction avoids Fodor and Pylyshyn's objection?