

Essay One

Requirements

You are to submit one 4-6 page research paper on Monday 17 March, addressing one and only one of the questions listed below. A hard copy of the paper must be submitted in class.

Guidelines

An excellent resource to read before starting your essay is James Pryor's "Guidelines on Writing a Philosophy Paper" [<http://www.jimpryor.net/teaching/guidelines/writing.html>]. You might also find his "Philosophical Terms and Methods" [<http://www.princeton.edu/~jimpryor/general/vocab/>] and "How To Read a Philosophy Paper" [<http://www.jimpryor.net/teaching/guidelines/reading.html>] useful.

Some additional comments on the assignments:

- Do not hand in a first draft of your essay—read it through at least once before submitting, if only to check spelling and grammar and assess the overall coherency of your prose.
- Do not submit anything over the page length.
- I don't mind which referencing system you use, as long as it is consistent. If you are not already committed to a particular style, my preference is for the Harvard system.
- Use footnotes if necessary, but *do not use endnotes*.
- When researching, it is better to read one paper many times than many papers once.

Questions

- Explain and evaluate Popper's solution to the demarcation problem, focussing on the problem of how to determine when a theory has been falsified. Address at least one of the following questions:
 - Why does Popper think that explanation is not a good way to discriminate between science and pseudo-science?
 - Why does Popper think that confirmation is not a good way to discriminate between science and pseudoscience?
- Compare and evaluate Popper and Kuhn's solutions to the demarcation problem, addressing at least one of the following questions:
 - Kuhn says that Popper has focussed on an atypical variety of scientific activity. What does he mean? Is he right?
 - Kuhn says that it is typically the scientist who is tested, and not a scientific theory. What does he mean? Is he right?
 - Is Kuhn's solution to the demarcation problem specific enough to be applied in particular cases?
- Lakatos criticises both Popper and Kuhn, and attempts to combine their views into a unified solution to the demarcation problem. Explain how his view is influenced by Popper and Kuhn, and evaluate whether his solution is acceptable. Address at least one of the following questions:
 - What does Lakatos think is wrong with Popper's solution? Is he right?
 - What does Lakatos think is wrong with Kuhn's solution? Is he right?
 - Does Lakatos provide a solution to the demarcation problem specific enough to be applied in particular cases?
- Evaluate whether astrology is a pseudoscience. Include in your discussion a description of how the view of either Popper, Kuhn, Lakatos, Thagard or Laudan applies in the astrological case.
- Describe Kuhn's view of the nature of scientific change, and consider whether his view allows for the possibility of scientific progress. Address at least one of the following questions:
 - How is change within paradigms different from change between paradigms, for Kuhn?
 - Why is it difficult on Kuhn's view to evaluate whether a new paradigm is more progressive than an old paradigm?

- Is there a notion of scientific progress compatible with both change within paradigms and change between paradigms?
- Explain and evaluate Bird's cumulative view of scientific progress. Address at least one of the following questions:
 - What is the difference between the epistemic, the semantic and the functional-internalist position on scientific progress, as Bird describes these positions?
 - How does Bird argue for the epistemic position? Is he successful?
 - Why does Bird end up requiring the notion of approximate truth, and how does this notion figure in his account?