Essay Two

Requirements

You are to submit one 8-10 page research paper on Wednesday 7 May, addressing one and only one of the questions listed below. The paper must be submitted to me by email at bradley.weslake@rochester.edu. You must paste the text of your essay into the email, and also attach the essay in PDF, DOC, RTF or ODT format. Note: I will not accept DOCX files.

Guidelines

An excellent resource to read before starting your essay is James Pryor’s “Guidelines on Writing a Philosophy Paper”¹. You might also find his “Philosophical Terms and Methods” ² and “How To Read a Philosophy Paper”³ 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.
- 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.

¹http://www.jimpryor.net/teaching/guidelines/writing.html
²http://www.princeton.edu/~jimpryor/general/vocab/
³http://www.jimpryor.net/teaching/guidelines/reading.html
Questions

• What is the issue between reductionists and non-reductionists concerning laws of nature? Explain and evaluate the arguments of Schaffer and Carroll on this issue, and argue for either reductionism or non-reductionism.

• Explain and evaluate the Lewis view of laws of nature, addressing at least two of the following questions:
  – How does the Lewis view improve on the basic regularity view of laws?
  – How should Lewis respond to thought experiments that seem to show that the laws could vary independently of the pattern of individual events?
  – Does the Lewis view have a problem with the explanation of individual events in terms of laws?
  – How does the Lewis view allow for uninstantiated laws?

• Explain and evaluate either the Dretske or the Tooley account of laws, addressing at least two of the following questions:
  – How does the view provide for the explanation of individual events in terms of laws?
  – How does the view explain the intuitions behind thought experiments that seem to show that the laws could vary independently of the pattern of individual events?
  – Does the view provide for a stronger notion of natural necessity than reductionist views such as the Lewis view?
  – Explain the identification problem and the inference problem, as described by Van Fraassen. How do these problems apply to the view you are discussing?

• Explain and evaluate Beatty’s argument for the absence of laws in biology, addressing at least two of the following questions:
  – Explain and evaluate Beatty’s argument for the dilemma of biology containing either contingent biological generalisations, or non-contingent non-biological generalisations.
  – What are relative significance controversies, and why does Beatty think they count as evidence for his view? Is he right?
  – Explain and evaluate Sober’s reply to Beatty.

• Explain and evaluate Van Fraassen’s constructive empiricism, addressing at least two of the following questions:
Explain and evaluate Van Fraassen’s reply to Maxwell’s argument against the observable and non-observable distinction playing a role in scientific epistemology.

Scientific theories often explain the observable in terms of the unobservable. Explain and evaluate Van Fraassen’s view of this type of explanation.

Explain and evaluate Van Fraassen’s reply to the challenge for the constructive empiricist to explain the success of science.

Laudan argues that scientific realism is unsupported by an inductive argument from the failure of past scientific theories. Explain and evaluate his argument, addressing at least one of the following questions:

Explain and evaluate Lewis’ argument that Laudan’s argument is fallacious, considering the form of realism required to employ the Lewis strategy and the historical evidence needed to refute it.

Explain and evaluate Lange’s argument that Laudan’s argument is fallacious, considering the form of realism required to employ the Lange strategy and the historical evidence needed to refute it.

Note: I may add further questions over the next few weeks. If you would like to write on a topic addressed in class but not included here, you may make a proposal to me. You may only address a different question to those above if I have approved your proposal.