

**Philosophy 3334: Philosophy of Biology
Fall 2023, Long Paper Assignment #7**

Due Monday, Dec 11 (11:59pm)

Purpose: The purpose of our class as a whole is to think about how biology is (or is not) relevant to understanding ourselves. In the second half of the class we read Kathryn Paige Harden's book *The Genetic Lottery* which argues that understanding (and using) our knowledge of genetics is important for creating a better society. The purpose of this final assignment is to engage in a substantial way with the arguments of her book.

The standard unit of philosophical analysis is the argumentative essay. Writing is an extension of thinking. It allows you (and forces you!) to think more deeply about a topic than you are able to do by keeping things 'in your head.' Exposition of someone else's views (including careful description of those ideas, issues, terms and scope) allows you to understand them better, and it is then much easier to critically evaluate these views. Laying out your own argument or that of someone else often forces you to be explicit about connections which can reveal weaknesses in your own thinking which must be acknowledged so they can then either be fixed or can lead to better views overall. Thus the purpose of assigning an essay is both as an effective way to evaluate your learning and progress in the class and to help improve your philosophical skills.

Instructions: You are to write an argumentative paper on some topic relevant to any of portion of Harden's book *The Genetic Lottery*. The paper should be between roughly 1200 and 1600 words. If you double space and have natural fonts and margins, your essay would be about 4-6 pages.

Due Date: Your essay should be uploaded into Blackboard before **Monday, Dec 11 at 11:59pm.**

Grading: This paper will be worth 12 points (about 13% of your final grade).

Guidelines: An argumentative essay is a reasoned defense of some particular claim. A general guideline for a paper like this is that you should spend about half of your time in exposition and half your time in evaluation.

Here are some useful guides to writing philosophy papers:

https://philosophy.fas.harvard.edu/files/phildept/files/brief_guide_to_writing_philosophy_paper.pdf (from Harvard College's Writing Center)

<https://www1.cmc.edu/pages/faculty/akind/Intro01s/Writing.htm> (from Amy Kind)

<http://www.jimpryor.net/teaching/guidelines/writing.html> (from Jim Pryor)

http://joelvelasco.net/teaching/120/How_to_Write.pdf (from Chris Hitchcock)

Topic:

You may choose to write about any topic relevant to this book. For example, here are some sample questions that might help stimulate your thinking. If you find yourself thinking that one of these topics would lead to an extremely short answer, then don't choose it and pick another topic. You are welcome to pick one question as the prompt for your whole essay, to combine multiple topics, or to choose your own.

1. One purpose of Harden's book is to argue that liberals should care about genetics. Why does she think this? Do you think the book succeeds in this goal?
2. In chapter 1, Harden says that she will argue in the book that our genetic endowments are relevantly like other accidents of our birth and our lives and they should be treated as such. Is she right about this?
3. What are polygenic index scores and what are they useful for? Are they useful for predicting individual outcomes? How about comparing groups? What about for explanation?
4. There is a long history of very bad uses of genetics for social purposes including social Darwinism and eugenics. Is Harden advocating more of the same or is it importantly different?
5. Are heritability studies (such as twin studies) importantly different from GWAS studies? Are they both telling us useful (and different) things?
6. What is the missing heritability problem and is it a real problem? What do you think it shows about the nature of genetic and environmental interactions?
7. Genes only have effects in an environment. What does that tell us about whether it is a worthwhile project to talk about 'the nature/nurture' debate? What about causation? What about partitioning variance?
8. Is it appropriate to say that there are genes that cause obesity? Or high IQ? Or crime? Under what circumstances? Does it depend on the mechanisms of how these genes are working?
9. What does Jenck's 'red-haired children can't go to school' example tell us about heritability studies and genetic causation? Why do Sober and Harden think that we can still usefully talk about genetic causation in this kind of case? Do you agree?
10. What does equality of opportunity mean and is it a good thing? Is it achievable? Should we be trying to achieve it?

11. Harden says that we can better understand environmental causation and better predict the results of environmental interventions if we better understand genetics. (Using nature to understand nurture). What does she mean? Is she right?

12. What is the relationship between genetics and free will? What about moral responsibility? Praise and blame?

13. Is it possible to acknowledge group differences without hierarchy? Or is this inherently problematic?

14. What does Harden mean by an anti-eugenic policy and how does it differ from a genome blind policy. Are anti-eugenic policies a good idea? When should we ignore genetic information and when would it be useful?

15. Are there dangers of genetic information being spread everywhere? What if insurance companies can use this information? Or college admissions committees? Or employers? Do we have a right to genetic privacy? How could this work?

15. --- It would also be totally appropriate to talk about some particular issue like crime or IQ or educational attainment and talk about genetics and how it is or is not relevant.