Philosophy 4330: Epistemology
Spring 2015, Fifth Paper Assignment

Instructions: Answer each of the four questions below.

Due Date: You must submit your answers through Blackboard before the start of class on Wednesday, April 15th. Remember that these papers will be graded anonymously so do not write any identifying information (such as your name) in the paper.

Grading: There will be five short assignments throughout the semester. I will drop your lowest score. The remaining four assignments will constitute 40% of your final grade.

1. Look at the data about bicycle commuting contained in this <u>report by the League of American Bicyclists</u>, made using census data. Now explain why the following argument is bad:

> *Among cities of over 1,000,000 people, Philadelphia has the highest bike*
>   *commute rate at 2.3%.*
> *Among cities of over 300,000 people, Portland has the highest bike*
>   *commute rate, at 6.1%.*
> *Among cities of over 200,000 people, Madison has the highest bike*
>   *commute rate, at 6.23%.*
> *Among cities of over 100,000 people, Boulder has the highest bike*
>   *commute rate, at 12.1%.*
> *Among cities of over 50,000 people, Davis has the highest bike*
>   *commute rate, at 19.1%.*

Since the bike commute rate goes up as the population goes down, smaller cities must be better for bike commuting than larger cities.

In explaining what is wrong with this, you may want to explain the phenomenon Kahneman calls "the law of small numbers". You shouldn't have to do any actual statistical analysis to show why this argument shouldn't be convincing. (Question due to Kenny Easwaran)

2. Explain what Kahneman means by "anchoring" and give an example of the phenomenon. Then describe two different ways that anchoring can come about and make sure to explain how these explanations are different.

3. Explain what is meant by "the conjunction fallacy". Give an example where someone commits the fallacy. Which probability rule(s) given in chapter 11.1 of our book does the conjunction fallacy violate? Why does Kahneman think that people commit this fallacy?

4. On page 169, Kahneman says "It is useful to remember, however, that neglecting valid stereotypes inevitably results in suboptimal judgments." Imagine that you are serving on a jury where the female defendant is accused of a drive-by shooting. It is a statistical fact that most murders in the US today are committed by men. Explain how, if at all, you think the fact that the defendant is female should affect your judgment in this case. Give one reason why someone might disagree with what you say here (no matter what you say, someone could disagree).