

## **HPS/PI 130 Winter 2013 Second Paper Assignment**

**Instructions:** Write an argumentative paper of 1,500 to 2,000 words (3-5 single spaced typed pages). The general guidelines are as follows. First, your paper must critically engage one or more of the topics we have discussed in the class (any week). Second, your paper should not *merely* summarize the position(s) of some of the authors you discuss or describe some factual or technical details; it should in some way locate ideas relative to each other, synthesize those ideas, criticize them, defend them against important objections, or develop them in your own way. Third, the topic of your paper should be of an appropriate scope given the length constraints. Think of the audience for the paper as another member of the class. They have read the papers, but of course explaining details of what we have read is relevant for argument. If you introduce scientific examples from outside of class, be sure to explain the details of the case and the relevant terms involved. Your goal should be to convince them that the thesis of your paper is true. To do that, you need to explain your thesis clearly and to articulate some good arguments for it. If something we read in class exhibits a different conclusion on a similar thesis, you should explain why those papers are mistaken.

**Due Date:** You must submit your paper to me by email before midnight on Tuesday, March 19<sup>th</sup> [Tuesday evening before Wednesday morning].

**Grading:** This paper is worth 40% of your final grade, and will receive a numerical grade out of 40.

**Collaboration:** Collaboration on this assignment is encouraged. Students are free to discuss the topics with one another, read each other's papers, and offer suggestions. Any suggestions or ideas contributed by another student must be acknowledged just as you would acknowledge an idea taken from any other source. The only restriction is that each student must write their own paper containing their own ideas and words.

**References:** All sources used in the writing of your paper must be properly referenced. This applies to material in the course readings, other published material, lecture notes from this class and other classes, material 'published' on the internet, and ideas contributed verbally by other students. Information about proper procedures and formats for references is included in my handout "How not to get BOC'ed," which is posted on the course website. Failure to follow these guidelines may result in a lowered grade or even an automatic F in the course; it may also lead to charges being brought before the Board of Control. If you have any questions about these issues, please do not hesitate to contact me.

**Advice on Writing a Philosophy Paper:** The course website contains several handouts on writing a philosophy paper, as well as links to a sample philosophy paper and websites on the topic.

**Reading Drafts:** I am happy to read drafts of papers, on a time-permitting, first-come,

first-served basis. If you get a draft to me early it is likely that I can get it back to you in about 24 hours. Please indicate whether you would like to receive detailed comments, or only a general sense of whether you are on the right track. Please request the former only if you actually plan to make substantial revisions to your paper based on the feedback.

**Topics:** The topics offered below are given as suggestions: you may address one of them as is, you may modify one of these topics, or you may create your own topic. Whatever topic you may choose, your essay should have a title that clearly and accurately reflects what the essay is about. It is strongly recommended that your opening paragraph make clear what the conclusion of your paper is and give as much of the key argument for this conclusion as possible. For example, do not write a paper with the title “On Natural Selection” and then proceed to simply talk about natural selection. Better would be a title of “Why natural selection is not a causal process” with an opening paragraph that explains why this is true. If you would like further readings that may be helpful in addressing some of these topics; I recommend starting with the Stanford Encyclopedia of Philosophy. I have also put up a number of additional readings that are directly relevant to the papers we have read in class, though it is not always clear exactly how they are relevant without some research. Asking me for advice for what to look at is also a very good idea.

You may write about any topic relevant to the class as long as it is sufficiently different from your first topic. So if your first paper was about the propensity view of fitness, it is okay to argue that selection is a causal process. However, do not write a second paper on the concept of fitness. Many topics are obviously very tightly linked so this can be a difficult call in some cases. If you are not sure if your topic is sufficiently different, PLEASE ASK ME. A rough guide is that shouldn't be able to just take what you write in the second paper, paste paragraphs into your first paper and create a coherent, but just longer, paper. This rule doesn't apply if you have specific permission otherwise of course.

**Some possible topics (just quickly thought of off the top of my head) –**

Should we think of natural selection (and drift/or but not drift?) as a causal process acting on populations?

Are evolutionary ‘forces’ such as selection and drift sufficiently like Newtonian forces to merit the use of the term? Or are they more like the statistical effects of lower level processes?

Are there any laws in biology? Does this matter for its status as a science?

Beatty argues that all ‘biological’ generalizations are merely contingent results of evolution and could have been different and could change in the future. Is this right? Could *every* (biological) aspect of life really have been different?

Mitchell argues that statements can function more or less like laws in sciences in a

number of different parameters. Is this right? Are her parameters the right ones?

Can distribution generalizations (say about which taxa have which properties) be explanatory?

Is Woodward right that generalizations can be explanatory as long as they are invariant under some kinds of changes even if they aren't over all possible changes?

Can there be laws about particular species?

What is the relationship between biological generalizations and 'lower level' generalizations like those in chemistry and physics? Is some kind of reductionist story right here?