

## HPS/PI 129 Second Paper Assignment

**Instructions:** Write a paper of approximately 2,700 words (9 double-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. Your topic should not be too close to the topic of your first paper without special permission from me. Second, your paper should not *merely* summarize the position(s) of some of the authors you discuss; it should in some way locate them 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. Some students will have strong backgrounds in some area of science that they may wish to bring to bear in their papers. This is fully encouraged, so long as: (i) all of the technical ideas are explained as clearly as possible within the constraints of the length limits of the paper; and (ii) your paper grapples directly with the philosophical issues raised in this course, and is not merely an exposition of the relevant science.

**Due Date:** You must submit your paper to me by email before 5:00 pm on Friday, December 9th.

**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. Further information is also available at <http://www.its.caltech.edu/~words/plagiarism/index.html>. 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 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 within 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. 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. Asking me for advice for what to look at is also a very good idea.

1. Is there any reason to prefer a single taxonomic classification system rather than a pluralist system? If so, what is the best taxonomic system?
2. Are birds reptiles? Are humans bony fish?
3. Could a paraphyletic collection of populations constitute a species?
4. Do the worries about ranks (what is the difference between a class and a subclass really?) apply to the species rank as well? Or are species special?
5. Are particular phylogenetic trees testable? It appears as though any tree is consistent with any distribution of character states of extant species. Does this fact have any bearing on a general theory of testability?
6. How should we interpret the use of probability statements in phylogenetic inference? Is Sober's "no theory theory" (ch 3) a viable solution here?
7. Are there any special problems with studying the evolution of human behavior that make sociobiology or evolutionary psychology doomed to fail?
8. Are there good ways of testing particular claims about whether behaviors such as homosexuality or rape are adaptations? What implications does your answer have for the larger research programs like evolutionary psychology?
9. Does the fact that our species has evolved bear at all on ethics? In what ways?
10. Does the evolution of biological altruism tell us anything about whether humans are naturally altruistic or cooperative? Does our "natural behavior" tell us anything about ethics?
11. Is there a way in which natural selection models can be very helpful in thinking about the evolution of culture?