Philosophy of Biology Philosophy 147 Winter, 2006

Directions for Paper

The questions below are meant to locate the space of your paper. This is to be your paper. It is different from an answer to an exam question. You set the specific topic and address it. The question you address may depart in various ways from the ones posed below. If you have a question as to whether your question might drift too far from the ones posed below, ask me. The overall evaluation of your paper will reflect both how well you do what you set out to do, and how ambitious your project is. (But be aware of the page limit—do not get so ambitious that you need 10-20 pages to do what you set out to do. Typically, one is better off narrowing one's focus and developing the discussion in detail than pursuing a very broad issue superficially.)

Write your paper for an intelligent audience, but do not assume that they have been in this class or read what you have read. That is, you need to explain the relevant material to your audience, not just make an allusion and assume they will understand. You may ask others to read your paper and give feedback, but the writing is to be your own.

This is to be a short paper, 3-5 pages double-spaced (900 to 1500 words). If possible, please submit it electronically to the following email address (phill147@mechanism.ucsd.edu) in MS Word format. Please be sure that you do not have any computer viruses before submitting (I hope you don't have any other kind either). Otherwise, you may submit hardcopy. It is due by the beginning of class on March 9.

- 1. Lloyd challenges the pluralist position advanced by Waters on the levels of selection question. What is the pluralist position and in what sense is it pluralist? What is Lloyd's objection to it? What is (are) the fundamental issue(s) in dispute between them? What is at stake? How can the issue be resolved? (The last might involve an argument for one side or the other, or identifying the issue that must be resolved first to address this issue.)
- 2. Holcomb and Baker invoke Mayr's distinction between ultimate and proximate explanations in the attempt to answer some of the criticisms of sociobiology and to present sociobiology in its strongest light. In particular, how does this approach conceive of the relation between behavioral social science and evolutionary biology? What role does it provide for such things as social practices or moral codes? (You might want to focus on something like the different meanings of *altruism*.)
- 3. Both the propensity conception and the ecological conception of fitness are designed to avoid rendering evolutionary theory into a tautology. What are the competing understandings of fitness advanced by the propensity interpretation and the ecological conception? What leads Rosenberg and Bouchard to conclude that, despite serous problems, only the ecological conception is really viable? What implications does this have for future work in evolutionary biology?