

Philosophy of Biology
Philosophy 147
Winter, 2004

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 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.)

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 (phil147p@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). It is due by the beginning of class on March 4.

1. Gunther Stent comments: "What geneticist could take seriously any explication of 'reduction' which leads to the conclusion that molecular genetics does not amount to successful reduction of classical genetics?" Why has the reduction of classical genetics to molecular genetics proven controversial? How would you respond to Stent's comment?
2. In light of our discussion of gene selection and developmental systems theory, address this question which appeared in Marilyn vos Savant's column in *Parade Magazine*, February 15, 2004: "Imagine that a pair of identical twins is separated at birth. Each is isolated in a room with no human contact. Everything else they need, however, is amply provided, including food, recording voices for learning and the finest schooling materials. Their controlled environment is identical. So is their DNA. When the twins are old enough, each is asked to write an essay. Would their writings be identical?"
3. What is at stake in our discussion of whether there are superorganisms? In view of what is at stake, analyze different conceptions of what be would be to be superorganism. Do any of the conceptions of superorganism suffice for the purposes for which superorganisms are invoked?