

Philosophy 128
Spring 2007
Roush
Philosophy of Science

Paper #4 Topics

Due: 4pm., Monday May 7th to Kenny at easwaran@berkeley.edu

Please write a 4-page paper that develops a response to one of the following questions. Remember to give reasons why. (12 pt., standard margins, etc.)

1. Forster and Sober advertise the Akaike Information Criterion (AIC) as a solution to several outstanding problems in general methodology. According to them, the AIC explains why we often should prefer simpler, more unified, more causally parsimonious, and less ad hoc theories on epistemic grounds. Choose one of these proposed solutions, explain it, and critically evaluate it.
2. There are various worries about arbitrariness in the AIC - sensitivity of k to reparametrization, the subfamily problem, and the choice of hierarchy, for example. Choose one and explain the supposed problem. Assess whether it is solvable, and if not whether that should worry us.
3. Reconstruct what you take to be the best form of the “Ultimate Argument” for scientific realism, the argument that says, roughly, that the realist does a better job explaining the patent success of science. Critically evaluate the argument. You may find interesting considerations in Musgrave, Laudan, or the final Sober paper.
4. Sober (2002) claims that the Akaike framework “helps provide instrumentalism with the epistemology it needs.” This has something to do with the fact, as he sees it, that “a true theory can be *less* predictively accurate than a false one.” Explain how Akaike helps the instrumentalist position on Sober’s view, and try to make sense of the claim that a true theory can be less predictively accurate than a false one. Does this claim need to be true for the AIC to help instrumentalism?