Philosophy 395: Philosophical Paradoxes
Fall, 2015
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Study Questions for Midterm

The midterm will be in class, closed notes, on Thurs. 10/29. It will have four essay questions taken from the following list, and you must do all four. Answers should be 2 to 3 blue book pages each. I think the exam can be finished in 75 minutes, but I will give you up to 90 minutes. We will start promptly at 4:00 P.M. I will be in my office from 2-4 before the exam in case you have any last-minute questions.

1. Present Zeno's paradox of Achilles and the Tortoise. Explain the concept of the sum of an infinite series and, assuming space and time are continuous, use it to resolve the paradox. Does the paradox arise if space and time are discrete?

2. State clearly what is meant by "the relativity of simultaneity" in the theory of relativity. Carefully present an argument for the relativity of simultaneity. The argument need not be quantitative, but you must identity all assumptions. Finally, respond to the following confusion: "The relativity of simultaneity is nothing new; it holds in classical physics. For example, if I see two stars explode at the same time, an observer closer to one star than I am would see that star explode before the other. We didn't need Einstein to tell us that!"

3. How does the A-series of events differ from the B-series of events? Present McTaggart's argument that the A-series is incoherent. What is the natural A-theorist response to the argument? Why does McTaggart reject that response?

4. Present the Grandfather paradox, clearly articulating both the argument that Tim can kill Grandfather and the argument that Tim cannot kill Grandfather. Then present David Lewis's solution to the paradox.

5. Present Russell's paradox, making clear the role that the (naïve) comprehension principle plays. How does Zermelo suggest modifying the comprehension principle so as to avoid the paradox? Does the resulting concept of set correspond with our ordinary concept of set? Explain.

6. Consider the following sentence:
(L): (L) is false.
Explain why (L) is paradoxical? A natural response to (L) is to say that it fails to express any proposition, and thus that it is neither true nor false. Why does this response fail to solve the problem? Sketch an alternative response.

7. Present a sorites argument with the conclusion that a single grain of sand is a heap of sand. Explain how the supervaluations approach can be used to resolve the paradox. Present at least one objection to the supervaluations approach, and then try to respond to this objection.