## Discussion questions on 'The Paradoxes of Time Travel' 14 April 2007

- 1. Explain as exactly as you can how Lewis would analyse the remark on p 70 ('he may even now—if I may use the phrase—be wandering on some plesiosaurus-haunted oolitic coral reef', in such a way as to make it true in the imagined circumstances.
- 2. In the movie '12 Monkeys', Bruce Willis goes around in the 90s telling people "this isn't the present at all, it's really the past". Explain why time-travellers don't have to think that the people they meet on their travels are making some sort of systematic mistake when they talk about what's present.
- 3. The first full paragraph on p. 74 is worth close attention; the objection to the possibility of backwards time travel that it attempts to argue against is, I think, one that many of you will find compelling. Do the questions 'Where did the information come from in the first place? Why did the whole affair happen?' constitute a good argument against the possibility of the "bootstrapping" story Lewis tells?
- 4. Why does Lewis say (p. 76) that 'you cannot change a present or future event from what it was originally to what it is after you change it'? How does this fit in with the response to the objection.
- 5. In the light of Lewis's discussion, is it correct that (p. 75) 'the impossibility of [back-wards] time travel is revealed after all when we ask not what the time traveler *does*, but what he *could do*'?
- 6. In the story of Tim and Grandfather, how should Tim assess the following conditionals: 'If I succeed in killing this guy, he is not after all my grandfather'; 'If I had succeeded in killing this guy, he would not after all have been my grandfather'.
- 7. Assess the following argument: 'if there are ever going to be reliable time machines, people will go back in time to kill their infant selves and so forth. And unless there is some mysterious new cosmic force to stay their hands, some of them will succeed, and hence will never grow up, and hence will not kill themselves...; so contradictions will obtain. But contradictions can never obtain. So either there are never going to be reliable time machines, or there is some mysterious new cosmic force to stay the hands of would-be autoinfanticides.' How would Lewis respond?
- 8. Consider the following argument: 'It is impossible to travel back in time to "meet one's earlier self". For if this were possible, it could happen, e.g., that one's "earlier self" was sitting while one's "later self" was not sitting. But one and the same person can't be both sitting and not sitting at the same time. So the sitting person and the one who is not sitting cannot be one and the same person, so the case is not after all one of time travel.' How would a proponent of the doctrine of temporal parts re-

spond? What about a rejecter of temporal parts? Is there a good argument for temporal parts here?

- 9. Is the fact that we don't see lots of strangely-clad futuristic folk wandering among us and showing up when important things happen good evidence that time machines capable of traveling into the present will never be invented?
- 10. If we had a time machine (and we knew that it worked in the interesting way Lewis is talking about, not in branching time or whatever), what should we do with it? (Assume it only works once.) Consider: it doesn't seem to make much sense to, e.g., send an assassin back to kill Hitler, since we have excellent evidence that if we send one, he will fail.