(PHIL10125)
Philosophy of Time Travel Course Guide 2017/18

Course Organiser:
Dr. Alasdair Richmond, A.Richmond@ed.ac.uk
Dugald Stewart Building, room 6.11, 0131 650 3656
Office hours (term time): Mondays 3-5 pm Thursdays 1–3 pm

Course Secretary:
Ann-Marie Cowe, annmarie.cowe@ed.ac.uk

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Course Aims and Objectives

This course will offer detailed seminars on key philosophical issues in the philosophy of time travel, largely with an analytical slant. Students should end this course conversant with a range of significant metaphysical (and other) issues surrounding time travel. No detailed logical, scientific or metaphysical expertise will be assumed, and the course is intended to be accessible to students with a wide range of philosophical interests and aptitudes.

Intended Learning Outcomes

To develop further the philosophical skills, and to extend and deepen the philosophical knowledge, acquired in previous philosophy courses. Transferable skills that students will acquire or hone in taking this course should include the following:

- written skills (through summative essays)
- oral communication skills (through lecturer-led and/or student-led seminar discussions)
- presentation skills (through giving and criticising student presentations)
- analytical skills (through exploring a carefully-chosen series of philosophical texts)
- ability to recognise and critically assess an argument.

Lecture Times and Locations

Second semester (PHIL10125): Fridays 11.10 – 13.00
David Hume Tower, LG.10

Lecture Content and Readings

Asterisked items below are available from JSTOR. All other journal items should be available via the electronic journals access facilitated by the Library / MyEd. Any problems, do please let me know.

Main texts:
What with this being a research-led course, driven by my ongoing monograph and spin-offs articles on sundry aspects of time travel, there isn’t yet a full-length book on the philosophy of time travel – although I’m working on it. However, below is probably the best available introduction to space and time in general:
  Durham Acumen 2010, multiple copies should be available in the Library Hub Reserve (at shelf-mark BD632 Dai).
I spent academic year 2008-2009 and 2016-17 on research-leave, working on a raft
of time-travel related articles plus a book. On request, I am happy to circulate draft papers and other works-in-progress of my own. (Just please don’t post my draft stuff anywhere – I’ll just end up looking silly / even sillier.)

Please note that the following lists of readings are prioritised, with the most important / useful readings at the top. So the recommended way to tackle the suggested readings is to start at the top of each list and work downwards. If you read only one thing for each seminar, read the top one.

**Week 1**

Introducing the Debate – What is Time Travel?
The Lewisian Analysis.

Recommended reading:

Useful background / of related interest:

**Week 2**

Developments of, and Objections to, the Lewisian Analysis.

Recommended reading:

Useful background / of related interest:

**Week 3**

A) Introducing Relativity.

Further reading:


B) Gödel and the Unreality of Time
Recommended reading:
- Craig Bourne, A Future for Presentism, Oxford, Oxford University Press, 2006, Ch. 8: 204–224. (Whole book available electronically via the Main Library.)

Useful background / of related interest:

Week 4
The Cheshire Cat Problem and Other Spatial Perplexities.
Recommended reading:

Useful background / of related interest:

Week 5
Information Loops and Object Loops.
Recommended reading:


Useful background / of related interest:

*** N.B. Semester Two: Flexible Learning Week 19th – 23rd February 2018 ***

**Week 6**


Recommended reading:

Useful background / of related interest:

B) Time Travel and Non-Turing Computation.

Recommended reading:
• AR, ‘The Big Pitowsky: Doing Infinitely Many Tasks in (Less Than) No Time At All’, MS still in progress.

Useful background / of related interest:

**Week 7**

Branching-Histories Time Travel.

The Autonomy Principle.

Recommended reading:
• John Abbruzzese, ‘On Using the Multiverse to Avoid the Paradoxes of Time Travel’, *Analysis*, 61, 2001: 36-38.

Useful background / of related interest:
• Timothy Chambers, ‘Time Travel: How Not to Defuse the Principal Paradox’, *Ratio*, 12, 1999, 296-301.
• Kadri Vihvelin, ‘What Time Travelers Cannot Do’, *Philosophical Studies*, 81,

Week 8
The Nomological Contrivance Problem.
Bananas-Skins and Tomato-Rolling.
Recommended reading:

Useful background / of related interest:

Week 9
A) Travel in Multi-Dimensional Time.
Recommended reading:
- G. C. Goddu, ‘Time Travel and Changing the Past (or How to Kill Yourself and Live to Tell the Tale)’, *Ratio*, 16, 2003: 16-32.

Useful background / of related interest:

B) Testimony to Time-Travel.
Recommended reading:

Week 10
A) Free Will and Determinism
Recommended reading:
- Stephanie Rennick, ‘Things Mere Mortals Can Do, But Philosophers Can’t’, *Analysis* 75, 2015:22-26

Useful background / of related interest:
B) Personal Identity
Recommended reading:
Useful background / of related interest:

Week 11
Recapitulation / Revision.

Assessment Information

This course will be assessed by a mixture of written and presented instruments of assessment, which will encourage not merely written responses but active participation in the seminar from all students.

1. A short presentation (10% overall mark):
   Generally at the relevant seminar but no later than the end of teaching. NB. To be submitted electronically to A.Richmond@ed.ac.uk

2. A short (no more than 1,500 word) essay (40% overall mark):
   Due no later than **Thursday 1st March 2018, by 12 pm**

3. A final long (no more than 2,000 word) essay (50% overall mark):
   Due no later than **Thursday 26th of April 2018 by 12 pm**

4. Only for Honours students doing one of the long essays for the coursework dissertation option:
   A 5000 word essay (100% of the overall mark) due no later than **Tuesday 24th April 2018, by 12 pm**

Word Count Penalties

Essays must not exceed the word limit, which includes footnotes but excludes bibliography. The precise word count must be written on the coversheet. Overlong essays will be penalised according to the following rule: 5% will be deducted for every 100 words, or part thereof, over the word limit. So, 1-100 words over lose 5%; 101-200
Penalties for Late Submission of Essays

Unless an extension has been granted, essays must be submitted by the dates shown in the table of Submission Dates below. Essays submitted late without an extension may not be marked, but, if marked, will incur a penalty (in accordance with section 3.8 of the University Undergraduate Assessment Regulations at: http://www.docs.sasg.ed.ac.uk/AcademicServices/Regulations/TaughtAssessmentRegulations2013-14.PDF

For each working day that the work is late there will be a reduction of the mark by 5% of the maximum obtainable mark (e.g. a mark of 65% on the common marking scale would be reduced to 60% up to 24 hours later). This penalty applies for up to five working days, after which a mark of zero will be given.

Please note - Regulation 14 Assessment deadlines: Student responsibilities

It is a student's responsibility to ascertain and meet his or her assessment deadlines, including examination times and locations.

Presentations

You can elect to do your presentation in one of two ways.

EITHER:

a) Give a short (c. 10 minute) presentation summarising/criticising one or more of the assigned course readings, ideally at the seminar for which the reading(s) is (are) assigned. If you like, PowerPoint slides or a handout can be used but these are not compulsory.

OR:

b) Submit a short comprehension text (up to 1,000 words long) summarising/criticising one or more of the assigned course readings.

I would stress that either option a) or option b) is fine by me. However, whichever format you adopt, please submit the text of your presentation electronically to me (A.Richmond@ed.ac.uk), NOT to the Teaching Office. Experience from previous years suggests that it’s vital that I have a record of receipt of presentations.
Essay Questions

Below are some suggested questions for the short mid-term (no more than 1,500 word) essay. The same questions may be used for the longer final (no more than 2,000 word) essay but please note that for long essay purposes, students will be expected to supplement the suggested readings above, either though their own research and/or through consultation with course organiser.

Additional / alternative readings and/or questions can be provided on request.

1) Did David Lewis successfully establish the logical possibility of backward time travel?
Reading as for week 1.

2) Discuss at least three objections to time-travel and explain which you find most convincing.
Reading as for week 2.

3) Did Gödel successfully argue that time is ideal?
Reading as for weeks 3.

4) Are any of the following philosophically intolerable: a) information loops, b) object loops, c) both, d) neither?
Reading as for week 5 and week 6 A).

5) Would time travel oblige us to accept the existence of many histories?
Reading as for week 7.

6) Would time travel worlds necessarily have peculiar physical laws?
Reading as for week 8.

7) Would impact might time travel have on our conceptions of freedom and personal identity?
Reading as for week 10.

Selected Additional References / Further Reading

- David Bacon, ‘Quantum Computational Complexity in the Presence of Closed Timelike Curves’, Physical Review A, 70, 2004: 032309, pre-print archived at:

- John W. Carroll, ‘Self Visitation, Traveler Time and Non-Contradiction’, MS available online at: http://www4.ncsu.edu/~carroll/SVTTNC.pdf
- Mauro Dorato, ‘On Becoming, Cosmic Time and Rotating Universes’, in Callender (ed.): 253-76, pre-print archived at: http://philsci-
archive.pitt.edu/archive/00000150/


1446-1449.

- Steven S. Savitt, ‘There’s No Time like the Present (in Minkowski Spacetime)’,

- Steven S. Savitt, 'Time Travel and Becoming', The Monist, 88, 2005.
- Bas C. van Fraassen, An Introduction to the Philosophy of Time and Space, New

- Peter B. Vranas, ‘Do Cry Over Spilt Milk – Possibly You Can Change the Past’, *The Monist*, 88, 2005
- Christian Wüthrich, ‘Does Modern Physics Permit the Operation of Time Machines?’, MS available online at: [http://aardvark.ucsd.edu/grad_conference/wuthrich.pdf](http://aardvark.ucsd.edu/grad_conference/wuthrich.pdf)
Selected on-line resources:


Some articles of mine:

Over the last sixteen years or so, I've published a few things on the philosophy of time travel, mainly academic articles but some popular too, as follows:

4. 'Gödelian Time-Travel and Anthropic Cosmology', Ratio, 17, 2004: 176-190.

Some fictions and films:

A short word on historical precedence first: Unlike most metaphysical topics, time-travel has drawn forth rather a large fictional literature too. I used to think that H. G. Wells or Mark Twain had invented time travel fiction between them with The Chronic Argonauts (1888) and A Connecticut Yankee in King Arthur's Court (1889) respectively. Well, how wrong I was. A special mention goes to Edward Page Mitchell (1852 - 1927), who I reckon for the first writer (in English at any rate) to pen an unequivocal time travel story, complete with causal loop. The story in question was first published in 1881 and it's called ‘The Clock That Went Backward’, available online at: http://www.forgottenfutures.com/game/ff9/tachypmp.htm#clock

Another interesting Page Mitchell nugget is ‘An Uncommon Sort of Spectre’, from 1879 which features what I think is the first appearance in fiction of a ghost from the future and is available here: http://www.horrormasters.com/Text/a2228.pdf

Both the above Page Mitchell stories can be found in a fascinating anthology edited by Chad Arment, called About Time: The Forerunners of Time Travel and Temporal Anomalies in Science Fiction and Fantasy (Coachwhip Press, Landisville, Pennsylvania, 2009). This anthology also includes what may be (setting definitional subtleties to one side) an even earlier tale of backward time travel, ‘An Anachronism, or Missing One’s Coach’, published
anonymously in the Dublin University Magazine for 1838.

Completeness and fairness alike demand that I acknowledge Enrique Gaspar, and his 1887 story *El Anacronopete*. Although not yet available in English translation (hence I haven’t been able to read it, monoglot Anglophone as I regrettably am), *El Anacronopete* is due to appear in the English for the first time next year under the title *The Time Ship: A Chrononautical Journey*. See BBC News item at: [http://www.bbc.co.uk/news/world-europe-12900390](http://www.bbc.co.uk/news/world-europe-12900390)

Anyway, the following list cannot possibly claim to be exhaustive but here are a few stories I found interesting, (although I don’t necessarily claim literary merit in all cases):

- **Stephen Baxter**, *The Time Ships*, (1995). Authorised centenary sequel to Wells’ *The Time Machine*. (Features not only Wells himself but also Gödel.)
- **John Crowley**, ‘Great Work of Time’, (1989), reprinted in Crowley’s collection *Novelty*. Pushes the notion of changing history about as far as it can possibly go … and a bit further.
- **Lester Del Rey**, ‘My Name is Legion’, (1942), reprinted in *The Best of Lester Del Rey*. Perhaps the pinnacle of multi-occupancy stories – also contains some intriguing advice on what to do with (the obviously then still-living) Adolf Hitler.
- **Michael Moorcock**, *Behold the Man*, (1969), original short story version appears in Moorcock’s *Book of Martyrs*. Centred on a remarkable feat of historical impersonation. (I say no more.)
- **Audrey Niffeneger**, *The Time Traveler’s Wife*, (2004). Very intriguing attempt at depicting (with complete consistency) a life whose personal time is very convoluted indeed. Lewis might well have applauded.
- **Christopher Priest**, ‘Palely Loitering’, (1979), reprinted in Priest’s collection *An Infinite Summer*. Poignant tale of revisited chances that also oddly anticipates
real physical speculation about (e.g.) time-travel by Alcubierre warp-tube (of which more anon).

- Mark Twain, *A Connecticut Yankee at King Arthur’s Court*, (1889). Transmigration of epochs, no less – transplants a then-contemporary American to the British Dark Ages, and all quite independently of Wells’ efforts.

Likewise, a few time-travel films seemed interesting to me too:

- *12 Monkeys*, (1995), written by David Peoples and Janet Peoples, directed by Terry Gilliam, (inspired by Marker’s *La Jetée*). Perhaps the best fictional exemplification of David Lewis’s classic analysis yet devised.
- *Primer*, (2004), written, directed and produced by Shane Carruth. Not at all Lewisian but thoroughly intriguing – watch it at least twice, ideally the second time with director’s commentary, some string and a notepad handy
- *Time Crimes (Los Cronocrimenes)*, (2007), written and directed by Nacho Vigalondo. Also thoroughly Lewisian, albeit to some very strange, film-noir-ish, ends. Another “watch at least twice” job.

I am always in the market for more recommendations however. (I still haven’t managed to see *Looper* yet …)

**Feedback**

It’s very important that you should know what sort of standard of feedback you can expect on my courses and how quickly I aim to turn work around. I aim to make my feedback as useful as I can and to help you pinpoint not only those areas where improvement might be indicated but also those areas where you’ve done well. Because there are three units of assessment for this course (presentation, short essay and long essay), I’m afraid I will not be undertaking to mark or make comments on draft work. However, please note that besides written feedback on summative work, you can also obtain feedback by making an appointment to see me, by sending me questions or concerns via e-mail. For written feedback, I aim to produce a completed comments–sheet with a mixture of quantitative and qualitative feedback for each and every piece of work you submit.

For short or long essays, I aim to complete coversheets and return work electronically within **three working weeks** of initial submission. Turn-around for presentations can typically be a lot faster, but to be on the safe side, let’s say that you’ll get your
presentations back within no more than ten working days of initial submission.

If you’ve any questions relating to feedback or any other aspect of the course, please don’t hesitate to get in touch.

Useful Information

i. This course is completely independent of my Honours option course 'Philosophy of Time'. Some topics inevitably may reflect each other across the two courses but neither course is required for the other.

ii. Students may elect to do their presentation on the same topic as either their short or long essays, but I would greatly prefer it if short and long essays were on different topics. So, you may elect to do two of your three units of assessment on the same topic but no more than two.