COGR 225D, HIGR 241, PHIL 209D, SOCG 255D. Introduction to Science Studies, Part II

Charles Thorpe (Sociology) and Nancy Cartwright (Philosophy)

Time: Winter Quarter, 2016. Tuesdays 9.30-12.20

Location: HSS 3027

Topic: Realism and Anti-Realism in the Natural and Social Sciences

Assessment:
Final essay: 80%
Class discussion and presentation: 20%

Essay assignment:
Write one essay: 15 pages (double-spaced). Worth 80% of grade.

Your paper should be an analysis and critique of the articles and chapters set for the course, addressing one or more of the weekly topic areas. You may include further reading, but the focus should be the literature set for the course.

Due by Wednesday March 16 at 12 noon.
Turn in two copies of your paper: one to be emailed to Nancy Cartwright (ncartwright@ucsd.edu or nancy.cartwright@durham.ac.uk – both addresses end up in the same box) and one paper copy to Charlie Thorpe’s mailbox in Sociology.

Note that offices close at 12 noon for lunch.

An incomplete (i.e. extension) will only be granted if the request is made in advance of the paper due date, and if there are compelling reasons.

Attendance policy.
Attendance at seminars is mandatory. If you miss more than two seminars during the term, without prior permission or valid reason (medical, or family emergency) you may receive a failing grade for the course.

Class discussion and Presentations
You are expected to read all the texts listed under the topic for each week.

A group of students will lead each session (except for Week 1). They will:
a. Prepare a set of questions before the session and distribute it at the beginning of class.

b. Present short reviews in class and lead discussion

Presentations and participation in class discussion will be worth 20% of the final grade.

**Weekly Topics**

1) What is scientific realism and what good is it? An overview

Stanford Encyclopedia of Philosophy article on scientific realism

[https://books.google.com/books?id=5aSGAgAAQBAJ&printsec=frontcover&dq=psillos+scientific+realism&hl=en&sa=X&ved=0ahUKEwjmlN3qw_3JAhUH2WMKHQLbBHwQ6AEIEBAA#v=onepage&q&f=false](https://books.google.com/books?id=5aSGAgAAQBAJ&printsec=frontcover&dq=psillos+scientific+realism&hl=en&sa=X&ved=0ahUKEwjmlN3qw_3JAhUH2WMKHQLbBHwQ6AEIEBAA#v=onepage&q&f=false)


Please read the above in preparation for the first week’s seminar.

Hasok Chang, Cambridge Inaugural Lecture: “Scientific Pluralism and the Mission of History and Philosophy of Science”
[https://www.youtube.com/watch?v=zGUslf9qYw8](https://www.youtube.com/watch?v=zGUslf9qYw8)
*We will view this lecture in class.*

2) Marx’s materialism as realism

V. I. Lenin, “Materialism and Empirio-Criticism.”

Recommended:


3) Critical realism and Marxism

Roy Bhaskar and Tony Lawson, “Introduction: Basic Texts and Developments”

Roy Bhaskar, “Philosophy and Scientific Realism”
The above are chapters 1-2 of Margaret Archer et al., *Critical Realism: Essential Readings*


Recommended:

Ernst Mandel, “Marx’s Labour Theory of Value,”
[https://www.marxists.org/archive/mandel/19xx/marx/ch04.htm](https://www.marxists.org/archive/mandel/19xx/marx/ch04.htm)

4) Anti-realisms 1: Scientific theory as an organizing scheme

Pierre Duhem, *Aim & Structure of Scientific Theory*, Part 1, Ch II and Part 2, CH V,
[https://books.google.com/books?id=5mVPK7Q8dTkC&printsec=frontcover&dq=duhem+aim+and+structure+of+physical+theory&hl=en&sa=X&ved=0ahUKEwj_huKq-vrJAhVC_WMKHacDNIQ6AEIHDAAnv=onepage&q=duhem%20aim%20and%20structure%20of%20physical%20theory&f=false](https://books.google.com/books?id=5mVPK7Q8dTkC&printsec=frontcover&dq=duhem+aim+and+structure+of+physical+theory&hl=en&sa=X&ved=0ahUKEwj_huKq-vrJAhVC_WMKHacDNIQ6AEIHDAAnv=onepage&q=duhem%20aim%20and%20structure%20of%20physical%20theory&f=false)

Alisa Bokulich, “Pluto and the ‘Planet Problem’: Folk Concepts and Natural Kinds in Philosophy”

5) Anti-realisms 2: the sociology of knowledge


Recommended:

6) Anti-realisms 3: Platonism and instrumentalism

Friedman, M (1953), ‘The Methodology of Positive Economics’, part II. in Essays in Positive Economics, pp. 3-43

Menger, C (1963), Problems of Economics and Sociology, Book One, 35-94

7) Defense of scientific realism


8) The Problem of Evaluating Scientific Expertise

William Rehg, “Evaluating Complex Collaborative Expertise: the Case of Climate Change”

H. M. Collins and Rob Evans, “The Third Wave of Science Studies: Studies of Expertise and Experience” Social Studies of Science 32(2) (April 2002), 235-296

Julian Reiss, “Struggling over the Soul of Economics: Objectivity vs Expertise”

9) Realism and anti-Realism in feminism


Recommended:

10) New neither-nor positions

Hasok Chang, Is Water H2O? Chapters to be decided

Ronald Giere, Scientific Perspectivism. Chapters to be decided

Rune Nyrup, “Perspectival realism: where's the perspective in that?” (from the author)