Interactions between Early Modern Science and Philosophy: 1644-1786

Fall, 2003: HPS 2538

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Office hours by appointment

Assigned Texts:

Rene Descartes, “Discourse on Method and Meditations on First Philosophy,” (Hackett, translated by Donald Cress)

“Principles of Philosophy” Parts 1 and 11 (CSM. Vol 1: Photocopy in HPS)

Robert Boyle, “Selected Philosophical Papers of Robert Boyle”( Hackett, edited by M.A.Sanford )

John Locke, “An Essay Concerning Human Understanding” (Everyman, abridged and edited by John W. Yolton)


David Hume, “ An Essay Concerning Human Understanding” (Hackett, edited by Eric Steinberg)

David Hume, “A Treatise of Human Nature.” (Selections on photocopy in
HPS)

Immanuel Kant, “Prolegomena to any Future Metaphysics.” (Hackett, edited by James Ellington)

Immanuel Kant, “Critique of Pure Reason” (Selections on photocopy from first Critique in HPS).

Immanuel Kant, “Metaphysical Foundations of Natural Science.” (Ellington: Selections on photocopy in HPS)

Syllabus:

August 27 Introduction: The cognitive legacy and world view of early modern science. The question of the scope and limits of knowledge

September 3 Descartes: God, matter, motion and the mechanical world picture.

September 10 Descartes: Causes, laws, and the exclusion of sensible qualities from ‘The Real’ The issue of the knower and the known

September 17 Robert Boyle: mechanical affections vs sensible qualities, motion and laws

September 24 Newton and Leibniz and the “New Science.”

October 1 Locke: ideas, associationism, qualities, and “nominal” vs ‘real’ essence

October 8 Locke: perception, primary qualities, representationalism and Boyle’s “corpuscular philosophy.”

October 15 Berkeley: The New Principle, ‘esse est perci, ’ the phenomenology of sensory content, and the critique of abstract ideas.
October 22  Berkeley: Common Sense, ‘mentalism’ and the rejection of matter: the critique of the “New Science

October 29  Hume: epistemic naturalism: habit, custom, association and belief

November 5  Hume: The “cement of the universe” and the ‘New Science’: “The Secret Connexion” vs the ‘constant conjunction.’ view of causation

November 12  Kant: The knower as agent; intuition, the apriori, and the transcendental critique.

November 19  Kant: the assimilation of Newtonian principles to the transcendental critique

December 3  Kant: the ontology of active powers and dynamics in the Kantian architectonic
READINGS: Early Modern Philosophy of Science

For those confounded by the terms “mechanism,” “rationalism,” “empiricism,” have a look at Ayers “Locke Volume 11: Ontology (1991) Part 11, Chapters 11, 12, & 13. This is purely optional. The secondary readings for each meeting are photocopied and in a separate folder marked by the subject and date of the session. The primary readings are from the assigned texts.

September 3 Descartes:

Primary:

(1) Principles of Philosophy: Part 1, Articles 1-71; Part 2, Articles 1-43, 53 and 64

Secondary:


* For those interested in the Scholastic background in which Descartes worked I recommend Roger Ariew, “Descartes and the Last Scholastics.” (1999)

September 10 Descartes:

Primary:

(1) Meditations: Meditation Two (margin numbers 30-34): Meditations Three and Six. Cress translation

Secondary:

(2) Marleen Rozemond, “Descartes’s Dualism” (1998) Chapters 2, 3, 4

(3) Garber Chapter 3
September 17 Boyle:

Primary:

(1) “The Origin of the Forms and Qualities...” In Stewart, pp.1-53

Secondary:


September 24 Newton and Leibniz and the “New Science.”

For this session I’ll provide the class with some (not much) photocopied material from Newton and Leibniz. I assume you are familiar (most of you) with this pair of giants. What I want to get at is the various strands in Newton’s writings which helped to craft important later positions on concepts such as law, cause, explanation, qualities and agency. With respect to Leibniz I want to look at his perspective on mechanical explanation and his views on metaphysical intelligibility and ultimate ontology.

October 1 Locke:

Primary:

(1) “An Essay Concerning Human Understanding” Book 11, Chapters 1, 2, 6, 7, 10, 11, 12, 13, 19, 21, 22, 33: Book 111, Chapters 2 & 3 (nominal/real essence distinction)

Secondary:

(2) Lisa Downing, “The Status of Mechanism in Locke’s Essay” in The Philosophical Review

October 8 Locke:

Primary:

(1) “An Essay Concerning Human Understanding” Book 1, Chapters 4, 8, 9, 23, 26, 30, 31, 32: Book 11, Chapter 6: Book IV, Chapters 1, 2, 3, 4, 9

Secondary:

(1) Ayers, Part 1 (you will have read it) and Part 11


(3) For those of you who find Yolton too dry consult E.J.Lowe, “Locke on Human Understanding” (1995) Chapters 2, 3, & 4

October 15 Berkeley

Primary:

(1) “A Treatise Concerning the Principles of Human Understanding” Introduction, Principles Part 1, sections 1-34. This is optional (i.e., not required of you), but it would be instructive to read through Dialogues 1 & 11 of the “Three Dialogues between Hylas and Philonous.” Berkeley argues in fine style that his philosophy does not break with common sense and gives the reader a vivid account of what motivates his ‘idealists’ position.

Secondary:

October 22 Berkeley

Primary


Secondary:


(1) Grayling, Chapter Two, sections 5,6,7: Chapter Three, sections 1 & 2

October 29 Hume

Primary:

(1) “An Enquiry Concerning Human Understanding” Sections 1-V1: Section X11, Parts 1,11, 111 (“Of the Academical and Sceptical Philosophy”)

(2) This is optional. “A Treatise of Human Nature.” Book 1, “Of the

Secondary:

(1) Buchdahl, "Metaphysics and the Philosophy of Science" Chapter VI

November 5 Hume

Primary:

(1) "Enquiry" Section VI1 ("Of the Idea of Necessary Connexion"). "Treatise" Book 1, Part 4, Sect.1 ("Of scepticism with regard to reason"): Sect.2 ("Of scepticism with regard to the senses."). Sect. 4 ("Of the Modern Philosophy")

Secondary:

(1) Galen Strawson, "The Secret Connexion" I Introduction: then read Appendix C "A Short-cut" (in which Strawson abridges key Chapters of his account): Chapters 2, 3, 4, and 5: Part 11 ("Causation in the Treatise") and Part 111 ("Causation in the Enquiry").