

**HOS 903**  
**Early Modern Scientific Biography**  
Spring 2006  
2:30-5:00 T  
6117 Social Science

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*I. course summary*

Despite historians' efforts to move beyond the confines of the 'Great Man' approach to history, biographical accounts of great scientists are alive and well in both the popular and scholarly literature, as recent studies of Tycho Brahe, Galileo Galilei, Robert Boyle, Isaac Newton, and John Harrison show. We will look at a wide variety of materials in order to explore how the genre of scientific biography was constructed in early modern Europe as part and parcel of the larger movement we call the Scientific Revolution. We will also critically review the growing body of contemporary scholarship on biographical approaches to early modern European natural philosophers.

*II. course requirements*

You'll be asked to take turns presenting the assigned readings (the number of presentations will depend on the number of seminar participants). A typed summary/critique (1 page in length) should accompany each of your presentations.

You should also complete 15-20 pages of prose writing in connection with this course – ideally a research paper which relates to the themes of this course, analyses one or more primary sources, and makes use of some conceptual and/or methodological insight gained through the readings. Such a paper may involve comparison of early modern materials with materials from your own period of interest.

Other possibilities include a critical discussion of some historiographical issue in the secondary literature; two or more book reviews (situating the book with respect to existing scholarship and critiquing the author's use of source material); or a bibliographic survey in preparation for a prelim field. Please see me as early as you can in the semester to discuss how you propose to fulfill the writing requirement. Grading will be based on class participation and the special collections exercise (~25%), in-class presentations (~25%), and your written work (~50%).

A prospectus and preliminary bibliography for your written work is due **April 11**. You should be prepared to discuss your written work-in-progress at the last class meeting, **May 2**. All of your written work is due on **Wednesday, May 10**.

Jan. 17 **introduction: biography and the Scientific Revolution**

Jan. 24 **exemplary lives**

Plutarch, 'Life of Pericles,' in *The rise and fall of Athens; nine Greek lives*, trans. Ian Scott-Kilvert, [Harmondsworth]: Penguin Books, 1960, pp. 165-206, esp. sections 1-6, 15-39

\*Michael Segre, "Viviani's life of Galileo," *Isis* 80 (1989): 207-231

\*\*Pierre Gassendi, *The mirrour of true nobility and gentility: being the life of the renowned Nicolaus Claudius Fabricius, Lord of Pieresk, Senator of the Parliament at Aix*, trans. William Rand, London: Printed by J. Streater for Humphrey Moseley, 1657, prefaces (page images 1-11) [Early English Books Online]

\*\*Pierre Borel, *A summary or compendium of the life of the most famous philosopher Renatus Descartes*, London: Printed by E. Okes for George Palmer, 1670, prefaces (5 pp.) + pp. 1-75 (= page images 1-42) [Early English Books Online]

Lynn S. Joy, *Gassendi the atomist: advocate of history in an age of science*, Cambridge: Cambridge University Press, 1987, chap. 3 (pp. 41-65)

Jan. 31 **prefatory lives**

Diogenes Laertius, *Lives of eminent philosophers*, trans. Robert Drew Hicks, New York: G.P. Putnam's sons, 1925 [Loeb Classical Library edition; many reprintings], prologue (11 pp.); book II, chaps. 1-3 (8 pp.)

Peter Gassendi, "A discourse of the antiquity, progress, and augmentation of astronomy," in Joseph Moxon, *A tutor to astronomy and geography*, London: Printed by Tho. Roycroft, for Joseph Moxon, 1674, prefatory material (5pp.) + pp. 233-71 [1968 reprint; also available via Early English Books Online]

Nicholas Jardine, *The birth of history and philosophy of science*, Cambridge: Cambridge University Press, 1984, introduction (1-5), chap. 8 (pp. 258-86)

Johannes Kepler, "A defence of Tycho against Ursus," in Jardine, *The birth of history and philosophy of science*, preface + chap. 2 (pp. 134-36, 158-85)

Frances Willmoth, "Models for the practice of astronomy: Flamsteed, Horrocks and Tycho," in *Flamsteed's stars: new perspectives on the life and work of the first Astronomer Royal, (1646-1719)*, ed. Frances Willmoth, Suffolk: Boydell Press, 1997, pp. 49-75

Feb. 7 **elegaic lives**

Gilbert Burnet, *A sermon preached at the funeral of the Honourable Robert Boyle* (1692), in Michael Hunter, ed., *Robert Boyle by himself and his friends*, London: W. Pickering, 1994, pp. 35-57; also see Hunter's introduction, section 4 (pp. xxix-xxxv)

Charles B. Paul, *Science and immortality: the éloges of the Paris Academy of Sciences (1699-1791)*, Berkeley: University of California Press, 1980, introduction, chaps. 1 + 6, conclusion, appendices A + F (pp. 1-27, 86-120, 134-55)

\*\*Bernard le Bovier de Fontenelle, *The lives of the French, Italian and German philosophers late members of the Royal Academy of Sciences in Paris*, London: printed for W. Innys, 1717, prefatory material (through table of contents = page images 1-14) [Eighteenth Century Collections Online]

- \*\*Bernard le Bovier de Fontenelle, *The elogium of Sir Isaac Newton: by Monsieur Fontenelle*, London: printed for J. Tonson, and J. Osborn and T. Longman, 1728 (32 pp.) [Eighteenth Century Collections Online]**
- François-Marie Arouet Voltaire, *Letters on England*, Harmondsworth: Penguin, 1980, Letter 14, "On Descartes and Newton," pp. 68-72 [first published London, 1733]

**Feb. 14 Special Collections exercise**

**Feb. 21 psychobiography and history of science (I)**

- Frank E. Manuel, *A portrait of Isaac Newton*, Cambridge: Belknap Press of Harvard University Press, 1968, esp. introduction, chaps. 1-4, 7-8, 10, 13, 15. 17-18 (pp. 1-88, 133-90, 213-25, 264-91, 321-48, 361-92) [many reprintings]
- \*Arnold Thackray, "Frank Manuel, A portrait of Isaac Newton," *Eighteenth-century studies* 4 (1971): 485-87
- Mordechai Feingold, "The limits of the use of psychoanalysis in the history of science," in *Psicoanalisi e storia delle scienze*, ed. Michele Ranchetti, Firenze: L.S. Olschki, 1983, pp. 81-91

**Feb. 28 psychobiography and history of science (II)**

- \*Robert S. Westman, "The Melanchthon circle, Rheticus, and the Wittenberg interpretation of the Copernican theory," *Isis* 66 (1975): 165-93 [reprinted in *The scientific enterprise in early modern Europe*, ed. by Peter Dear (Chicago, 1997)]
- \*Robert S. Westman, "Two cultures or one? A second look at Kuhn's *The Copernican revolution*," *Isis* 85 (1994): 79-115
- \*"Psychoanalysing Robert Boyle: A special issue," *British journal for the history of science* 32 (1999): 257-324

**March 7 self-fashioning**

- \*Robert Finlay, "The refashioning of Martin Guerre," *American historical review* 93 (1988): 553-571
- \*Natalie Zemon Davis, "On the lame," *American historical review* 93 (1988): 572-603
- Steven Shapin, "Who was Robert Hooke?" in *Robert Hooke: new studies*, ed. Michael Hunter and Simon Schaffer, Woodbridge: Boydell Press, 1989, pp. 253-85
- Mario Biagioli, *Galileo, courtier*, Chicago: University of Chicago Press, 1993, prologue and chap. 1 (pp. 1-101)

**March 14 SPRING BREAK**

**March 21 self-functioning**

- Thomas Söderqvist, "Existential projects and existential choice in science: science biography as an edifying genre," *Telling lives in science: essays on scientific biography*, ed. Michael Shortland and Richard R. Yeo, New York: Cambridge University Press, 1997, pp. 45-84
- Michael Hunter, "The conscience of Robert Boyle: functionalism, 'dysfunctionalism' and the task of historical understanding," *Robert Boyle, 1627-91: scrupulosity and science*, Woodbridge: Boydell Press, 2000, pp. 58-71 [first publ. in J.V. Field and

Frank A.J.L. James, *Renaissance and revolution*, Cambridge: Cambridge University Press, 1993, pp. 147-59]

\*Stephen D. Snobelen, "'God of gods, and lord of lords': the theology of Isaac Newton's General Scholium to the *Principia*," *Osiris* 16 (2001): 169-208

### March 28 **authorial lives**

John Harwood, "Science writing and writing science: Boyle and rhetorical theory," in *Robert Boyle reconsidered*, ed. Michael Hunter, Cambridge: Cambridge University Press, 1994, pp. 37-56

Rob Iliffe, "Butter for parsnips: authorship, audience, and the incomprehensibility of the *Principia*," in *Scientific authorship: credit and intellectual property in science*, ed.

Mario Biagioli and Peter Galison, New York: Routledge, 2003, pp. 33-65

Mary Terrall, "The uses of anonymity in the age of reason," in *Scientific authorship: credit and intellectual property in science*, ed. Mario Biagioli and Peter Galison, New York: Routledge, 2003, pp. 91-112

April 4 no class meeting – paper prospectus due **April 11**

### April 11 **collective biography**

Louis Pyenson, "'Who the guys were': prosopography in the history of science," *History of science* 15 (1977): 155-88

\*James E. McClellan, "The Académie Royale des Sciences, 1699-1793: a statistical portrait," *Isis* 72 (1981): 541-567

John R. Christianson, *On Tycho's island: Tycho Brahe and his assistants, 1570-1601*, Cambridge: Cambridge University Press, 2000, introduction, chap. 4-7, 10-11 and at least the beginning of the 'The biographical dictionary' (pp. 3-6, 58-170, 207-51)

### April 18 **personae**

\*"Special issue: Scientific personae," *Science in context* 16 (2003): 1-87

Florence C. Hsia, "Mathematical martyrs, mandarin missionaries, and apostolic academicians: telling institutional lives." In *Institutional culture in early modern society*, ed. Anne Goldgar and Robert I. Frost, Leiden: Brill, 2004, pp. 3-34

### April 25 **portraiture**

Angela Mayer-Deutsch, "Quasi-optical palingenesis: the circulation of portraits and the image of Kircher," in *Athanasius Kircher: the last man who knew everything*, ed.

Paula Findlen, New York: Routledge, 2004, pp. 105-29

Ludmilla Jordanova, *Defining features: scientific and medical portraits, 1660-2000*, London: Reaktion, 2000

### May 2 **roundtable discussion**

May 10 papers due (Wednesday)