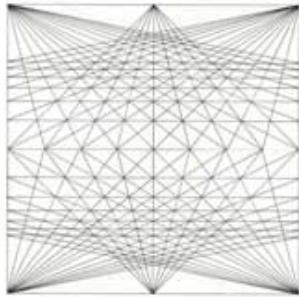


Bibliographies



- [Syllabus](#)
- [Primary Sources](#)
- [Web Resources](#)

Syllabus

The Textures of Experience

Visiting Faculty: John Sutton, Senior Lecturer in Philosophy, Macquarie University, Australia

Monday:

Aristotle. *Selected works from Parva Naturalia. The Complete Works of Aristotle: the Revised Oxford Translation*. Edited by Jonathan Barnes. 2 vols. Princeton: Princeton University Press, 1984.

Essential reading: Vol. 1: *On Memory*, pp. 714-720; *On Sleep*, pp. 721-8; *On Dreams*, pp. 729-735; *On Divination in Sleep*, pp. 736-9.

Recommended reading: Vol. 1: *Sense and Sensibilia*, pp. 693-713.

Tuesday:

Aristotle. *De Anima. The Complete Works of Aristotle: the Revised Oxford Translation*. Edited by Jonathan Barnes. 2 vols. Princeton: Princeton University Press, 1984.

Vol. 1: pp. 641-92. Read especially Book One, chapters 1 and 5; Book Two, chapters 1-5 and 12; and Book Three, chapters 3-5.

Descartes, René. *Treatise of Man (L'homme)*. Translation and commentary by Thomas Steele Hall. Cambridge: Harvard University Press, 1972.

Read especially pp. 1-5, 17-22, 33-40, 71-91, 96, and 108-113.

Reiss, Timothy. "Denying the Body? Memory and the Dilemmas of History in Descartes," *Journal of the History of Ideas* 57 (1996): 587-607.

Sutton, John. *Philosophy and Memory Traces: Descartes to Connectionism*. New York: Cambridge University Press, 1998. See especially pp. 31-49.

Sutton, John. "The Body and the Brain." *Descartes' Natural Philosophy*. Edited by Stephen Gaukroger, John Schuster, and John Sutton. London: Routledge, 2000, pp. 697-722.

Wednesday:

Ficino, Marsilio. *Three Books on Life*. Edited and translated by Carol V. Kaske and John R. Clark. Binghamton, NY: Medieval & Renaissance Texts & Studies, 1989.

Read Book I, chapters 1-6; Book III, especially chapters 1-6, 13, 20-21, 25-26.

Pomponazzi, Pietro. *De Immortalitate Animae*. Trans. W. Hay, in E. Cassirer, P. Kristeller, and J. Randall (eds.), *The Renaissance Philosophy of Man*. Chicago: Chicago University Press, 1948. Read pp. 280-284.

Agrippa, H. C. *Three Books of Occult Philosophy or Magic, by the famous mystic Henry Cornelius Agrippa - Book One - Natural Magic*. Willis F. Whitehead (ed.), Chicago: Hahn and Whitehead, 1898. Read Chapters 9-14, pp. 58-73.

Digby, Kenelm. *Two Treatises . . .* New York and London: Garland reprints, 1977.

Read Book I, chapters 18, 32-33, 35-38.

Sutton, John. "Body, Mind, and Order: local memory and the control of mental representations in medieval and Renaissance sciences of self." *1543 And All That: Word and Image in the Proto-Scientific Revolution*. Edited by Guy Freeland and Anthony Coronas. Dordrecht: Kluwer, 2000, pp. 117-150.

Sutton, John. *Philosophy and Memory Traces: Descartes to Connectionism*. New York: Cambridge University Press, 1998.
Read especially pp. 117-148.

Thursday:

Paracelsus. "Seven Defensiones" and "On the Miners' Sickness."
Four Treatises of Theophrastus von Hohenheim, called Paracelsus.
Translated by C. Lilian Temkin et al. Baltimore: Johns Hopkins
University Press, 1941, 1996.

Read pp. 1-41 and pp. 43-126; see especially "The Fourth
Defense," pp. 24-29; and pp. 124-26.

Paracelsus. "The *Herbarius* of Paracelsus." Translated with
introduction by Bruce T. Moran. *Pharmacy in History* 35.3 (1993):
99-127.

Read especially pp. 113-118 and pp. 123-24.

Pliny the Elder. *Historia naturalis*. Translated by H. Rackham. 10
Vols. Cambridge: Harvard University Press; London: W.
Heinemann, 1938-1963.

Read Vol. 1: pp. 24-25 and pp. 37-41; Vol. 2: pp. 506-537
(*Historia naturalis* 1 [contents and list of authorities]; and 7.1-10).

Porta, Giambattista della. *Natural Magick*. Edited by Derek J. de
Solla Price. A reproduction of the anonymous English translation of
1658. New York: Basic Books, 1957.

Read pp. 1-25.

Daston, Lorraine, and Katharine Park. *Wonders and the Order of
Nature, 1150-1750*. New York: Zone Books, 1998.

Read chapter 4.

Scribner, Bob. "Cosmic Order and Daily Life: Sacred and Secular in
Pre-Industrial German Society." *Religion and Society in Early
Modern Europe 1500-1800*. Edited by Kaspar von Greyerz. Boston:
Allen & Unwin, 1984, pp. 17-32.

Supplementary Reading:

Paracelsus. "Volumen medicinae paramirum." Translated by Kurt F.
Leidecker. *Bulletin of the History of Medicine*. Supplement No. 11.
Baltimore: Johns Hopkins University Press, 1949.

Piccolomini, Aeneas Sylvius. *The Commentaries of Pius II*.

Translated by Florence Alden Gragg. Introduction and notes by
Leona C. Gabel. Northampton, MA: Smith College, 1915-1957.

Des Chene, Dennis. *Life's Form: Late Aristotelian Conceptions of
the Soul*. Ithaca: Cornell University Press, 2001

Des Chene, Dennis. *Spirits and Clocks: Machine and Organism in
Descartes*. Ithaca: Cornell University Press, 2000,
Read especially the introduction and the conclusion.

*The Renaissance Computer: Knowledge Technology in the First Age
of Print*. Edited by Neil Rhodes and Jonathan Sawday. London:
Routledge, 2000.

Read the papers by Rhodes and Sawday; Marcus; Sawday; Corns;
and Rhodes.

Scarry, Elaine. "Donne: 'but yet the body is his booke.'" *Literature
and the Body*. Edited by Elaine Scarry. Baltimore: Johns Hopkins
University Press, 1988.

Walker, D. P. *Music, Spirit, and Language in the Renaissance*.

London: Variorum Reprints, 1985.

Read especially "Medical Spirits in Philosophy and Theology from
Ficino to Newton" and "The Astral Body in Renaissance Medicine."

Walker, D. P. *Spiritual and Demonic Magic from Ficino to*

Campanella. London: Warburg Institute, 1958, reprinted University
of Notre Dame Press, 1975.

Read especially chapters 1, 2, and 4.

Webster, Charles. *From Paracelsus to Newton: Magic and the Making of Modern Science*. Cambridge: Cambridge University Press, 1982.

Vernacular Epistemologies

Visiting Faculty: Mary Fissell, Associate Professor of the History of Science, Medicine, and Technology, Johns Hopkins University; and Gail Kern Paster, Professor of English, George Washington University

Monday: Vernacular Knowledge and Print Culture

Bacon, Francis. *Sylva Sylvarum. Works of Francis Bacon*. Edited by James Spedding et al. London, 1876.

Read Vol. II: Century I, Experiments 45-59 (358-65), Experiment 63 (367), Experiments 65-66 (368-69), Experiment 98 (380-82); Century III, Experiment 293 (437-38); Century VII, Experiments 601-607 (528-30); and Century X, Experiment 928 (649), Experiment 960 (660-1).

Lupton, Thomas. *A thousand notable things*. London: 1601, p. A2r-B3r.

Eamon, William. *Science and the Secrets of Nature: Books of Secrets in Medieval and Early Modern Culture*. Princeton: Princeton University Press, 1994.

Read pp. 3-12 and pp. 234-66.

Fissell, Mary. "Imagining Vermin in Early Modern England," *History Workshop Journal* 47 (1999): 1-29.

Tuesday: The Body and/in The World

Moffett, Thomas. *Health's Improvement*. London, 1655, pp. 1-11 and pp. 29-49.

Paster, Gail Kern. "The Body and Its Passions."

Paster, Gail Kern. "The Clear Spirit Puddled: Physiological Tropes of Passion in *Othello*"

Schoenfeldt, Michael. *Bodies and Selves: Physiology and Inwardness in Spenser, Shakespeare, Herbert, and Milton*. Cambridge: Cambridge University Press, 2000.

Read especially pp. 1-39.

Thursday: Book Exercise

Chartier, Roger. "Culture as Appropriation." *Understanding Popular Culture: Europe from the Middle Ages to the Nineteenth Century*. Berlin: Mouton, 1984, pp. 230-53.

Friday: Female Bodies

Heywood, Thomas. *Wise Woman of Hogsdon (1604?)*. Edited by Michael Leonard. Garland, 1980.

Fissell, Mary. "Making Bodies Speak: Prophets and Midwives." *Making Books into Bodies: Women and Popular Medicine in Early-Modern England*, forthcoming.

Women's Worlds in Seventeenth-Century England. Edited by Patricia Crawford and Laura Gowing. London: Routledge, 2000, Items 1.7, 1.15, 1.16, 1.20.

Supplementary Reading:

Aristotle's Masterpiece: or The Secrets of Generation. London, 1694.

Bennett, Jim and Scott Mandelbrote. *The Garden, the Ark, the Tower, and the Temple: Biblical Metaphors of Knowledge in Early Modern Europe*. Oxford: Museum of the History of Science in association with the Bodleian Library, 1998.

Fissell, Mary. "Gender and Generation: Representing Reproduction in Early Modern England," *Gender and History* 7 (1995): 433-56.

Henry, John. "Doctors and Healers: Popular Culture and the Medical Profession." *Science, Culture, and Popular Belief in Renaissance Europe*. Edited by Stephen Pumfrey, Paolo L. Rossi, and Maurice Slawinski. Manchester: Manchester University Press, 1991.

Vaughan, William. *Naturall and Artificial Directions for Health, deriued from the best philosophers, as well moderne, as auncient*. London, 1600.

Carlino, Andrea. *Books of the Body: Anatomical Ritual and Renaissance Learning*. Translated by John Tedeschi and Anne C. Tedeschi. Chicago: University of Chicago Press, 1999.

Ginzburg, Carlo. *The Cheese and the Worms: The Cosmos of a Sixteenth-Century Miller*. Translated by John Tedeschi and Anne C. Tedeschi. Reprint edition. Baltimore: Johns Hopkins University Press, 1992.

Mechanical Arts, Natural Philosophy, and Visual Representation

Visiting Faculty: David Summers, William R. Kenan, Jr. Professor of the History of Art, University of Virginia; and Beth L. Holman, Associate Professor, Studies in the Decorative Arts, Design, and Culture, The Bard Graduate Center

Monday:

Manetti, Antonio di Tuccio. *The Life of Brunelleschi*. Edited by Howard Saalman. University Park, PA: Pennsylvania State University, 1970.

Summers, David. "Pandora's Crown: On Wonder, Imitation and Mechanism in Western Art." *Wonders, Marvels and Monsters in Early Modern Culture*. Edited by Peter G. Platt. Newark: University of Delaware Press, 1999, pp. 45-75.

Tuesday:

The Didascalicon of Hugh of St. Victor: A Medieval Guide to the Arts. Translated by Jerome Taylor. New York: Columbia University Press, 1991.

Summers, David. "Quello che non è sia." Michelangelo and the Language of Art. Princeton: Princeton University Press, 1981, pp. 41-55.

Wednesday:

Holman, Beth L. "A 'subtle artifice': Giulio Romano's *Salt Cellar with Satyrs* for Federico II Gonzaga," *Quaderni de Palazzo Te* (December 2000): 57-67.

Cellini, Benvenuto. *The Autobiography of Benvenuto Cellini*. Translated by George Bull. London; New York: Penguin, 1998. Read the story of the saltcellar: Chapter II, section ii; story of chalice for Clement VII: Chapter I, sections lxi-lxii.

Alberti, Leon Battista. "On Painting." *On Painting and On Sculpture*. Edited with translations, introduction, and notes by Cecil Grayson. London: Phaidon, 1972. Reprint is also available with introduction by Martin Kemp. London: Penguin, 1991.

Homer. *Iliad*. Translated by A. T. Murray. The Loeb Classical Library. Cambridge, Massachusetts: Harvard University Press, 1999. Read section on Achilles shield: Book XVIII, lines 540-709.

Ovid. *Metamorphoses*. Translated by A. D. Melville. Oxford; New York: Oxford University Press, 1986. Read opening of Book II.

Thursday:

Da Vinci, Leonardo. *The Madrid Codices*. Edited by Ladislao Reti. 5 vols. New York: McGraw-Hill, 1974.

Serlio, Sebastiano. *Sebastiano Serlio on Architecture: Books I-V of Tutte L'Opere d'Architettura et Prospetiva*. Translated, with an

introduction and commentary, by Vaughan Hart and Peter Hicks. New Haven: Yale University Press, 1996. Read front matter, pp. 252-255, and 287.

Vesalius, Andreas. *De Humani Corporis Fabrica*. Basel, 1555.

Vesalius. *On the Fabric of the Human Body*. 2 vols. Translated by William Frank Richardson and John B. Carman. San Francisco: Norman Publishing, 1998.

Read Vol. 1: frontispiece, dedication to Charles V; letter to Oporinus (xlvii-lxii), and pp. 1-18 and 370-384 ("How the Bones and Cartilages of the Human Body are Prepared for Study -chapter xxxix)

Gabbey, Alan. "Between *Ars* and *Philosophia Naturalis*: Reflections on the Historiography of Early Modern Mechanics." *Renaissance and Revolution: Humanists, Scholars, Craftsman, and Natural Philosophers in Early Modern Europe*. Edited by J. V. Field and Frank A.J.L. James. Cambridge; New York: Cambridge University Press, 1993, pp. 133-145.

Long, Pamela O. "Power, Patronage, and the Authorship of *Ars*: From Mechanical Know-how to Mechanical Knowledge in the Last Scribal Age," *Isis* 88 (March 1997): 1-41.

Supplementary Primary Reading:

Colonna, Francesco. *Hypnerotomachia Poliphili: The Strife of Love in a Dream*. Translated by Joscelyn Godwin. New York: Thames and Hudson, 1999.

Da Vinci, Leonardo. *Leonardo Da Vinci on the Human Body: The Anatomical, Physiological, and Embryological Drawings of Leonardo Da Vinci*. Translations, emendations, and a biographical introduction by Charles D. O'Malley and J. B. de C. M. Saunders. New York: H. Schuman, 1952.

Da Vinci, Leonardo. *Leonardo on Painting: An Anthology of Writings by Leonardo Da Vinci with a Selection of Documents Relating to his Career as an Artist*. Edited by Martin Kemp; Translated by Margaret Walker. New Haven: Yale University Press, 1989.

Paré, Ambroise. *An Explanation of the Fashion and Use of the Three and Fifty Instruments of Chirurgery*. Facsimile of the 1631 London edition. New York: Da Capo Press, 1969.

Serlio, Sebastiano. *Tutte L'Opere d'Architettura*. Venice, 1584.

Taccola, Mariano. *De Machinis: The Engineering Treatise of 1449*. Introduction, Latin texts, and technical commentaries by Gustina Scaglia. Wiesbaden: Reichert, 1971.

Supplementary Secondary Reading:

Edgerton, Samuel Y. *The Heritage of Giotto's Geometry: Art and Science on the Eve of the Scientific Revolution*. Ithaca: Cornell University Press, 1991.

Elkins, James. *The Poetics of Perspective*. Ithaca: Cornell University Press, 1994.

Kemp, Martin. *Leonardo Da Vinci: The Marvelous Works of Nature and Man*. Cambridge, Massachusetts: Cambridge University Press, 1981.

Kemp, Martin. *The Science of Art: Optical Themes in Western Art from Brunelleschi to Seurat*. New Haven: Yale University Press, 1990.

Reeves, Eileen A. *Painting the Heavens: Art and Science in the Age of Galileo*. Princeton: Princeton University Press, 1997.

Rossi, Paolo. *Philosophy, Technology, and the Arts in the Early Modern Era*. Translated by Salvator Attanasio. New York: Harper & Row, 1970.

Summers, David. *The Judgment of Sense: Renaissance Naturalism and the Rise of Aesthetics*. Cambridge: Cambridge University Press, 1987.

Disciplining Experience: Cartography and Mathematics

Visiting Faculty: Chandra Mukerji, Professor of Communications, Sociology, and Science Studies, University of California at San Diego; and Jim Bennett, Keeper of the Museum of the History of Science, Oxford

Monday:

Cortés, Martín. *Breve compendio de la sphaera*. Seville, 1551.

La Cosa, Juan de. Spanish World Chart, ca. 1500.

Mukerji, Chandra. *Territorial Ambitions and the Gardens of Versailles*. Cambridge; New York: Cambridge University Press, 1997.

Read chapters 3 and 4.

Harley, J.B. "Silences and Secrecy: The Hidden Agenda of Cartography in Early Modern Europe," *Imago Mundi* 40 (1988): 57-76.

Turnbull, David. "Tricksters and Cartographers: Maps, Science and the state in the making of a modern scientific knowledge space." *Masons, Tricksters and Cartographers: Comparative Studies in the Sociology of Scientific and Indigenous Knowledge*. Newark: Gordon & Breach, 2000, pp. 89-130.

Tuesday:

Mukerji, Chandra. "Cartography, Entrepreneurialism, and Power in the Reign of Louis XIV: The Case of the Canal du Midi." *Merchants and Marvels: Commerce, Science, and Art in Early Modern Europe*. Edited by Pamela H. Smith and Paula Findlen. New York: Routledge, 2002.

Turnbull, David. "Pacific Navigation: An Alternative Scientific Tradition." *Masons, Tricksters and Cartographers: Comparative Studies in the Sociology of Scientific & Indigenous Knowledge*. Newark: Gordon & Breach, 2000, pp. 131-160.

Alexander, Amir. "Lunar Maps and Coastal Outlines: Thomas Hariot's Mapping of the Moon," *Studies in History and Philosophy of Science* 29.3 (1998): 345-368.

Latour, Bruno. "Drawing things together." *Representation in Scientific Practice*. Edited by Michael Lynch and Steve Woolgar. Cambridge, Massachusetts: MIT Press, 1990, pp. 19-68.

Wednesday:

Dee, John. Preface, *The elements of geometrie of ... Euclide*. London, 1570.

Gilbert, William. *De Magnete*. Translated by P. Fleury Mottelay. New York. Dover, 1958.

Read pp. 1-25 and pp. 272-304.

Norman, Robert. *The Neue Attractive*. London, 1581. Amsterdam: Theatrum Orbis Terrarum, 1974. Read prefatory material and pp. 1-26.

Bennett, J. A. "The Mechanics' Philosophy and the Mechanical Philosophy," *History of Science* 24 (1986): 1-28.

Ziisel, Edgar. "The Origins of William Gilbert's Scientific Method," *Journal of the History of Ideas* 2 (1941): 1-32.

Henry, John. "Animism and Empiricism: Copernican Physics and the Origins of William Gilbert's Experimental Method," *Journal of the History of Ideas* 62 (January 2001): 99-119.

Hooke, Robert. *Micrographia, or Descriptions of some Minute Bodies Made by Magnifying Glasses* (1665). *Early Science in Oxford*. Edited by R. T. Gunther. Oxford: Oxford University Press, 1938, Vol. 13: "The Preface"; Observation #1 "Of the point of a sharp small needle," pp. 1-4; and Observation #53 "Of a flea," pp. 210-211.

Hooke, Robert. "An Attempt to Prove the Motion of the Earth" and "Animadversions on the *Machina Coelestis* of Johannes Hevelius," from *The Cutler Lectures of Robert Hooke*. *Early Science in Oxford*. Edited by R. T. Gunther. Oxford: Oxford University Press, 1931, Vol. 8: the prefatory material and pp. 1-114.

Thursday:

Instrument Session, The Bern Dibner Collection, Museum of American History.

Borough, William. *A Discours of the Variation of the Cumpas, or Magneticall Needle*. London, 1581.

Supplementary Reading:

Hood, Thomas. *A copie of the speache made by the Mathematicall Lecture*. London, 1588.

Blieth, Walter. *The English Improover, or, A New Survey of Husbandry*. London, 1649.

Brotton, Jerry. *Trading Territories: Mapping the Early Modern World*. Ithaca: Cornell University Press, 1998.

Chandra Mukerji, "Cartography, Entrepreneurialism, and Power in the Reign of Louis XIV: The Cast of the Canal du Midi," *Merchants and Marvels: Commerce, Science, and Art in Early Modern Europe*. Edited by Pamela H. Smith and Paula Findlen. New York: Routledge, 2002, pp. 248-276.

Schmitt, Charles B. "Experience and Experiment: A Comparison of Zabarella's View with Galileo's in *De Motu*," *Studies in the Renaissance* 16 (1969): 80-138.

Ramelli, Agostino. *The Various and Ingenious Machines of Agostino Ramelli: A Classic Sixteenth-Century Illustrated Treatise on Technology*. Translated and edited by Martha Teach Gnudi and Eugene S. Ferguson. London: Scolar Press, 1976.

Zilsel, Edgar. "The Sociological Roots of Science," *American Journal of Sociology* 47 (1942): 544-562.

Buisseret, David. *Monarchs, Ministers, and Maps: The Emergence of Cartography as a Tool of Government in Early Modern Europe*. Chicago: University of Chicago Press, 1992.

Conley, Tom. *The Self-Made Map: Cartographic Writing in Early Modern France*. Minneapolis: University of Minnesota Press, 1996.

Woodward, David, ed. . Chicago: University of Chicago Press, 1987.

Objects of Art/Objects of Nature

Visiting Faculty: Paula Findlen, Director of the Science, Technology, and Society Program and Professor of History, Stanford University

Monday:

Cennini, Cennino. *The Craftsman's Handbook. "Il Libro dell' Arte."* Translated by Daniel V. Thompson, Jr. New York: Dover, 1960. Read pp. 1-7, 16-20, and 123-131.

Palissy, Bernard. *Admirable Discourses*. Translated by Aurèle La Rocque. Urbana: University of Illinois, 1957. Read pp. 188-219.

Dürer, Albrecht. *Dürer's Record of Journeys to Venice and the Low Countries*. Edited by Roger Fry. New York: Dover, 1995.
Read pp. 31-99.

Montaigne, Michel de. "On Experience." *The Complete Essays of Montaigne*. Translated by Donald Frame. Stanford: Stanford University Press, 1957.
Read pp. 815-857.

Tuesday:

Session in the National Gallery with Dr. Peter Parshall in the exhibit "The Unfinished Print," 1:00 - 3:00 p.m.

Parshall, Peter. "Introduction," *The Unfinished Print* exhibition catalogue, forthcoming.

Parshall, Peter. "Imago contrafacta: Images and Facts in the Northern Renaissance," *Art History* 16 (1993): 554-579.

Stone, Richard E. "Antico and the Development of Bronze Casting in Italy at the End of the Quattrocento," *Metropolitan Museum Journal* 16 (1982): 87-116.

Bewer, Francesca G. "The Sculpture of Adriaen de Vries: A Technical Study." *Small Bronzes in the Renaissance*. Edited by Debra Pincus. Washington, DC: Center for Advanced Study in the Visual Arts, 2001, pp. 159-193.

Sturman, Shelley, "A group of Giambologna Female Nudes: Analysis and Manufacture." *Small Bronzes in the Renaissance*. Edited by Debra Pincus. Washington, DC: Center for Advanced Study in the Visual Arts, 2001, pp. 120-141.

Wednesday:

Bacon, Francis. *Novum Organum; With Other Parts of The Great Instauration*. Translated and edited by Peter Urbach and John Gibson. Chicago: Open Court, 1994.

Bacon, Francis. "The New Atlantis." *The Works of Francis Bacon*. Collected and edited by James Spedding, Robert Leslie Ellis, and Douglas Denon Heath. 14 vols. London: Longmans & Co., 1857-1874, Vol. 3: pp. 119-166.

Booker, John. *A Bloody Irish Almanack, or, Rebellious and Bloody Ireland*. . . .London, 1646.

Daston, Lorraine, and Katharine Park. *Wonders and the Order of Nature, 1150-1750*. New York: Zone Books, 1998.
Read especially chapters 6 and 7.

Kemp, Martin. "'Wrought by No Artist's Hand': The Natural, the Artificial, the Exotic, and the Scientific in Some Artifacts from the Renaissance." *Reframing the Renaissance: Visual Culture in Europe and Latin America, 1450-1650*. Edited by Claire Farago. New Haven: Yale University Press, 1995, pp. 177-196.

Thursday:

Session in the National Gallery sculpture collection and conservation lab with Dr. Shelley Sturman and Dr. Debra Pincus, 3:30 - 5:00 p.m.

Findlen, Paula. "Inventing Nature: Commerce, Art, and Science in the Early Modern Cabinet of Curiosities." *Merchants and Marvels*. Edited by Pamela H. Smith and Paula Findlen, eds. *Merchants and Marvels: Commerce, Science, and Art in Early Modern Europe* (New York: Routledge, 2002).

Findlen, Paula. "Jokes of Nature and Jokes of Knowledge: The Playfulness of Scientific Discourse in Early Modern Europe," *Renaissance Quarterly* 43 (1990): 292-331.

Kaufmann, Thomas Dacosta. "From Mastery of the World to Mastery of Nature: The Kunstammer, Politics, and Science." *The*

Mastery of Nature: Aspects of Art, Science, and Humanism in the Renaissance. Princeton: Princeton University Press, 1993, pp. 174-94.

Supplementary Reading:

Cellini, Benvenuto. *The treatises of Benvenuto Cellini on goldsmithing and sculpture*. Translated by C. R. Ashbee. New York: Dover, 1967.

Cole, Michael, "Cellini's Blood," *Art Bulletin* 81 (1999): 215-35.

Daston, Lorraine. "The Nature of Nature in Early Modern Europe," *Configurations* 6 (1998): 149-72.

Dürer, Albrecht. *The Painter's Manual: A Manual of Measurement of Lines, Areas, and Solids by Means of Compass and Ruler. Assembled by Albrecht Dürer for the use of All Lovers of Art with Appropriate Illustrations (1525)*. Translated and with a commentary by Walter L. Strauss. New York: Abaris Books, 1977.

Dürer, Albrecht. *Vier Bücher von Menschlicher Proportion, Nürnberg, 1528*. Nördlingen: A. Uhl, 1996.

Findlen, Paula. *Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy*. Berkeley: University of California Press, 1994.

Jardine, Lisa and Alan Stewart. *Hostage to Fortune: The Troubled Life of Francis Bacon*. London: Victor Gollancz, 1998.

The Origins of Museums: The Cabinet of Curiosities in Sixteenth- and Seventeenth-Century Europe. Edited by Oliver Impey and Arthur MacGregor. Oxford: Oxford University Press, 1985.

Pérez-Ramos, Antonio. *Francis Bacon's Idea of Science and the Maker's Knowledge Tradition*. Oxford: Clarendon Press, 1988.

Experience and Experiment in the Scientific Revolution

Visiting Faculty: Peter Dear, Professor of History and of Science & Technology Studies, Cornell University; and Adrian Johns, Professor of History, University of Chicago

Monday:

Boyle, Robert. "Experiments Physico-Mechanical touching the Spring and Weight of Air." *The Works of Robert Boyle*. 14 vols. Edited by Michael Hunter and Edward Davis. Brookfield, Vermont: Pickering and Chatto, 1999-2000, Vol. 1, pp. 143-300.

Shapin, Steven and Simon Schaffer. *'Leviathan' and the Air-pump: Hobbes, Boyle, and the Experimental Life*. Princeton: Princeton University Press, 1985.
Read chapter 2.

Frank, Robert G., Jr. *Harvey and the Oxford Physiologists: Scientific Ideas and Social Interaction*. Berkeley: University of California Press, 1980.
Read especially pp. 115-163.

Sprat, Thomas. *A History of the Royal Society of London*. Edited with critical apparatus by Jackson I. Cope and Harold Whitmore Jones. St. Louis: Washington University, 1958.
Read especially pp. 1-71.

Tuesday:

Galilei, Galileo. *Sidereus Nuncius, or, the Sidereal Messenger*. Edited and translated by Albert van Helden. Chicago: University of Chicago Press, 1989.

Hooke, Robert. *The Diary of Robert Hooke, 1672-1680*. Edited by Henry Robinson and Walter Adams. London: Taylor & Francis, 1935.

Hooke, Robert. "The Present State of Natural Philosophy" and "Of the True Method of Building a Solid Philosophy, or of a Philosophical Algebra" *Posthumous Works . . . containing his Cutlerian Lectures and other discourses*. London, 1705, pp. 1-70.

Henry, John. "Robert Hooke, the Incongruous Mechanist." *Robert Hooke: New Studies*. Edited by Michael Hunter and Simon Schaffer. Woodbridge: Boydell, 1989, pp. 149-180.

Iliffe, Rob. "Material Doubts: Hooke, Artisan Culture, and the Exchange of Information in 1670s London," *British Journal for the History of Science* 28 (1995): 285-318.

Shapin, Steven. "Who was Robert Hooke?" *Robert Hooke: New Studies*. Edited by Michael Hunter and Simon Schaffer. Woodbridge: Boydell, 1989, pp. 253-285.

Wednesday:

Dear, Peter. *Discipline & Experience: The Mathematical Way in the Scientific Revolution*. Chicago: University of Chicago Press, 1995. Read especially chapters 1, 6, 7, and 8.

Shapin, Steven and Simon Schaffer. *'Leviathan' and the Air-pump: Hobbes, Boyle, and the Experimental Life*. Princeton: Princeton University Press, 1985. Read chapter 4.

Shapin, Steven. "The House of Experiment in Seventeenth-Century England," *Isis* 79 (1988): 373-404.

Thursday:

Pascal, Blaise. "A Treatise of the Equilibrium of Liquids." *The Physical Treatises of Pascal*. New York: Columbia University Press, 1937, pp. 3-26.

Newton, Isaac. *The Optical Papers of Isaac Newton. Volume I: Optical Lectures, 1670-1672*. Edited by Alan E. Shapiro. Cambridge: Cambridge University Press, 1984. Read especially pp. 81-99.

Newton, Isaac. "New Theory about Light and Colours," *Phil. Trans.* 6 (1672): 3075-87.

Supplementary Reading:

Dear, Peter. *Revolutionizing the Sciences: European Knowledge and its Ambitions 1500-1700*. Princeton: Princeton University Press, 2001.

Johns, Adrian. *The Nature of the Book: Print and Knowledge in the Making*. Chicago: University of Chicago Press, 1998.

Rogers, John. *The Matter of Revolution: Science, Poetry, and Politics in the Age of Milton*. Ithaca: Cornell University Press, 1996.

Smith, Pamela H. "Science and Taste: Painting, the Passions, and the New Philosophy in Seventeenth-century Leiden," *Isis* 90 (1999): 420-461.

Smith, Pamela H. *The Business of Alchemy: Science and Culture in the Holy Roman Empire*. Princeton: Princeton University Press, 1994.

Jardine, Lisa. *Ingenious Pursuits: Building the Scientific Revolution*. New York: Nan A. Talese, 1999.

Johns, Adrian. *The Nature of the Book: Print and Knowledge in the Making*. Chicago: University of Chicago Press, 1998.

