

STS.002  
Fall 2003

Professor David Kaiser  
STS Program

*Instructions for Paper 1*

**Assignment:** Analyze a primary source from the syllabus

**Due date:** Wednesday, 24 September 2003

**Length:** 4-5 double-spaced pages. You should use standard margins (1-inch to 1.25-inches on each side of the page) and a 12-point font.

**Grade:** Your grade on *Paper 1* will contribute 20% of your final course grade.

In your first paper for this course, you will select any one primary source from the syllabus which we will have covered in class by 24 September, and analyze this text. A “primary source” is any text written by one of the natural philosophers we have been studying. For example, Plato’s *Timaeus* counts as a primary source, whereas G. E. R. Lloyd’s commentary on Plato’s text is a secondary source.

A good analysis should include first a summary of what the text is about: what are the large questions or themes involved? What are some of the details involved in the author’s discussion of these questions or themes? You should also give some thought as to what form the author’s argument takes: does the author rely on a series of empirical examples, argue primarily on the basis of logic and deduction, or proceed with some combination? Once you have provided a review of the text’s content and form of argument, you may want to discuss what assumptions undergird the author’s discussion, and provide your own critique of the author’s claims or approach.

You are encouraged to work with the class’s writing tutor while preparing your paper.

## *Instructions for Paper 2*

**Assignment:** Analyze a primary source and a related secondary source

**Due date:** Wednesday, 29 October 2003

**Length:** 6-7 double-spaced pages. You should use standard margins (1-inch to 1.25-inches on each side of the page) and a 12-point font.

**Grade:** Your grade on *Paper 2* will contribute 20% of your final course grade.

For this paper, you should choose a primary source from the syllabus, together with a relevant secondary source also from the syllabus. (Any pair of primary and related secondary sources that we will have covered by this paper's due date would be appropriate.) As we have seen throughout this semester, certain ideas within primary sources can often be ambiguous; it is often the goal of a secondary source to try to explain or clarify these points of ambiguity. You should select a portion or passage of a primary source which you think is ambiguous, and which was likely to have been ambiguous for readers in its own way. Describe why this passage is ambiguous, and why you think other readers might also have found it so. Then analyze how the secondary source discusses this ambiguity in the primary source: how does the secondary source attempt to explain or clarify the point in question. Do ambiguities remain?

You are encouraged to work with the class's writing tutor while preparing your paper.

### *Instructions for Final Paper Assignment*

**Due date:** Wednesday, 11 December 2002, in class.

**Length:** 10-12 double-spaced pages. You should use standard margins (1-inch to 1.25-inches on each side of the page) and a 12-point font.

**Grade:** Your grade on *Paper 3* will contribute 25% of your final course grade.

In this assignment you will be writing a 10-12 page paper that advances a specific historical argument and supports it by citing primary and secondary sources. In order to construct and present your argument, you will have to bring to bear all of the skills that you have been practicing this term. You should select one of the two topics listed on the back of this sheet. Your paper must draw on at least one primary source, as well as at least four secondary sources. For the two topics listed below, we have compiled a list of references and made several materials available on the course website. If you would prefer to write about a different topic, you must discuss your topic ahead of time with either Prof. Kaiser or the course TA.

First, you have to do a close reading of your primary source(s). What exactly does the author say? How does he or she argue for the points that are made? What is taken for granted? What remains ambiguous or unclear at the end of your reading? What does the author assume about his or her readership? Are there any indications in the text of the workings of institutional settings, appropriation (à la Sabra), or the role of patronage? Are there obvious ways that the text has been shaped by its social, cultural, intellectual, institutional, religious, or political contexts?

Second, you have to read at least four secondary sources and try to figure out the various ways that the primary sources have been interpreted. Have historians generally understood these sources in the same the way that you do? What ideas do they think are important, and why? How do they position these sources in the flow of history? How do the historians agree or disagree amongst themselves about these sources? What historiographical points have been particularly interesting, or contentious, or murky? What are you adding to the historiographical literature by writing your paper?

As you are reading and rereading your sources, take detailed notes. You will need to know where you found a particularly interesting quote or idea so that you can cite the author properly. Proper footnote and bibliography citations are required.

When you start to compose your paper, think carefully about its structure. Do you have an introductory paragraph that sets up the problem, clearly states your thesis, and outlines your ensuing discussion? Do each of the points that you raise in the body of your paper support your thesis in a clear and compelling way? Do you have a concluding paragraph that wraps up your argument and gestures at its wider significance? Is your writing concise, precise and explicit? Is it lively? Is your TA going to fall to his knees and bless your name for putting such a thing of grace and beauty into his hands?

## Topics for Final Paper Assignment

I. Discuss Robert Boyle's experiments and the place of natural philosophy in England's Royal Society.

### Primary sources:

1. Robert Boyle, Selections from *New Experiments Physico-Mechanical* (1660), as reprinted in Marie Boas Hall, *Robert Boyle on Natural Philosophy: An Essay with Selections from his Writings* (Bloomington: Indiana University Press, 1965), pp. 323-363.
2. Thomas Sprat, *The History of the Royal Society*, edited by Jackson Cope and Harald W. Jones (St. Louis: Washington University Press, 1958 [1667]), pp. 1-51.

### Secondary sources:

1. Steven Shapin, "Pump and Circumstance: Robert Boyle's Literary Technology," *Social Studies of Science* **14** (1984): 481-520.
2. Steven Shapin, "'A Scholar and a Gentleman': The Problematic Identity of the Scientific Practitioner in Early Modern England," *History of Science* **29** (1991): 279-327.
3. Peter Dear, "Totius in Verba: Rhetoric and Authority in the Early Royal Society," *Isis* **76** (1985): 144-161.
4. Michael Hunter, "Robert Boyle (1627-91): A Suitable Case for Treatment?," *History of Science* **32** (1999): 261-275.
5. Christoph Meinel, "Early Seventeenth-Century Atomism: Theory, Epistemology, and the Insufficiency of Experiment," *Isis* **79** (1988): 68-103.
6. Jan Golinski, "A Noble Spectacle: Phosphorus and the Public Cultures in the Early Royal Society," *Isis* **80** (1989): 11-39.
7. Steven Shapin, "'The mind in its own place': Science and Solitude in Seventeenth-Century England," *Science in Context* **4** (1991): 191-218.
8. Adrian Johns, "Miscellaneous Methods: Authors, Societies, and Journals in Early Modern England," *British Journal for the History of Science* **33** (2000): 159-186.

II. Discuss William Harvey's physiological work in its intellectual, institutional, and political contexts.

### Primary sources:

1. William Harvey, *The Circulation of the Blood, and other Writings*, translated by Kenneth J. Franklin (London: J. M. Dent, 1990 [1649]), pp. 3-15, 45-47.

### Secondary sources:

1. H. P. Bayon, "The Significance of the Demonstration of the Harveyan Circulation by Experimental Tests," *Isis* **33** (Dec., 1941): 443-453.
2. William Joseph Birken, "The Royal College of Physicians of London and Its Support of the Parliamentary Cause in the English Civil War," *Journal of British Studies* **23** (Autumn, 1983): 47-62.
3. I. Bernard Cohen, "Harrington and Harvey: A Theory of the State Based on the New Physiology," *Journal of the History of Ideas* **55** (Apr., 1994): 187-210.
4. Donald Fleming, "William Harvey and the Pulmonary Circulation," *Isis* **46** (Dec., 1955): 319-327.
5. Anita Guerrini, "The Ethics of Animal Experimentation in Seventeenth-Century England," *Journal of the History of Ideas* **50** (Jul.-Sep., 1989): 391-407.
6. Geoffrey Keynes, "The Wilkins Lecture, 1967: Bacon, Harvey and the Originators of the Royal Society," *Proceedings of the Royal Society of London. Series B, Biological Sciences* **169** (Dec. 19, 1967): 1-16.
7. Walter Pagel, "William Harvey and the Purpose of Circulation," *Isis* **42** (Apr., 1951): 22-38.
8. George Kimball Plochmann, "William Harvey and His Methods," *Studies in the Renaissance* **10** (1963): 192-210.
9. Steven Shapin, "The House of Experiment in Seventeenth-Century England," *Isis* **79** (Sep., 1988): 373-404.
10. Leonard G. Wilson, "The Transformation of Ancient Concepts of Respiration in the Seventeenth Century," *Isis* **51** (Jun., 1960): 161-172.