STS.003 The Rise of Modern Science Spring 2008

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Week 3: A New Language of Science

Readings:

- Bowler and Morus, "The Chemical Revolution," MMS, pp. 55-78.
- Jan Golinski, "The Chemical Revolution and the Politics of Language," *The Eighteenth Century* 33:3 (1992): 238-251.
- Antoine Lavoisier, *Elements of Chemistry* (Edinburgh, 1790), from Dover facsimile edition (1965), "Preface," pp. xiii-xxxvii. [available at http://web.lemoyne.edu/~giunta/lavpref.html]
- Carl Linnaeus, *A General System of Nature, Through Three Grand Kingdoms of Animals, Vegetables and Minerals* (London: Lackington, Allen, and Co., 1806), "Preface," "Introduction," and "Mammalia."

In Bowler and Morus's chapter on "The Chemical Revolution," pay attention both to the substance of intellectual disputes and to the larger role played by chemistry in the Enlightenment. As in the previous assignment, try to read a primary source (Lavoisier) first, then read Golinski's article, take a second look at Lavoisier, and conclude with Linnaeus. In your response, you may choose from the questions listed below. Your response must touch upon all the assigned readings, except for Bowler and Morus.

What were Lavoisier's arguments in support of his new nomenclature? What were the arguments of his critics? Whose arguments do you find more persuasive? Why did Lavoisier prevail?

Compare Linnaeus's new taxonomy with Lavoisier's project. What are the similarities and the differences in their approaches? Does the critique of Lavoisier's nomenclature apply to the Linnaeus case?

Lavoisier's chemical nomenclature and Linnaeus's botanical taxonomy were two major Enlightenment attempts to systematize nature. Can you compare them to any modern scientific systematization projects? Does criticism leveled against Lavoisier and Linnaeus apply to modern science?

Think about professional terminology used in a particular branch of science that you are familiar with. Compare the present state of scientific language with Enlightenment science. Are the debates over the language of Enlightenment science relevant today?