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STS.003 The Rise of Modern Science
Spring 2008

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STS.003 First Paper Assignment

Assignment: analyze and contextualize a primary source.

Due Date: paper must be submitted online prior to Ses #12.

Length: 2000 words

Grading: This paper will form 10% of the final course grade. Late papers will be penalized one full grade (e.g. A->B->C) for each day.

Instructions: You may choose one of the readings from the syllabus or some other work written by a scientist whom we have studied by the due date (this will include Darwin). You can use a 15-20 pp. excerpt from a larger work. Choose from among the scientists mentioned in the lists of keywords posted on the STS.003 site.

You must address, in whatever order makes the most sense, the following six topics. The questions listed below for each topic are suggestive; some will not apply to all sources, and others might be relevant. Assessment is especially important: the essays should not be purely descriptive.

- Who: who is the author, what is his (sadly, they are all men) background, training, position, social status, etc.? What else did he publish, if relevant?
- What: what is the content of the source, e.g. is it the report of an experiment or scientific discovery, is it a description of a hypothetical thought experiment, or is it an argument / speculation / proposal of a new theory? What kind of work was done to provide the evidence? Were instruments used? Does the description enable the testing / replication of the findings?
- Where: where / how was the source presented -- as an article, as part of a book, as a speech? Who is the desired audience: scientists, general intellectuals, politicians, the wider public?
- When: what was going on in culture and science when the work appeared? What is the role of the work in the author's broader career?
- Why: what was the author's intent in publishing? Was he arguing for or against something? Did he seek an impact on science, or broader culture?
- Assessment: What does the source reveal about the author, science at the time, and today's tensions within science and culture?

For example, suppose you chose the Declaration of Independence. Who: a committee led by Thomas Jefferson, a slave-owning aristocrat. What: a declaration of rights, a long list of grievances, and the claim that the grievances justified rebellion. Where: published as a broadside that was distributed widely; audience included local elites, the general public, and English intellectual and political elites. When: 1776, after several years of simmering discontent and one year of open warfare. Why: a justification of rebellion and war in pursuit of self-rule. Assessment, for instance: inspired the revolutionary war in the US, as well as revolutions in

France, Latin America, and countless other areas; it has become an icon of the Enlightenment; it uses unsubstantiated assertions of natural law to defend political and economic self-interest; it triggered on-going debates about the rights of individuals vs. governments.

Some additional reading would help you place your source in a broader context. The best strategy is to find an academic book or an article about your topic. I do not recommend using Wikipedia; the quality of its articles varies greatly. I recommend consulting these websites:

Online Complete Dictionary of Scientific Biography, which contains the original 18-volume Dictionary of Scientific Biography (1970-90) and the 8-volume New Dictionary of Scientific Biography (2007), which includes updates for articles in the original edition and references to recent literature.

“Reading the History of Western Science: A List of Good Places to Start”
http://www.hssonline.org/teach_res/essays/list/readinglist.html

History of Science, Technology, and Medicine Bibliographic Database

ECHO (Exploring and Collecting History Online), a directory to 5,000+ websites concerning the history of science, technology, and industry. <http://echo.gmu.edu/>

- Citations: cite your primary source with (Author, page #). If you use any other sources, provide appropriate citations according to the format used in the syllabus. If you cite a lecture, use this format:

Slava Gerovitch, STS.003, lecture 4, “Natural History and Colonialism,” February 14, 2008.