

History of Science 280
Honors Seminar: Studies in Science, Technology and Medicine
Topic: Travel and Exploration in the 18th and 19th Centuries

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Office hours: 10:00–12:00 p.m. Thursdays

Welcome to our seminar! Our topic this semester is travel and how travel yields various kinds of scientific knowledge. As you will see, during the period covered by the course – roughly between 1750 and 1850 – travel for purposes of exploration and scientific discovery took on some of the characteristics of an industry. In the early 1700s, travel was still pretty hazardous, testing travelers' endurance and health, and sometimes costing them their lives. After 1850, by contrast, travel might still pose some hazards, but it had become so frequent that scientific explorers went about their work with a well-developed sense of what they were trying to accomplish and what their peers back home expected of them. This made travel an essential part of the creation of scientific knowledge, which we will see illustrated by Charles Darwin's famous voyage on the *Beagle*.

Broadly speaking, this course has two aims. First, I hope our readings and discussions during the first eight weeks will give you a good introduction to travel and exploration in the 18th and 19th centuries. Those readings will serve as preparation for the second and major part of the course: the production of a 12–15 page research paper, in which you will: 1) define your own specific topic within the general subject of the seminar; 2) work with historical documents in the researching of the paper; 3) present an oral report of your work to the group; 4) write a complete draft of the paper for critique and revision; and 5) submit a final draft of the paper for a grade.

There is only one required textbook, which you can purchase directly from me:

Charles Darwin, *Voyage of the Beagle* (If you choose to buy this yourself or borrow a copy from a library, **please** get the edition published by Penguin Books. It contains lots of additional material that we will also be reading).

The other required reading is a packet of xeroxed articles, available from the History of Science Department office (7143 Social Science). Please get this packet as soon as possible, since our first meeting after Labor Day asks you to do readings from the packet.

Course Requirements and Grading

1. Class Meetings and Readings

A course such as this one, which has you writing a research paper by the end of the semester, requires that you get up to speed in the subject very quickly. For this reason, there will be readings assigned for nearly every one of our meetings during the first part of the semester – generally fewer pages for Thursday meetings than Tuesdays, but sometimes Tuesday will be a little heavy, too. Please read the assignment before class. It turns out to be nearly impossible to have a good discussion when students haven't done the reading!

"So," you may be asking, "how does one get through as much as 100 pages of reading?" Well, the first thing to do is to allow enough time for it. Don't start two hours before class! Second and more importantly, don't try to read and digest every single word. If they are good writers, authors frequently give you signals about what they intend to do in a particular piece of writing. They may briefly describe the topics to be covered in the introduction, for example, or the conclusion may contain a summary of the argument. Pay closest attention to these parts of the reading, because they will give you a sense of what the whole thing is about. Knowing what the structure of a writing is and keeping that structure in mind as you go along often allows you to read faster. Finally, don't be afraid to skip or just glance at certain portions of a reading, if you clearly understand what the author is doing in that section. *But whatever you do, please make every attempt to look at the entire reading for each assignment.*

2. Writing Assignments

Your written work for the course will consist of: 1) the previously mentioned research paper, 12–15 pages in length; 2) a shorter 3-page research proposal, in which you will briefly describe your research topic and the sources you intend to use for it; and 3) a 2-page review of a primary source, which you will be assigned toward the end of September. **PLEASE NOTE:** both the research proposal and the paper itself require that you produce a draft, which will be read and critiqued by Kyle Oliver, our writing fellow, in consultation with me. The draft must be written as a finished paper – that means it must be typewritten, polished with respect to prose and spelling, must contain appropriate references in the form of footnotes or endnotes, etc. After you have submitted the drafts and Kyle has had a chance to read and comment on them, you will arrange a meeting with him (and then, if desired, with me) to discuss the paper. You will then re-write the paper, taking the criticisms in hand, and submit it for a grade. **Submission of the drafts is an essential component of this course, and failure to turn in a draft will result in lowering your final grade by 1.5 points.** Therefore a 4.0 paper will receive a 2.5, and so on.

Why do we place such emphasis on production of the drafts and rewriting? Experienced writers know that good writing necessarily involves rewriting, not just to correct spelling errors and typos, but also to re-think what the paper is trying to do. The students who participate in the writings fellows program are themselves excellent writers and have undergone training to give them the skills as effective critics of writing. Writing fellows allow you to receive informed feedback on your writing from students like yourself, and you will find this feedback extremely useful. So please make good use of it.

Finally, because you will be required to use footnotes or endnotes for your assignments, you may choose to buy one of the following guides, which help you through this and other aspects of doing research papers:

1. Kate L. Turabian, *A Manual for Writers of Term Papers, Theses, and Dissertations*
2. *The Chicago Manual of Style* (this is a comprehensive & obsessive guide to prose style, and may be useful for your college career, but not required for this course)
3. Wayne C. Booth, et al., *The Craft of Research*

3. Grading

Your final grade will be weighted as follows:

- 25% Class participation
- 20% 3-page research proposal
- 55% research paper

"Class participation" is defined as including attendance at our weekly meetings, timely and regular submission of the informal writing assignments, and finally, willingness to participate in weekly discussions. By making your grade rest in part on participation in discussions, it is not my intention to penalize students who may be shy or who may otherwise lack the confidence to talk a lot in class. I do not expect everyone to talk the same amount, but I do expect everyone to be able to answer questions when asked and do his or her best to support the discussion.

Schedule of Assignments, Meetings and Readings

Sept. 2 – Course Introduction

Sept. 7 – Introduction: The commercial & scientific impulses of travel.

Readings: Williams, *The Great South Sea*, pp. 214–250.

Livingstone, *Putting Science in Its Place*, pp. 135–178.

Sept. 9 – Scientific travel in the later 18th century.
Readings: Williams, *The Great South Sea*, pp. 251–273.
Iliffe, "Science and Voyages of Discovery."

Sept. 14 – Narratives of Capt. Cook's 2nd voyage, part 1: J.R. Forster
Reading: *The Resolution Journal of Johann Reinhold Forster*, pp. 202–268.

Sept. 16 – Narratives of Capt. Cook's second voyage, part 2: Capt. Cook
Reading: *The Journals of Captain Cook*, pp. 238–269.

Sept. 21 – Narratives of Cook's second voyage, part 3: J.R. Forster (again !)
Reading: Forster, *Observations Made during a Voyage round the World*,
pp. 143–201.

****Distribution of 1st writing assignment: Hakluyt Society Reprints****

Sept. 23 – Tour of Memorial Library. **(Meet in the Department of Special Collections on the 9th Floor.)**
Reading: none!

Sept. 28 – Discussion of the Hakluyt Society Assignment
Reading: none

****1st writing assignment due in class****

****Distribution and discussion of 2nd writing assignment: Research proposal****

Sept. 30 – The establishment of travel as a scientific enterprise
Readings: Sörlin, "Ordering the World for Europe" and Mackay, "Agents of Empire."

Oct. 5 – Mungo Park's travels in Africa: part 1
Readings: Marshall and Williams, *The Great Map of Mankind*, and Park, *Travels in the Interior Districts of Africa*, pp. 1–28, 67–69, 108–129.

Oct. 7 – Mungo Park's travels in Africa: part 2
Reading: Park, *Travels in the Interior Districts of Africa*, pp. 130–172.

Oct. 12 – Mungo Park's travels in Africa: part 3
Reading: Park, *Travels in the Interior Districts of Africa*, pp. 228–272.

Oct. 14 – In-class workshop on researching and writing history
Readings: none!

****2nd writing assignment (research proposal) due in class****

Oct. 19 – Charles Darwin and the *Beagle*: Introduction

Reading: Camerini, "Remains of the Day," and Darwin, *Voyage of the Beagle*, pp. 1–26, 378–399.

Oct. 21 – Darwin in Argentina

Reading: Darwin, *Voyage of the Beagle*, pp. 95–145.

Oct. 26 – Darwin in Patagonia & Chile.

Reading: Darwin, *Voyage of the Beagle*, pp. 145–184, 195–217.

Oct. 28 – Darwin in the Galapagos Islands

Reading: Darwin, *Voyage of the Beagle*, pp. 268–290.

Nov. 2 – No class (Meetings on Monday & Tuesday to discuss research)

Nov. 4 – Student-led discussions of research papers

Nov. 9 – Student-led discussions of research papers

Nov. 11 – Student-led discussions of research papers

Nov. 16 – Student-led discussions of research papers

Nov. 18 – No class (the prof will be out of town!)

Nov. 23 – Film: *Mutiny on the Bounty* (1985)

****Preliminary drafts of research papers due in class today****

Nov. 25 – No class: Thanksgiving

Nov. 30 – (Open for now)

Dec. 2 – Student presentations of research papers

Dec. 7 – Student presentations of research papers

Dec. 9 – Student presentations of research papers

Dec. 14 – Wrap-up party

****Final research papers due 5:00 p.m. December 15****

