

History of Science 280: Honors Seminar
Science, Medicine, and Technology in the Utopias

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University of Wisconsin-Madison, Fall 2006
TTh 8-9:15 (Social Science 6109)

The format of this honors course is writing-intensive, and will be conducted in a seminar format despite the two meetings per week. The reading load is relatively heavy, but you will find the material very stimulating and rewarding, even entertaining at times. The writing assignments seek to put more pressure on the beginning of the semester.

Office hours are Wednesdays, 2-3:30 in Social Science 7135; you can also reach me at 262-3972 and mhshank@wisc.edu.

Books (in order of appearance in the course):

More, Utopia, (Dover Thrift Edition) ISBN: 0486295834
The New Atlantis, and the City of the Sun (Dover Thrift Edition) ISBN: 0486430820
 Samuel Butler, Erewhon (1876) (Dover Thrift Edition) ISBN: 0486420485
 Edward Bellamy, Looking Backward, 2000-1887 (Dover Thrift Edition) ISBN: 0486290387
 H. G. Wells, The Time Machine (Dover Thrift Editions) ISBN: 0486284727
 Charlotte Perkins Gilman, Herland (Dover Thrift Editions) ISBN 0486404293
 Evgenii Zamyatin, We (1924) (Avon, 1999); ISBN: 0380633132
 B.F. Skinner, Walden Two (1948) (Allyn and Bacon 1976) ISBN: 002411510X; Reissue edition
 Ursula LeGuin, The Dispossessed: An Ambiguous Utopia (Harper; repr. 1994) ISBN: 0061054887;
 Wayne Booth, Gregory G. Colomb, and Joseph N. Williams, The Craft of Research (Chicago: University of Chicago Press, 1995) ISBN: 0226065847

Photocopied selections will be handed out to supplement the books (photocopied in the dept at cost—cheaper than you can print it on your own printer)

Course Requirements

1. Conscientious reading of assigned selections (note: relatively heavy load; VERY important to keep up); bring readings to class.
2. Take good notes on your reading—you will need them for in-class discussion, for comparisons with the material in your project; for the future.
3. Active, weekly participation in class discussions (one-page focus paper each week; extra-credit for additional ones)
4. Presentation of two in-class oral reports:
 - a) one assigned author's biography and contextual sketch (5-7 minutes; hand in your 2-4 pp. at beginning of the relevant class)
 - b) one report on your research during the last weeks of the seminar (15 minutes plus discussion)
5. 15-page seminar paper (see below)
6. Revision of paper based on comments from prof and class (due Friday 15 December)

Grading:

All one-page focus papers: 15%

In-class participation (quality counts) 15%

Introductory presentations (historical context and biography)—oral and written: 5%

Presentation of research (last 3 weeks): 15%

First version of paper: 30%

Final version of paper: 20%

References: Utopia on the Internet (<http://users.erols.com/jonwill/utopialist.htm>)

History of Science Resources: History of Science Society website

History of Science Reading Room

Dictionary of Scientific Biography (in the major reference collections).

Key Journals: Alternative Futures, Science Fiction Studies, Isis, Bulletin of the History of Medicine, Technology and Culture

Key due dates: on Tuesdays, unless otherwise noted

9/12 general area of interest

9/19: paragraph about possible utopias/dystopias for the core of your final project

9/26: select utopia/dystopia for the paper

10/3: Preliminary bibliography due

10/28: Thesis statement and preliminary outline due

11/20 (Monday) All papers emailed in rtf format to class list due by noon

11/21-end: reports and in-class discussion of papers

12/15 (Friday): revised papers due (hand-in my marked-up version and the revised versions)

Week 1 (9/5-7): Introduction and Introductions

Tuesday: Introduction

Thursday: Frank Manuel and Fritzie Manuel, Utopian Thought in the Western World (Cambridge: Harvard University Press, 1979), ch. 1-2.

Steven Weinberg, "Five and a Half Utopias," Atlantic Monthly 285 (January 2000), pp. 107-114.

Start reading Plato for next week!

Suggestion for further reading:

Roger Emerson, "Utopia," Dictionary of the History of Ideas, ed. P. Wiener, vol. IV (New York, 1973), pp. 458-465.

Week 2 (9/12-14): The Predecessor (Plato) and the Archetype (More)

Due: 2 focus papers (TTh); include a few sentences about possible areas of interest for the final paper: time period, or subject (e.g., biological issues), or special question, or specific utopia/dystopia, or...).

Tuesday: Report:

Plato, The Republic, 368a-427c, 449a-474b, 497a-507a, 521c-541b (I give the "Stephanus numbers" so you can check passages in other editions)

Thursday: Report:

Thomas More, Utopia (1516).

Suggestions for further reading:

For a classic reaction to the Republic in response to fascism, see Karl Popper, The Open Society and Its Enemies [1943] (Princeton: Princeton University Press, 1971), vol. 1: The Spell of Plato, esp. ch. 1, 9-10.

Frank Manuel and Fritzie Manuel, Utopian Thought in the Western World (Cambridge: Harvard University Press, 1979), ch. 4.

R. P. Adams, "The Social Responsibilities of Science in Utopia, the New Atlantis and After," Journal of the History of Ideas 10 (1949) 374-398.

John Steintrager, "Plato and More's Utopia," Social Research 36 (Autumn 1969) 357-372.

Richard Marius, Thomas More: A Biography (New York: Knopf, 1984).

Week 3 (9/19-21): The Scientific Revolution

Due: A short paragraph about possible utopias/dystopias for the core of your final project. This is not a commitment, but an expression of your interests. **Take a good look** at Booth et al., The Craft of Research, Part II, esp. pp. 29-63.

2 focus papers (TTh)

Tuesday: Report:

Francis Bacon, The New Atlantis (ca. 1624)

Manuel and Manuel, Utopian Thought, ch. 9, pp. 243-60.

Thursday: Report:

Tommaso Campanella, The City of the Sun (1623)

Manuel and Manuel, Utopian Thought, ch. 10, pp. 261-288.

Suggestions for further reading:

Judah Bierman, "Science and Society in the New Atlantis and Renaissance Utopias," Publication of the Modern Language Association 78 (1963) 492-500.

Nell Eurich, Science in Utopia (Cambridge, Mass.: Harvard University Press, 1967).

Eleanor Blodgett, "Bacon's New Atlantis and Campanella's Civitas Solis: A Study in Relationships," PMLA 46 (1931) 763-780.

J. Weinberger, "Science and Rule in Bacon's Utopia: An Introduction to the Reading of the New Atlantis," American Political Science Review 70 (1976) 865-885.

Mulford Q. Sibley, Technology and Utopian Thought (Minneapolis, 1971).

Week 4 (9/26-28): Nineteenth Century Britain I

Due: After serious browsing and looking at summaries and reviews, pick a utopia/dystopia
1 focus paper

Tuesday: Report: Butler

Samuel Butler, Erewhon (1876) ch. 1-20.

Thursday: Report (Natural Selection)

Finish Erewhon

Charles Darwin, On the Origin of Species, ch. 4 (Natural Selection).

Suggestions for further reading:

Joseph Jones, The Cradle of Erewhon: Samuel Butler in New Zealand (Austin: University of Texas Press, 1959).

W. G. Bekker, An Historical and Critical Review of Samuel Butler's Literary Works (Rotterdam, 1925).

Karl Popper, "The Erewhonians and the Open Society," Etc. 20 (1963) 5-22.

Week 5 (10/3-5): Nineteenth Century Britain II

Due: Preliminary bibliography. Compile a list of ca. 20 printed items--books and articles--that **may** be relevant your paper and its background, and good bets for sources of evidence to answer your question or make your case. (Note: you are gathering titles that look promising, not looking at them yet). Cast your net widely: this list will be much larger than the one you will actually use in your paper. **Take a good look** at Booth et al., The Craft of Research, esp. pp. 64-84.

1 focus paper

Tuesday: Report (Wells)

H. G. Wells, The Time Machine [1895] (Dover Thrift Edition)

Roslynn D. Haynes, H. G. Wells, Discoverer of the Future: The Influence of Science on his Thought (), ch. 2: The Conversion to Science, pp. 18-38.

Thursday: finish Wells.

Due: Trimmed bibliography based on your skimming of items in your first bibliography.

Suggestions for further reading: Manuel and Manuel, Utopian Thought, ch. 33.

Week 6 (10/10-12): The U. S. in the Nineteenth-Century

1 focus paper

Tuesday: Report:

Edward Bellamy, Looking Backward, 2000-1887 [1888], ch. 1-13.

Howard Segal, Technological Utopianism in American Culture (Chicago: University of Chicago Press, 1985), Chapter 5.

Thursday: Report (impact of Bellamy?)

finish Bellamy

Recommended: Manuel and Manuel, Utopian Thought, Chapter 32.

For further reading:

Sylvia Bowman, The Year 2000: A Critical Biography of Edward Bellamy (New York, 1958).

Arthur E. Morgan, The Biography of Edward Bellamy (New York, 1975).

Ira L. Mandelker, Religion, Society and Utopia in Nineteenth Century America (1984).

Jean Pfaelzer, The Utopian Novel in America, 1886-1896 (Pittsburgh: Pittsburgh University Press, 1985).

Charles J. Rooney, Dreams and Visions: A Study of American Utopias, 1865-1917 (Westport, Conn.: Greenwood Press, 1985).

Week 7 (10/17-19): An Early Feminist Utopia

Paper: you should be reading items in your bibliography, cutting out the irrelevant items, taking notes on the relevant, and thinking about the argument you want to make.

1 focus paper

Tuesday: Report:

Charlotte Perkins Gilman, Herland [1915] (Dover), ch. 1-6.

Evelyn Fox Keller, "Science and Power for What?" in Everett Mendelsohn and Helga Nowotny, eds., Nineteen-Eighty-Four: Science Between Utopia and Dystopia (D. Reidel, 1984), pp. 261-72.

Thursday: Finish Herland, ch. 7-12

For further reading, see the Resource on feminist utopian literature and science fiction:

<http://www.feministsf.org/femsf/reviews/index.html>

Week 8 (10/24-26): Paper-writing workshop and Zamiatin I

Thesis statement and detailed outline due/ (ca. 2 pages) (begin work hard on paragraphs about background, analysis, comparisons/contrasts)

Read carefully: Booth et al., The Craft of Research, Part III, pp. 85-148

1 focus paper

Tuesday: paper workshop

Thursday: Report:

Evgenii Zamiatin, We (1924), first half.

For further reading:

Frank Bartholomew, "The Russian Utopia," in E. D. S. Sullivan, ed., The Utopian Vision (San Diego: San Diego State University Press, 1983), pp. 69-91.

Alexander Shane, The Life and Works of Evgenii Zamiatin (Berkeley, Calif.: University of California Press, 1968).

J. J. White, "Mathematical Imagery in Musil's Young Torless and Zamyatin's We," Comparative Literature 18 (1966) 71-78.

Week 9 (10/31-11/2): The Early Soviet Union

Outlines returned

SCHEDULE ALTERNATIVE MEETING for next week

1 focus paper

Tuesday: Finish Zamiatin

Thursday: Report:

B.F. Skinner, Walden Two (Macmillan, 1948), ch. 1-17.

Week 10 (11/7-9): Mid-Twentieth Century U.S.

?: Finish Skinner

Selected Reviews [New York Times, 13 June 1948, p. 6; New Yorker 24 (12 June 1948) 94; Christian Science Monitor 24 June 1948, p. 11; New York Herald Tribune, 18 July 1948, p. 6; School and Society 67 (29 May 1948) 416]

Work on the paper!

For further reading:

B.F. Skinner's autobiography, Particulars of My Life (New York: Knopf, 1974).

R. Puligandla, Fact and Fiction in B. F. Skinner's Science and Utopia (St. Louis: Warren Green, Inc., 1974).

Krishan Kumar, Utopia and Anti-Utopia in Modern Times (Oxford: Blackwell, 1987), ch. 9: "The Utopia of 'Behavioral Engineering': B. F. Skinner and Walden Two" 347-78.

Week 11 (11/14-16): Late Twentieth-Century America

Papers due next week—by noon Monday

Schedule reports

1 focus paper

Tuesday: Report

Ursula LeGuin, The Dispossessed: An Ambiguous Utopia [1974]

Thursday: Finish Leguin

For further reading:

Krishan Kumar, Utopia and Anti-Utopia in Modern Times (Oxford: Blackwell, 1987), ch. 10: "Utopia and Anti-Utopia in the Twentieth-Century", pp. 380-424.

Judah Bierman, "Ambiguity in Utopia: The Dispossessed," Science Fiction Studies 2 (1975) 249-55.

Williams, Raymond. "Utopia and Science Fiction." Science Fiction Studies 5(1978) 203-214.

Tentative Report Schedule

Week 12 (11/21) / Reports read relevant papers

Schedule MEETING TIME FOR NEXT WEEK 15!

Monday 11/20: All papers emailed in rtf format to class list due by noon

Tuesday: 3 reports; read and comment on relevant papers

[Thursday: Thanksgiving Day]

Week 13 (11/28-30) reports; read and comment on relevant papers

Tuesday: 3 reports

Thursday: 3 reports

Week 14 (12/5-7): reports; read and comment on relevant papers

Tuesday: 3 reports

Thursday: 3 reports

ONE SPECIAL MEETING

[Week 15 (12/12-14) Final reports; read and comment on relevant papers]

Friday 12/15: revised papers due (**hand-in my marked-up version and the revised version**)

Some guidelines on the assignments

The one-page “focus papers”—brief and informal

Due for every new work (for some weeks, there will be two) **at the beginning of the relevant class** and are graded “credit/no credit” basis. I will probably mark them up and hand them back only at the beginning of the course. Their purpose is to commit you in writing to choosing some issues that you find worthy of discussion, because they are surprising, stimulating, disturbing, or problematic, etc. (Explain why) You need to think about the assignment ahead of time and select some specific issues/passages that you consider particularly significant in relation to the themes of the course. You can fulfill the assignment by making observations on the material or by raising questions that you would want to discuss, by discussing. Ideally, your focus paper will contain the best of your reflections: if you take good notes, this is an easy assignment.

The weekly reports (5-7 minutes max.)

You will want to say a few things about the author's biography, but the report is not meant to be primarily biographical; the focus should be on the historical background relevant to the book (what is happening in the world and in the history of science, medicine, and technology?)

The research paper

Topic: Tackle a work that is not on our list and is new to you. **Check with me for approval of the topic.** The paper should be “on-topic”—that is, deal with some aspects of science, technology, or medicine). It should have a thesis (pose a question, set out to solve a problem, or argue a case). Booth et al., *The Craft of Research*, contains much valuable advice on the matter of moving from a topic to a question.

Ideally, the paper will be analytical, historical, and comparative.

Analytical: you will analyze the utopia/dystopia you have chosen for its ideas in relation to one another and the plot of the work itself.

Comparative: you will draw upon the readings in the seminar to compare and contrast views/approaches in the work you have chosen with the ones we are reading as a group.

Historical: Your paper will probably involve some attention to the author's intellectual development and to the work as a literary document, but the bulk of your paper will seek to understand the work in its historical context (intellectual, political, social, etc), and investigate themes relevant to the history of science, medicine, and/or technology.

It is important that you start exploring ideas for a paper at an early stage, so that you can find out early if your idea will “fly.” I have therefore given you an early deadline for such exploration (first round: 9/23). In addition, it takes some time to learn about the historical context of the utopia/dystopia that you will choose.

Formally, the paper should include the following elements:

- an introduction that sets out the problem, thesis, argument, or question around which the

paper is organized;

- a main body that sets the work of your choice in its historical context, analyzes it, and proceeds to build a case, marshal evidence on its behalf, and refute actual or potential objections to it. This section of the paper will normally be thoroughly documented, with footnotes to the relevant primary and secondary sources (if the paper is word processed, the notes should appear at the bottom of the page; if typewritten, they may be placed at the end). It is very important to distinguish the words and work of others from your own: place all direct citations in quotation marks and acknowledge the paraphrased ideas of others;

- a conclusion that recapitulates the main findings of the paper;

- a bibliography of works cited, including articles (or consulted, if they are relevant to the topic at hand, but were not cited).

Use Booth, et al., The Craft of Research, which is an invaluable guide to paper writing.

All work must be your own. The exact words of authors should be placed in quotation marks and properly credited. Needless to say, the purchase of papers or research services is out of the question. For most of us, writing a paper from beginning to end is an intellectual struggle, and it should be. Some people can make it look easy, but for most of us, it's a lot of work. As such, a paper is an invaluable experience in research, organization, and communication that should not be "short-circuited." This is only one of the reasons why I do not tolerate any form of plagiarism or academic dishonesty. It is only fair to tell you that when I have found it, I have done everything in my power to have the guilty expelled.

The research reports (final 3-4 weeks):

Everyone will have a copy of everyone else's work, which we will all be reading for the relevant week. It will therefore not be necessary to give much detail, which in any case will not fit into the final oral report (15 minutes maximum). The report should highlight the main argument/thesis and your main conclusions--the most important messages that you wish to communicate. Everyone is expected to participate in the discussion of the papers and to offer constructive feedback about improving the argument and the presentation of the paper generally.