Oberlin College

Gary J. Kornblith
Rice 306; x8526
Gary.Kornblith@oberlin.edu

History 324
Fall 2001
Blackboard CourseInfo: Indus Revol/Info Revolution

Industrial Revolution/Information Revolution: A Comparative Perspective

For a regularly updated version of this syllabus, go online to http://www.oberlin.edu/GJK/IR2/.

This course examines multiple dimensions of two long-term, technologically based social processes that have profoundly transformed how Americans live, work, relate to one another, and think about the world. We will begin with the history of American industrialization in the nineteenth century and then turn our attention to the Information Revolution currently underway. Among the issues we will explore are the relationship between technological progress and the distribution of wealth and opportunity in the United States, the impact of technology on gender roles and the sexual division of labor, the experience of community and alienation in different technological contexts, people's perceived sense of time and space, and utopian and dystopian visions of the future. Throughout the semester, we will endeavor to identify parallels and key differences between the Industrial and Information Revolutions so as to better understand what is and is not unique about the contemporary situation.

Evaluation: Final grades will be based on a ten-page analytical essay (35%), a group project (35%), contributions to the Blackboard CourseInfo discussion group (15%), and in-class participation (15%).

Purchases: The following books are available for purchase at the Oberlin Bookstore.

- Gary J. Kornblith, ed., The Industrial Revolution in America
- William Cronon, Nature's Metropolis
- Glenn Porter, The Rise of Big Business, 1860-1920, 2d ed.
- Edward Bellamy, Looking Backward
- Martin Campbell-Kelly and William Aspray, Computer
- Shoshana Zuboff, In the Age of the Smart Machine
- Roy Kurzweil, The Age of Spiritual Machines
- Neal Stephenson, The Diamond Age

Class Schedule:

Tues., Sept. 4

Introduction

 Thomas Jefferson, Notes on the State of Virginia, excerpts (online at http://www.oberlin.edu/~gkornbl/Hist258/NotesonVirginia.html)

Thurs., Sept. 6



Discussion: Definition and Overview of the Industrial Revolution

- David S. Landes, "The Fable of the Dead Horse; or, The Industrial Revolution Revisited," in Joel Mokyr, ed. *The British Industrial Revolution*, 2d ed., 128-59 (on <u>ERes</u>)
- Herbert G. Gutman, "Work, Culture and Society in Industrializing America, 1815-1919," American Historical Review, 78 (June 1973): 531-588 (on JSTOR via a College computer)
- Gary J. Kornblith, "Introduction," in Kornblith, ed., *Industrial Revolution in America*, xv-xxiii
- John F. Kasson, "Republican Values as a Dynamic Factor,"in Kornblith, ed Industrial Revolution in America, 3-12

Discussion: The Division of Labor and the Transformation of Work

Adam Smith, The Wealth of Nations, ch 1-3, 8 (online at http://www.adamsmith.org.uk/smith/won-index.htm and http://geolib.pair.com/smith.adam/woncont.html)

Thurs., Sept. 13

Discussion: Mechanization and the Transformation of Work

 Karl Marx, Capital, vol. 1, ch. 15, sect. 1-5 (online at http://csf.colorado.edu/psn/marx/Archive/1867-C1/)



Tues., Sept. 18





- Thomas Dublin, "Factory Employment as Female Empowerment," in Kornblith, ed., *Industrial Revolution in America*, 53-62
- Gary J. Kornblith, "The Entrepreneurial Ethic," in Kornblith, ed., *Industrial Revolution in America*, 71-79
- Sean Wilentz, "The Bastardization of Craft," in Kornblith, ed., *Industrial Revolution in America*, 79-87
- Robert B. Gordon, "Realizing the Ideal of Interchangeability," in Kornblith, ed., Industrial Revolution in America, 88-98

Thurs., Sept. 20

Discussion: Railroads, the Telegraph, and the Reorganization of Space and Time

- Cronon, Nature's Metropolis, xv-xix, 23-93
- Richard R. John, "Recasting the Information Infrastructure for the Industria Age," in Alfred D. Chandler, Jr. and James W. Cortada, eds., A Nation Transformed by Information, 55-105 (on ERes)
- Henry David Thoreau, Walden, ch. 4 (online at http://xroads.virginia.edu/~HYPER/WALDEN/hdt04.html)
- George M. Beard, American Nervousness (excerpt online at http://classweb.uchicago.edu/Civilization/American/Supp136/Beard.html)

Tues., Sept. 25

Video: The Richest Man in the World: Andrew Carnegie, 1



Thurs., Sept. 27

No class: Yom Kippur

Tues., Oct. 2	Discussion: The Rise of Big Business and the Struggle for Control of Production
	 Porter, Rise of Big Business, 1-90 Alfred D. Chandler, Jr., "The Coming of Mass Production and Modern Management," in Kornblith, ed., Industrial Revolution in America, 141-149 Andrew Carnegie, "The Gospel of Wealth" (online at http://xroads.virginia.edu/%7EDRBR/wealth.html) David Montgomery, "The Struggle for Control of Production," in Kornblith, ed., Industrial Revolution in America, 173-179.
Thurs., Oct. 4	Video: The Richest Man in the World: Andrew Carnegie, 2
Tues., Oct. 9	Discussion: The Dynamics of the National Marketplace
	 Cronon, Nature's Metropolis, 94-147, 207-59, 310-369 Richard Ohmann, Selling Culture: Magazines, Markets and Class at the Turn of the Century, 48-117 (on <u>ERes</u>)
Thurs., Oct. 11	Video: Mr. Sears' Catalogue
	1897 1897 1897 1897 1897 1897 1897 1897
Tues., Oct. 16	Discussion: Visions of the Future, 1
	 Henry Adams, The Education of Henry Adams, ch. 25 (online at http://xroads.virginia.edu/~HYPER/hadams/eha25.html) Bellamy, Looking Backward, preface and ch. 1-10
Thurs., Oct. 18	Discussion: Visions of the Future, 2
	Bellamy, Looking Backward, ch. 11-28 and postscript
Sat., Oct. 20	Analytical essay due
	Fall Break

Tues., Oct. 30 Lab: Creating Web Pages

Thurs., Nov. 1 Discussion: Definition and Overview of the Information Revolution

- Daniel Bell, "The Social Framework of the Information Society" in Michael Dertouzos and Joel Moses, eds., *The Computer Age*, 163-211 (on <u>ERes</u>)
 Michael L. Dertouzos, "The Five Pillars of the Information Age," appendix
- Michael L. Dertouzos, "The Five Pillars of the Information Age," appendix What Will Be: How the New World of Information Will Change Our Lives, 317-28 (on <u>ERes</u>)

 Manuel Castells, The Rise of the Network Society, vol 1 of The Information Age: Economy, Society and Culture, 2d ed., 1-76 (on ERes)

Tues., Nov. 6



Thurs., Nov. 8

Discussion: The Emergence of Computers

- Campbell-Kelly and Aspray, Computer, 1-180
- Paul N. Edwards, Closed World, chap. 2 (online at http://www.si.umich.edu/~pne/PDF/cw.ch2.pdf)
- Vannevar Bush, "As We May Think," Atlantic Monthly, July 1945 (online at http://www.theatlantic.com/unbound/flashbks/computer/bushf.htm)
- A. M. Turing, "Computing Machinery and Intelligence," *Mind*, Oct. 1950 (online at http://www.abelard.org/turpap/turpap.htm)

Library Resources (presentation by Haipeng Li in Mudd 443)

Mon., Nov. 12

Tues., Nov. 13

Thurs., Nov. 15

Video: *Triumph of the Nerds,* **episodes 1 and 2** (special meeting at 271 West College St., beginning at 7:30 p.m.)

Video: Triumph of the Nerds, episode 3

Recommended:

- Campbell-Kelly and Aspray, Computer, 181-282
- Otto Friedrich, "Machine of the Year: The Computer Moves In, " *Time*, Jan 3, 1983 (online at http://www.time.com/time/special/moy/1982.html)

Discussion: Computerization and the Transformation of Work

 Zuboff, In the Age of the Smart Machine, xi-xv, 3-123, 224-84, 311-61, 38 414

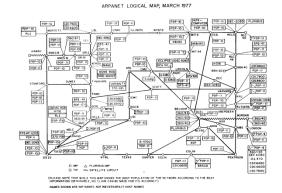
Tues., Nov. 20

Discussion: Computer Networks, the Internet, and the Reorganization of Space and Time

- Campbell-Kelly and Aspray, Computer, 259-300
- Roy Rosenzweig, "Wizards, Bureaucrats, Warriors, and Hackers: Writing the History of the Internet, American Historical Review 103 (Dec. 1998):1530-{
 (online at http://chnm.gmu.edu/chnm/wizards.html)
- James Gleick, *Faster*, 65-76, 83-93 (on <u>ERes</u>)

Recommended:

Barry M. Leiner et al., "A Brief History of the Internet," (online at http://www.isoc.org/internet/history/brief.shtml)



Thurs., Nov. 22

No class

Tues., Nov. 27

Thurs., Nov. 29

Lab and discussion: The IR2 Website

Discussion: The Rise of New Media, the Struggle for Control of Informatior and the Dynamics of the Global Marketplace

- Lee S. Spruill, "Computers in U.S. Households since 1977" in Chandler an Cortada, eds., *Nation Transformed by Information*, 257-80 (on <u>ERes</u>)
- Andrew Shapiro, The Control Revolution, 13-33, 40-59, 84-100, 217-230 (on <u>ERes</u>)
- Benjamin R. Barber, "Jihad Vs. McWorld," Atlantic Monthly, March 1992 (online at http://www.theatlantic.com/politics/foreign/barberf.htm and at http://www.geocities.com/ResearchTriangle/Lab/6408/Jihad.html)
- Dan Schiller, Digital Capitalism, xv-xvii, 37-60, 82-113, 203-209 (on <u>ERes</u>

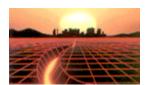
Recommended:

- Susan Herring, "Posting in a Different Voice: Gender and Ethics in Computer-Mediated Communication," in Mayer, ed., Computer Media and Communication, 241-65 (on ERes)
- Peter F. Drucker, "Beyond the Information Revolution," Atlantic Monthly, Oct. 1999 (online at http://www.theatlantic.com/issues/99oct/9910drucker.htm)

Tues., Dec. 4

Lab and discussion: The IR2 Website

Thurs., Dec. 6



Discussion: Visions of the Future, 1

- Kurzweil, Age of Spiritual Machines, 1-156
- Bill Joy, "Why the Future Doesn't Need Us," Wired, April 2000 (online at http://www.wired.com/wired/archive/8.04/joy_pr.html)

Tues., Dec.11

Lab and discussion: The IR2 Website

Thurs., Dec. 13

Discussion: Visions of the Future 2

• Stephenson, Diamond Age, entire

Wed., Dec. 19

Group projects due