

ITCP 70100: *History, Theory and Practice of Interactive Media*
Interactive Technology and Pedagogy Certificate Program
Professor Stephen Brier
Spring 2002
Wednesdays, 4:15-6:15 PM, Room 5382

This is the initial core course in the Interactive Technology and Pedagogy certificate program. We will examine the economic, social, and intellectual history of technology in general and interactive media in specific. We will consider how links between science and technology shape the ways we think and act in the academy, in industry, and in everyday life. The course examines the coinciding legacies of, fascination with, and ambivalence about technology in order to gauge the expansive impact of technological changes, first on society and the economy, and then on pedagogy and education. The course also explores the history and theory of hypertext and multimedia, highlighting the theoretical and practical possibilities for research, reading, writing and presentation in a world where new, nonlinear narrative structures are increasingly available and popular.

The first part of the course employs readings in social theory and history to explore larger questions about the role of science and technology in the era of international capitalist expansion and transformation, focusing on questions related to technological change, human agency, and technological determinism. The second part of the course focuses on science and technology as they relate to teaching and learning, exploring the support for (and opposition to) the complex coupling of technology and pedagogy.

Each student will write two papers: a short one, due immediately after Spring break; and a longer one, due during the final exam period in late May. By the second half of the course, individual students will take responsibility in class for offering introductory comments on and criticisms of particular readings. In addition to doing the reading each week and participating in (and occasionally leading) class discussions, ITP students are expected to spend time exploring the World Wide Web (and other forms of multimedia such as CD- and DVD-ROMs) for intellectually challenging and pedagogically interesting materials, especially in their academic disciplines, and, where appropriate, to participate in discussion groups on the course Blackboard Web site (<http://bb.gc.cuny.edu/index.html>).

BOOKS TO PURCHASE (all are available in paperback; you are encouraged to purchase books via the GC Virtual Bookshop at <http://www.gc.cuny.edu/bookshop>):

1. Michael Adas, *Machines as the Measure of Man: Science, Technology and Ideologies of Western Dominance*, Cornell University Press, 1989.
2. Edward Bellamy, *Looking Backward, 2000-1887*, Penguin Classic, 1982 (originally published in 1888).
3. Merritt R. Smith and Leo Marx, editors, *Does Technology Drive History? The Dilemma of Technological Determinism*, MIT Press, 1995.
4. David Harvey, *The Condition of Postmodernity*, Blackwell, 1990.
5. Sherry Turkle, *Life on the Screen: Identity in the Age of the Internet*, MIT Press, 1996.
6. Janet Murray, *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*, MIT Press, 1998.

SYLLABUS

INTRODUCTION

January 30: Introduction to the course and the ITP Certificate Program

Reading: ITP Certificate Program Proposal (available online in PDF at http://web.gc.cuny.edu/instructtech/it/cert_prog/index.html). Be prepared to discuss your interest in and experience with computer-based instructional technology.

Go home or use a GC computer to log on to the Red Rock Eaters home page, <http://dlis.gseis.ucla.edu/people/pagre/rre.html>, which is run by Prof. Phil Agre, a UCLA faculty member in information sciences. Subscribe to the service, which will cause you to receive about half a dozen email communications from RRE each week, usually a series of web links on a variety of topics of interest to Phil and his friends (of which I count myself as one); sometimes he sends along his own or other people's think pieces on IT. The RRE home page also includes an archive of RRE postings over the past five years, many of which are articles and essays by Phil Agre, that are often very smart with respect to large, philosophical questions and issues related to IT. One or perhaps both of the papers assigned in the course will require you to do some research in the RRE archive.

PART ONE

February 6: Western and Non-Western Notions of Technological Change

Reading:

Michael Adas, *Machines as the Measure of Man: Science, Technology and Ideologies of Western Dominance*, All, but especially Introduction, Chapters 2-5, and Epilogue.

February 13: Technology Transforms the Industrial Work Process

Reading:

Karl Marx, *Capital*, Vol. 1, Chapter 7, “The Labor Process” and Chapter 15, “Machinery and Modern Industry,” Sections 1-5 and Section 8 (any edition; also available online at <http://csf.colorado.edu/psn/marx/Archive/1867-C1/>).

February 20: Class cancelled (Monday course schedule on Wednesday)

February 27: Technological change and working-class agency

Reading:

Edward P. Thompson, “Time Work-Discipline and Industrial Capitalism,” *Past and Present* 38 (1967), 56-97 (photocopies will be distributed in class).

Herbert G. Gutman, *Work, Culture and Society in Industrializing America*, Vintage Books, 1976. Chapter 1, “Work, Culture and Society in Industrializing America, 1815-1919” (photocopies will be distributed in class)

David Montgomery, *Workers’ Control in America*, Cambridge University Press, 1979. Introduction and Chapter 1, “Workers’ control of machine production in the nineteenth century” (photocopies will be distributed in class)

March 6: Technological Utopia/Technological Dystopia

Reading (and screening):

Read: Edward Bellamy, *Looking Backward, 2000-1887* (also available online at <http://eserver.org/fiction/bellamy/contents.html>)

Screen (rent these at any video store): *Blade Runner*, directed by Ridley Scott, Warner Bros. Pictures, 1982, based on the Philip K. Dick novel, *Do Androids Dream of Electric Sheep*, 1968 (published in paper by Ballantine Books; it’s a good book to read, if you’re interested).

AND/OR

The Matrix, written and directed by Larry and Andy Wachowski, Warner Bros., 2000.

March 13: Class cancelled - illness

March 20: Technological Determinism Considered (and Reconsidered)

Reading: Merritt R. Smith and Leo Marx, editors, *Does Technology Drive History? The Dilemma of Technological Determinism*.

Introduction;

M.R. Smith, "Technological Determinism in American Culture"

R.L. Heilbroner, "Do Machines Make History" and "Technological Determinism Revisited"

P. Scranton, "Determinism and Indeterminacy in the History of Technology"

R. Williams, "The Political and Feminist Dimensions of Technological Determinism"

L. Marx, "The Idea of 'Technology' and Postmodern Pessimism"

March 27: Spring Break

First short paper due first class after Spring break.

April 3: Technology and Postmodernism

Reading:

David Harvey, *The Condition of Postmodernity*.

PART TWO

April 10: Identity in the Age of the Internet

Reading:

Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Simians, Cyborgs and Women: The Reinvention of Nature*, Routledge, 1991, 149-81 (available online at <http://www.stanford.edu/dept/HPS/Haraway/CyborgManifesto.html>)

Sherry Turkle, *Life on the Screen: Identity in the Age of the Internet*. Introduction and Chapters 7-10.

April 17: An Information Revolution?

Roy Rosenzweig, “Wizards, Bureaucrats, Warriors and Hackers: Writing the History of the Internet,” *American Historical Review* (December 1998). Available online at <http://chnm.gmu.edu/chnm/wizards.html>.

“The Electronic Hive: Two Views” – Refuse It (Sven Birkerts) v. Embrace It (Kevin Kelly), originally published in *Harper's Magazine* (May 1994). Available online at <http://chnm.gmu.edu/courses/rr/f01/cw/hive.html>.

John Seeley Brown and Paul Duguid, *The Social Life of Information*, Harvard Business School Press, 2000. Introduction and Chapters 1 and 5 (photocopies will be distributed in class).

Philip Agre, “Yesterday’s Tomorrow,” *Times Literary Supplement*, 3 July 1998, available online at <http://dlis.gseis.ucla.edu/people/pagre/tls.html>

April 24: The Possibilities of Hypertext and the Transformation of Narrative

Reading:

George Landow, *Hypertext: The Convergence of Contemporary Critical Theory and Technology*, Johns Hopkins University Press, 1992, Chapter 1. An updated, hypertext version of Chapter 1 is available online at <http://www.scholars.nus.edu.sg/landow/cpace/ht/jhup/contents.html>; you can read the regular text version, available in the Graduate Center Reserve Collection, but I’d prefer that you read this as an online hypertext document.

Jerome McGann, “The Rationale of HyperText,” available online at <http://www.village.virginia.edu/public/jjm2f/rationale.html>

Ilana Snyder, “Beyond the Hype: Reassessing Hypertext,” *Page to Screen: Taking Literacy into the Electronic Era*, Routledge, 1998 (photocopies will be distributed in class).

Janet Murray, *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. Introduction; Chapters 1-4; 7; and 10.

May 1: The Future of the Book

Reading:

Cynthia L. Selfe, “The Problem of Polemic: Representations of Technological Literacy in the Popular Press,” in *Technology and Literacy in the Twenty-first Century*, Southern Illinois University Press, 1999 (photocopies will be distributed in class).

Nancy Kaplan, "Literacy Beyond Books: Reading When All the World's a Web," in *The World Wide Web and Contemporary Cultural Theory*, ed. by Andrew Herman and Thomas Swiss, Routledge, 2000 (photocopies will be distributed in class).

Nicholas C. Burbules, "Rhetorics of the Web: Hyperreading and Critical Theory," in *Page to Screen: Taking Literacy into the Electronic Era*, Routledge, 1998 (photocopies will be distributed in class).

J. Yellowlees Douglas, *The End of Books – Or Books without End?*, University of Michigan Press, 2000. Introduction and Chapter 7 (photocopies will be distributed in class).

Clifford Lynch, *The Battle to Define the Future of the Book in the Digital World*, *First Monday*, volume 6, number 6 (June 2001), available online at http://firstmonday.org/issues/issue6_6/lynch/index.html. You can read the book online at First Monday, but I'd prefer you to read it using the TK3 e-book reader, which is available free online at http://www.nightkitchen.com/books/samples_book.phtml?book=63.

You need to download and install both the free TK3 reader and the free copy of the Lynch book to your home computer (you probably won't be able to download TK3 software to a GC machine). I'd prefer that you read the Lynch book on screen and use the TK3 electronic book reading tools (highlighter, notebook, page "dog ears", etc.) when you do, which I'll demonstrate in class). Part of your assignment is to evaluate what you thought of this new technology for reading.

May 8: Dystopian Views of Instructional Technology and the University

Reading:

David Noble, *Digital Diploma Mills: The Automation of Higher Education*. Chapters 2 through 6. Chs. 2-4 available online at:

Ch. 2: <http://commons.somewhere.com/rre/1997/test3.html>

Ch. 3: <http://commons.somewhere.com/rre/1998/The.Coming.Battle.Over.O.html>

Ch. 4: <http://commons.somewhere.com/rre/1998/RRE.Digital.Diploma.Mill.html>

Chs. 5 & 6 will be photocopied and distributed in class.

Dan Schiller, *Digital Capitalism: Networking the Global Market System*, MIT Press, 1999. Chapter 4 (photocopies will be distributed in class).

Stephen Brier & Roy Rosenzweig, Review of Noble's *Digital Diploma Mills*, in April 22, 2002 issue of *The Nation* (photocopies will be distributed in class).

Andrew Feenberg, *Transforming Technology: A Critical Theory Revisited*, Ch. 5, "The Factory or the City: Which Model for Online Education?" originally posted on RRE site by Phil Agre and available online on at <http://commons.somewhere.com/rre/2002/RRE.Critical.Theory.of.T.html>

May 15: New Media's Positive Pedagogical Possibilities

Reading:

Philip Agre, "Notes on the New Design Space," article available online at <http://dlis.gseis.ucla.edu/people/pagre/design-space.html>.

Barbara Maria Stafford, *Good Looking: Essays On The Virtue Of Images*, MIT Press, 1997, 68-110 (photocopies will be distributed in class).

John Unsworth, "The Scholar in the Digital Library," article available online at <http://jefferson.village.virginia.edu/~jmu2m/sdl.html> .

Roy Rosenzweig and Stephen Brier, "Historians and Hypertext: Is It More than Hype?" in *Gateways to Knowledge: The Role of Academic Libraries in Teaching, Learning, and Research*, L. Dowler, ed., MIT Press, 1997 (photocopies will be distributed in class).