

**I625 Advanced Seminar I in Social Informatics
Fall 2006**

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Seminar: T 11:15-1:30, Eigenmann 919
Office Hours: M 3:30-4:30; W 11-12; or by appointment

Course Description

This seminar course will introduce Ph.D. students to the core literature and emerging scholarship in the field of social informatics. The seminars will provide the doctoral students with opportunities to examine and explore relevant and influential research literature, methods, and theoretical frameworks. Ideally, students will develop a profound intellectual understanding of leading research approaches and will design an independent research program in relation to their individual research fields and personal interests. I625 will concentrate on the social and cultural aspects of informatics as well as qualitative methods of research. This seminar will provide the foundation for future doctoral work in social informatics

Goals:

By the end of this course, students will be able to:

- 1) Identify the major theoretical frameworks used by researchers to study the social and cultural aspects of information technology.
- 2) Discuss the representative literature addressing the interplay of technology and society.
- 3) Apply the theoretical frameworks, themes, and critiques presented in class to a research project of their choosing or a series of critical essays.

Books at the IU Bookstore:

Wiebe Bijker, Thomas Hughes, and Trevor Pinch (1987). The Social Construction of Technological Systems. Cambridge, MIT Press.

Bruno Latour (1987). Science in Action: How to Follow Scientists and Engineers Through Society. Cambridge, Harvard University Press.

Paul N. Edwards (1996). The Closed World: Computers and the Politics of Discourse in Cold War America. Cambridge, MIT Press.

Joseph Dumit (2004). Picturing Personhood: Brain Scans and Biomedical Identity. Princeton, Princeton University Press.

Michael Chorost (2005). Rebuilt: How Becoming Part Computer Made Me More Human. New York, Houghton Mifflin.

Sherry Turkle (1995). Life on the Screen: Identity in the age of the Internet. New York, Simon & Schuster.

Yochai Benkler (2006). The Wealth of Networks New Haven, Yale University Press.

Michel Foucault (1995). Discipline and Punish. New York, Vintage Books.

Rob Kling, Howard Rosenbaum, et al. (2005). Understanding and Communicating Social Informatics: A Framework for Studying and Teaching the Human Contexts of Information and Communication Technologies. Medford, N.J., Information Today Inc.

Manuel Castells (1996). The Rise of the Network Society. Cambridge, Blackwell Publishers.

Evelyn Fox Keller (1995). Refiguring Life: Metaphors of Twentieth-Century Biology. New York, Columbia University Press.

Allegra Goodman (2006). Intuition, Dial Press.

All other readings are available via oncourse or will be distributed in class.

Recommended:

David Hess (1997) Science Studies: An Advanced Introduction. New York, NYU Press.

Assignments:

This is a reading intensive seminar. Students must complete the readings prior to class and will be graded on class participation as well as on their written submissions. Students will submit one research paper twenty pages in length that applies the course material to a topic of their choosing. In addition students will lead selected class discussions. Additional details will be given in class.

Topic List:

Week #1 8/29

Introduction

Week #2 9/5

The Sociology of Scientific Knowledge (SSK)

Harry Collins (1983) The Sociology of Scientific Knowledge. Annual Review of Sociology 9:265-285.

Harry Collins and Trevor Pinch (1998). The Golem at Large: What You Should Know About Technology, New York, Cambridge University Press, pp. 1-29.

Week #3 9/12 (class cancelled; readings will added to discussion on 9/19)

Social Construction

Wiebe Bijker, Thomas Hughes, and Trevor Pinch (1987). The Social Construction of Technological Systems. Cambridge, MIT Press, pp. 1-103.

Langdon Winner. (1993). Upon Opening the Black Box and Finding it Empty: Social Constructivism and Philosophy of Technology. Science, Technology, & Human Values 18:362-378.

Week #4 **9/19**

Actor-Network Theory

Bruno Latour (1987). Science in Action: How to Follow Scientists and Engineers Through Society. Cambridge, Harvard University Press.

Optional: Bruno Latour (1990). Drawing Things Together. Representations in Scientific Practice. M. Lynch. Cambridge, MIT Press: 19-68.

Optional: Bruno Latour (2004). Why Has Critique Run Out of Steam? From Matters of Fact to Matters of Concern. Critical Inquiry. 30: 225-248.

Week #5 **9/26**

History

Paul N. Edwards (1996). The Closed World: Computers and the Politics of Discourse in Cold War America. Cambridge, MIT Press.

Michael Mahoney (1988). The History of Computing in the History of Technology. Annals of the History of Computing. 10 (2):113-125.

Week #6 **10/3**

Ethnography

Joseph Dumit (2004). Picturing Personhood: Brain Scans and Biomedical Identity. Princeton, Princeton University Press.

Week #7 **10/10**

Cyborgs

Donna Haraway (1991). Cyborg Manifesto, Simians, Cyborgs, and Women. New York, Routledge.

Michael Chorost (2005). Rebuilt: How Becoming Part Computer Made Me More Human. New York, Houghton Mifflin.

Week #8 **10/17**

Technology and Identity

Sherry Turkle (1995). Life on the Screen: Identity in the Age of the Internet. New York, Simon & Schuster.

Week #9 **10/24**

Policy

Yochai Benkler (2006). The Wealth of Networks New Haven, Yale University Press.

Week #10 10/31

Surveillance and Normalization

Michel Foucault (1995). Discipline and Punish. New York, Vintage Books.

Week #11 11/7

Situating Social Informatics

Kling, R., H. Rosenbaum, et al. (2005). Understanding and Communicating Social Informatics: A Framework for Studying and Teaching the Human Contexts of Information and Communication Technologies. Medford, N.J., Information Today Inc.

Sawyer, S. (2005). Social Informatics: Overview, Principles and Opportunities. Bulletin of the American Society for Information Science and Technology. 31:5.

Week #12 11/14

Non-Western Perspectives

Eden Medina (2006). Designing Freedom, Regulating a Nation: Socialist Cybernetics in Allende's Chile, Journal of Latin American Studies, August 2006.

Arturo Escobar (1994). Encountering Development. Princeton, N.J.: Princeton University Press, Chapters 1 and 2.

Week #13 11/21

Globalization

Manuel Castells (1996). The Rise of the Network Society. Cambridge, Blackwell Publishers.

Week #14 11/28

Metaphors and Information

Lily Kay (1995). "Cybernetics, Information, Life: The Emergence of Scriptural Representations of Heredity." Configurations. 5: 23-91.

Evelyn Fox Keller (1995). Refiguring Life: Metaphors of Twentieth-Century Biology. New York, Columbia University Press.

Week #15 12/5

Research Practice

Allegra Goodman (2006). Intuition, Dial Press.

The final paper is due Tuesday, December 12 by 5pm (Eigenmann 1035).

Further Reading:

Abbate, J. (1999). Inventing the Internet. Cambridge, MIT Press.

Baudrillard, J. (1997). The Precession of Simulacra. Simulacra and Simulations, trans Sheila Faria Glaser, Ann Arbor, University of Michigan Press.

Bijker W., T. Hughes, and T. Pinch. (1987). The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology. Cambridge, MIT Press.

Bowker, G. C. and S. L. Star (1999). Sorting Things Out: Classification and its Consequences. Cambridge, MIT Press.

Campbell-Kelly, M. and W. Aspray (2004). Computer: A History of the Information Machine. New York, Westview.

Castells, M. (1997). The Power of Identity. Cambridge, Blackwell Publishers.

Castells, M. (2000). End of Millenium. Cambridge, Blackwell Publishers.

Chan, A. (2004) Coding Free Software, Coding Free States: Free Software Legislation and the Politics of Code in Peru. Anthropological Quarterly. December 2004.

Collins, H. M. and T. J. Pinch (2002). The Golem at Large: What You Should Know About Technology. New York, Cambridge University Press.

Dumit, J. (2004). Picturing Personhood. Princeton University Press.

Edwards, P. N. (1996). The Closed World: Computers and the Politics of Discourse in Cold War America. Cambridge, MIT Press.

Escobar, A. (1994). Welcome to Cyberia: Notes on the Anthropology of Cyberculture. Current Anthropology. 35: 211-321.

Escobar, A. (1995). Encountering Development: The Making and Unmaking of the Third World. Princeton, Princeton University Press.

Foucault, M. (1995) Discipline and Punish. New York, Vintage Books.

Galison, P. (1994). The Ontology of the Enemy: Norbert Wiener and the Cybernetic Vision. Critical Inquiry, 21: 228-66.

Gusterson, H. (2001). The Virtual Nuclear Weapons Laboratory in the New World Order. American Ethnologist. 28: 417-437.

Haraway, D. J. (1991). Simians, Cyborgs, and Women : The Reinvention of Nature. New York, Routledge.

Hayden, C. P. (2003). When Nature Goes Public: The Making and Unmaking of Bioprospecting in Mexico. Princeton, Princeton University Press.

- Hess, D. J. (1997). Science Studies: An Advanced Introduction. New York, New York University.
- Jameson, F. (1991). Postmodernism, or, the Cultural logic of Late Capitalism. Durham, Duke University Press.
- Kay, L. E. (1995). Who Wrote the Book of Life? Information and the Transformation of Molecular Biology. Science in Context, 8: 609-34.
- Keller, E. F. (1995). Refiguring Life: Metaphors of Twentieth-Century Biology. New York, Columbia University Press.
- Kling, R. (1999). What is Social Informatics and Why Does it Matter? [D-Lib Magazine](http://www.slis.indiana.edu/faculty/kling/publications.html). Available at <http://www.slis.indiana.edu/faculty/kling/publications.html>.
- Kling, R., H. Rosenbaum, et al. (2005). Understanding and Communicating Social Informatics: A Framework for Studying and Teaching the Human Contexts of Information and Communication Technologies. Medford, N.J., Information Today Inc.
- Knorr-Cetina, K. (1999). Epistemic Cultures : How the Sciences Make Knowledge. Cambridge, MA: Harvard University Press.
- Kuhn, T.S. (1962). The Structure of Scientific Revolutions. Chicago: University of Chicago Press.
- Latour, B. (1987). Science in Action: How to Follow Scientists and Engineers Through Society. Cambridge, Harvard University Press.
- Latour, B. (1990). Drawing Things Together. Representations in Scientific Practice. M. Lynch. Cambridge, MIT Press: 19-68.
- Latour, B. (2004). Why Has Critique Run Out of Steam? From Matters of Fact to Matters of Concern. Critical Inquiry, 30: 225-248.
- Liotard, J. F. (1984). The Postmodern Condition: A Report on Knowledge. Minneapolis, University of Minnesota Press.
- MacKenzie, D. A. (2001). Mechanizing Proof: Computing, Risk, and Trust. Cambridge, MIT Press.
- Marx, K. (1976) Capital Volume 1. New York, Penguin Books.
- Medina, E. (2006) Designing Freedom, Regulating a Nation: Socialist Cybernetics in Allende's Chile. Journal of Latin American Studies.
- Merton, R. (1968) "Science and Democratic Social Structure," Social Theory and Social Structure. New York: Free Press.
- Miller, D. and Slater, D. (2000). The Internet: An Ethnographic Approach. Oxford: Berg.

Pickering, A. (1992). Science as Practice and Culture. Chicago, University of Chicago Press.

Sawyer, S. (2005). Social Informatics: Overview, Principles and Opportunities. Bulletin of the American Society for Information Science and Technology, 31:5.

Smith, M. R. and L. Marx (1994). Does Technology Drive History?: The Dilemma of Technological Determinism. Cambridge, MIT Press.

Turkle, S. (1995). Life on the Screen: Identity in the age of the Internet. New York, Simon & Schuster.

Turkle, S. (2005). The Second Self: Computers and Human Spirit. Twentieth Anniversary Edition. Cambridge: MIT Press.

Wenger, E. (1999). Communities of Practice: Learning, Meaning, and Identity. New York, Cambridge University Press.

Wiener, N. (1965). Cybernetics: or, Control and Communication in the Animal and the Machine. Cambridge, MIT Press.

Winner, L. (1986). The Whale and the Reactor: A Search for Limits in an Age of High Technology. Chicago, University of Chicago Press.

Winner, L. (1993). Upon Opening the Black Box and Finding it Empty: Social Constructivism and Philosophy of Technology. Science, Technology, & Human Values 18:362-378.