1 Anthropology 315/515: Introduction to the Anthropology of Information and Networks

Fall 2005

Tuesdays and Thursdays, 2:30-3:45

Razor Hall 304

Christopher Kelty

ckelty@rice.edu

Introduction: An introduction to the historical, philosophical and anthropological study of software and networks. There is no disciplinary center to the class, the title notwithstanding: readings come from economics, anthropology, sociology, science studies, philosophy, political science, popular journalism, science and engineering.

Prerequisites: This is a research seminar-style, reading and writing-focused class. It is unofficially limited in size to 15 people. Priority is given to Anthropology majors, to those who have taken 1 or more Anthropology classes in the past, and to juniors, seniors, and graduate students. It is not designed, nor is it intended to be treated as a fun elective that is a break from your normal major(s). Be prepared to come to class regularly, and engage in discussion of the required reading. Students who show initiative and enthusiasm will be rewarded.

Online Component: As part of the research requirements of this course, you will be expected to engage in any of the various online activities that are studied in the course–including but not restricted to: blogs, wikis, social software, games, free and open source software, etc. You are not expected to learn detailed technical knowledge of anything, but nor will you be discouraged from doing so.

Requirements:

1. Reading and Discussion of 100 or more pages of reading per week (readings vary, from popular to philosophical, so the amount will change accordingly).

2. Each week, one or two people will be designated as "discussion leaders" for the class, and will be required to pose questions and kickstart the discussion.

3. Mandatory class attendance and participation. This is not a lecture course, so your participation will determine the content of the course, and a large portion of your grade.

4. Group work: several "modules" using the Connexions (http://cnx.rice.edu) system, 1500-2500 words. Number and due dates TBD.

5. "Social" software research project. Presentations at the end of the semester. Topics TBD in class.

Nota Bene:

- Plagiarism is Evil. Cite *all* of your sources.

- The Library is Good. Everything is (still) not on the internet. Learn to use the library, and your life will be richer and more complete.

Grading:
Attendance and Participation in discussion: 30%
Modules: 45%
Social Software Research Project: 25%

Required Texts at the Bookstore:

- William Aspray and Martin Campbell-Kelley, *Computer: A History of the Information Machine*, Basic Books 1996.

- Janet Abbate, *Inventing the Internet*, MIT Press, 1999.

- Alexander Galloway, *Protocol: How control exists after decentralization*, MIT Press, 2003.

- Mitchell Waldrop, *The Dream Machine: JCR Licklider and the Revolution that made computing personal* Viking Books, 2001

- Manuel Castells, *The Internet Galaxy*, Oxford University Press, 2001

- Steven Weber, *The Success of Open Source*, Harvard University Press, 2004.

Other Required Readings: Other required readings are listed in the schedule. They are either available online, or will be posted at
http://kelty.rice.edu/315/
(password to be given in class only).
Class Mailing List: anthroinfo-l@mailman.rice.edu

2 Schedule

2.1 Week 1: Introduction. What information? Which Network?

- Aug 23: Introduction to the class, readings, assignments, mailing list, discussion of core topics.

- Aug 25: An array of introductory readings on networks and information
  Readings:

  - Stanley Milgram, "The Small World Problem" in *The Individual in a Social World*, Reading, MA: Addison-Wesley, 1977,pps. 281-295.
  - Clifford Geertz, "The Bazaar Economy: Information and Search in Peasant Marketing," *The American Economic Review*, Vol. 68,No. 2, (May, 1978), pp. 28-32. (JSTOR)
  - Greg Downey "Virtual Webs, Physical Technologies and Hidden Workers" *Technology and Culture* 42, April 2001.
  - Susan Leigh Star and Geoffrey Bowker "ICD as Information Infrastructure" in *Sorting Things Out*, MIT Press, 1999.

2.2 Week 2: Writing after the Internet

- Aug 30: Writing a Connexions module

  - Read about Connexions http://cnx.rice.edu/content/col10151/1.14. Compare COnnexions modules with Wikipedia modules (http://wikipedia.org).
  - **Required experiment:** Try creating a module on some topic from last week's readings. Do not publish it, just see how far you get with the technical side.
  - **Discussion:** Wikipedia and encyclopedias; intellectual property issues; collaboration issues; technical issues, educational issues, "community" and "society".

- Sept 1: The effect of the Internet on Anthropology
  Reading:

  - Michael M.J. Fischer, "Worlding Cyberspace" in *Emergent Forms of Life and the Anthropological Voice* Duke University Press, 2003 pgs. 261-305.
  - Kelty, Christopher ed. "Cultures Open Sources" *Anthropological Quarterly* 77(3) at http://aq.gwu.edu/archive/table_summer04.htm (read at least, introduction by Kelty, and the article by Alex Golub "Copyright and Taboo").

2.3 Week 3: Free Software/Open Source as ethnographic site

- Sept 6: What is FOSS?

  Readings:

  – Steven Weber, *The Success of Open Source*, pgs 54-93.

  – Richard Stallman, as much as you can stomach at http://www.gnu.org/philosophy/

  – **Optional:** Eric Raymond's writings: http://www.catb.org/ esr/writings/cathedral-bazaar/

- Sept 8: Can you eat FOSS?

  Readings:

  – Weber, *The Success of Open Source*, pgs 128-189.

  – Coleman, *The Social Production of Creative Freedom* (PhD Dissertation, University of Chicago, 2005) chapter 6.

2.4 Week 4: Intellectual Property

- Sept 13: Copyright, Patent, Trademark

  Readings:

  – TBD

- Sept 15: Intellectual Property in information, networks, software, and life

  Readings:

  – Christopher Kelty, "Copyright License, 1976 to the present" in *Two Bits* manuscript.

  – James Boyle, "The Second Enclosures Movement" at http://www.law.duke.edu/journals/lcp/lcptoc6

  – Lessig, "Code is Law Wiki" http://codebook.jot.com/WikiHome

2.5 Week 5: Theorizing IP and technology

- Sept 20: Intellectual Property, Technology and History

  Readings:

  – Adrian Johns, "Pop Music Pirate Hunters" *Daedalus*, Spring 2002

  – Adrian Johns, "The Great Oscillation Controversy" manuscript.

- Sept 22: Intellectual Property and Social Science

  Readings:

  – Yochai Benkler,"Sharing Nicely: On shareable goods and the emergence of sharing as a modality of economic production" at http://benkler.org/SharingNicely.html

2.6 Week 6: History of Networks and Software

- Sept 27: The Source of Source

  Readings:

  - Kelty, "The Source of Source" in *Two Bits* manuscript.
  - Waldrop, *The Dream Machine:JCR Licklider*, pgs. 24-99

- Sept 29: Closed Worlds.

  Readings:

  - Waldrop Cont'd.
  - Mirowski
  - Brandon Hookway, *Pandemonium* Optional.

2.7 Week 7: The Galactic Internet

- Oct 4: Who is the Internet?

  Readings:

  - J.C.R Licklider, Man-Computer Symbiosis *IRE Transactions on Human Factors in Electronics* March 1960, Vol. HFE-1.
  - Douglas Englebart, the Mother of All Demos http://sloan.stanford.edu/MouseSite/1968Demo.html
  - Mitchel Waldrop, *Dream Machines*, cont'd

- Oct 6:

  Readings:

  - Paul Baran, Interview in Wired.
  - Janet Abbate, ch. 1.
  - Hauben and Hauben, *Netizens* http://www.columbia.edu/ rh120/ chapters 2,3.
  - Alex Galloway, Protocol
  - Manuel Castells (Lessons from, Culture of)

2.8 Week 8: More Internet history

- Oct 11: No class (Midterm Recess)

- Oct 13: TBD

2.9 Week 9: Social Theory of Networks and Information

- Oct 18: Latour and Actor Network Theory

  - Latour, *Science in Action*
  - Latour, *We Have Never Been Modern*, "On Recalling ANT."
  - ANT bibliography http://www.lancs.ac.uk/fss/sociology/css/antres/ant.htm

- Oct 20: No class (Conference)

2.10 Week 10:

- Oct 25: Latour Cont'd,

- Kelty Ch.1 "Against Networks" in *Two Bits* manuscript.

- Ong and Collier, Global Assemblages, TBD

- Oct 27: The "New" Science of Networks

- TBD

2.11 Week 11: Social Software

- Nov 1: Social Software and Social Philosophy

- Hannah Arendt *The Human Condition*, p 22-73

- Nov 3: TBD

2.12 Week 12:

- Nov 8: TBD

- Nov 10: No Class (Conference)

2.13 Week 13:

- Nov 15: TBD

- Nov 17: TBD

2.14 Week 14:

- Nov 22: Presentations

- Nov 24: No Class (Thanksgiving)

2.15 Week 15:

- Nov 29: Presentations, Last Day.

- Dec 1: No Class (Conference)

Other Important Information:
Incompletes are not given.

Honor Code issues: Groups will be graded as a whole, each member will recieve the same grade regardless of actual or perceived contribution. Renegotiation of group members is possible, if conflicts other than scheduling occur. In the case of work done in groups, the division of labor will be up to the students, and any further honor code guidelines will be provided if requested.

Any student with a documented disability needing academic adjustments or accommodations is requested to speak with me during the first two weeks of class. All discussions will remain confidential. Students with disabilities will need to also contact Disability Support Services in the Ley Student Center.

3   Further Reading

- Feller, Fitzgerald, Hissam, and Lakhani, *Perspectives on Free and Open Source Software*, MIT Press, 2005.

- Ghosh, Rishab Ayer *CODE: Collaborative ownership in the New Economy*, MIT Press, 2005.

- George Stigler, "The Economics of Information," *The Journal of Political Economy*, Vol. 69, No. 3 (June 1961).(JSTOR)

- Manfred Kochen and Ithiel De Sola Pool "Contacts and Influence" *Social Networks*, 1, (1978/9)pgs 5-51.

- Barabasi, Albert-Laszlo, *Linked : the new science of networks* Cambridge, Mass. : Perseus Pub., 2002.

- Marcel Mauss, *The Gift*, preface (by Mary Douglas), Introduction and Chapters 1-2.

- "Cooking Pot Markets: an economic model for trade in free goods and services on the internet" by Rishab Ayer Ghosh, *First Monday*, Volume 3, Issue 3, March 2, 1998. At http://www.firstmonday.dk/issues/issue3_3/

- Christopher Kelty, "Free Software/Free Science" *First Monday*, Volume 6, Number 12 - December 3rd 2001

- Jonathan Parry, "On the Moral Perils of Exchange" in Bloch and Parry eds. *Money and the Morality of Exchange*, Cambridge University Press, 1987

- Neal Stephenson "Mother Earth, Mother Board" *Wired*, 4.12, December 1996, pps 97-160. (www.wired.com).

- Blaine Harden, "The Dirt in the New Machine," *The New York Times Magazine*, August 12, 2001.

- Martin Dodge and Rob Kitchin, *Atlas of Cyberspace* New York: Addison Wesley, 2001. (On Reserve)

- Tom Standage *The Victorian Internet*, New York: Walker and Company, 1998. (On Reserve)

- Philip Agre, "Yesterday's Tomorrow," *Times Literary Supplement*, 3 July 1998, pages 2-3.

- Carla Freeman *High Tech and High Heels*, Chapel Hill: Duke University Press, 2000 pgs 1-20, 141-178

- "Hi I'm in Bangalore (but I can't say so)" *New York Times* March 21, 2001.

- Asma Lateef, "Linking up with the Global Economy: a case study of the Bangalore software industry," *International Institute for Labor Studies Report DP/96/1997*, 1997.

- William Aspray and Martin Campbell-Kelley, *Computer: A History of the Information Machine*, Basic Books 1996

- Ray and Charles Eames, *A Computer Perspective*, Harvard University Press, 1973.

- Janet Abbate, *Inventing the Internet*, MIT Press, 1999. Chapter 1.

- "Founding Father" (Interview with Paul Baran), *Wired Magazine*, March 2001. At
  http://www.wired.com/wired/archive/9.03/baran.html?pg=1

- Aspray and Campell-Kelley, *Computer*, pgs 157-206.

- "Software's Chronic crisis," *Scientific American* , September 1994

- Michael Mahoney, "Roots of Software Engineering," *CWI Quarterly*, 3,4(1990), 325-334

- Fred Brooks, *The Mythical Man-Month*, Reading, Mass. : Addison-Wesley Pub. Co., c1995

- Eric Raymond "The Cathedral and The Bazaar," http://tuxedo.org/ esr/writings/

- J.C.R. Licklider "Man-Computer Symbiosis" from *IRE Transactions on Human Factors in Electronics*, volume HFE-1, Pages 4-11, March 1960.

- Rhonda Hauben *Netizens* pgs 35-66, 127-152.

- John Seely Brown and Paul Duguid, *The Social Life of Information*, Harvard Business School Press, 2000.

- "Pop Music Pirate Hunters" by Adrian Johns *Daedalus*, Spring 2002, pg 67.

- Andy Oram, ed. *Peer to Peer*, Oreilly Press, 2001 chs. 1 and 16.

- Selected Salon.com articles concerning Napster, p2p technology and the entertainment industry:
  "The Music Revolution will not be Digitized"1 June 2001:
  http://www.salon.com/tech/feature/2001/06/01/digital_music/index.html
  "Revenge of the File-Sharing Masses!" 20 July, 2001:
  http://www.salon.com/tech/col/rose/2001/07/20/napster_diaspora/index.html
  "Courtney Love does the Math" 14 June, 2000:
  http://www.salon.com/tech/feature/2000/06/14/love/index.html

- "Anticircumvention Rules: A Threat to Science" by Pamela Samuelson, *Science*, Volume 293(5537) 14 September 2001 p. 2028.

- David Touretsky's "Gallery of CSS descramblers" at
  http://www-2.cs.cmu.edu/ dst/DeCSS/Gallery/

- "Second Enclosure Movement and the construction of the public domain"
  available at http://www.law.duke.edu/pd/papers/boyle.pdf

- "A Politics of Intellectual Property: Environmentalism for the Net?" by
  James Boyle, at
  http://www.law.duke.edu/boylesite/intprop.htm or at
  http://www.james-boyle.com

- "Control_Shift_Commons," an interview with James Boyle, by Ted Byfield,
  Mute Magazine, July 20, Issue 20.

- Larry Lessig "The Internet Under Seige," *Foreign Policy*, November 2001,
  p 56.

- Yochai Benkler, "Coase's Penguin, or, Linux and the Nature of the Firm,"
  112 Yale Law Journal Winter 2002 available at
  http://www.law.nyu.edu/benklery/

- Ronald Coase, "The Nature of the Firm" in *The Firm, The Market, and
  The Law* Chicago: University of Chicago Press, 1988.

- Craig J. Saper, *Networked Art*, St. Paul:Minnesota University Press, 2001.
  Selections TBD

- Timothy Druckery and Peter Weibel *net_condition,* Cambridge MA: MIT
  Press, 2001. Selections TBD

- David Ronfeldt and John Arquilla, *Networks and Netwars*, Santa Monica:
  Rand Publications, 2001. Read chapter 1 and pick one other chapter to
  read. At http://www.rand.org/publications/MR/MR1382/

- Brandon Hookway, *Pandemonium: The Rise of Predatory Locales in the
  Post-War World*, New York: Princeton Architectural Press, 1999.