

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

Fall 2002  
Tuesdays and Thursdays, 9:25-10:40  
Razor Hall 204  
Christopher Kelty  
ckelty@rice.edu

**Introduction:** This class is an exploration of contemporary society through its software and networks. We will examine the “total social facts” of various technical, legal, and economic processes in a globally connected and information-rich world. Because it is an anthropology class, it will linger on questions concerning the role, status, development and necessity of human beings in a world now primarily populated by algorithms and radiowaves, silicon and plastic. Neither the ‘computer’ as an object, nor the ‘human’ as a subject will be taken for granted. The class will touch equally on the very practical concerns of everyday experience (e.g. how email works) as well as sometimes difficult theoretical problems (e.g. how email works) that can affect the public sphere, or individual subjective action.

**Prerequisites:** This class is 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. Some of the material in this class assumes a basic familiarity with the internet and email, but will not be provided in the class.

### **Requirements:**

1. Reading and Discussion of around 100 pages of reading per week.
2. Mandatory class attendance and participation.
3. A weekly response paper, c. 500 words.
4. Optional research paper + presentation.
5. Plagiarism is Evil. Cite *all* of your sources.
6. The Library is Good. Not everything is on the internet. Learn to use the library, and your life will be richer and more complete.

**Grading:** Grading works as follows:

There will be 12 grades, one per week, that will assess your class participation and your response paper. These grades are pass/fail. The scale looks like this:

12/12 or 11/12 = B

10/12 = B-

9/12 = C+

8/12 = C

7/12 = C-

6/12 = D

In addition, you have the chance to write an optional research paper and presentation which, if done well, can increase your base grade by one whole letter grade. (Yes, this means the paper is required if you want an A). A poorly done or incomplete paper will neither help nor hurt your base grade, but it will make me very sad.

**Required Texts at the bookstore:**

- Ray and Charles Eames, *A Computer Perspective*, Harvard University Press, 1973
- William Aspray and Martin Campbell-Kelley, *Computer: A History of the Information Machine*, Basic Books 1996.
- Janet Abbate, *Inventing the Internet*, MIT Press, 1999.
- Marcel Mauss, *The Gift: The Form and Reason for Exchange in Archaic Societies*, W.W. Norton Press, 1990 [1950, original].
- John Seely Brown and Paul Duguid, *The Social Life of Information*, Harvard Business School Press, 2000.

Class Mailing List: [anthro\\_info@listserv.rice.edu](mailto:anthro_info@listserv.rice.edu)

**Preliminary Schedule**

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

- Aug 27: Introduction to the Class
- Aug 29: Networks and Information without Computers  
*Required:*

- 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)

These two articles are available at the following site: <http://kelty.rice.edu/315/papers/>

*Optional:*

- George Stigler, “The Economics of Information,” *The Journal of Political Economy*, Vol. 69, No. 3 (June 1961). (JSTOR)
- Manfred Kochen and Itzhak De Sola Pool “Contacts and Influence” *Social Networks*, 1, (1978/9) pgs 5-51.

**Week 2: How anthropologists think about economics**

- Sept 3: Marcel Mauss and the gift exchange

*Required:*

- 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/](http://www.firstmonday.dk/issues/issue3_3/)

- Sept 5: No Class.

**week 3: Exchange Cont'd**

- Sept 10: More Mauss

*Required:*

- Mauss, *The Gift*, chapters 3 and 4

- Sept 12: Analogue Money and Free Software

*Required:*

- TBD on Free Software

- 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

#### **Week 4: Where is the internet and who goes there?**

- Sept 17: Where is the internet?

*Required:*

- Neal Stephenson “Mother Earth, Mother Board” *Wired*, 4.12, December 1996, pps 97-160. ([www.wired.com](http://www.wired.com)).
- Blaine Harden, “The Dirt in the New Machine,” *The New York Times Magazine*, August 12, 2001.

*Optional:*

- 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)

- Sept 19: Labor on the internet

*Required:*

- Greg Downey “Virtual Webs, Physical Technologies and Hidden Workers” *Technology and Culture* 42, April 2001.
- Philip Agre, “Yesterday’s Tomorrow,” *Times Literary Supplement*, 3 July 1998, pages 2-3.

#### **Week 5: Offshore**

- Sept 24: Its the 21st Century, do you know where your support staff is?

*Required:*

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

- Sept 26: Networks as Hardware

*Required:*

- “Hi I’m in Bangalore (but I can’t say so)” *New York Times* March 21, 2001.
- Freeman, *High Tech, High Heels*, pgs 179-212.

*Optional:*

- 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.

## **Week 6: Hardware History**

- Oct 1: Computers as Business Machines

*Required:*

- William Aspray and Martin Campbell-Kelley, *Computer: A History of the Information Machine*, Basic Books 1996, pgs 79-153.

*Optional:*

- Aspray and Campbell-Kelley, pgs 1-78.
- Ray and Charles Eames, *A Computer Perspective*, Harvard University Press, 1973.

- Oct 3: Networks as War Machines

*Required:*

- 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>

*Optional:*

- Abbate, *Inventing the Internet*, chapters 2,3,4.

## Week 7: Software History

- Oct 8: Around 1968. *Required:*

- Aspray and Campell-Kelley, *Computer*, pgs 157-206.
- “Software’s Chronic crisis,” *Scientific American* , September 1994

*Optional:*

- 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/>
- “Extreme Programming” <http://www.extremeprogramming.org/>

- Oct 10: Man-Computer Symbiosis and Self-Documentation.

*Required:*

- Aspray and Campbell-Kelley, pgs. 207-229
- 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.

## Week 8: The Boom and the Bust

- Oct 15: No Class

*Required:*

- Search through Wired Magazine from the 1990s

- Oct 17: All the Promises We Made.

*Required:*

- John Seely Brown and Paul Duguid, *The Social Life of Information*, Harvard Business School Press, 2000. Read Chapters 1-3.

*Optional:*

- *The Social Life of Information*, Chapters 4-5.

### **Week 9: Boom and Bust Continued**

- Oct 22: Social Life of Information

*Required:*

- Brown and Duguid, *The Social Life of Information*, Chapters 7-8.

- Oct 24: Napster, Content Control, DVDs, DMCA, DeCSS, etc.

*Required:*

- “Pop Music Pirate Hunters” by Adrian Johns *Daedalus*, Spring 2002, pg 67.
- Andy Oram, ed. *Peer to Peer*, Oreilly Press, 2001, selections.
- 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](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](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>

### **Week 10: Governments vs Governance: DMCA, Security, Entertainment**

- Oct 29: Special Guest, Dan Wallach, CS Dept. Rice University

*Required:*

- [http://www.eff.org/IP/DMCA/Felten\\_v\\_RIAA/](http://www.eff.org/IP/DMCA/Felten_v_RIAA/)
- <http://www.usenix.org/events/sec01/craver.pdf>

- Oct 31: Discussion of DMCA and Scientific Research

*Required:*

- “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/>

- TBD

### **Week 11: Intellectual Property and Free Software**

- Nov. 5: Commons and Public Domains

*Required:*

- "Fencing off Texts" by James Boyle, *Daedalus*, Spring 2002.
- "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.

*Optional:*

- <http://www.uspto.gov/> (Read about Intellectual Property– Patent, Copyright, and Trademark)

- Nov 7: The Social Science of Free Software

*Required:*

- 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/>

*Optional:*

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

### **Week 12: net.art and net.war: New kinds of connections**

- Nov 12: Networked art

*Required:*

- 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

*Optional:*

–

– <http://www.calarts.edu/line/history.html>

- Nov 14: Networked Art Continued.

**Week 13: net.art and net.war cont'd**

- Nov 19: net.war

*Required:*

– 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/>

*Optional:*

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

- Nov 21: No Class

**Week 14: Class Presentations**

- Nov 26: TBD
- Nov 28: No Class Thanksgiving

**Week 14: Class Presentations**

- Dec 3: TBD
- Dec 5: No Class

**Other Important Information:**

Incompletes are not given.

**Honor Code issues:** Each response paper must be the work of an individual student. The Final Paper may be done in groups, subject to approval by the instructor, and in such cases, division of labor will be up to the students, and any necessary 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.