

Information Studies 204, UCLA
Fall, 2007
Fridays, 9:00am-12:20pm (8:45am-12:30pm starting October 5)
GSE&IS Room 121

Scholarly Publishing in the Digital Age

(Electronic Publishing 204)

Christine L. Borgman, Professor & Presidential Chair in Information Studies
Department of Information Studies
235 GSE&IS Bldg.
310/825-6164
borgman@gseis.ucla.edu

Scholarship is an inherently social activity, involving a wide range of public and private interactions within a research community. Publications, as the public report of research, are part of a continuous cycle of reading, writing, discussing, searching, investigating, presenting, submitting, and reviewing. No scholarly publication stands alone. Each new work in a field is positioned relative to others through the process of citing relevant literature.

In between the most public and private forms of communication lie a wide range of channels and activities. Scholars communicate with each other via manuscripts, preprints, articles, abstracts, reprints, seminars, and conference presentations. They interact intensively in person, by telephone, and by post. Scholars in the 21st century also communicate by email, blogs, chat, and text messages. They publish in print and digital forms, and may share their publications and data through websites, preprint archives, institutional repositories, and data repositories.

The information infrastructure to support scholarship must facilitate these myriad means of communication. Scholars use the Internet to communicate with more people, and more frequently, than was feasible in the days of paper and post. They also can share much larger volumes of data and documents. The Internet has led to more, faster, and cheaper communication among scholars. Because anyone can “publish” online, the balance between authors, publishers, and librarians has shifted radically. The “open access movement” is changing the relationships between authors, scholarly societies, publishers, and funding agencies. Digital documents are malleable, mutable, and mobile, which leads to many new forms of use and distribution. They also are harder to control than printed ones, which leads both to more democratization of access and to greater difficulty in preserving the scholarly record.

This course will survey the past, present, and future of scholarly publishing, building upon a foundation of scholarly communication theory. We survey a wide range of technical, policy, economic, legal, and institutional aspects of this rapidly changing environment.

Course audience, prerequisites

The course is recommended for masters and doctoral students in information studies, education, communication, sociology, English, and management, and is open to interested graduate students in other disciplines.

While no specific courses are prerequisite, a basic understanding of the scholarly process is assumed, through introductory work in one or more of the above fields. Familiarity with the Internet, World-Wide Web, digital libraries, and other electronic forms of information dissemination also is assumed.

Grading procedures and policy

The course will be conducted as a seminar, with students writing a major paper. This course satisfies the major paper requirement for the MLIS degree.

- 25% Short paper assignment
- 50% Seminar paper (10% for proposal; 40% for paper)
- 25% Class participation

Readings are to be completed prior to the class meeting for the week. The grade for class participation will be based on preparation for the discussion, contributions to the discussion, and attendance.

The seminar paper format and content are to follow the *Publication Manual of the American Psychological Association*, 5th ed. (2001). Washington: DC: American Psychological Association. Students are to select a journal to which their paper will be submitted and are to tailor their papers to the scope and format of the journal. References for the short paper also should follow the APA format.

Late assignments will be marked down 2 points per day late. No assignments will be accepted after 5pm Wednesday, December 12, without advance permission of the instructor.

Course materials

Course materials are in four categories, based on availability and format. The variety of access mechanisms reflects the changing nature of scholarly publishing.

1. Required for purchase:

Borgman, C.L. (2007) *Scholarship in the Digital Age: Information, Infrastructure, and the Internet*. Cambridge: MIT Press. (Available at LuValle Commons Bookstore)

Note: the official publication date for the book is September 24. It should arrive at the bookstore by October 1. If not, we will put copies of the first 3 chapters on reserve (readings for October 5).

2. Available online:

Most of the readings are available online, either through the UCLA libraries or free on the World Wide Web. If URLs are not given or are incorrect, please search ISI Web of Knowledge, JSTOR, INSPEC, or LISA. Articles found via Google Scholar or other search engine may be accessible only through the UCLA libraries.

To access the UCLA library databases from off campus, you must have a proxy server or VPN client set up. See <http://www.bol.ucla.edu> for instructions.

3. On Reserve:

The few required readings not available online will be placed on reserve in the Multimedia and Information Technology Laboratory in the GSE&IS Building.

Note: all the reserve readings are those to be read for the first class session (Sept 29). These are the older, historical readings, or ones from recent books that are not available online.

4. Recommended:

Borgman, C.L. (2003). *From Gutenberg to the Global Information Infrastructure: Access to Information in the Networked World*. Cambridge: MIT Press. Paperback edition. (Available at LuValle Commons Bookstore)

Office hours

Tuesdays, 1-3pm, GSE&IS 235. Please sign up in advance, as office hours may be full.

Topical course outline

Note: The course will be conducted in 9 sessions, 8 of which are 225 minutes in length, the equivalent of 40 50-minute class periods.

9am – 12:20pm

Session 1 (Sept 28): History of Scholarly Publishing

8:45am – 12:30pm (all remaining sessions):

Session 2 (Oct 5): New Models of Scholarship

(Oct 12): No class; Work on your term papers

Session 3 (Oct 19) Scholarly Communication

Session 4 (Oct 26): Electronic Publishing Technologies

Session 5 (Nov 2): Intellectual Property

Session 6 (Nov 9): Economics of Information

Session 7 (Nov 16): Data as a Scholarly Product

(Nov 23): Thanksgiving holiday (work on term papers)

Session 8 (Nov 30): Disciplines, Documents, and Data

Session 9 (Dec 7): The Future of Scholarly Publishing

Exam week (WED Dec 12): TERM PAPERS DUE

**Session 1 (Sept 28, 9am – 12:20pm):
History of Scholarly Publishing**

We will survey briefly the history of scholarly publishing and book trade, including some of the controversies that led to the strategic shifts now underway.

Required:

(Borgman, 2000; Donaldson, 1998; Harnad, 1991; Hawkins, 1998; Hickey & Noreault, 1992; Naylor & Geller, 1995; Thompson, 2005)

Notes: Hawkins; Naylor & Geller; and Thompson are on reserve in the MIT lab (only print copies available).

Thompson: read Chapters 1, 2, 4:

- 1: Publishing as an economic and social practice, 5-29
- 2: The social structure of publishing fields, 30-46
- 4: Academic publishing under pressure, 81-110

Recommended

(Borgman, 2003a; b; Turoff & Hiltz, 1982)

References

- Borgman, C. L. (2000). Digital Libraries and The Continuum Of Scholarly Communication. *Journal of Documentation*, **56**: 412-430. Retrieved from <http://www.emeraldinsight.com/Insight/viewContentItem.do?contentType=Article&contentId=864134>
- Borgman, C. L. (2003a). Preface. *From Gutenberg to the Global Information Infrastructure: Access to Information in the Networked World*. Cambridge, MIT Press: ix-xiii.
- Borgman, C. L. (2003b). Ch 1: The Premise and Promise of A Global Information Infrastructure. *From Gutenberg to the Global Information Infrastructure: Access to Information in the Networked World*. Cambridge, MIT Press: 1-32.
- Donaldson, I. (1998). The Destruction of the Book. *Book History, the Annual of the Society for the History of Authorship, Reading and Publishing*, SHARP. **1**: 1-10. Visited http://muse.jhu.edu/journals/book_history/v001/1.1donaldson.html
- Harnad, S. (1991). Post-Gutenberg Galaxy: The Fourth Revolution in the Means of Production of Knowledge. *Public-Access Computer Systems Review*, **2**(1): 39-53. Retrieved from <http://www.ecs.soton.ac.uk/~harnad/Papers/Harnad/harnad91.postgutenberg.html>
- Hawkins, B. L. (1998). The Unsustainability of the Traditional Library and the Threat to Higher Education. In B. L. Hawkins & P. Battin (Eds.). *The Mirage of Continuity: Reconfiguring Academic Information Resources for the 21st Century*. Washington, D.C., Council on Library and Information Resources and the Association of American Universities: 129-153.
- Hickey, T. B. & Noreault, T. (1992). The Development of a Graphical User Interface for The Online Journal of Current Clinical Trials. *The Public-Access Computer Systems Review*, **3**(2): 4-12. Retrieved from <http://info.lib.uh.edu/pr/v3/n2/hickey.3n2>

- Naylor, B. & Geller, M. (1995). A Prehistory of Electronic Journals: The EIES and BLEND Projects. In M. Tuttle & K. D. Darling (Eds.). *Advances in Serials Management*. Greenwich, CT, JAI Press. **5**: 27-47.
- Thompson, J. B. (2005). *Books in the Digital Age*. Cambridge, U.K.: Polity.
- Turoff, M. & Hiltz, S. R. (1982). The Electronic Journal: A Progress Report. *Journal of the American Society for Information Science*, **33**(4): 195-202. Retrieved from <http://web.njit.edu/~turoff/Papers/ElectronicJournal.html>

**Session 2 (Oct 5, 8:45am – 12:30):
New Models of Scholarship**

Required:

(Borgman, 2007) Preface, Chapters 1-3

(*Cyberinfrastructure Vision for 21st Century Discovery*, 2007; Atkins et al., 2003; Berman & Brady, 2005; Hey & Trefethen, 2005; Unsworth et al., 2006)

Atkins: read Executive Summary and skim the rest

References

- Atkins, D. E., Droegemeier, K. K., Feldman, S. I., Garcia-Molina, H., Klein, M. L., Messina, P., Messerschmitt, D. G., Ostriker, J. P. & Wright, M. H. (2003). *Revolutionizing Science and Engineering Through Cyberinfrastructure: Report of the National Science Foundation Blue-Ribbon Panel on Cyberinfrastructure*. National Science Foundation. Visited <http://www.nsf.gov/cise/sci/reports/atkins.pdf>
- Berman, F. & Brady, H. (2005). *Final Report: NSF SBE-CISE Workshop on Cyberinfrastructure and the Social Sciences*. National Science Foundation. Visited <http://vis.sdsc.edu/sbe/reports/SBE-CISE-FINAL.pdf>
- Borgman, C. L. (2007). *Scholarship in the Digital Age: Information, Infrastructure, and the Internet*. Cambridge, MA: MIT Press.
- Cyberinfrastructure Vision for 21st Century Discovery* (2007). National Science Foundation. Visited <http://www.nsf.gov/pubs/2007/nsf0728/>
- Hey, T. & Trefethen, A. (2005). Cyberinfrastructure and e-Science. *Science*, **308**: 818-821. Retrieved from <http://www.sciencemag.org/cgi/content/full/308/5723/817>
- Unsworth, J., Courant, P., Fraser, S., Goodchild, M., Hedstrom, M., Henry, C., Kaufman, P. B., McGann, J., Rosenzweig, R. & Zuckerman, B. (2006). *Our Cultural Commonwealth: The Report of the American Council of Learned Societies Commission on Cyberinfrastructure for Humanities and Social Sciences*. American Council of Learned Societies. Visited <http://www.acls.org/cyberinfrastructure/cyber.htm>

(Oct 12): No class; Work on your term papers

Prof. Borgman will be participating in the e-Social Science Conference at the University of Michigan <http://ess.si.umich.edu/> and the Annual Meeting of the Society for Social Studies of Science in Montreal <http://www.4sonline.org/meeting.htm>. She'll report back on both next week.

**Session 3 (Oct 19, 8:45am – 12:30)
Scholarly Communication**

Required:

(Borgman, 2007) Chapter 4

(Agre, 1995; Atkinson, 2003; Cronin, 2003; Harnad, 2004; King et al., 2006; Lynch, 2001; 2007)

Recommended:

(Borgman, 2003a; b; Frankel et al., 2000; Kling & Callahan, 2003; Meadows, 1998)

References

- Agre, P. E. (1995). Institutional Circuitry: Thinking About the Forms and Uses of Information. *Information Technology and Libraries*, 14: 225-230. Retrieved from <http://find.galegroup.com/itx/infomark.do?contentSet=IAC-Documents&docType=IAC&type=retrieve&tabID=T002&prodId=EAIM&docId=A17814175&userGroupName=uclosangeles&version=1.0>
- Atkinson, R. C. (2003). A New World of Scholarly Communication. *The Chronicle Review*, 50(11): B16. Retrieved from <http://chronicle.com/weekly/v50/i11/11b01601.htm>
- Borgman, C. L. (2003a). Ch 2: Is It Digital or Is It a Library? Digital Libraries and Information Infrastructure. *From Gutenberg to the Global Information Infrastructure: Access to Information in the Networked World*. Cambridge, MIT Press: 33-52.
- Borgman, C. L. (2003b). Ch 3: Access to Information. *From Gutenberg to the Global Information Infrastructure: Access to Information in the Networked World*. Cambridge, MIT Press: 53-168.
- Borgman, C. L. (2007). *Scholarship in the Digital Age: Information, Infrastructure, and the Internet*. Cambridge, MA: MIT Press.
- Cronin, B. (2003). Scholarly Communication and Epistemic Cultures. *Scholarly Tribes and Tribulations: How Tradition and Technology are Driving Disciplinary Change*, Washington, DC. Association of Research Libraries. Visited <http://www.arl.org/bm~doc/cronin.pdf>
- Frankel, M. S., Elliott, R., Blume, M., Bourgois, J.-M., Hugenholtz, B., Lindquist, M. G., Morris, S. & Sandewall, E. (2000). *Defining and Certifying Electronic Publication in Science: A Proposal to the International Association of STM Publishers*. American Association for the Advancement of Science. Visited <http://www.aaas.org/spp/sfrr/projects/epub/define.shtml>

- Harnad, S. (2004). The Invisible Hand of Peer-Review. In B. Shatz (Ed.). *Peer Review: A Critical Inquiry*, Rowland & Littlefield: 235-242. Visited <http://cogprints.soton.ac.uk/documents/disk0/00/00/16/46/index.html>
- King, C. J., Harley, D., Earl-Novell, S., Arter, J., Larence, S. & Perciali, I. (2006). *Scholarly Communication: Academic Values and Sustainable Models*. Andrew W. Mellon Foundation, Center for Studies in Higher Education, University of California, Berkeley. Visited <http://cshe.berkeley.edu/publications/publications.php?id=23>
- Kling, R. & Callahan, E. (2003). Electronic Journals, the Internet, and Scholarly Communication. In B. Cronin (Ed.). *Annual Review of Information Science and Technology*. Medford, NJ, Information Today. **37**: 127-177. Visited <http://www3.interscience.wiley.com/cgi-bin/fulltext/109882851/HTMLSTART>
- Lynch, C. A. (2001). The Battle to Define the Future of the Book in the Digital World. *First Monday*, **6**(6). Retrieved from http://www.firstmonday.dk/issues/issue6_6/lynch/index.html
- Lynch, C. A. (2007). The Shape of the Scientific Article in the Developing Cyberinfrastructure. *CT Watch Quarterly*, **3**(3). Retrieved from <http://www.ctwatch.org/quarterly/articles/2007/08/the-shape-of-the-scientific-article-in-the-developing-cyberinfrastructure/>
- Meadows, A. J. (1998). *Communicating Research*. San Diego: Academic Press.

Session 4 (Oct 26): Electronic Publishing Technologies

Required:

(Borgman, 2007) Chapter 5

(Bekaert & Van de Sompel, 2006; Cisler, 2002; Paskin, 2000; Van de Sompel & Lagoze, 2007; Van de Sompel, Nelson et al., 2004; Van de Sompel, Hammond et al., 2006; Van de Sompel, Payette et al., 2004)

Note: OAIS: Read the introduction and skim the rest

Recommended:

(Van de Sompel, Lagoze et al., 2006)

Sites to visit:

NetLibrary. <http://www.netlibrary.com>

International Digital Publishing Forum. <http://www.idpf.org/>

The Digital Object Identifier System (DOI). <http://www.doi.org/>

Open Archives Initiative (OAI). <http://www.openarchives.org/>

Open Archival Information System (OAIS).
http://www.rlg.org/en/page.php?Page_ID=3201

Open URL. <http://library.lanl.gov/lww/openurl.htm>

California Digital Library e-scholarship. <http://escholarship.cdlib.org/>

Electronic Literature Organization. <http://www.eliterature.org/>

Arxiv e-print archive. <http://arXiv.org>

OAIster. <http://www.oaister.org/>

Object Reuse and Exchange. <http://www.openarchives.org/ore/>

OpenURL and CrossRef. <http://www.crossref.org/02publishers/16openurl.html>

References

- Bekaert, J. & Van de Sompel, H. (2006). Access Interfaces for Open Archival Information Systems Based on the OAI-PMH and the OpenURL Framework for Context-Sensitive Services. *PV 2005: Ensuring Long-term Preservation and Adding Value to Scientific and Technical Data*, The Royal Society, Edinburgh. Visited <http://www.ukoln.ac.uk/events/pv-2005/pv-2005-final-papers/032.pdf>
- Borgman, C. L. (2007). *Scholarship in the Digital Age: Information, Infrastructure, and the Internet*. Cambridge, MA: MIT Press.
- Cisler, S. (2002). Letter from San Francisco: The Internet Bookmobile. *First Monday*, 7(10). Retrieved from http://www.firstmonday.dk/issues/issue7_10/cisler/index.html
- Paskin, N. (2000). E-Citations: Actionable Identifiers and Scholarly Referencing. *Learned Publishing*, 13(3): 159-166. Retrieved from <http://www.ingentaconnect.com/content/alpsp/lp/2000/00000013/00000003/art00004>
- Van de Sompel, H. & Lagoze, C. (2007). Interoperability for the Discovery, Use, and Re-Use of Units of Scholarly Communication. *CT Watch Quarterly*, 3(3). Retrieved from <http://www.ctwatch.org/quarterly/articles/2007/08/interoperability-for-the-discovery-use-and-re-use-of-units-of-scholarly-communication/>
- Van de Sompel, H., Nelson, M. L., Lagoze, C. & Warner, S. (2004). Resource Harvesting within the OAI-PMH Framework. *D-Lib Magazine*, 10(12). Retrieved from <http://www.dlib.org/dlib/december04/vandesompel/12vandesompel.html>
- Van de Sompel, H., Hammond, T., Neylon, E. & Weibel, S. L. (2006). *RFC 4452: The "Info" URI Scheme for Information Assets with Identifiers in Public Namespaces*. Requests for Comments, Internet Engineering Task Force. Visited <http://www.rfc-archive.org/getrfc.php?rfc=4452>
- Van de Sompel, H., Payette, S., Erickson, J., Lagoze, C. & Warner, S. (2004). Rethinking scholarly communication: Building the system that scholars deserve. *D-Lib Magazine*, 10(9). Retrieved from <http://www.dlib.org/dlib/september04/vandesompel/09vandesompel.html>
- Van de Sompel, H., Lagoze, C., Bekaert, J., Liu, X., Payette, S. & Warner, S. (2006). An Interoperable Fabric For Scholarly Value Chains. *D-Lib Magazine*, 12(10). Retrieved from <http://www.dlib.org/dlib/october06/vandesompel/10vandesompel.html>

**Session 5 (Nov 2):
Intellectual Property**

Policy: intellectual property: Copyright, licensing, digital rights management

Required:

(Bailey, 2006; Boyle & Jenkins, 2003; Courant, 2006; Farb, 2006; Lessig, 2004; Samuelson, 2003; *The Digital Dilemma: Intellectual Property in the Information Age*, 2000)

Note: Read at least the Executive Summary of the Digital Dilemma; Read Lessig, Chapter 10 (p 116-174)

Recommended:

(Fox & LaMacchia, 2003; Hirtle, 2003; Litman, 2001; Scotchmer, 2003)

Sites to visit:

Creative Commons: <http://www.creativecommons.org>

Public Library of Science: <http://www.plos.org>

SHERPA/RoMEO: Publisher copyright policies & self-archiving
<http://www.sherpa.ac.uk/romeo.php>

Directory of Open Access Journals: <http://www.doaj.org>

SPARC Initiative: <http://www.arl.org/sparc/>

Open Society Initiative: <http://www.soros.org/initiatives/information>

Soros Project. <http://www.soros.org/openaccess/>

Public Library of Science. (2005). <http://www.plos.org>

Library Copyright Alliance. <http://www.copyright.gov/orphan/comments/OW0658-LCA.pdf>

IFLA Licensing Principles. <http://www.ifla.org/V/ebpb/copy.htm>

References

Bailey, C. W. J. (2006). What is Open Access? In N. Jacobs (Ed.). *Open Access: Key Strategic, Technical and Economic Aspects*. Oxford, U.K., Chandos. Visited <http://www.digital-scholarship.com/cwb/WhatIsOA.pdf>

- Boyle, J. & Jenkins, J. (2003). The Genius of Intellectual Property and the Need for the Public Domain. In J. M. Esanu & P. F. Uhlir (Eds.). *The Role of Scientific and Technical Data and Information in the Public Domain*. Washington, DC, The National Academies Press: 10-14. Visited http://books.nap.edu/openbook.php?record_id=10785&page=10
- Courant, P. N. (2006). Scholarship and Academic Libraries (and Their Kin) in the World of Google. *First Monday*, 11(8). Retrieved from http://firstmonday.org/issues/issue11_8/courant/index.html
- Farb, S. (2006). Libraries, Licensing, and the Challenge of Stewardship. *First Monday*, 11(7). Retrieved from http://www.firstmonday.org/issues/issue11_7/farb/index.html
- Fox, B. L. & LaMacchia, B. A. (2003). Encouraging Recognition of Fair Uses in DRM Systems. *Communications of the ACM*, 46(4): 61-63. Retrieved from <http://portal.acm.org/citation.cfm?id=641233>
- Hirtle, P. B. (2003). *Digital Preservation and Copyright*. Copyright & Fair Use, Stanford University. Visited http://fairuse.stanford.edu/commentary_and_analysis/2003_11_hirtle.html
- Lessig, L. (2004). *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*. New York: Penguin. <<http://www.free-culture.cc/freeculture.pdf>>
- Litman, J. (2001). *Digital Copyright*. Amherst, NY: Prometheus Books.
- Samuelson, P. (2003). DRM [and, or, vs.] the Law. *Communications of the ACM*, 46(4): 41-45. Retrieved from <http://portal.acm.org/citation.cfm?id=641229>
- Scotchmer, S. (2003). Intellectual Property -- When Is It the Best Incentive Mechanism for S&T Data and Information? In J. M. Esanu & P. F. Uhlir (Eds.). *The Role of Scientific and Technical Data and Information in the Public Domain*. Washington, DC, The National Academies Press: 15-18. Visited http://books.nap.edu/openbook.php?record_id=10785&page=15
- The Digital Dilemma: Intellectual Property in the Information Age*. (2000). Washington, D.C.: National Academy Press. <<http://www.nap.edu/books/0309064996/html/>>

Session 6 (Nov 9): Economics of Information

Economics: costs to publish, distribute, access, and store; who pays

Required:

(Anderson, 2004; Costs of Publication, 2004; David, 2003; Ginn, 2002; King et al., 2003; Varian, 2000; Willinsky, 2003)

Recommended:

(Dalrymple, 2003; Odlyzko, 1997; 1999; Publication Business Models and Revenue, 2004; Quandt, 2003; Special Issue on Economic Factors of Managing Digital Content and Establishing Digital Libraries, 2004)

Site to visit:

COUNTER: Counting Online Usage of Networked Electronic Resources.
<http://www.projectcounter.org/index.html>

References

- Anderson, C. (2004). The Long Tail. *Wired Magazine*, **12**(10). Retrieved from http://wired.com/wired/archive/12.10/tail_pr.html
- Costs of Publication (2004). *Electronic Scientific, Technical, and Medical Journal Publishing and Its Implications: Report of a Symposium*. Washington, DC, Committee on Electronic Scientific, Technical, and Medical Journal Publishing. Committee on Science Engineering, and Public Policy. Policy and Global Affairs Division, National Research Council, The National Academies. The National Academies Press: 9-19. Visited http://books.nap.edu/openbook.php?record_id=10969&page=9
- Dalrymple, D. (2003). Scientific Knowledge as a Global Public Good: Contributions to Innovation and the Economy. In J. M. Esanu & P. F. Uhlir (Eds.). *The Role of Scientific and Technical Data and Information in the Public Domain*. Washington, DC, The National Academies Press: 35-51. Visited http://books.nap.edu/openbook.php?record_id=10785&page=35
- David, P. A. (2003). The Economic Logic of "Open Science" and the Balance Between Private Property Rights and the Public Domain in Scientific Data and Information: A Primer. *The Role of the Public Domain in Scientific Data and Information*. Washington, D.C., National Academy Press: 19-34. Visited http://books.nap.edu/openbook.php?record_id=10785&page=19
- Ginn, C. (2002). Calculating Pricing Models Choices: Rising to the Challenge. *Learned Publishing*, **15**(July): 199-203. Retrieved from <http://www.ingentaconnect.com/content/alpsp/lp/2002/00000015/00000003/art00007>
- King, D. W., Boyce, P. B., Montgomery, C. H. & Tenopir, C. (2003). Library Economic Metrics: Examples of the Comparison of Electronic and Print Journal Collections and Collection Services. *Library Trends*, **51**(3): 376-400. Retrieved from <http://find.galegroup.com/itx/infomark.do?contentSet=IAC-Documents&docType=IAC&type=retrieve&tabID=T002&prodId=EAIM&docId=A102270883&userGroupName=uclosangeles&version=1.0>
- Odlyzko, A. M. (1997). The Economics of Electronic Journals. *First Monday*, **2**(8). Retrieved from http://www.firstmonday.org/issues/issue2_8/odlyzko/index.html
- Odlyzko, A. M. (1999). Competition and Cooperation: Libraries and Publishers in the Transition to Electronic Scholarly Journals. *Journal of Scholarly Publishing*, **30**(4): 163-185. Retrieved from <http://www.dtc.umn.edu/~odlyzko/doc/competition.cooperation.pdf>
- Publication Business Models and Revenue (2004). *Electronic Scientific, Technical, and Medical Journal Publishing and Its Implications: Report of a Symposium*. Washington, DC, The National Academies Press: 20-39. Visited http://books.nap.edu/openbook.php?record_id=10969&page=20
- Quandt, R. E. (2003). Scholarly Materials: Paper or Digital? *Library Trends*, **51**(3): 349-375. Retrieved from <http://find.galegroup.com/itx/infomark.do?contentSet=IAC-Documents&docType=IAC&type=retrieve&tabID=T002&prodId=EAIM&docId=A102270882&userGroupName=uclosangeles&version=1.0>
- Special Issue on Economic Factors of Managing Digital Content and Establishing Digital Libraries. (2004). *Journal of Digital Information*, **4**(2). Retrieved from <http://journals.tdl.org/jodi/issue/view/18>

- Varian, H. (2000). Versioning Information Goods. In B. Kahin & H. R. Varian (Eds.). *Internet Publishing and Beyond: The Economics of Digital Information and Intellectual Property*. Cambridge, MA, MIT Press: 190-202. Visited <http://www.ischool.berkeley.edu/~hal/Papers/version.pdf>
- Willinsky, J. (2003). Scholarly Associations and the Economic Viability of Open Access Publishing. *Journal of Digital Information*, 4(2). Retrieved from <http://jodi.tamu.edu/Articles/v04/i02/Willinsky/>

**Session 7 (Nov 16):
Data as a Scholarly Product**

Required:
(Borgman, 2007) Chapter 6

(Bourne, 2005; Hey & Trefethen, 2003; *Long-Lived Digital Data Collections: Enabling Research and Education for the 21st Century*, 2005; Lyon, 2007; *OECD Principles and Guidelines for Access to Research Data from Public Funding*, 2007; Wallis et al., in press)

Recommended:
(Bowker, 2005; Lord & Macdonald, 2003)

References

- Borgman, C. L. (2007). *Scholarship in the Digital Age: Information, Infrastructure, and the Internet*. Cambridge, MA: MIT Press.
- Bourne, P. (2005). Will a Biological Database Be Different from a Biological Journal? *PLoS Computational Biology*, 1(3): e34. Retrieved from <http://dx.doi.org/10.1371/journal.pcbi.0010034>
- Bowker, G. C. (2005). *Memory Practices in the Sciences*. Cambridge, MA: MIT Press.
- Hey, A. J. G. & Trefethen, A. (2003). The Data Deluge: An e-Science Perspective. In F. Berman, G. Fox & A. J. G. Hey (Eds.). *Grid Computing: Making the Global Infrastructure a Reality*. Chichester, Wiley. Visited <http://www.rcuk.ac.uk/cmsweb/downloads/rcuk/research/esci/datadeluge.pdf>
- Long-Lived Digital Data Collections: Enabling Research and Education for the 21st Century*. (2005). National Science Board. Visited http://www.nsf.gov/nsb/documents/2005/LLDDC_report.pdf
- Lord, P. & Macdonald, A. (2003). *E-Science Curation Report--Data Curation for E-science in the UK: An Audit to Establish Requirements for Future Curation and Provision*. JISC Committee for the Support of Research. Visited http://www.jisc.ac.uk/uploaded_documents/e-scienceReportFinal.pdf
- Lyon, L. (2007). *Dealing with Data: Roles, Rights, Responsibilities, and Relationships*. UKOLN. Visited http://www.jisc.ac.uk/whatwedo/programmes/programme_digital_repositories/project_dealing_with_data.aspx

OECD Principles and Guidelines for Access to Research Data from Public Funding (2007). The Organization for Economic Co-operation and Development (OECD). Visited <http://www.oecd.org/dataoecd/9/61/38500813.pdf>

Wallis, J. C., Borgman, C. L., Mayernik, M., Pepe, A., Ramanathan, N. & Hansen, M. (in press). Know Thy Sensor: Trust, Data Quality, and Data Integrity in Scientific Digital Libraries. *11th European Conference on Digital Libraries*, Budapest, Hungary. Berlin: Springer. Visited http://polaris.gseis.ucla.edu/cborgman/pubs/wallisetal_2007.pdf

**Session 8 (Nov 30):
Disciplines, Documents, and Data**

Required:

(Borgman, 2007) Chapters 7, 8

Sciences:

(Borgman et al., 2007; Murray-Rust & Rzepa, 2004; Zimmerman, in press)

Social Sciences

(Brady, 2004; Unsworth et al., 2006; Wiberley, 2004)

Humanities

(Crane, 2006; Duguid, 2007; Frischer, 2004)

Sites to visit:

Dspace. <http://www.dspace.org>

Global Earth Observation System of Systems. <http://www.epa.gov/geoss/>

Higher Education Research Institute. University of California, Los Angeles.
<http://www.gseis.ucla.edu/heri/index.php>

Incorporated Research Institutions for Seismology (IRIS). <http://www.iris.edu>

International Virtual Observatory Alliance. <http://www.ivoa.net/>

National Earthquake Engineering Simulation Cyberinfrastructure Center
<http://it.nees.org/>

Network of Expertise in Long-Term Storage of Digital Resources (Nestor).
<http://www.langzeitarchivierung.de/index.php?newlang=eng>

Protein Data Bank. <http://www.rcsb.org/pdb/>

Survey Research Center, Institute for Social Research.. University of Michigan.
<http://www.isr.umich.edu/src/>

Survey Research Center, UC-Berkeley. University of California, Berkeley.
<http://srcweb.berkeley.edu/>

References

- Borgman, C. L. (2007). *Scholarship in the Digital Age: Information, Infrastructure, and the Internet*. Cambridge, MA: MIT Press.
- Borgman, C. L., Wallis, J. C., Mayernik, M. & Pepe, A. (2007). Drowning in Data: Digital Library Architecture to Support Scientists' Use of Embedded Sensor Networks. *JCDL '07: Proceedings of the 7th ACM/IEEE-CS Joint Conference on Digital Libraries*, Vancouver, BC. Association for Computing Machinery. Visited http://polaris.gseis.ucla.edu/cborgman/pubs/JCDL07_117_fin.pdf
- Brady, H. (2004). *Testimony to the Commission on Cyberinfrastructure for the Humanities and Social Sciences*. American Council of Learned Societies. Visited http://www.acls.org/cyberinfrastructure/cyber_meeting_notes_august.htm#brady_summary
- Crane, G. (2006). What Do You Do with a Million Books? *D-Lib Magazine*, **12**(3). Retrieved from <http://www.dlib.org/dlib/march06/crane/03crane.html>
- Duguid, P. (2007). *Inheritance and Loss? A Brief Survey of Google Books*. **12**. Visited http://www.firstmonday.org/issues/issue12_8/duguid/index.html
- Frischer, B. (2004). *Testimony to the Commission on Cyberinfrastructure for the Humanities and Social Sciences*. American Council of Learned Societies. Visited http://www.acls.org/cyberinfrastructure/cyber_meeting_notes_october.htm#frischer_summary
- Murray-Rust, P. & Rzepa, H. S. (2004). The Next Big Thing: From Hypermedia to Datuments. *Journal of Digital Information*, **5**(1): Article No. 248. Retrieved from <http://jodi.tamu.edu/Articles/v05/i01/Murray-Rust/>
- Unsworth, J., Courant, P., Fraser, S., Goodchild, M., Hedstrom, M., Henry, C., Kaufman, P. B., McGann, J., Rosenzweig, R. & Zuckerman, B. (2006). *Our Cultural Commonwealth: The Report of the American Council of Learned Societies Commission on Cyberinfrastructure for Humanities and Social Sciences*. American Council of Learned Societies. Visited <http://www.acls.org/cyberinfrastructure/cyber.htm>
- Wiberly, S. E. (2004). The Social Sciences: Who Won the '90s in Scholarly Book Publishing. *College & Research Libraries*, **65**(6): 505-523. Retrieved from <http://www.ala.org/ala/acrl/acrlpubs/crljournal/crl2004/november/wiberly.pdf>
- Zimmerman, A. S. (in press). New Knowledge from Old Data: The Role of Standards in the Sharing and Reuse of Ecological Data. *Science, Technology, & Human Values*. Retrieved from http://www-personal.si.umich.edu/~asz/zimmerman_sthv_manuscript_accepted_april_2007.pdf

Session 9 (Dec 7): The Future of Scholarly Publishing

Required:
(Borgman, 2007) Chapter 9

(*Digital Curation and Preservation: Defining the Research Agenda for the Next Decade*, 2005; Campbell, 2006; Couzin, 2006; Young, 2006)

Site to visit:

eBooks on Demand from European Libraries. <http://www.books2ebooks.eu/>

References

- Borgman, C. L. (2007). *Scholarship in the Digital Age: Information, Infrastructure, and the Internet*. Cambridge, MA: MIT Press.
- Campbell, J. D. (2006). Changing a Cultural Icon: The Academic Library as a Virtual Destination. *EDUCAUSE Review*, **41**(1): 16-31. Retrieved from <http://www.educause.edu/apps/er/erm06/erm0610.asp>
- Couzin, J. (2006). Don't Pretty Up That Picture Just Yet. *Science*, **314**(5807): 1866-1868. Retrieved from <http://www.sciencemag.org/cgi/content/full/314/5807/1866>
- Digital Curation and Preservation: Defining the Research Agenda for the Next Decade* (2005). Report of the Warwick Workshop - 7 & 8 November 2005: Digital Curation Centre. Visited http://www.dcc.ac.uk/events/warwick_2005/Warwick_Workshop_report.pdf
- Young, J. (2006). Book 2.0: Scholars Turn Monographs into Digital Conversations. *The Chronicle of Higher Education*, **52**(47): A20-A24. Retrieved from <http://chronicle.com/weekly/v52/i47/47a02001.htm>

Merged References

- Agre, P. E. (1995). Institutional Circuitry: Thinking About the Forms and Uses of Information. *Information Technology and Libraries*, **14**: 225-230. Retrieved from <http://find.galegroup.com/itx/infomark.do?contentSet=IAC-Documents&docType=IAC&type=retrieve&tabID=T002&prodId=EAIM&docId=A17814175&userGroupName=uclosangeles&version=1.0>
- Anderson, C. (2004). The Long Tail. *Wired Magazine*, **12**(10). Retrieved from http://wired.com/wired/archive/12.10/tail_pr.html
- Atkins, D. E., Droegemeier, K. K., Feldman, S. I., Garcia-Molina, H., Klein, M. L., Messina, P., Messerschmitt, D. G., Ostriker, J. P. & Wright, M. H. (2003). *Revolutionizing Science and Engineering Through Cyberinfrastructure: Report of the National Science Foundation Blue-Ribbon panel on Cyberinfrastructure*. National Science Foundation. Visited <http://www.nsf.gov/cise/sci/reports/atkins.pdf>
- Atkinson, R. C. (2003). A New World of Scholarly Communication. *The Chronicle Review*, **50**(11): B16. Retrieved from <http://chronicle.com/weekly/v50/i11/11b01601.htm>
- Bailey, C. W. J. (2006). What is Open Access? In N. Jacobs (Ed.). *Open Access: Key Strategic, Technical and Economic Aspects*. Oxford, U.K., Chandos. Visited <http://www.digital-scholarship.com/cwb/WhatsOA.pdf>
- Bekaert, J. & Van de Sompel, H. (2006). Access Interfaces for Open Archival Information Systems Based on the OAI-PMH and the OpenURL Framework for

- Context-Sensitive Services. *PV 2005: Ensuring Long-term Preservation and Adding Value to Scientific and Technical Data*, The Royal Society, Edinburgh. Visited <http://www.ukoln.ac.uk/events/pv-2005/pv-2005-final-papers/032.pdf>
- Berman, F. & Brady, H. (2005). *Final Report: NSF SBE-CISE Workshop on Cyberinfrastructure and the Social Sciences*. National Science Foundation. Visited <http://vis.sdsc.edu/sbe/reports/SBE-CISE-FINAL.pdf>
- Borgman, C. L. (2000). Digital Libraries and The Continuum Of Scholarly Communication. *Journal of Documentation*, **56**: 412-430. Retrieved from <http://www.emeraldinsight.com/Insight/viewContentItem.do?contentType=Article&contentId=864134>
- Borgman, C. L. (2003a). Ch 2: Is It Digital or Is It a Library? Digital Libraries and Information Infrastructure. *From Gutenberg to the Global Information Infrastructure: Access to Information in the Networked World*. Cambridge, MIT Press: 33-52.
- Borgman, C. L. (2003a). Preface. *From Gutenberg to the Global Information Infrastructure: Access to Information in the Networked World*. Cambridge, MIT Press: ix-xiii.
- Borgman, C. L. (2003b). Ch 1: The Premise and Promise of A Global Information Infrastructure. *From Gutenberg to the Global Information Infrastructure: Access to Information in the Networked World*. Cambridge, MIT Press: 1-32.
- Borgman, C. L. (2003b). Ch 3: Access to Information. *From Gutenberg to the Global Information Infrastructure: Access to Information in the Networked World*. Cambridge, MIT Press: 53-168.
- Borgman, C. L. (2007). *Scholarship in the Digital Age: Information, Infrastructure, and the Internet*. Cambridge, MA: MIT Press.
- Borgman, C. L., Wallis, J. C., Mayernik, M. & Pepe, A. (2007). Drowning in Data: Digital Library Architecture to Support Scientists' Use of Embedded Sensor Networks. *JCDL '07: Proceedings of the 7th ACM/IEEE-CS Joint Conference on Digital Libraries*, Vancouver, BC. Association for Computing Machinery. Visited http://polaris.gseis.ucla.edu/cborgman/pubs/JCDL07_117_fin.pdf
- Bourne, P. (2005). Will a Biological Database Be Different from a Biological Journal? *PLoS Computational Biology*, **1**(3): e34. Retrieved from <http://dx.doi.org/10.1371/journal.pcbi.0010034>
- Bowker, G. C. (2005). *Memory Practices in the Sciences*. Cambridge, MA: MIT Press.
- Boyle, J. & Jenkins, J. (2003). The Genius of Intellectual Property and the Need for the Public Domain. In J. M. Esanu & P. F. Uhler (Eds.). *The Role of Scientific and Technical Data and Information in the Public Domain*. Washington, DC, The National Academies Press: 10-14. Visited http://books.nap.edu/openbook.php?record_id=10785&page=10
- Brady, H. (2004). *Testimony to the Commission on Cyberinfrastructure for the Humanities and Social Sciences*. American Council of Learned Societies. Visited http://www.acls.org/cyberinfrastructure/cyber_meeting_notes_august.htm#brady_summary
- Campbell, J. D. (2006). Changing a Cultural Icon: The Academic Library as a Virtual Destination. *EDUCAUSE Review*, **41**(1): 16-31. Retrieved from <http://www.educause.edu/apps/er/erm06/erm0610.asp>
- Cisler, S. (2002). Letter from San Francisco: The Internet Bookmobile. *First Monday*, **7**(10). Retrieved from http://www.firstmonday.dk/issues/issue7_10/cisler/index.html
- Costs of Publication (2004). *Electronic Scientific, Technical, and Medical Journal Publishing and Its Implications: Report of a Symposium*. Washington, DC,

- Committee on Electronic Scientific, Technical, and Medical Journal Publishing. Committee on Science Engineering, and Public Policy. Policy and Global Affairs Division, National Research Council, The National Academies. The National Academies Press: 9-19. Visited http://books.nap.edu/openbook.php?record_id=10969&page=9
- Courant, P. N. (2006). Scholarship and Academic Libraries (and Their Kin) in the World of Google. *First Monday*, **11**(8). Retrieved from http://firstmonday.org/issues/issue11_8/courant/index.html
- Couzin, J. (2006). Don't Pretty Up That Picture Just Yet. *Science*, **314**(5807): 1866-1868. Retrieved from <http://www.sciencemag.org/cgi/content/full/314/5807/1866>
- Crane, G. (2006). What Do You Do with a Million Books? *D-Lib Magazine*, **12**(3). Retrieved from <http://www.dlib.org/dlib/march06/crane/03crane.html>
- Cronin, B. (2003). Scholarly Communication and Epistemic Cultures. *Scholarly Tribes and Tribulations: How Tradition and Technology are Driving Disciplinary Change*, Washington, DC. Association of Research Libraries. Visited <http://www.arl.org/bm~doc/cronin.pdf>
- Cyberinfrastructure Vision for 21st Century Discovery* (2007). National Science Foundation. Visited <http://www.nsf.gov/pubs/2007/nsf0728/>
- Dalrymple, D. (2003). Scientific Knowledge as a Global Public Good: Contributions to Innovation and the Economy. In J. M. Esanu & P. F. Uhler (Eds.). *The Role of Scientific and Technical Data and Information in the Public Domain*. Washington, DC, The National Academies Press: 35-51. Visited http://books.nap.edu/openbook.php?record_id=10785&page=35
- David, P. A. (2003). The Economic Logic of "Open Science" and the Balance Between Private Property Rights and the Public Domain in Scientific Data and Information: A Primer. *The Role of the Public Domain in Scientific Data and Information*. Washington, D.C., National Academy Press: 19-34. Visited http://books.nap.edu/openbook.php?record_id=10785&page=19
- Digital Curation and Preservation: Defining the Research Agenda for the Next Decade* (2005). Report of the Warwick Workshop - 7 & 8 November 2005: Digital Curation Centre. Visited http://www.dcc.ac.uk/events/warwick_2005/Warwick_Workshop_report.pdf
- Donaldson, I. (1998). The Destruction of the Book. *Book History, the Annual of the Society for the History of Authorship, Reading and Publishing*, SHARP. **1**: 1-10. Visited http://muse.jhu.edu/journals/book_history/v001/1.1donaldson.html
- Duguid, P. (2007). *Inheritance and Loss? A Brief Survey of Google Books*. **12**. Visited http://www.firstmonday.org/issues/issue12_8/duguid/index.html
- Farb, S. (2006). Libraries, Licensing, and the Challenge of Stewardship. *First Monday*, **11**(7). Retrieved from http://www.firstmonday.org/issues/issue11_7/farb/index.html
- Fox, B. L. & LaMacchia, B. A. (2003). Encouraging Recognition of Fair Uses in DRM Systems. *Communications of the ACM*, **46**(4): 61-63. Retrieved from <http://portal.acm.org/citation.cfm?id=641233>
- Frankel, M. S., Elliott, R., Blume, M., Bourgois, J.-M., Hugenholtz, B., Lindquist, M. G., Morris, S. & Sandewall, E. (2000). *Defining and Certifying Electronic Publication in Science: A Proposal to the International Association of STM Publishers*. American Association for the Advancement of Science. Visited <http://www.aaas.org/spp/sfrl/projects/epub/define.shtml>
- Frischer, B. (2004). *Testimony to the Commission on Cyberinfrastructure for the Humanities and Social Sciences*. American Council of Learned Societies. Visited http://www.acls.org/cyberinfrastructure/cyber_meeting_notes_october.htm#frisch

- [er summary](#)
- Ginn, C. (2002). Calculating Pricing Models Choices: Rising to the Challenge. *Learned Publishing*, **15**(July): 199-203. Retrieved from <http://www.ingentaconnect.com/content/alpsp/lp/2002/00000015/00000003/art00007>
- Harnad, S. (1991). Post-Gutenberg Galaxy: The Fourth Revolution in the Means of Production of Knowledge. *Public-Access Computer Systems Review*, **2**(1): 39-53. Retrieved from <http://www.ecs.soton.ac.uk/~harnad/Papers/Harnad/harnad91.postgutenberg.htm>
- Harnad, S. (2004). The Invisible Hand of Peer-Review. In B. Shatz (Ed.). *Peer Review: A Critical Inquiry*, Rowland & Littlefield: 235-242. Visited <http://cogprints.soton.ac.uk/documents/disk0/00/00/16/46/index.html>
- Hawkins, B. L. (1998). The Unsustainability of the Traditional Library and the Threat to Higher Education. In B. L. Hawkins & P. Battin (Eds.). *The Mirage of Continuity: Reconfiguring Academic Information Resources for the 21st Century*. Washington, D.C., Council on Library and Information Resources and the Association of American Universities: 129-153.
- Hey, A. J. G. & Trefethen, A. (2003). The Data Deluge: An e-Science Perspective. In F. Berman, G. Fox & A. J. G. Hey (Eds.). *Grid Computing: Making the Global Infrastructure a Reality*. Chichester, Wiley. Visited <http://www.rcuk.ac.uk/cmsweb/downloads/rcuk/research/esci/datadeluge.pdf>
- Hey, T. & Trefethen, A. (2005). Cyberinfrastructure and e-Science. *Science*, **308**: 818-821. Retrieved from <http://www.sciencemag.org/cgi/content/full/308/5723/817>
- Hickey, T. B. & Noreault, T. (1992). The Development of a Graphical User Interface for The Online Journal of Current Clinical Trials. *The Public-Access Computer Systems Review*, **3**(2): 4-12. Retrieved from <http://info.lib.uh.edu/pr/v3/n2/hickey.3n2>
- Hirtle, P. B. (2003). *Digital Preservation and Copyright*. Copyright & Fair Use, Stanford University. Visited http://fairuse.stanford.edu/commentary_and_analysis/2003_11_hirtle.html
- King, C. J., Harley, D., Earl-Novell, S., Arter, J., Larence, S. & Perciali, I. (2006). *Scholarly Communication: Academic Values and Sustainable Models*. Andrew W. Mellon Foundation, Center for Studies in Higher Education, University of California, Berkeley. Visited <http://cshe.berkeley.edu/publications/publications.php?id=23>
- King, D. W., Boyce, P. B., Montgomery, C. H. & Tenopir, C. (2003). Library Economic Metrics: Examples of the Comparison of Electronic and Print Journal Collections and Collection Services. *Library Trends*, **51**(3): 376-400. Retrieved from <http://find.galegroup.com/itx/infomark.do?contentSet=IAC-Documents&docType=IAC&type=retrieve&tabID=T002&prodId=EAIM&docId=A102270883&userGroupName=uclosangeles&version=1.0>
- Kling, R. & Callahan, E. (2003). Electronic Journals, the Internet, and Scholarly Communication. In B. Cronin (Ed.). *Annual Review of Information Science and Technology*. Medford, NJ, Information Today. **37**: 127-177. Visited <http://www3.interscience.wiley.com/cgi-bin/fulltext/109882851/HTMLSTART>
- Lessig, L. (2001). *The Future of Ideas: The Fate of the Commons in a Connected World*. New York: Random House.
- Lessig, L. (2004). *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*. New York: Penguin. <<http://www.free-culture.cc/freeculture.pdf>>

- Litman, J. (2001). *Digital Copyright*. Amherst, NY: Prometheus Books.
- Long-Lived Digital Data Collections: Enabling Research and Education for the 21st Century. (2005). National Science Board. Visited http://www.nsf.gov/nsb/documents/2005/LLDDC_report.pdf
- Lord, P. & Macdonald, A. (2003). *E-Science Curation Report--Data Curation for E-science in the UK: An Audit to Establish Requirements for Future Curation and Provision*. JISC Committee for the Support of Research. Visited http://www.jisc.ac.uk/uploaded_documents/e-scienceReportFinal.pdf
- Lynch, C. A. (2001). The Battle to Define the Future of the Book in the Digital World. *First Monday*, **6**(6). Retrieved from http://www.firstmonday.dk/issues/issue6_6/lynch/index.html
- Lynch, C. A. (2007). The Shape of the Scientific Article in the Developing Cyberinfrastructure. *CT Watch Quarterly*, **3**(3). Retrieved from <http://www.ctwatch.org/quarterly/articles/2007/08/the-shape-of-the-scientific-article-in-the-developing-cyberinfrastructure/>
- Lyon, L. (2007). *Dealing with Data: Roles, Rights, Responsibilities, and Relationships*. UKOLN. Visited http://www.jisc.ac.uk/whatwedo/programmes/programme_digital_repositories/project_dealing_with_data.aspx
- Meadows, A. J. (1998). *Communicating Research*. San Diego: Academic Press.
- Murray-Rust, P. & Rzepa, H. S. (2004). The Next Big Thing: From Hypermedia to Datuments. *Journal of Digital Information*, **5**(1): Article No. 248. Retrieved from <http://jodi.tamu.edu/Articles/v05/i01/Murray-Rust/>
- Naylor, B. & Geller, M. (1995). A Prehistory of Electronic Journals: The EIES and BLEND Projects. In M. Tuttle & K. D. Darling (Eds.). *Advances in Serials Management*. Greenwich, CT, JAI Press. **5**: 27-47.
- Odlyzko, A. M. (1997). The Economics of Electronic Journals. *First Monday*, **2**(8). Retrieved from http://www.firstmonday.org/issues/issue2_8/odlyzko/index.html
- Odlyzko, A. M. (1999). Competition and Cooperation: Libraries and Publishers in the Transition to Electronic Scholarly Journals. *Journal of Scholarly Publishing*, **30**(4): 163-185. Retrieved from <http://www.dtc.umn.edu/~odlyzko/doc/competition.cooperation.pdf>
- OECD Principles and Guidelines for Access to Research Data from Public Funding (2007). The Organization for Economic Co-operation and Development (OECD). Visited <http://www.oecd.org/dataoecd/9/61/38500813.pdf>
- Paskin, N. (2000). E-Citations: Actionable Identifiers and Scholarly Referencing. *Learned Publishing*, **13**(3): 159-166. Retrieved from <http://www.ingentaconnect.com/content/alpsp/lp/2000/00000013/00000003/art00004>
- Publication Business Models and Revenue (2004). *Electronic Scientific, Technical, and Medical Journal Publishing and Its Implications: Report of a Symposium*. Washington, DC, The National Academies Press: 20-39. Visited http://books.nap.edu/openbook.php?record_id=10969&page=20
- Quandt, R. E. (2003). Scholarly Materials: Paper or Digital? *Library Trends*, **51**(3): 349-375. Retrieved from <http://find.galegroup.com/itx/infomark.do?contentSet=IAC-Documents&docType=IAC&type=retrieve&tabID=T002&prodId=EAIM&docId=A102270882&userGroupName=uclosangeles&version=1.0>
- Samuelson, P. (2003). DRM [and, or, vs.] the Law. *Communications of the ACM*, **46**(4): 41-45. Retrieved from <http://portal.acm.org/citation.cfm?id=641229>
- Scotchmer, S. (2003). Intellectual Property -- When Is It the Best Incentive Mechanism for S&T Data and Information? In J. M. Esanu & P. F. Uhler (Eds.). *The Role of*

- Scientific and Technical Data and Information in the Public Domain*. Washington, DC, The National Academies Press: 15-18. Visited http://books.nap.edu/openbook.php?record_id=10785&page=15
- Special Issue on Economic Factors of Managing Digital Content and Establishing Digital Libraries. (2004). *Journal of Digital Information*, **4**(2). Retrieved from <http://journals.tdl.org/jodi/issue/view/18>
- The Digital Dilemma: Intellectual Property in the Information Age*. (2000). Washington, D.C.: National Academy Press. <<http://www.nap.edu/books/0309064996/html/>>
- Thompson, J. B. (2005). *Books in the Digital Age*. Cambridge, U.K.: Polity.
- Turoff, M. & Hiltz, S. R. (1982). The Electronic Journal: A Progress Report. *Journal of the American Society for Information Science*, **33**(4): 195-202. Retrieved from <http://web.njit.edu/~turoff/Papers/ElectronicJournal.html>
- Unsworth, J., Courant, P., Fraser, S., Goodchild, M., Hedstrom, M., Henry, C., Kaufman, P. B., McGann, J., Rosenzweig, R. & Zuckerman, B. (2006). *Our Cultural Commonwealth: The Report of the American Council of Learned Societies Commission on Cyberinfrastructure for Humanities and Social Sciences*. American Council of Learned Societies. Visited <http://www.acls.org/cyberinfrastructure/cyber.htm>
- Unsworth, J., Courant, P., Fraser, S., Goodchild, M., Hedstrom, M., Henry, C., Kaufman, P. B., McGann, J., Rosenzweig, R. & Zuckerman, B. (2006). *Our Cultural Commonwealth: The Report of the American Council of Learned Societies Commission on Cyberinfrastructure for Humanities and Social Sciences*. American Council of Learned Societies. Visited <http://www.acls.org/cyberinfrastructure/cyber.htm>
- Van de Sompel, H. & Lagoze, C. (2007). Interoperability for the Discovery, Use, and Re-Use of Units of Scholarly Communication. *CT Watch Quarterly*, **3**(3). Retrieved from <http://www.ctwatch.org/quarterly/articles/2007/08/interoperability-for-the-discovery-use-and-re-use-of-units-of-scholarly-communication/>
- Van de Sompel, H., Hammond, T., Neylon, E. & Weibel, S. L. (2006). *RFC 4452: The "Info" URI Scheme for Information Assets with Identifiers in Public Namespaces*. Requests for Comments, Internet Engineering Task Force. Visited <http://www.rfc-archive.org/getrfc.php?rfc=4452>
- Van de Sompel, H., Lagoze, C., Bekaert, J., Liu, X., Payette, S. & Warner, S. (2006). An Interoperable Fabric For Scholarly Value Chains. *D-Lib Magazine*, **12**(10). Retrieved from <http://www.dlib.org/dlib/october06/vandesompel/10vandesompel.html>
- Van de Sompel, H., Nelson, M. L., Lagoze, C. & Warner, S. (2004). Resource Harvesting within the OAI-PMH Framework. *D-Lib Magazine*, **10**(12). Retrieved from <http://www.dlib.org/dlib/december04/vandesompel/12vandesompel.html>
- Van de Sompel, H., Payette, S., Erickson, J., Lagoze, C. & Warner, S. (2004). Rethinking Scholarly Communication: Building the System That Scholars Deserve. *D-Lib Magazine*, **10**(9). Retrieved from <http://www.dlib.org/dlib/september04/vandesompel/09vandesompel.html>
- Varian, H. (2000). Versioning Information Goods. In B. Kahin & H. R. Varian (Eds.). *Internet Publishing and Beyond: The Economics of Digital Information and Intellectual Property*. Cambridge, MA, MIT Press: 190-202. Visited <http://www.ischool.berkeley.edu/~hal/Papers/version.pdf>
- Wallis, J. C., Borgman, C. L., Mayernik, M., Pepe, A., Ramanathan, N. & Hansen, M. (in press). Know Thy Sensor: Trust, Data Quality, and Data Integrity in Scientific Digital Libraries. *11th European Conference on Digital Libraries*, Budapest, Hungary. Berlin: Springer. Visited

- http://polaris.gseis.ucla.edu/cborgman/pubs/wallisetal_2007.pdf
- Wiberley, S. E. (2004). The Social Sciences: Who Won the '90s in Scholarly Book Publishing. *College & Research Libraries*, **65**(6): 505-523. Retrieved from <http://www.ala.org/ala/acrl/acrlpubs/crljournal/crl2004/november/wiberly.pdf>
- Willinsky, J. (2003). Scholarly Associations and the Economic Viability of Open Access Publishing. *Journal of Digital information*, **4**(2). Retrieved from <http://jodi.tamu.edu/Articles/v04/i02/Willinsky/>
- Young, J. (2006). Book 2.0: Scholars Turn Monographs into Digital Conversations. *The Chronicle of Higher Education*, **52**(47): A20-A24. Retrieved from <http://chronicle.com/weekly/v52/i47/47a02001.htm>
- Zimmerman, A. S. (in press). New Knowledge from Old Data: The Role of Standards in the Sharing and Reuse of Ecological Data. *Science, Technology, & Human Values*. Retrieved from http://www-personal.si.umich.edu/~asz/zimmerman_sthv_manuscript_accepted_april_2007.pdf