

**School of Information and Library Science**  
**University of North Carolina, Chapel Hill**  
**INLS 881 – Research Issues and Questions**

**Fall 2023**

**Day/Time:** Tuesday only, 11:00-1:45pm

**Location:** Manning 214

**Credits:** 3

**Instructor:** Brian Sturm

**Office:** Manning 204

**Phone:** 919-962-2460

**E-Mail:** sturm[at]ils.unc.edu

**Office Hours:** By appointment

**Course Web Site:** <https://edtech.unc.edu/service/canvas/>

## **COURSE DESCRIPTION**

***Overview.*** Investigation of the fundamental ideas in information and library science. Exploration and discussion in seminar format.

The goal of this course is to introduce doctoral students to research and discovery in the ILS field and to prepare them to become productive scholars. Students will encounter the range of research questions and issues that arise in the field of information and library science, with particular emphasis on the research interests of the current SILS faculty and doctoral students. The role of both theory and prior empirical research in generating research questions will be discussed. The variety of methods available to conduct ILS research will be reviewed.

The class members will participate in reading, reviewing, analyzing, and discussing, in some detail, relevant research literature in six particular facets of information and library science:

- Describing and organizing information,
- Curation, management, and preservation of materials,
- Information services and the organizations that provide them,
- Information needs, information seeking, and information sources,
- Information retrieval systems, interactive information retrieval, and human-computer interaction, and
- Information use and sharing, with special emphasis on scholarly communication.

As we explore each of these areas, you will be asked to consider how your own research interests interact with them. Is your research interest fully included in one of these areas? Is it a combination of two or more of the areas? Is it related to one or more of these areas, but also brings in the perspectives of other disciplines? Through our discussion and the assignments, you will have the opportunity to further develop your own interests in relation to the larger field of information and library science.

A second goal of this seminar is to assist the participants in being successful as doctoral students at SILS and as future scholars. This goal will be addressed by providing opportunities for you to develop particular research-related knowledge and skills, particularly in the following areas:

- Literature searching, managing your literature, and writing a literature review,
- Peer reviewing, and receiving and giving feedback,

- Project management,
- Research ethics and working with human subjects/participants,
- Presenting your work in various formats (orally, in a poster, in a paper),
- Collaboration, including interdisciplinary collaboration,
- Proposal writing, and
- Data management.

*Rationale and relationship to the current curriculum.* It is required that students take INLS 881 at or near the beginning of their doctoral studies. The discussions in this seminar will help students identify research questions of particular interest to them and will provide a context within which initial explorations of those questions can be conducted.

**Special Needs:** If you feel that you may need an accommodation for a disability or have any other special need, please make an appointment to discuss this with me and/or register with UNC [Accessibility Resources and Service](#). I will best be able to address special circumstances if I know about them early in the semester. My office hours and contact information are listed at the beginning of this syllabus.

### **Diversity Statement**

"In support of the University's diversity goals and the mission of the School of Information and Library Science, SILS embraces diversity as an ethical and societal value. We broadly define diversity to include race, gender, national origin, ethnicity, religion, social class, age, sexual orientation and physical and learning ability. As an academic community committed to preparing our graduates to be leaders in an increasingly multicultural and global society we strive to:

- Ensure inclusive leadership, policies and practices;
- Integrate diversity into the curriculum and research;
- Foster a mutually respectful intellectual environment in which diverse opinions are valued; Recruit traditionally underrepresented groups of students, faculty and staff; and Participate in outreach to underserved groups in the State.

The statement represents a commitment of resources to the development and maintenance of an academic environment that is open, representative, reflective and committed to the concepts of equity and fairness."

~The faculty of the School of Information and Library Science (<https://sils.unc.edu/diversity>)

### **NOTE ON WRITING IN YOUR OWN WORDS**

It is very important that you both attribute your sources and avoid excessive use of quotes. Be aware of the University of North Carolina's policy on plagiarism. Your written work must be original. Ask if you have any doubts about what this means. We will also consider the ethical use of generative AI such as ChatGPT (the Center for Faculty Excellence has a [useful overview](#)).

All cases of plagiarism (unattributed quotation or paraphrasing) of anyone else's work, whether from someone else's answers to homework or from published materials, will be officially reported and dealt with according to UNC policies (Instrument of Student Judicial Governance, Section II.B.1. and III.D.2, <http://instrument.unc.edu>).

# EVALUATION AND ASSIGNMENTS

The assignments for the seminar aim to foster your growth as a scholar and researcher in information and library science, through participation in discussions, reviews of current issues and the relevant literature, and development of research questions and proposals. They include:

## **Seminar participation and contributions (25%)**

You are expected to complete reading assignments prior to the class in which they will be discussed. I will be expecting you to be an active participant in class, remembering that the quality of your comments and questions is as important as the quantity. Other contributions to the seminar are also important, such as sharing interesting articles you have read, things you have learned, or questions to which you do not know the answer. As a researcher, you are expected to express opinions, as well as the reasons and evidence for them.

## **Seminal work; inspirational work/event (25% combined)**

As we read and discuss important topics in information and library science this year, we will have the task of exploring each area's underlying theories, the methods used, and current work in the area. We'll increase our exposure to these research areas through your contributions. Each student will be expected to select, read, and report on (a) two seminal works and (b) one inspirational work or event, in the context of a class discussion.

### **One seminal work (20%)**

A seminal work is one that initiates a new area of research – it might propose a different way of understanding some phenomenon and/or be a ground-breaking empirical study. In all cases, it was work that later scholars built upon fruitfully. For the purposes of this assignment, any article that was published prior to 2000, that has been cited more than 50 times, and that you believe was important to the development of the field is eligible.

Read a seminal article of your choosing, preferably in the area in which you envision conducting your own research. Are there issues or questions from the literature we discussed that built on this work or were informed by it? In what way(s) is this article still important for current research?

Be prepared to give a brief, informal summary of the selected article and your thoughts and ideas about it (5 minutes, no slides necessary). You should report on the seminal work during the section of the course to which it is pertinent. **At least one week in advance**, email the article citation to the class via CANVAS before the class session in which you will present it, as well as posting the full text in the Files section, "Seminal Works" folder of our CANVAS site. **Due one week after your assigned class session: submit a short essay (2-3 pages single spaced, plus references) that discusses literature that has been influenced by your seminal work.**

### **Inspirational works/events (5%)**

An inspirational article or event may help you develop or understand a research question, make you think about something you thought you understood in a new way, serve as the basis for a line of research, model a particular research method, drive you to demonstrate that the author/speaker is wrong, or be an example of excellent research.

Select your inspirational work or event (it could be an article, a book chapter, a web site, a lecture, a video, or a conference presentation). As soon as possible after you've identified the inspirational work or event, you will share it with us in class. Please do so **at least one week in advance** of your assigned week.

Please notify me when you're ready to tell us about this work or event — why you find this work or event inspirational, and how it is helping you or will help you with your work. (Note that I am not asking you to summarize it.) Email the work's citation or a link to the event's website to us before the class session in which you will present it, as well as posting the full text (if applicable) to our CANVAS site, "Inspirational Works" folder.

## **Evaluation criteria**

This assignment will be evaluated in terms of the selection of the works/event (i.e., it was important for the field and relevant to the topic at hand), the clarity of your summation and analysis, and the originality of your ideas about it.

## **Developing your own research interests in relation to specific aspects of the field (50%)**

In each of the reviews just described, you are considering a particular aspect of the field of information and library science, and how your research interests are positioned in relation to that aspect of the field. In other words, you're taking the broad view and positioning your interests within it. In this assignment, you'll focus on your own research interests and try to specify them more clearly, still keeping in mind their position within the field. In other words, you'll take the specific view based on your own interests and discuss them in relation to what you've learned about the broader field. As you consider the various things that you've learned about these three areas in the first semester, your own interests will likely evolve.

For this assignment, write an analytical literature review focused very specifically on your own research interests. In addition, you will include a brief prospectus for a study that you'd like to conduct as a preliminary look at your research area. The introduction and literature review of the paper should provide a rationale for conducting the study; the prospectus should provide a brief explanation of how the study will be carried out.

## **Evaluation criteria**

The final paper should be approximately 8-10 pages, single-spaced, plus references; the prospectus portion should be approximately 1-2 pages.

The criteria used to evaluate your final product will be similar to the criteria routinely applied to research proposals. These include the significance of the question/problem to the field, the adequacy of the citations to previous work, the feasibility, validity and logic of your plans for a study, and the organization, clarity, and style of your presentation.

## **August 22 - Course Introduction**

Introductions; Course Overview; Being a doctoral student and beyond (joys and challenges); Topics you'd like to address this semester

## **August 29 - Defining Your Place in the Research Landscape**

An introduction to writing Literature Reviews (style, scope, format, etc.)

## Readings:

- Lunenburg, Fred C., and Irby, Beverly J. "Writing the Literature Review Chapter." In *Writing a Successful Thesis or Dissertation: Tips and Strategies for Students in the Social and Behavioral Sciences*, 137-164. Thousand Oaks, CA: Corwin Press, 2008. [on CANVAS]

## September 5 – Wellness Day – NO CLASS

## September 12 - Scope of Library and Information Science

### Readings (choose one to read solo and one we'll all read):

- Bates, Marcia. "The Invisible Substrate of Information Science." *Journal of the American Society for Information Science* 50, no. 12 (1999): 1043-50. [https://doi-org.libproxy.lib.unc.edu/10.1002/\(SICI\)10974571\(1999\)50:12<1043::AID-ASII>3.0.CO;2-X](https://doi-org.libproxy.lib.unc.edu/10.1002/(SICI)10974571(1999)50:12<1043::AID-ASII>3.0.CO;2-X) (ALL)
- Buckland, Michael. "What Kind of Science Can Information Science Be?" *Journal of the American Society for Information Science and Technology* 63, no. 1 (2012): 1-7. <https://doiorg.libproxy.lib.unc.edu/10.1002/asi.21656> (Raef)
- Gibson, Amelia., Hughes-Hassell, Sandra, and Threats, Megan Chapter 4: Critical Race Theory in the LIS Curriculum. In *Re-Envisioning the MLS: Perspectives on the Future of Library and Information Science Education* (Vol. 44B, pp. 49–70). Emerald Publishing Limited, 2018. [CANVAS] (Lyric)
- Saracevic, Tefko. "Information Science." *Journal of the American Society for Information Science* 50, no. 12 (1999): 1051-63. [https://doi-org.libproxy.lib.unc.edu/10.1002/\(SICI\)10974571\(1999\)50:12<1051::AID-ASI2>3.0.CO;2-Z](https://doi-org.libproxy.lib.unc.edu/10.1002/(SICI)10974571(1999)50:12<1051::AID-ASI2>3.0.CO;2-Z) (Brian)
- Tuomaala, Otto, Kalervo Järvelin, and Pertti Vakkari. "Evolution of Library and Information Science, 1965–2005: Content Analysis of Journal Articles." *Journal of the Association for Information Science and Technology* 65, no. 7 (2014): 1446-62. <https://doi-org.libproxy.lib.unc.edu/10.1002/asi.23034> (Focus on the results reported in Tables 2, 4, 5, 11 (or Appendix C), and 14, and the discussions of them. Skim the rest.) (Viviane)

## September 19 - Anatomy of a Research Question

### Readings:

- Alter, Steven, and Alan R. Dennis. "Selecting Research Topics: Personal Experiences and Speculations for the Future." *Communications of the Association for Information Systems* 8 (2002). <https://aisel.aisnet.org/cais/vol8/iss1/21/> and on CANVAS] Read the first sections, through the presentation of the framework; skim the two authors' personal stories as you wish; you can skip section V.
- Leek, Jeffery T., and Roger D. Peng. "What Is the Question?" *Science* 347, no. 6228 (2015): 1314-15. <http://science.sciencemag.org.libproxy.lib.unc.edu/content/347/6228/1314> This brief article demonstrates that not only information and library science struggles with formulating research questions. Consider it in relation to questions you might pursue in your research.

- Wildemuth, Barbara M. *Applications of Social Research Methods to Questions in Information and Library Science*. Westport, CT: Libraries Unlimited, 2017. [Z669.7 .W55 2017 and as eBook via UNC Catalog] *Read Chapter 2 (p.11-20) [available in CANVAS along with table of contents] and at least one of the other chapters in Part II of the book. Consider possible sources for research questions in your area of interest.*

## September 26 - Work-Life Balance, Health and Wellness

### Readings:

- Aguilar, Stephen. "We are not impostors." *Inside Higher Ed*. April 13, 2015. <https://www.insidehighered.com/advice/2015/04/13/essay-how-graduate-students-can-fight-impostorsyndrome>
- Levy, David M. "No Time to Think: Reflections on Information Technology and Contemplative Scholarship." *Ethics and Information Technology* 9, no. 4 (2007): 237-49. <https://doi.org.libproxy.lib.unc.edu/10.1007/s10676-007-9142-6>

## October 3 - Information Retrieval, Information Seeking and User Services

**In class:** Viviane gives seminal/inspirational work presentation

### Readings (choose one to read solo and one we'll all read):

- Agichtein, Eugene, Eric Brill, Susan Dumais, and Robert Ragno. "Learning user interaction models for predicting web search result preferences." In *Proceedings of the 29th annual international ACM SIGIR conference on Research and development in information retrieval (SIGIR '06)*, 3-10. New York: ACM, 2006. <https://doi.org/10.1145/1148170.1148175>.
- Armstrong, Timothy G., Alistair Moffat, William Webber, and Justin Zobel. "Improvements that don't add up: ad-hoc retrieval results since 1998." In *Proceedings of the 18th ACM conference on Information and knowledge management (CIKM '09)*, 601-610. New York: ACM, 2009. <https://doi.org/10.1145/1645953.1646031>
- Bates, Marcia J. "The Design of Browsing and Berrypicking Techniques for the Online Search Interface." *Online Review* 13, no. 5 (1989): 409-22. <https://pages.gseis.ucla.edu/faculty/bates/berrypicking.html> (recommended 2x) (Raef)
- Blair, David C., and M.E. Maron. "An evaluation of retrieval effectiveness for a full-text document retrieval system." *Communications of the ACM* 28, no. 3 (1985): 289-299. <https://doi.org/10.1145/3166.3197>
- Calvano, Margaret, and George Needham. "Public empowerment through accessible health information." *Bulletin of the Medical Library Association*, 84, no. 2 (1996): 253-56. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC299421/> (Lyric)
- Culpepper, J. Shane, Fernando Diaz, and Mark D. Smucker. "Research Frontiers in Information Retrieval: Report from the Third Strategic Workshop on Information Retrieval in Lorne (SWIRL 2018)." *SIGIR Forum* 52, 1 (2018): 34-90. <https://doi.org/10.1145/3274784.3274788>
- Knight, S. A., & Spink, A. "Toward a web search information behavior model." In *Web Search* (pp. 209-234). Berlin: Springer, 2008. [https://doi.org/10.1007/978-3-540-75829-7\\_12](https://doi.org/10.1007/978-3-540-75829-7_12)
- Kuhlthau, Carol Collier. "Inside the Search Process: Information Seeking from the User's Perspective." *Journal of the American Society for Information Science* 42, no. 5 (1991): 361-71. [https://doi.org/10.1002/\(SICI\)1097-4571\(199106\)42:5%3C361::AID-ASI6%3E3.0.CO;2-%23](https://doi.org/10.1002/(SICI)1097-4571(199106)42:5%3C361::AID-ASI6%3E3.0.CO;2-%23) (ALL)

- Li, Yuelin Li, and Nicholas J. Belkin. "A faceted approach to conceptualizing tasks in information seeking." *Information Processing and Management* 44, no. 6 (2008): 1822–1837. <https://doi.org/10.1016/j.ipm.2008.07.005>.
- Marchionini, Gary. "Exploratory Search: From Finding to Understanding." *Communications of the ACM* 49, no. 4 (2006): 41-46. <https://doi.org/10.1145/1121949.1121979> [Recommended 2x]
- Maron, M. E., and J. L. Kuhns. "On relevance, probabilistic indexing and information retrieval." *Journal of the ACM* 7, no. 3 (1960): 216-244. <https://doi.org/10.1145/321033.321035>
- Roter, Debra. "The enduring and evolving nature of the patient-physician relationship." *Patient Education & Counseling* 39, no.1 (2000), 5-15. [https://doi-org.libproxy.lib.unc.edu/10.1016/S0738-3991\(99\)00086-5](https://doi-org.libproxy.lib.unc.edu/10.1016/S0738-3991(99)00086-5)
- Sonnenwald, Diane H. "Evolving Perspectives of Human Information Behavior: Contexts, Situations, Social Networks and Information Horizons." In *Exploring the Context of Information Behaviour*, edited by T. Wilson and C. Allen, 176-90. London: Taylor Graham, 1999. [CANVAS] (Ebtehal)
- Taylor, Robert S. "Question-Negotiation and Information Seeking in Libraries." *College and Research Libraries* 29 (1968): 178-94. <https://crl.acrl.org/index.php/crl/article/download/12027/13473> (Brian)
- Twidale, M., Nichols, D., Paice, C. "Browsing is a Collaborative Process." *Information Processing and Management* 33, no. 6 (1997): 761-783. [https://doi.org/10.1016/S0306-4573\(97\)00040-X](https://doi.org/10.1016/S0306-4573(97)00040-X) (Viviane)

## October 10 - Organizations, Institutions and Social Interactions

### Readings (choose one to read solo and one we'll all read):

- Berlant, L. G. *Cruel optimism*. Durham: Duke University Press, 2011. <http://libproxy.lib.unc.edu/login?url=http://dx.doi.org/10.1215/9780822394716> [Read: p.1-5] (Lyric)
- Brennan, Teresa. *Transmission of affect*. Ithaca: Cornell University Press, 2004. <http://libproxy.lib.unc.edu/login?url=http://ebookcentral.proquest.com/lib/unc/detail.action?docID=3138638> [Read: Chapter 1]
- Brown, J. S., & Duguid, P. *The social life of information*. Boston, MA: Harvard Business School Press, 2017. <https://catalog.lib.unc.edu/catalog/UNCb4324207>. [Read: "Limits to Information" (chapter 1).]
- Dewey, Melvil. "Medical departments in public libraries-a symposium." *Medical Libraries* 5, no. 1 (1902): 2-3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1783522/>
- Ditzion, Sidney H. *Arsenals of a democratic culture: A social history of the American public library movement in New England and the middle states from 1850 to 1900*. Chicago, IL: ALA, 1947. [CANVAS] [Read: Chapters 1, 2, 12, browse table of contents]
- Garceau, Oliver. *The Public Library in the Political Process: A Report of the Public Library Inquiry of the Social Science Research Council*. New York: Columbia University Press, 1956. [CANVAS] [Read: Chapter 1, browse table of contents]
- Huotaria, Maija-Leena, and Elfreda Chatman. "Using everyday life information seeking to explain organizational behavior." *Library and Information Science Research* 23, no. 4 (2001), 351-366. <https://www.sciencedirect.com/science/article/abs/pii/S0740818801000937>. (Raef and Ebtehal)
- Kling, Rob. "What Is Social Informatics and Why Does It Matter?". *D-Lib Magazine* 5, no. 1 (January 1999). <http://www.dlib.org:80/dlib/january99/kling/01kling.html>.
- Kromhout, B. "Containers will not fix your broken culture (and other hard truths)." *ACM Queue* 15, no. 6 (2017): 61, 4, 40-43. <https://queue.acm.org/detail.cfm?id=3185224>. (ALL)

- Lamb, Roberta, and Rob Kling. "Reconceptualizing users as social actors in information systems research." *MIS quarterly* (2003): 197-236. <https://www.jstor.org/stable/30036529>
- Rheingold, Howard. *The Virtual Community*. Cambridge, MA: MIT, 2000 (originally 1993). <https://www.rheingold.com/vc/book/intro.html> [CANVAS] [Read: Introduction]
- Samek, Toni. *Librarianship and Human Rights: A Twenty-First Century Guide*. Oxford: Chandos, 2007. [CANVAS] [Read: Chapters 1 and 2]
- Shera, Jesse H. *Foundations of the public library: The origins of the public library movement in New England, 1629–1855*. Chicago, IL: University of Chicago Press, 1949. [CANVAS] [Read: Chapter 7 and Conclusion] (Brian)
- Orlikowski, Wanda J. "Using technology and constituting structures: A practice lens for studying technology in organizations." *Organization Science* 11, no. 4 (2000): 404-428. <https://www.jstor.org/stable/2640412>
- Toffler, Alvin. *The third wave*. New York: Morrow, 1980. [CANVAS] [Read: Chapter 1 – A Collision of Waves] (Viviane)

## October 17 - Encountering Information, Teaching and Learning

In class: Ebtehal gives seminal work presentation

Readings (choose one to read solo and one we'll all read):

- Brown, Ann L. Design experiments: Theoretical and methodological challenges in creating complex interventions in classroom settings. *Journal of the Learning Sciences* 2, no. 2 (1992): 141-178. [https://doi.org/10.1207/s15327809jls0202\\_2](https://doi.org/10.1207/s15327809jls0202_2)
- Cleveland, William S., and Robert McGill. "Graphical Perception: Theory, Experimentation, and Application to the Development of Graphical Methods." *Journal of the American Statistical Association* 79, no. 387 (1984): 531-554. <https://www.jstor.org/stable/2288400>
- Davis, Lois M., Robert Bozick, Jennifer L. Steele, Jessica Saunders, Jeremy N. V. Miles. "Evaluating the Effectiveness of Correctional Education: A Meta-Analysis of Programs That Provide Education to Incarcerated Adults." Santa Monica, CA: RAND Corporation, 2013. [https://www.rand.org/pubs/research\\_reports/RR266.html](https://www.rand.org/pubs/research_reports/RR266.html) [Read: Chapter 1 (Introduction) and Chapter 6 (Conclusions).]
- Freire, Paulo. *Pedagogy of the oppressed*. New York: Continuum, 1993. (First published in Portuguese in 1968, first English translation published in 1970.) [CANVAS] [Read: Chapter 2] (Lyric and Viviane)
- González, N., Moll, L. C., & Amanti, C. *Funds of knowledge: theorizing practice in households, communities, and classrooms*. Mahwah, NJ: L. Erlbaum Associates, 2005. <http://libproxy.lib.unc.edu/login?url=http://site.ebrary.com/lib/uncch/Doc?id=10103913> [Read: Chapter 1 (1-24)]
- hooks, b. *Teaching to Transgress: Education as the Practice of Freedom*. New York: Routledge, 1994. [CANVAS] [Read: Chapter 1]
- Lidwell, W., Holden, K., Butler, J., & Elam, K. *Universal principles of design: 125 ways to enhance usability, influence perception, increase appeal, make better design decisions, and teach through design*. Beverly, MA: Rockport Publishers, an imprint of the Quarto Group, 2010. <https://ebookcentral-proquestcom.libproxy.lib.unc.edu/lib/unc/detail.action?docID=3399678> [Browse through each of the section headings and tag lines]
- Nell, Victor. *Lost in a book: The psychology of reading for pleasure*. New Haven: Yale University Press, 1988. [CANVAS] [Read: Introduction] (Brian)



- Norman, D. A. *Living with complexity*. Cambridge, MA: MIT Press, 2011. <https://ebookcentral-proquestcom.libproxy.lib.unc.edu/lib/unc/detail.action?docID=3339197>. [Read: Living with Complexity (p. 1-32)]
- Papert, Seymour. *Mindstorms: Children, computers, and powerful ideas*. New York: Basic Books, 1980. [CANVAS] [Read: Introduction]
- Rosenblatt, Louise M. *The reader, the text, the poem: The transactional theory of the literary work*. Carbondale: Southern Illinois University Press, 1978. <http://libproxy.lib.unc.edu/login?url=http://www.netlibrary.com/urlapi.asp?action=summary&v=1&bookid=11607> [Read: Chapters 1 and 2] (Brian)
- Stallings, Fran. "The web of silence: storytelling's power to hypnotize." *National Storytelling Journal* 5, no. 2 (1988): 6-19. <http://healingstory.org/wp-content/uploads/2013/05/TheWebOfSilence.pdf> (Ebtehal)
- Wexelblat and P. Maes. "Footprints: History-rich tools for information foraging." In *Proceedings of CHI*, 270–277. ACM, 1999. <https://doi.org/10.1145/302979.303060> (Raef)

## October 24 - Research Methods and Theory Development

**In class:** Ebtehal gives inspirational work presentation

**Readings (choose one to read solo and one we'll all read):**

- Chatman, Elfreda A. "The Impoverished Life-World of Outsiders." *Journal of the American Society for Information Science* 47, no. 3 (1996): 193-206. [https://doi.org/10.1002/\(SICI\)1097-4571\(199603\)47:3%3C193::AID-ASI3%3E3.0.CO;2-T](https://doi.org/10.1002/(SICI)1097-4571(199603)47:3%3C193::AID-ASI3%3E3.0.CO;2-T). [Recommended 2x] (Lyric)
- Fisher, Karen E., Sanda Erdelez, and Lynne EF McKechnie, ed. *Theories of Information Behavior*. Information Today, 2005. [CANVAS] [Peruse table of contents, read chapter 1] (Raef)
- Glaser, Barney G., and Anselm L. Strauss. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago: Aldine Publishing Company, 1967. [CANVAS] [Read: Chapters 1 and 2] (Brian)
- Lincoln, Yvonna S., and Egon G. Guba. *Naturalistic Inquiry*. Newbury Park, CA: Sage, 1985. [CANVAS] [Read: Chapter 1 – Postpositivism and the naturalistic paradigm (14-46)]
- Popper, Karl. *Open Society and Its Enemies*. London: Routledge, 2002 (originally 1945). <http://libproxy.lib.unc.edu/login?url=http://ebookcentral.proquest.com/lib/unc/detail.action?docID=1098977> [Read: Introduction: <https://ebookcentral-proquestcom.libproxy.lib.unc.edu/lib/unc/reader.action?docID=1098977&ppg=36>] (Viviane)

## October 31 - Classification, Organization and Representation of Information

**In class:** Lyric gives inspirational work presentation

**Readings (choose one to read solo and one we'll all read):**

- Bates, Marcia. "Rigorous systematic bibliography." *RQ* 16 (1976): 7-26. [CANVAS]
- Bowker, Geoffrey C., and Susan Leigh Star. *Sorting Things Out: Classification and Its Consequences*. Cambridge, MA: MIT Press, 1999. <http://webcat.lib.unc.edu/record=b4005639>. [CANVAS] [Read: Introduction, Chapter 9, Chapter 10] [Recommended 3x]
- Buckland, Michael. "What is a 'document'?" *Journal for the American Society of Information Science* 48, no. 9 (1997): 804–809. [https://doi.org/10.1002/\(SICI\)1097-4571\(199709\)48:9%3C804::AIDASIS%3E3.0.CO;2-V](https://doi.org/10.1002/(SICI)1097-4571(199709)48:9%3C804::AIDASIS%3E3.0.CO;2-V) (Raef)

- Codd, E.F. "A Relational Model of Data for Large Shared Data Banks." *Communications of the ACM* 13, no. 6 (1970): 377-387. <https://doi.org/10.1145/362384.362685>
- Kent, William. *Data and Reality: A Timeless Perspective on Perceiving and Managing Information in Our Imprecise World, Third Edition (Updated by Steve Hoberman)*. Westfield, NJ: Technics Publications, 2012. [Originally published in 1978]. [CANVAS] [Read: Chapters 1 and 2]
- Larrick, Nancy. "The all-white world of children's books." *Saturday Review* (September 11, 1965): 63-65 and 84-86. <https://brichislitspot.files.wordpress.com/2017/08/384larrick.pdf> (Lyric)
- McLuhan, Marshall and Fiore, Quentin. *The Medium is the Massage*. Corte Madera, CA: Gingko Press, 1967. [SILS Library - P90 .M258 2001] (Brian)
- Maron, M.E. "Automatic indexing: an experimental inquiry." *Journal of the ACM* 8, no. 3 (1961): 404-17. <https://doi.org/10.1145/321075.321084> (Ebtehal)
- Shannon, Claude Elwood. "A Mathematical Theory of Communication." *Bell System Technical Journal* 27 (July and October 1948): 379-423, 623-56. <http://netlib.belllabs.com/cm/ms/what/shannonday/paper.html>. (Viviane)
- Weaver, Warren. "Recent contributions to the mathematical theory of communication." In *The Mathematical Theory of Communication*. Urbana, IL: University of Illinois Press, 1949. <https://pdfs.semanticscholar.org/c4ee/686f5dd14ac83c4b10a8bce9a62341ea0a3a.pdf>
- Wilson, Patrick. 1968. *Two kinds of power: an essay on bibliographic control*. Berkeley and Los Angeles: University of California Press. [CANVAS] Chapter 1: The bibliographic universe; Chapter 2: Describing and exploiting; Chapter 5, Subjects and the sense of position [Recommended 2x]

## November 7 – 1<sup>st</sup> half: Critical Studies in LIS; 2<sup>nd</sup> half: Professions, Field Dynamics, and Science and Technology Studies (STS)

In class: Lyric gives seminal work presentation; Raef gives inspirational presentation

Readings (choose one to read solo and one we'll all read):

- Bush, Vannevar. "As We May Think." *Atlantic Monthly* 176, no. 1 (1945): 101-08. <http://www.theatlantic.com/unbound/flashbks/computer/bushf.htm> [Recommended 4x] (Raef)
- Cooper, I.D., & Crum, J. A. "New activities and changing roles of health sciences librarians: a systematic review, 1990-2012." *Journal of the Medical Library Association* 101, no. 4 (2013): 268-277. <https://doi.org/10.3163/1536-5050.101.4.008>
- Engelbart, Douglas C. *Augmenting Human Intellect: A Conceptual Framework*. Stanford Research Institute. Menlo Park, CA: October 1962. <http://dougengelbart.org/content/view/138>
- Gleick, James. *The information: A history, a theory, a flood*. New York: Vintage Books. 2012. [CANVAS] [Read: Prologue, Chapter 8]
- Haraway, Donna. "Situated knowledges: the science question in feminism and the privilege of partial perspective." *Feminist Studies* 14, no. 3 (1988): 575-599. <https://www.jstor.org/stable/3178066> (Viviane)
- Hey, Tony, Stewart Tansley, and Kristin Tolle, eds. *The Fourth Paradigm: Data-Intensive Scientific Discovery*. Redmond, WA: Microsoft Research, 2009. <https://www.immagic.com/eLibrary/ARCHIVES/EBOOKS/M091000H.pdf> [Read: "Jim Gray on Esience: A Transformed Scientific Method"; browse the rest of book]
- Licklider, J.C.R. *Libraries of the Future*. (MIT Press, 1965) <http://worrydream.com/refs/Licklider%20-%20Libraries%20of%20the%20Future.pdf> [Read: Introduction and browse the rest] (Lyric)
- Pollack, M. E. (2010). TIMELINES: Reflections on the Future of iSchools from a Dean Inspired by Some Junior Faculty. *Interactions*, 17(1), 66-68. <https://doi.org/10.1145/1649475.1649492> (Ebtehal)

- Star, Susan Leigh, and James Griesemer. "Institutional Ecology, 'Translations,' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-1939." *Social Studies of Science* 19, no. 3 (1989): 387-420. <https://www.jstor.org/stable/285080>
- Zuboff, Shoshana. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. New York: PublicAffairs, 2019. [CANVAS] [Read: Introduction (3-24)]

## November 14 - Design to Support Interaction, HCI and CSCW

**In class:** Raef gives seminal work presentation

**Readings (choose one to read solo and one we'll all read):**

- Dourish, Paul. "What We Talk About When We Talk About Context." *Personal and Ubiquitous Computing* 8, no. 1 (2004): 19-30. <https://doi.org/10.1007/s00779-003-0253-8> (Lyric)
- Mayhew, Deborah H. *The Usability Engineering Lifecycle: A Practitioner's Handbook for User Interface Design*. San Francisco, CA: Morgan Kaufmann, 1999. [CANVAS] [Read: Chapter 1]
- Nielsen, J., & Molich, R. Heuristic evaluation of user interfaces. SIGCHI Conference Proceedings on Human Factors in Computing Systems (pp. 249-256). Seattle: Association for Computing Machinery, 1990. <https://doi.org/10.1145/97243.97281> (Raef)
- Preece, J., Sharp, H., & Rogers, Y. *Interaction design: Beyond human-computer interaction*. Chichester: John Wiley, 2015. [CANVAS] [Read: Chapter 1] (Viviane)
- Pye, David. *The nature and art of workmanship*. Cambridge, UK: Cambridge University Press, 1968. [CANVAS] [Read: Chapters 1-4] (Brian)
- Shneiderman, Ben. 1996. The Eyes Have It: A Task by Data Type Taxonomy for Information Visualizations. In *Proceedings of the 1996 IEEE Symposium on Visual Languages (VL '96)*. IEEE Computer Society, Washington, DC, 336-358. <https://www.cs.umd.edu/~ben/papers/Shneiderman1996eyes.pdf> (Ebtehal)
- Star, Susan Leigh, and Karen Ruhleder. "Steps toward an ecology of infrastructure: Design and access for large information spaces." *Information Systems Research* 7, no. 1 (1996): 111-134. <https://doi.org.libproxy.lib.unc.edu/10.1287/isre.7.1.111>
- Suchman, Lucy A. *Plans and Situated Actions: The Problem of Human-Machine Communication*. Palo Alto, CA: Xerox Corporation, 1985. [http://bitsavers.trailing-edge.com/pdf/xerox/parc/techReports/ISL6\\_Plan\\_and\\_Situated\\_Actions.pdf](http://bitsavers.trailing-edge.com/pdf/xerox/parc/techReports/ISL6_Plan_and_Situated_Actions.pdf) [Read: p.1-46]. Note: published later as: Suchman, Lucille Alice. *Plans and Situated Actions: The Problem of Human-Machine Communication*. Cambridge: Cambridge University Press, 1987 [also on CANVAS]

**First full draft of final paper due on November 14 at 11pm**

## November 21 - Keeping Information over Time: Curation, Law, Policy and Ethics

**Readings (choose one to read solo and one we'll all read):**

- Baru, Chaitanya, Reagan Moore, Arcot Rajasekar, and Michael Wan. 1998. The SDSC storage resource broker. In *Proceedings of the 1998 conference of the Centre for Advanced Studies on Collaborative research (CASCON '98)*, Stephen A. MacKay and J. Howard Johnson (Eds.). IBM Press. <https://dl.acm.org/citation.cfm?id=783165>

- Hedstrom, Margaret. "Digital Preservation: A Time Bomb for Digital Libraries." *Computers and the Humanities* 31, no. 3 (1998): 189-202. <https://www.jstor.org/stable/30200423> (Ebtehal)
- Human Rights Council. "The promotion, protection and enjoyment of human rights on the Internet. United Nations, 2016. [https://digitallibrary.un.org/record/845728/files/A\\_HRC\\_32\\_L-20-EN.pdf](https://digitallibrary.un.org/record/845728/files/A_HRC_32_L-20-EN.pdf)
- La Rue, Frank. "Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression." United Nations, 2011. [http://www2.ohchr.org/english/bodies/hrcouncil/docs/17session/A.HRC.17.27\\_en.pdf](http://www2.ohchr.org/english/bodies/hrcouncil/docs/17session/A.HRC.17.27_en.pdf) (Brian)
- Lessig, Lawrence. *Code: Version 2.0*. New York, NY: Basic Books, 2006. <http://codev2.cc/> [First version published in 1999; Read: Code is Law (1-9), Regulating Code (61-80)]
- O'Toole, James. "On the Idea of Permanence." *American Archivist* 52, no. 1 (Winter 1989): 10-25. <http://www.jstor.org/stable/40293309>. (Viviane)
- Rothenberg, Jeff. "Ensuring the Longevity of Digital Documents." *Scientific American* 272, no. 1 (January 1995): 42-47. <https://www.jstor.org/stable/24980135> (Raef)
- Shapiro, Carl, and Hal Varian. "Recognizing Lock-In." In *Information Rules*, 103-134. Boston, MA: Harvard Business School Press, 1999. <http://libproxy.lib.unc.edu/login?url=http://www.netLibrary.com/urlapi.asp?action=summary&v=1&bookid=35060>
- Task Force on Archiving of Digital Information. *Preserving Digital Information: Report of the Task Force on Archiving of Digital Information*. Commission on Preservation and Access and Research Libraries Group (Washington, DC: May 1 1996). <https://www.clir.org/pubs/reports/pub63/> [Read: Pages 1-20, skim the rest] [Recommended 2x] (Lyric)

## November 28 - Artificial Intelligence, Natural Language Processing, Data Mining and Analytics, Synthesis and Conclusions

### Readings (choose one to read solo and one we'll all read)

- Biber, Douglas. "A typology of English texts." *Linguistics* 27 (1989): 3-43. <https://www.degruyter.com/view/j/ling.1989.27.issue-1/ling.1989.27.1.3/ling.1989.27.1.3.xml> (Biber)
- Dean, Jeffrey, and Sanjay Ghemawat (2004), "MapReduce: Simplified Data Processing on LargeClusters," OSDI 2004, <http://static.googleusercontent.com/media/research.google.com/es/us/archive/mapreduce-osdi04.pdf>
- Halevy, Alon, Peter Norvig, Fernando Pereira. "The Unreasonable Effectiveness of Data." *IEEE Intelligent Systems* 24, no. 2 (2009): 8-12. <https://doi.org/10.1109/MIS.2009.36> (Raef)
- Harkema Henk, John N. Dowling, Tyler Thornblade, and Wendy W. Chapman. "ConText: an algorithm for determining negation, experienter, and temporal status from clinical reports." *Journal of Biomedical Informatics* 42, no. 5 (2009): 839-51. <https://doi.org/10.1016/j.jbi.2009.05.002> (Viviane)
- Keim, Daniel, Andrienko G., Fekete JD., Görg C., Kohlhammer J., Melançon G. (2008) Visual Analytics: Definition, Process, and Challenges. In: Kerren A., Stasko J.T., Fekete JD., North C. (eds) *Information Visualization*. Lecture Notes in Computer Science, vol 4950. Berlin: Springer, 2008. [https://doi.org/10.1007/978-3-540-70956-5\\_7](https://doi.org/10.1007/978-3-540-70956-5_7) (Brian)
- Stolte, Chris & Tang, Diane & Hanrahan, P. "Polaris: A system for query, analysis, and visualization of multidimensional relational databases." *IEEE Transactions on Visualization and Computer Graphics* 8, no. 1 (2002): 52-65. <https://doi.org/10.1109/2945.981851>.
- Turing, Alan M. "Computing Machinery and Intelligence." *Mind* 59, no. 236 (1950): 433-60. <https://doi.org/10.1093/mind/LIX.236.433> (Ebtehal)

- Wiener, Norbert. *Cybernetics: Or Control and Communication in the Animal and the Machine*. New York: MIT Press, 1948 (see also 1961 edition on SILS Reserve).  
<https://catalog.hathitrust.org/Record/000468497> [Read: 49-56, 113-116, 181-194]

## **December 5 – Parting Thoughts and Wrapping Up**

***Final version of semester paper due: December 7<sup>th</sup> at 11pm***

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