

INST801: Theoretical and Epistemological Foundations in Information Studies

- **Course instructor:** Joel Chan | HBK South 2118E | joelchan@umd.edu
- **Class Meets:** Mondays, 6:00 - 8:45pm, HBK South 2119
- **Office Hours:** Tuesdays, 2-3:30pm and by appointment (please email to schedule): In-person or Zoom available

Course Description

Pursuing a doctorate in information studies involves the scholarly examination of the interaction between people, information, technology, and society. There are, however, as many ways to examine the interaction of people, information, technology and society as there are researchers, and many ways of understanding what counts as evidence and knowledge about information in society.

This doctoral seminar will introduce you to the diverse scholarly traditions that comprise information studies, and will introduce you to how scholarly evidence and knowledge differ between them. It will examine why there are so many ways of knowing and methods of discovery within our field, and help you identify the social theory and methods that will support your path through information scholarship.

This course is designed to help you find your home among important ideas drawn from various disciplines, which include psychology, library and information science, economics, archives, computer science, sociology, public policy, management, organization studies, history, and anthropology.

The course has three goals:

1. to introduce you to representative theories of interest in information studies; and
2. to help you map diverse ways that information studies scholars understand what counts as data, knowledge, and evidence, and why;
3. to help you practice reflective consideration of theory and epistemology when investigating topics of interest in information studies.

Course Objectives

The overall course objectives are for you to:

- Improve your ability to read, remember, and analyze large bodies of diverse content.
- Synthesize concepts, ideas, and literatures foundational to the study of information.
- Understand the diversity of theoretical and methodological frameworks in information studies and learn to appreciate contributions from scholars and researchers outside your area of interest.

- Understand foundational controversies in scientific knowledge creation, including what counts as evidence and who gets to decide.
- Apply best practices in scholarly communication, including clear and succinct synthesis of prior literature, critical commentary, and compelling presentation of your own ideas.
- Create your own epistemological stance by recognizing what counts as data, evidence, and knowledge in your own work.

Because we will cover a large number of ideas, the course is a reading-intensive discussion seminar. As the course progresses, you will be expected to compare, contrast and/or synthesize ideas from your prior experience, other courses you have taken, and material discussed earlier in the course. Additionally, we will work to develop creative, constructive, and critical engagement: the ability to identify and imagine how theories and concepts from one area may apply to others.

Resources

Required

- **Course Website on ELMS:** for tracking assignments, submissions and grades, and for asynchronous discussion.
- **Miro:** we will be making extensive use of digital whiteboards on Miro: I ask that you create a free account to facilitate coordination and tracking of contributions to the digital whiteboards. It will also be helpful for you to bring a laptop or tablet to participate in class.
- **Readings:** The main set of readings are provided as PDFs on ELMS where available (and if not, can be obtained via inter-library loan), with one exception: in [[Week 11]], you are expected to have completed a reading of the following book as an exemplar of a Constructivist approach to knowing:
 - Schüll, N. D. (2012). *Addiction by Design: Machine Gambling in Las Vegas*. In *Addiction by Design*. Princeton University Press.
<https://doi.org/10.1515/9781400834655>
 - This book has been out for some time now, and has made a significant impact, so it is easy to obtain used copies / e-books for under \$20 from various sources.
 - I recommend that you purchase a copy ASAP so that you can spread out your reading of this book over multiple weeks leading up to Week 11. It is... theoretically possible to read it in a week, but not in a way that will really meet the learning goals.

May be helpful

As background on various epistemological and methodological approaches, you may find the following texts useful:

- Jaccard, J., & Jacoby, J. (2020). *Theory Construction and Model-Building Skills: A Practical Guide for Social Scientists* (2nd Ed.). New York: The Guilford Press.
- Crotty, M. J. (1998). *The Foundations of Social Research*. London ; Thousand Oaks, Calif: SAGE Publications Ltd.
- Small, M. L., & Calarco, J. M. (2022). *Qualitative Literacy: A Guide to Evaluating Ethnographic and Interview Research*. Univ of California Press.
- Olson, J. S., & Kellogg, W. A. (Eds.). (2014). *Ways of Knowing in HCI*. Springer-Verlag. <https://doi.org/10.1007/978-1-4939-0378-8>

This resource may also be helpful as you learn/practice the skill of reading a scholarly book (esp. with limited time!):

- How to Read a Book r6 <https://pne.people.si.umich.edu/PDF/howtoread.pdf>

Course Structure

This is a reading- and writing-intensive seminar, powered by robust in-class discussion and hands-on activities.

Given the goals of the course, you will be actively engaging with a wide range of epistemologies, theories, and methods that sample from as close to the full range of the theoretical and epistemological “menu” in information studies, writ large (with a particular bent to the mix of flavors in the iSchool). This means that everyone will be uncomfortable at some point: humanists and social scientists will need to grapple with a computational model or experiment as best they can (with support from the community!), and quantitative-oriented or engineering-oriented folks will need to grapple with complex conceptual theories and ethnographic data. We’ll need each other!

So I want to call out two specific norms I expect you to adhere to in our discussions:

1. **Embrace the value of not knowing:** As we discuss more below, honest uncertainty and “ignorance” are important drivers of our learning together. Indeed, leaning into this is also central to doing great research, particularly in an interdisciplinary field. We will endeavor to create a safe space to practice **not knowing** together. We do not need to prove ourselves here or show that we are the smartest. We will ask questions when we are uncertain or don’t know, and reap the rewards together.
2. **Embrace epistemological diversity; begin with good faith:** We will try to engage with the best versions of others’ arguments/evidence (whether discussing or criticizing/evaluating/comparing). We will seek to understand before we critique. This is important especially when engaging with theoretical perspectives and epistemologies that are unfamiliar to us (or may even have been disparaged in your circles). Remember that these are often associated with and valued by one of your colleagues!

These norms are crucial for the learning goals of this course, but are also what (in my view) make the iSchool a special place to do interdisciplinary research.

Major Assignments

Your final grade will be calculated based on the weighting of the following course requirements:

1. Active participation 20%
2. Theory “Trading Cards”: 20%
3. Theory and Epistemology Examples and Sightings: 30%
4. Epistemological and Theoretical Approach Essay 30%

Active participation in class sessions (20% of grade)

I expect you to participate actively in class discussions and activities. In addition to the core work of analyzing and interrogating how each reading is making arguments and bringing evidence / theory to bear on their arguments, effective participation can look like:

- Rephrasing (“I’d like to make sure I understand... What I’m hearing X say is...”) or connecting to your own knowledge base (“Ah! This makes me think of Y in my field; we call it Z; is that similar?”)
- Finding and sharing concrete references from the reading to engage in discussion (“Oh, it’s on Page XX”)
- Asking clarifying or open-ended questions

Your goal is **not** to arrive each week feeling like you’ve completely mastered all aspects of all the readings. Indeed, in this class (and, really, any grad seminar!), often the best conversations will come from befuddlement (“I really can’t make out why they would do X” / “I’m sorry, when I look at Y, I get nothing; can someone help me understand?” / “Hold on; I’m not familiar with term X; can you explain before we move on?”); here, they will often reveal fruitful interdisciplinary seams for us to discuss and explore together.

In general, if you show up and participate in a way that evidences your active engagement with the readings, and/or produce any artifacts you are asked to generate/bring to class for discussion, you will receive credit for the day. However, one concrete thing that will be due most weeks when there are readings will be a **reading response Discussion Thread on ELMS**; posting and replying at least once by the Sunday before will be a minimum expectation for active participation for that week. This is not the case for the first week of class, for obvious reasons!

Theory “Trading Cards” (due Week 8, 10/16/23: 20% of grade)

On **one week** of your choosing in the Theory Module, you will collaborate with a partner to summarize class discussions of theories (including relevant theory sightings) into a set of theory “trading cards” (one for each major theory discussed) that describe 1) the core intuitions/claims of the theory, 2) info-relevant example uses and applications of the theory, and 3) connections/comparisons to other theories.

You will receive feedback on the accuracy of your descriptions in written feedback from me, including (as appropriate) requested revisions. Upon satisfactory revision, I will then add

this to the course repository of theory cards on ELMS. We will draw on this repository in downstream in-class activities where we practice choosing and comparing ways of seeing applied to information studies objects/phenomena of interest.

Theory and Epistemology Examples and Sightings (due when scheduled; 30% of grade)

On **two** weeks of your choosing (15% each), enrich our discussion for that week by scavenging for 1 example/sighting of the key theories / epistemologies up for discussion that week from scholarly/research contributions (e.g., books, paper, talks).

One particularly fruitful source of “sightings” may be research talks hosted by the iSchool, elsewhere on campus, or within your broader scholarly community (e.g. virtual conference talks, symposia, etc). Sources of talks include:

- Center talks series, such as HCIL, CAFE, OTTRs, SODA, and CLIP, and others
- Job candidate talks
- Dissertation defenses
- Conference practice talks
- Dean’s lecture series
- Conferences and symposia
- Talks elsewhere on campus or at conferences are also permitted!

You should be prepared to describe *how* a given contribution is an exemplar of a given theory or epistemological approach. You will receive feedback on the appropriateness and accuracy of your sightings from both discussion in class as well as in written feedback from me. If your sighting is not an appropriate/accurate example of the theory/epistemology, I will ask for a revision of your description or contribution.

Upon satisfactory revision, theory sightings will be integrated into their respective theory cards. Epistemological sightings will be added to a page on our ELMS site.

This contribution and formative feedback from me will be additional practice for you to check your understanding of the epistemologies/theories/methods at play in the week’s readings.

You are welcome to seek formative feedback on your draft contribution beforehand. If you wish to do this, please submit a draft of your contribution to me for review via email no later than the Wednesday before the week you have signed up for.

Epistemological and Theoretical Approach Essay (Due 10/30/23 and 12/15/23; 30% of grade)

Choose a phenomenon/object/question of interest which you might (someday / soon) research. Explain your epistemological/methodological and theoretical orientation to this phenomenon/object/question in a short essay (suggested range: 2,500-4,000 words).

Contents

Your essay should address these sets of questions:

1. How would you describe your epistemology and theoretical perspectives that you tend to and/or resonate with when considering how you (will) approach researching your phenomenon of interest. Accurate references to specific terminology from our readings (with appropriate citations) is required.
2. Explain why you think your framework might support your research goals. For example, what might a particular theoretical perspective (as opposed to another) allow you to see/notice in your setting, or predict is important to measure (with particular methodological consequences for design/analysis of your study)? Or how does your choice of potential methodologies follow from the epistemological approaches you do or do not resonate with or adopt?

The granularity/specificity of your phenomenon/object/question should be narrower than a “research area” (e.g., museum studies), but it’s ok if it’s broader than a really specific research question. Examples of appropriate granularity include: “how to improve accessibility of archives”, or “why do organizations fail to construct useful knowledge bases” or “how do rural LGBTQ youth navigate and construct their identity online”.

It is ok (and encouraged even!) to describe theoretical perspectives that go beyond what we discuss in class (e.g., drawing from your prior experiences, or other coursework). Requirements for specificity of discussion and citation also apply if you do this. But I expect you to engage with at least one of the theoretical perspectives (even if it is to reject it!) we discussed this semester!

Structure and formatting

In terms of structure, more than likely, it will make more narrative sense to interleave these elements, rather than break them out by section.

Here is a suggested outline: - Start with a description of your phenomenon/object/question of interest. - Then talk about approaches you are considering and how/why it is informed by what epistemology/theory/methodology. Ideally, you would also talk about some epi/theory/method you considered and are not choosing to apply/resonate, and why. This is not required, but would be an especially powerful way to reflect on how you are approaching your topic.

In terms of level of detail and formatting, the following remarks hold: - You need more than just the “proper names” of epi/theory/methodologies: I want to see at least a few sentences explaining *how* they connect to your interests and *why* you are choosing them. - It’s 100% ok to reference perspectives/theories, latent or explicit, that we haven’t covered in class! - Use scholarly citation forms appropriate to your main / target research tradition.

Deliverables

To enable constructive connection with the course materials, the **first rough outline** of your thinking on the material is due in Week 10 (after the completion of the Theory Module), where I will give formative feedback on your exploration of different ways of seeing as applied to your phenomenon/object of interest (10% of grade). Grading is for-credit (i.e., grade is pass/fail based on whether you submitted something).

Grading of the **final draft** will emphasize the degree to which you have explored each of the two main sets of questions (20%).

Grading

All assessment scores will be posted on the course ELMS page. If you would like to review any of your grades, or have questions about how something was scored, please email me to schedule a time for us to meet and discuss. Final letter grades are assigned based on the percentage of total assessment points earned. I have to establish clear standards and apply them consistently, so please understand that being close to a cutoff is not the same as making the cut (89.99 \neq 90.00). It would be unethical to make exceptions for some and not others. The weighted average of your grades on all of the assignments will be converted to a letter grade according to the following table:

Weighted Average	Letter Grade
97.0 and above	A+
94.0-96.9	A
90.0-93.9	A-
87.0-89.9	B+
84.0-86.9	B
80.0-83.9	B-
77.0-79.9	C+
74.0-76.9	C
70.0-73.9	C-
67.0-69.9	D+
64.0-66.9	D
60.0-63.9	D-
Below 60.0	F

Course Policies

Health and safety and in-person attendance

Synchronous discussions are a powerful learning resource that can be even better when in-person. We will work hard to preserve our ability to tap into this resource, but also recognize the reality that COVID is still around. So I anticipate some disruptions to the ability to join in-person discussions, due to symptom monitoring, precautionary self-isolation/quarantine, and (hopefully not!) infections. We also recognize that risk tolerances vary for many reasons: for example, some of us (and our loved ones) may be unvaccinated or immunocompromised. I will work with you to figure out reasonable accommodations related to pandemic disruptions.

Note that because the course is a reading and discussion-intensive seminar, appropriate engagement in the course will involve not just passive “watching/listening”, but also active engagement, including asking questions, responding to peers, and working in groups with peers. Thus, if you need to participate in class activities remotely, I expect this to involve active engagement in asynchronous discussions on ELMS, but also making use of Zoom features for “raising hands”, unmuting, video, and engaging in the Zoom chat to actively engage in both in-class and small group activities. Simply “tuning in” without engaging in these ways will not be acceptable participation.

Names/Pronouns and Self-Identifications.

The University of Maryland recognizes the importance of a diverse student body, and we are committed to fostering inclusive and equitable classroom environments. I invite you to tell us how you want to be referred to both in terms of your name and your pronouns (he/him, she/her, they/them, etc.). The pronouns someone indicates are not necessarily indicative of their gender identity. Visit trans.umd.edu to learn more.

Additionally, how you identify in terms of your gender, race, class, sexuality, religion, and dis/ability, among all aspects of your identity, is your choice whether to disclose (e.g., should it come up in classroom conversation about our experiences and perspectives) and should be self-identified, not presumed or imposed. I will do my best to address and refer to all students accordingly, and I ask you to do the same for all of your fellow Terps.

Communication with Instructor.

Email: If you need to reach out and communicate with me, please email me at joelchan@umd.edu. Please DO NOT email me with questions that are easily found in the syllabus or on ELMS (i.e. When is this assignment due? How much is it worth? etc.) but please DO reach out as frequently as you like about personal, academic, and intellectual concerns/questions. I will do my best to respond to emails within 24 hours, although any emails sent over the weekend will be answered on Monday.

ELMS

I will send IMPORTANT announcements via ELMS messaging. You must make sure that your email & announcement notifications (including changes in assignments and/or due dates) are enabled in ELMS so you do not miss any messages. You are responsible for checking your email and Canvas/ELMS inbox with regular frequency.

Communication with Peers

With a diversity of perspectives and experience, we may find ourselves in disagreement and/or debate with one another. As such, it is important that we agree to conduct ourselves in a professional manner and that we work together to foster and preserve a virtual classroom environment in which we can respectfully discuss and deliberate controversial questions. I encourage you to confidently exercise your right to free speech—bearing in mind, of course, that you will be expected to craft and defend arguments that support your position. Keep in mind, that free speech has its limit and this course is NOT the space for

hate speech, harassment, and derogatory language. I will make every reasonable attempt to create an atmosphere in which each student feels comfortable voicing their argument without fear of being personally attacked, mocked, demeaned, or devalued. Any behavior (including harassment, sexual harassment, and racially and/or culturally derogatory language) that threatens this atmosphere will not be tolerated. Please alert me immediately if you feel threatened, dismissed, or silenced at any point during our semester together and/or if your engagement in discussion has been in some way hindered by the learning environment.

Citations

For citations, you may use the style guide most appropriate to your area of scholarship, but you must be consistent.

Submitting Assignments

Each assignment must be submitted before the beginning of class on the indicated due date through our Canvas site ("INST801"). Please include your last name in the file name.

Late Work

My general policy is that, unless you request an extension from me at least 24 hours in advance of the due date, late work will automatically be graded down by 10% for each day that it is late. However, we are living through a prolonged pandemic. If you are having trouble submitting assignments on time, please reach out to me: let's talk about alternatives that will work for you.

Syllabus Change Policy.

This syllabus is a guide for the course and is subject to change with advance notice.

Resources and Accommodations

Student Resources and Services

Taking personal responsibility for your own learning means acknowledging when your performance does not match your goals and doing something about it. I hope you will come talk to me so that I can help you find the right approach to success in this course, and I encourage you to visit [UMD's Student Academic Support Services website](#) to learn more about the wide range of campus resources available to you.

In particular, everyone can use some help sharpening their communication skills (and improving their grade) by visiting [UMD's Writing Center](#) and schedule an appointment with the campus Writing Center.

You should also know there are a wide range of resources to support you with whatever you might need ([UMD's Student Resources and Services website](#) may help). If you feel it

would be helpful to have someone to talk to, visit [UMD's Counseling Center](#) or [one of the many other mental health resources on campus](#).

Basic Needs Security. If you have difficulty affording groceries or accessing sufficient food to eat every day, or lack a safe and stable place to live, please visit [UMD's Division of Student Affairs website](#) for information about resources the campus offers you and let me know if I can help in any way.

Accessibility and Disability Services.

The University of Maryland is committed to creating and maintaining a welcoming and inclusive educational, working, and living environment for people of all abilities. The University of Maryland is also committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of the University, or be subjected to discrimination. The [Accessibility & Disability Service \(ADS\)](#) provides reasonable accommodations to qualified individuals to provide equal access to services, programs and activities. ADS cannot assist retroactively, so it is generally best to request accommodations several weeks before the semester begins or as soon as a disability becomes known. Any student who needs accommodations should contact me as soon as possible so that I have sufficient time to make arrangements. For assistance in obtaining an accommodation, contact Accessibility and Disability Service at 301-314-7682, or email them at adsfrontdesk@umd.edu. Information about [sharing your accommodations with instructors](#), [note taking assistance](#) and more is available from the [Counseling Center](#).

Schedule

Introductions

Week 1: 8/28/23: Introductions, Invitation to Theory

Readings:

- This syllabus!
- Gregor, S. (2006). The Nature of Theory in Information Systems. *MIS Quarterly*, 30(3), 611–642. <https://doi.org/10.2307/25148742>

Notes / Additional resources

- Other readings on theory
 - Van Turnhout, K., Jacobs, M., Losse, M., Geest, T., & Bakker, R. (2019). *A Practical Take on Theory in HCI (A White Paper)*.
 - Oulasvirta, A., & Hornbæk, K. (2022). Counterfactual Thinking: What Theories *Do* in Design. *International Journal of Human–Computer Interaction*, 38(1), 78–92. <https://doi.org/10.1080/10447318.2021.1925436>

- Reddy, M. J. (1979). The conduit metaphor: A case of frame conflict in our language about language. In A. Ortony (Ed.), *Metaphor and Thought* (pp. 284–310). Cambridge University Press.
- Abend, G. (2008). The Meaning of “Theory.” *Sociological Theory*, 26(2), 173–199.
- Berlant, L., & Warner, M. (1995). Guest Column: What Does Queer Theory Teach Us about X? *PMLA*, 110(3), 343–349.
- Examples of IS/HCI-relevant theories
 - Hjørland, B. (1998). Theory and metatheory of information science: A new interpretation. *Journal of Documentation*, 54(5), 606–621.
<https://doi.org/10.1108/EUM0000000007183>
 - Ch. 12: Historically Influential Systems of Thought, in Jaccard, J., & Jacoby, J. (2020). *Theory Construction and Model-Building Skills, Second Edition: A Practical Guide for Social Scientists* (Second edition). The Guilford Press.
 - Fisher, K. E., Erdelez, S., McKechnie, L., & Technology, A. S. for I. S. and. (2005). *Theories of Information Behavior*. Information Today, Inc.
 - see Table of Contents for list of theories
 - Pettigrew, K. E., & McKechnie, L. (E. F.). (2001). The use of theory in information science research. *Journal of the American Society for Information Science and Technology*, 52(1), 62–73.
[https://doi.org/10.1002/1532-2890\(2000\)52:1<62::AID-ASI1061>3.0.CO;2-J](https://doi.org/10.1002/1532-2890(2000)52:1<62::AID-ASI1061>3.0.CO;2-J)
 - see esp. Appendices for lists of theories
 - https://is.theorizeit.org/wiki/Main_Page
 - <https://guides.lib.byu.edu/c.php?g=216417&p=1686139>

Week 2: 9/4/23: labor day, no class

Module I: Theory: Ways of Seeing

Week 3: 9/11/23: Information Behavior

Ways of Seeing

- Information Foraging Theory
- Chatman Information Poverty
- Information Marginalization

Readings

- Pirolli, P., & Card, S. (1999). Information foraging. *Psychological Review*, 106(4), 643–675. <https://doi.org/10.1037/0033-295x.106.4.643>
- Gibson, A. N., & Martin, J. D. (2019). Re-situating information poverty: Information marginalization and parents of individuals with disabilities. *Journal of the Association for Information Science and Technology*, 70(5), 476–487.
<https://doi.org/10.1002/asi.24128>

Notes / Additional resources

- Zhang, P., & Dagobert, S. (2014). Towards a comprehensive model of the cognitive process and mechanisms of individual sensemaking. *Journal of the Association for Information Science and Technology*, 65(9), 1733–1756. <https://doi.org/10.1002/asi.23125>
- Hjørland, B. (2002). Epistemology and the socio-cognitive perspective in information science. *Journal of the American Society for Information Science and Technology*, 53(4), 257–270. <https://doi.org/10.1002/asi.10042>
- Lee, M., & Butler, B. S. (2019). How are information deserts created? A theory of local information landscapes. *Journal of the Association for Information Science and Technology*, 70(2), 101–116. <https://doi.org/10.1002/asi.24114>

Week 4: 9/18/23: Information Interfaces

Ways of Seeing

- Mental Models
- Distributed Cognition
- Feminist Theory

Readings

- Zhicheng Liu, & Stasko, J. T. (2010). Mental Models, Visual Reasoning and Interaction in Information Visualization: A Top-down Perspective. *IEEE Transactions on Visualization and Computer Graphics*, 16(6), 999–1008. <https://doi.org/10.1109/TVCG.2010.177>
- D'Ignazio, C., & Klein, L. F. (2016). Feminist Data Visualization. *Workshop on Vis. for the Digital Humanities (VIS4DH)*, IEEE, 5.

Notes / Additional resources

- Baumer, E. P. S., Jasim, M., Sarvghad, A., & Mahyar, N. (2022). Of Course it's Political! A Critical Inquiry into Underemphasized Dimensions in Civic Text Visualization. *Computer Graphics Forum*, 41(3), 1–14. <https://doi.org/10.1111/cgf.14518>
- Franconeri, S. L., Padilla, L. M., Shah, P., Zacks, J. M., & Hullman, J. (2021). The Science of Visual Data Communication: What Works. *Psychological Science in the Public Interest*, 22(3), 110–161. <https://doi.org/10.1177/15291006211051956>
- Dörk, M., Feng, P., Collins, C., & Carpendale, S. (2013). Critical InfoVis: Exploring the politics of visualization. *CHI '13 Extended Abstracts on Human Factors in Computing Systems*, 2189–2198. <https://doi.org/10.1145/2468356.2468739>
- Haraway, D. J. (1991). *Simians, cyborgs, and women: The reinvention of nature*. New York : Routledge. <http://archive.org/details/simianscyborgswo000hara>
- Hutchins, E. L., Hollan, J. D., & Norman, D. A. (1985). Direct Manipulation Interfaces. *Human-Computer Interaction*, 1(4), 311–338. https://doi.org/10.1207/s15327051hci0104_2

Week 5: 9/25/23: Information (in) Organization(s)

Ways of Seeing

- Boundary Objects
- Communities of Practice
- ~~Organizational Memory~~

Readings

- Huvila, I., Anderson, T. D., Jansen, E. H., McKenzie, P., & Worrall, A. (2017). Boundary objects in information science. *Journal of the Association for Information Science and Technology*, 68(8), 1807–1822. <https://doi.org/10.1002/asi.23817>
- Brown, J. S., & Duguid, P. (1991). Organizational Learning and Communities-of-Practice: Toward a Unified View of Working, Learning, and Innovation. *Organization Science*, 2(1), 40–57. <https://doi.org/10.1287/orsc.2.1.40>

Notes / Additional resources

- Wand, Y., & Weber, R. (1993). On the ontological expressiveness of information systems analysis and design grammars. *Information Systems Journal*, 3(4), 217–237. <https://doi.org/10.1111/j.1365-2575.1993.tb00127.x>
- Ackerman, M. S., Dachtera, J., Pipek, V., & Wulf, V. (2013). Sharing Knowledge and Expertise: The CSCW View of Knowledge Management. *Computer Supported Cooperative Work (CSCW)*, 22(4–6), 531–573. <https://doi.org/10.1007/s10606-013-9192-8>

Week 6: 10/2/23: Information Infrastructures

Ways of Seeing

- infrastructure
- Infrastructuring
- Postmodernism

Readings

- Millerand, F., & Baker, K. S. (2020). Data Infrastructures in Ecology: An Infrastructure Studies Perspective. In *Oxford Research Encyclopedia of Environmental Science*. <https://doi.org/10.1093/acrefore/9780199389414.013.554>
- Cook, T. (2001). Archival science and postmodernism: New formulations for old concepts. *Archival Science*, 1(1), 3–24. <https://doi.org/10.1007/BF02435636>

Notes / Additional resources

- Ribes, D., & Finholt, T. (2009). The Long Now of Technology Infrastructure: Articulating Tensions in Development. *Journal of the Association for Information Systems*, 10(5), 375–398. <https://doi.org/10.17705/1jais.00199>
- Bowker, G. C. (2000). Biodiversity Datadiversity. *Social Studies of Science*, 30(5), 643–683. <https://doi.org/10.1177/030631200030005001>

- Bowker, G. C., & Star, S. L. (2000). *Sorting Things Out: Classification and Its Consequences* (Revised edition). The MIT Press.
- Manoff, M. (2004). Theories of the Archive from Across the Disciplines. *Portal: Libraries and the Academy*, 4(1), 9–25. <https://doi.org/10.1353/pla.2004.0015>
- Caswell, M. (2016). “The archive” is not an archives: Acknowledging the intellectual contributions of archival studies. *Reconstruction: Studies in Contemporary Culture*, 16(1).
<https://go.gale.com/ps/i.do?p=AONE&sw=w&issn=15474348&v=2.1&it=r&id=GAL E%7CA484096647&sid=googleScholar&linkaccess=abs>
- Ghaddar, J. J., & Caswell, M. (2019). “To go beyond”: Towards a decolonial archival praxis. *Archival Science*, 19(2), 71–85.
<https://doi.org/10.1007/s10502-019-09311-1>

Week 7: 10/9/23: Information (in) Networks

Ways of Seeing

- Network Models
- Actor-Network Theory

Readings

- Borgatti, S. P., & Halgin, D. S. (2011). On Network Theory. *Organization Science*, 22(5), 1168–1181. <https://doi.org/10.1287/orsc.1100.0641>
- Walsham, G. (1997). Actor-Network Theory and IS Research: Current Status and Future Prospects. In A. S. Lee, J. Liebenau, & J. I. DeGross (Eds.), *Information Systems and Qualitative Research* (pp. 466–480). Springer US.
https://doi.org/10.1007/978-0-387-35309-8_23

Notes / Additional resources

- Kadushin, C. (2012). *Understanding Social Networks: Theories, Concepts, and Findings*. Oxford University Press. (full access to e-book for online reading available via UMD libraries)
- Venturini, T., Munk, A. K., & Jacomy, M. (2019). Actor-Network versus Network Analysis versus Digital Networks. In J. Vertesi & D. Ribes (Eds.), *DigitalSTS: A field guide for science and technology studies*. Princeton University Press.
<https://digitalsts.net/essays/actor-network-versus-network-analysis-versus-digital-networks/>
- Stovel, K., & Shaw, L. (2012). Brokerage. *Annual Review of Sociology*, 38(1), 139–158.
<https://doi.org/10.1146/annurev-soc-081309-150054>
- Watts, D. J. (2004). The “New” Science of Networks. *Annual Review of Sociology*, 30(1), 243–270. <https://doi.org/10.1146/annurev.soc.30.020404.104342>
- Watts, D. (2016, February 10). How small is the world, really? *Medium*.
<https://medium.com/@duncanjwatts/how-small-is-the-world-really-736fa21808ba>

- Le Dantec, C. A., & DiSalvo, C. (2013). Infrastructuring and the formation of publics in participatory design. *Social Studies of Science*, 43(2), 241–264. <https://doi.org/10.1177/0306312712471581>

Interlude

Week 8: 10/16/23: Reviewing and Reflecting on Ways of Seeing [Joel at CSCW]

Week 9: 10/23/23: Choosing and Comparing Ways of Seeing | Invitation to epistemology

Readings

- Lincoln, Y. S., Lynham, S. A., Guba, E. G., & others. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. In *The Sage handbook of qualitative research* (Vol. 4, pp. 97–128).

Notes / Additional resources

- Chapter 1: Introduction: The Research Process. In Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Routledge. <https://doi.org/10.4324/9781003115700>
- Oulasvirta, A., & Hornbæk, K. (2016). HCI Research as Problem-Solving. *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems*, 4956–4967. <https://doi.org/10.1145/2858036.2858283>

Module II: Epistemology: Ways of Knowing

Week 10: 10/30/23: Objectivist / Post-positivist

Readings

- Nosek, B. A., Spies, J. R., & Motyl, M. (2012). Scientific Utopia: II. Restructuring Incentives and Practices to Promote Truth Over Publishability. *Perspectives on Psychological Science*, 7(6), 615–631. <https://doi.org/10.1177/1745691612459058>
- Nyhan, B., Settle, J., Thorson, E., Wojcieszak, M., Barberá, P., Chen, A. Y., Allcott, H., Brown, T., Crespo-Tenorio, A., Dimmery, D., Freelon, D., Gentzkow, M., González-Bailón, S., Guess, A. M., Kennedy, E., Kim, Y. M., Lazer, D., Malhotra, N., Moehler, D., ... Tucker, J. A. (2023). Like-minded sources on Facebook are prevalent but not polarizing. *Nature*, 620(7972), Article 7972. <https://doi.org/10.1038/s41586-023-06297-w>

Notes / Additional resources

- Buzbas, E. O., Devezer, B., & Baumgaertner, B. (2023). The logical structure of experiments lays the foundation for a theory of reproducibility. *Royal Society Open Science*, 10(3), 221042. <https://doi.org/10.1098/rsos.221042>
- Rajkumar, K., Saint-Jacques, G., Bojinov, I., Brynjolfsson, E., & Aral, S. (2022). A causal test of the strength of weak ties. *Science*, 377(6612), 1304–1310. <https://doi.org/10.1126/science.abl4476>

- <https://www.nobelprize.org/uploads/2021/10/advanced-economicsciencesprize2021.pdf>
- Angrist, J. D., & Pischke, J.-S. (2010). The Credibility Revolution in Empirical Economics: How Better Research Design is Taking the Con out of Econometrics. *Journal of Economic Perspectives*, 24(2), 3–30. <https://doi.org/10.1257/jep.24.2.3>

Week 11: 11/6/23: Constructivist / Interpretivist [Special Guest: Mols Sauter]

Readings

- Cho, J., & Trent, A. (2006). Validity in qualitative research revisited. *Qualitative Research*, 6(3), 319–340. <https://doi.org/10.1177/1468794106065006>
- Schüll, N. D. (2012). Addiction by Design: Machine Gambling in Las Vegas. In *Addiction by Design*. Princeton University Press. <https://doi.org/10.1515/9781400834655>

Notes / Additional resources

- Small, M. L., & Calarco, J. M. (2022). *Qualitative Literacy: A Guide to Evaluating Ethnographic and Interview Research*. Univ of California Press.
- Tracy, S. J. (2010). Qualitative Quality: Eight “Big-Tent” Criteria for Excellent Qualitative Research. *Qualitative Inquiry*, 16(10), 837–851. <https://doi.org/10.1177/1077800410383121>

Week 12: 11/13/23: Designerly [Special Guest: Amanda Lazar]

Readings

- Gaver, W. (2014). Science and design: The implications of different forms of accountability. In J. S. Olson & W. A. Kellogg (Eds.), *Ways of knowing in HCI* (pp. 143–165). Springer.
- Liu, J., Byrne, D., & Devendorf, L. (2018). Design for Collaborative Survival: An Inquiry into Human-Fungi Relationships. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, 1–13. <https://doi.org/10.1145/3173574.3173614>

Notes / Additional resources

- Houde, S., & Hill, C. (1997). What do Prototypes Prototype? In M. Helander, T. Landauer, & P. Prabhu (Eds.), *Handbook of Human-Computer Interaction* (2nd ed.). Elsevier Science Press.
- Wallace, J., McCarthy, J., Wright, P. C., & Olivier, P. (2013). Making design probes work. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 3441–3450. <https://doi.org/10.1145/2470654.2466473>
- Gulotta, R., Odom, W., Forlizzi, J., & Faste, H. (2013). Digital artifacts as legacy: Exploring the lifespan and value of digital data. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 1813–1822. <https://doi.org/10.1145/2470654.2466240>

Week 13: 11/20/23: Participatory [Special Guest: Sheena Erete]

Readings

- Heron, J., & Reason, P. (1997). A Participatory Inquiry Paradigm. *Qualitative Inquiry*, 3(3), 274–294. <https://doi.org/10.1177/107780049700300302>
- Dickinson, J., Arthur, J., Shiparski, M., Bianca, A., Gonzalez, A., & Erete, S. (2021). Amplifying Community-led Violence Prevention as a Counter to Structural Oppression. *Proceedings of the ACM on Human-Computer Interaction*, 5(CSCW1), 1–28. <https://doi.org/10.1145/3449279>

Notes / Additional resources

- Hayes, G. R. (2014). Knowing by Doing: Action Research as an Approach to HCI. In J. S. Olson & W. A. Kellogg (Eds.), *Ways of Knowing in HCI* (pp. 49–68). Springer New York. https://doi.org/10.1007/978-1-4939-0378-8_3
- Bergold, J., & Thomas, S. (2012). Participatory Research Methods: A Methodological Approach in Motion. *Historical Social Research / Historische Sozialforschung*, 37(4 (142)), 191–222.

Week 14: 11/27/23: Choosing and Synthesizing (Across, Between) Ways of Knowing

Readings

- Roth, W. D., & Mehta, J. D. (2002). The Rashomon Effect: Combining Positivist and Interpretivist Approaches in the Analysis of Contested Events. *Sociological Methods & Research*, 31(2), 131–173. <https://doi.org/10.1177/0049124102031002002>
- Patin, B., Sebastian, M., Yeon, J., Bertolini, D., & Grimm, A. (2021). Interrupting epistemicide: A practical framework for naming, identifying, and ending epistemic injustice in the information professions. *School of Information Studies - Faculty Scholarship*. <https://surface.syr.edu/istpub/194>

Notes / Additional resources

- Dotson, K. (2015). Inheriting Patricia Hill Collins's Black Feminist epistemology. *Ethnic and Racial Studies*, 38(13), 2322–2328. <https://doi.org/10.1080/01419870.2015.1058496>
- Suri, H., & Clarke, D. (2009). Advancements in Research Synthesis Methods: From a Methodologically Inclusive Perspective. *Review of Educational Research*, 79(1), 395–430. <https://doi.org/10.3102/0034654308326349>
- Lin, A. C. (1998). Bridging positivist and interpretivist approaches to qualitative methods. *Policy Studies Journal*, 26(1), 162–180. <https://doi.org/10.1111/j.1541-0072.1998.tb01931.x>
- Haraway, D. (1988). Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. *Feminist Studies*, 14(3), 575–599. JSTOR. <https://doi.org/10.2307/3178066>
- Latour, B. (2004). Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern. *Critical Inquiry*, 30(2), 225–248. <https://doi.org/10.1086/421123>

Closing

Week 15: 12/4/23: Theoretical and Epistemological Approach Workshop

Readings

- None!

Notes / Additional resources

- Bring your current draft of your thinking (in talk form!) to share and discuss

Week 16: 12/11/23: (optional) Co-working / Workshopping Theoretical and Epistemological Approach Essay

Readings

- None!

Notes / Additional resources

- As the title says, this is an optional class session. We will make the space available for co-working and further workshopping if needed, but you are not required to participate!