

Navigating the Digital Landscape: From Thing to Everything

Dr. Eveleen Kaur Sidana
eveleen.sidana@jgu.edu.in
Assistant Professor, JGLS
O.P. Jindal Global University, Sonipat

The digital infrastructural landscape appears to be robust with particular “things” composing its sphere of knowledge and mode of engagement — artificial intelligence, algorithms, computing, LLMs, Blockchains, data, Platforms, programming, data centers, automated decision making, datasets — while dissolving boundaries between different fields threatening specific expertise while instituting a distinct knowledge and expertise generating its own knowledge forms — from analyses, predictions, summaries, presentations, videos, images, curating and reshaping materials, interpreting, philosophizing, pondering and even hallucinating at times at a fascinating and spellbinding speed. The ambit of AI covers ‘thing’ to ‘everything’ as it comes to pervade and remake different fields of biomedicine, transport and security infrastructures, education, governance, construction, warfare, finance, currencies and more. With various social and economic contexts experiencing disruptions due to mere launch of new AI tools such as Anthropic’s Claude and Copilot, the robustness-induced clarity quickly disappears and gets replaced by anxiety fueled by the same ‘oneworldedness’ (Apter 2006) that was supposed to be empowering and enabling. The feeling of power imbalance returns remaining at the level of an undercurrent with erasures of who, what, how control takes place with the question of why rendered irrelevant. The knowledge and expertise of this ‘oneworldedness’ is computational but also creative, curative that is it has “network-making,” combinatory and permutational powers that fascinate and overwhelm. Bucher maps the force field of algorithms as a system that ‘governs the field of action of others and makes other worlds more or less probable’ (2019). The advanced digital technologies offer but also impede certain pathways to action, while its powers remain ambiguous. This course will explore the following vectors — one of analyzing the rapidly transforming and expanding digital sphere ‘from thing to everything’ as it encompasses and engulfs, second conceptual engagement with visuality and socio-technical representation — the visible and the invisible to interrogate opacities and blackboxes, and the ambiguity of power and ‘ambiguity as power’ (Suchman 2023), and third spatiality and temporality to understand and work with the ultimate frontier, the body.

Credits: 4

Cross-Registration: For both Law and Non-Law.

Pre-Requisites: Science and Technology Studies

TEACHING METHODOLOGY:

Lectures, Presentations and Continuous Assessments.

“Crowd Sourcing Knowledge” (Dumit 2017) Instead of teaching keywords of the dynamic field of digital technologies, the students will create a Digital Keywords as an assignment understanding and exploring the embeddedness of technologies in our lives supplemented by viva voce.

“Feel for the Game” (Bourdieu 1990) How do we study a system in which we are insiders? While the course interrogates certain socio-technical imaginaries brought into existence by society, the aim is for students to understand the digital field from a situated stand point. How do we understand something that may or may have the power to be true but has the power to become part of truth? (Bucher 2019).

Inculcating spirit of inquiry - Expanding the field of inquiry by understanding the form and coming into being of fields and vocabulary such as ‘platforms as social networks.’

INTENDED LEARNING OUTCOMES:

Leveraging and building upon existing knowledge: Students leverage their knowledge gained through use of digital technologies and engage with it critically through the materials covered in the course.

Holistic Learning: Appreciate as an opportunity to gather knowledge holistically because the field of digital technologies itself invites in its ability to blur boundaries between disciplines.

Reflective Learning: To engage with changing form of expertise and appreciate ones own adaptive practices of thinking and learning and become aware of situated standpoints and perspectives.

Learn to Discern: Learn to differentiate between AI as a tool and as a powerful system that makes different worlds more or less probable.

READING LIST (upto 10 select readings):**Books:**

Hayles, N. Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. Chicago: University of Chicago Press.

Dourish, Paul. (2017). *The Stuff of Bits: An Essay on the Materialities of Information*. MIT Press.

Mitchell, William J. (1995). *City of Bits: Space, Place, and the Infobahn*. Cambridge, MA: MIT Press.

Stuart Russell. (2019). *Human compatible: AI and the Problem of Control*. Allen Lane at the Imprint of Penguin Books. (Selection).

Kate Crawford. 2021. *Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence*. Yale University Press.

D'Ignazio, Catherine, and Lauren F. Klein. 2020. *Data Feminism*. Cambridge, MA: MIT Press

Salganick, M. (2017). *Bit by bit: Social research in the digital age*. Princeton University Press.

— (2016). *Digital Keywords: A vocabulary of Information, Society & Culture*. Edited by Benjamin Peters. Princeton & Oxford: Princeton University Press.

Halpern, Orit. (2018). *Beautiful Data: A History of Vision and Reason since 1945*. Duke University Press.

Jasanoff, S., & Kim, S.-H. (Eds.) (2015). *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*. Chicago: University of Chicago Press.

Dhaliwal RS, Lepage-Richer T and Suchman L (2024) *Neural Networks*. Minneapolis: University of Minnesota Press.

Films:

Daniel Kwan and Daniel Scheinert. *Everything, Everywhere all at once* (2022).

Dziga Vertov. *Man with a Movie Camera*. (Montage film)

Peter Greenaway. *Dear Phone*. (1976 film on visually understand database)

Week 1. Materiality - Thinking with things

Ahistorical demands of the objects - “Do not Knock” Adorno, Theodor W. 1978 / 1951. *Minima Moralia: Reflections from Damaged Life*. Trans. E. F. N. Jephcott. London: Verso. (Page 39-40).

Susanne Kuchler. 2005. “The changing face of things.” *Materiality*. Edited by Daniel Miller. Durham and London: Duke University Press. (206-231).

Week 2. Network-Making as power

Stewart Brand. *The Media Lab*. The MIT Press.
Connectivity as a commons project (Preface & Chapter 8).

Bruno Latour. 1983. “Give Me a Laboratory and I Will Raise the World.” In *Science Observed: Perspectives on the Social Study of Science*, edited by Karin Knorr-Cetina and Michael Mulkay, 141–170. Beverly Hills: Sage.

Gilles Deleuze. 1992. “Postscript on the Societies of Control.” *October* 59: 3–7.

Week 3. Socio-technical imaginary

Introducing the socio-technical imaginary by Shiela Jasanoff.

Bucher, T. (2017). The algorithmic imaginary: Exploring the ordinary affects of Facebook algorithms. *Information, Communication & Society*, 20(1), 30–44.
<https://doi.org/10.1080/1369118X.2016.1154086>

Hayles, N Katherine. 2010. “Cybernetics.” *Critical Terms for Media Studies*. Edited by Mark B Hansen and WJT Mitchell. University of Chicago Press. (145-157)

Sartori, L., Bocca, G. Minding the gap(s): public perceptions of AI and socio-technical imaginaries. *AI & Soc* **38**, 443–458 (2023). <https://doi.org/10.1007/s00146-022-01422-1>.

Recommended:

Jasanoff, S. (2015). Future Imperfect: Science, Technology, and the Imaginations of Modernity. In S. Jasanoff & S.-H. Kim (Eds.), *Dreamscapes of Modernity. Sociotechnical Imaginaries and the Fabrication of Power* (pp. 1–33). University of Chicago Press. <https://doi.org/10.7208/9780226276663-001>

Bucher, T. (2019). Algorithmic politics and imaginary: Interview with Taina Bucher. *DigiLabour*. <https://digilabour.com.br/pt/algorithmic-politics-and-imaginary-interview-with-taina-bucher/>

Week 4. Information

Clarke, Bruce. 2010. “Information.” *Critical Terms for Media Studies*. Edited by Mark B Hansen and WJT Mitchell. University of Chicago Press. (157-172).

Dourish, Paul. *The Stuff of Bits: An Essay on the Materialities of Information* is a 2017. MIT Press. (Selected chapters)

Week 5. Question of Control.

Stuart Russell. 2019. *Human compatible: AI and the Problem of Control*. Allen Lane at the Imprint of Penguin Books. (Selection)

Sartori, L., Theodorou, A. A socio-technical perspective for the future of AI: narratives, inequalities, and human control. *Ethics Inf Technol* **24**, 4 (2022). <https://doi.org/10.1007/s10676-022-09624-3>.

Week 6. Diving into the digital

Salganick, M. (2017). *Bit by bit: Social research in the digital age*. Princeton University Press. (Two chapters on method)

Bogdan Batrinca & Philip C. Treleaven. Social media analytics: a survey of techniques, tools and platforms. *AI & Soc.* (2015) 30:89–116.

Week 7. Politics of Aesthetics and experimental governance

Theodorou, A. (2020). Why artificial intelligence is a matter of design. In B. P. Goecke & A. M. der Pütten (Eds.), *Artificial intelligence* (pp. 105–131). Brill and Mentis.

Anderson, S. S. (2023). “Places to stand”: Multiple metaphors for framing ChatGPT’s corpus. *Computers and Composition*, 68, 102778.
<https://doi.org/10.1016/j.compcom.2023.102778>

Orit Halpern. “Introduction: Dreams for Our Perceptual Present.” *Beautiful Data: A History of Vision and Reason since 1945*, Duke University Press, 2015, pp. 9–38.
<https://read.dukeupress.edu/books/book/237/chapter/109810/IntroductionDreams-for-Our-Perceptual-Present>

Recommended:

Halpern, Orit. 2014. “Governing: Designing Information and Reconfiguring Population circa 1959-1990” *Beautiful Data*. Duke University Press. 199-239.

Week 8. Opacity as power

Suchman, Lucy. 2023. “The Uncontroversial Thingness of AI.” *Social Studies of Science* 53 (5): 783–804.

Ehsan, Upol, Rohan Singh, James Metcalf, and Mark Riedl. 2022. “The Algorithmic Imprint.” In *Proceedings of the 2022 ACM Conference on Fairness, Accountability, and Transparency (FAccT ’22)*, 1305–1317. Association for Computing Machinery. <https://doi.org/10.1145/3531146.3533186>

Week 9. Opacity as power (continued)

Apter, Emily. "On Oneworldedness: Or Paranoia as a World System." *American Literary History* 18, no. 2 (2006): 365–89. <http://www.jstor.org/stable/3876711>.

Hilke Schellman - The Algorithm: How AI decides who gets hired, monitored, promoted & fired and why we need to fight back now.

Safransky, S. 2019. Geographies of Algorithmic Violence: Redlining the Smart City. *International Journal of Urban and Regional Research*. <https://doi.org/10.1111/1468-2427.12833>

Week 10. Labour and AI

Crawford, Kate, and Joler Vladan. 2018. Anatomy of an AI System. <https://collections.vam.ac.uk/item/O1500029/anatomy-of-an-ai-system-digital-poster-kate-crawford/>.

Sarah T. Roberts. 2021. "Your AI is a Human," *Your Computer is On Fire*. Eds. Thomas S Mullaney and Kavita Philip. MA: MIT Press. (51-71).

Dias, Tatiana. 2025. "How We Investigated the Human Labor Behind AI." Pulitzer Center. <https://pulitzercenter.org/resource/how-we-investigated-human-labor-behind-ai>

Rani, Uma, and Rishabh Kumar Dhir. 2024. "The Artificial Intelligence Illusion: How Invisible Workers Fuel the 'Automated' Economy." International Labour Organization. December 10. <https://www.ilo.org/resource/article/artificial-intelligence-illusion-how-invisible-workers-fuel-automated>

International Economic Development Council. 2024. *Artificial Intelligence Impact on Labor Markets: Literature Review*. https://www.iedconline.org/clientuploads/EDRP%20Logos/AI_Impact_on_Labor_Markets.pdf

Irani, L, Algorithms of Suspicion: Authentication and Distrust on the Amazon Mechanical Turk Platform (June 16, 2023). Available at SSRN: <https://ssrn.com/abstract=4482508> or <http://dx.doi.org/10.2139/ssrn.4482508>

Recommended:

Kate Crawford. 2021. *Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence*. Yale University Press.

The New Yorker. (2021, May 17). *Briefly noted: Atlas of AI*.

<https://www.newyorker.com/magazine/2021/05/17/the-souvenir-museum-the-vietri-project-atlas-of-ai-and-beloved-beasts>

Week 11. Montage and Database - curating and structuring

Dziga Vertov. *Man with a Movie Camera*.

Manovich, Lev. 1998. “Database as a Symbolic Form.” *Rhizome*. (pp 1-18). www.rhizome.com. http://manovich.net/content/04-projects/022-database-as-a-symbolic-form/19_article_1998.pdf

S Shyam Sundar, Rise of Machine Agency: A Framework for Studying the Psychology of Human–AI Interaction (HAI), *Journal of Computer-Mediated Communication*, Volume 25, Issue 1, January 2020, Pages 74–88, <https://doi.org/10.1093/jcmc/zmz026>

Peter Greenaway. *Dear Phone* (1976 film)

Recommended:

D’Ignazio, Catherine, and Lauren F. Klein. 2020. *Data Feminism*. Cambridge, MA: MIT Press.

Week 12. LLMs

What are LLMs, What are we using them for? LLMs as Interpreters of intent.

Joseph Dumit, and Andreas Roepstorff. 2025. “AI Hallucinations Are a Feature of LLM Design, Not a Bug.” *Nature* 639 (8053): 38. <https://doi.org/10.1038/d41586-025-00662-7>

Using LLMs to discern pattern of misinformation:

Syeda Zainab Akbar, Anmol Panda, Divyanshu Kukreti, Azhagu Meena, and Joyojeet Pal. 2021. Misinformation as a Window into Prejudice: COVID-19 and the Information Environment in India. *Proc. ACM Hum.-Comput. Interact.* 4, CSCW3, Article 249 (December 2020), 28 pages. <https://doi.org/10.1145/3432948>

Week 13. The ultimate frontier - the body.

Hayles, N. Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. Chicago: University of Chicago Press. (Selections)

Thacker, Eugene. "Biomedica." *Critical Terms for Media Studies*. Edited by Mark B Hansen and WJT Mitchell. University of Chicago Press. (117-131).

Mitali Thakor, "Capture is Pleasure," *Your Computer is On Fire*. Eds. Thomas S Mullaney and Kavita Philip. MA: MIT Press. (117-135).

Hansen, Mark B. N. 2006. *Bodies in Code: Interface with digital media*. New York: Routledge.

Week 14. Automating Care: The therapy Chatbots.

Inhwa Song, Sachin R. Pendse, Neha Kumar, and Munmun De Choudhury. 2024. *The Typing Cure: Experiences with Large Language Model Chatbots for Mental Health Support*. arXiv. <https://doi.org/10.48550/arXiv.2401.14362>

Schwennesen, N. (2019), Algorithmic assemblages of care: imaginaries, epistemologies and repair work. *Sociol Health Illn*, 41: 176-192. <https://doi.org/10.1111/1467-9566.12900>

Mills, C., & Hilberg, E. (2020). The construction of mental health as a technological problem in India. *Critical Public Health*, 30(1), 41–52. <https://doi.org/10.1080/09581596.2018.1508823>

Week 15. End of Term.