DHU339Y0

Special Topics in Digital Humanities: "Network Technologies, Network Cultures."

Course Description

In this course, we'll explore how information and communication technologies—the telegraph to the Internet—have shaped London over the past century. We'll examine how these tools of communication connect to major social changes like colonialism, industrialization, globalization, capitalism, and consumer culture and how they've shaped the fabric of the city. The course follows two tracks. First, we'll draw material from archives housed at Oxford to understand the socio-technical, business, and political systems that helped spread the telegraph and Internet worldwide. Second, via site visits and field trips in London, we will explore how these technologies transformed London into a global center for information, finance, and culture in the twentieth century.

Learning Objectives

- Describe and understand the significant role information communication technologies like the telegraph, the radio, and the Internet have played in shaping popular understandings about social difference, in both the past and present, and in a global context;
- Analyze how DH tools can expand the kinds of research questions we bring to historical sources and materials;
- Incorporate international issues and concerns around information technology, including its uneven distribution of benefits and harms, into your thinking, analysis, and writing;
- Develop an appreciation for the ways communication technologies impact our understanding of information, culture, and the role of technology in everyday life, especially in the context of a highly mediated and networked global society;
- Understand and analyze primary source materials drawn from professional or business contexts;
- Understand and analyze primary source materials drawn from object collections; and
- Understand, analyze, and evaluate secondary source material with a sympathetic but critical eye.

Class Schedule – DRAFT – Subject to some revision

Week 1:			
Meeting 1	Aug 3	Introduction, Orientation, Our Goals	
Meeting 2	Aug 4	Methods: Thinking historically & digital tools to do so	
Meeting 3	Aug 5	Infrastructure, Work, Place & Power	
Meeting 4	Aug 6	**VISIT: Oxford History of Science Museum Visit**	
Week 2			
Meeting 5	Aug 10	London Telegraphy as a Coordinating Power	Field Report #1 Due
Meeting 6	Aug 11	Technology & New (kinds of) Markets	
Meeting 7	Aug 12	State, Capital, Technology at Mid-Century	
Meeting 8	Aug 13	**VISIT: National Museum of Computing**	
Week 3			
Meeting 9	Aug 17	"The Revolution Begins at long Last"	Field Report #2 Due
Meeting 10	Aug 18	The Long March to Profit over Privacy	
Meeting 11	Aug 19	Surveillance Capitalism in London	

Meeting 12	Aug 20	Digital in the City	
Week 4			
Meeting 13	Aug 24	Walking as Method in the Smart City	
Meeting 14	Aug 25	**VISIT: London Museum of Brands**	
Meeting 15	Aug 26	London, Network Technologies, Real Estate	Field Report #3 Due
Meeting 16	Aug 27	Conclusion	Prototype Precis Due

Reading List – DRAFT – Further material to come

Predeparture Reading

Lisa Gitelman, Always Already New: Media, History, and the Data of Culture (Cambridge, MA: MIT Press, 2008), 1-22 ("Media as Historical Subjects").

Week 1

Meeting 1: Introductions, Orientation, Our Goals

Before Class You'll Read…

Laura Skouvig, "Present and Past: the Relevance of Information History," Information and Culture 58, no. 1 (2023): 1–16.

Frederick Lesage and Simone Natale, "Rethinking the Distinctions Between Old and New Media," *Convergence* 25, no. 4 (2019): 575–589.

TeleGeography's Submarine Cable Map (https://www.submarinecablemap.com/)

Meeting 2: Methods: Thinking historically & digital tools to do so

Before Class You'll Read…

Richard R. John, "Debating New Media: Rewriting Communications History," *Technology and Culture* 64, no. 2 (2023).

Edmund Russell and Lauren Winkler, "Animating History: Digitally Mapping the United States Telegraph System," *Technology and Culture* 64, no. 4 (2023).

Uniting the States with Telegraphs (1844-1862) – (https://telegraph.library.cmu.edu/)

Submarine Cable Route Maps (Telegraph) – (https://atlantic-cable.com/Maps/)

Meeting 3: Infrastructure, Work, Place, & Power

Before Class You'll Read…

Sebastian James Rose, "The Telegraph from Below: Race, Labour, and the Indo-European Telegraph Department 1862-1927," *History Workshop Journal* 97 (2024): 126-148.

Anthony Trollope, "The Young Women at the London Telegraph Office," Good Words (December, 1877): 377–384.

App – Philips Code Translator (https://www.bauer.uh.edu/parks/phillips2.htm)

Meeting 4: Oxford History of Science Museum Visit!

Week 2

Meeting 5: London Telegraphy as a Coordinating Technology

Before Class You'll Read…

Roland Wenzlhuemer, "London in the Global Telecommunication Network of the Nineteenth Century," *New Global Studies* 3 no 1 (2009).

Katie Hindmarch-Watson, *Serving a Wired World: London's Telecommunication Works and the making of An Informational Capital* (Berkeley: University of California Press, 2020), "Dispatched from Underground."

Meeting 6: Making Global Financial Markets

Before Class You'll Read…

John Handel, "Wiring Markets: The Telegraph as Financial Infrastructure in the First Age of Globalization" in *The Cambridge Global Handbook of Financial Infrastructure,* edited by Carola Westermeier, Malcolm Campbell-Verduyn, and Barbara Brandl (Cambridge University Press, 2025), chapter 10.

Heidi J.S. Tworek, "How Not to Build a World Wireless network: German-British Rivalry and Visions of Global Communications in the Early Twentieth Century," *History and Technology: An International Journal* 32, no. 2 (2016): 178-200.

Simone M. Muller and Heidi J.C. Tworek, "The Telegraph and the Bank: On the Interdependence of global communications and capitalism, 1866-1914" *Journal of Global History* 10 (2015): 259-283.

Meeting 7: State, Capital & Technology at Mid-Century

Before Class You'll Read…

Tom Kelsey, "The Retreat from 'High Technology' in Post-War Britain," *The English Historical Review* 138 no. 594-595 (2023): 1363-1393.

Peter Kirstein, "Commentary: How Britain got its first Internet," UCL. January 9 2025.

Meeting 8: The National Museum of Computing Visit!

Week 3

Meeting 9: The Revolution at Last

Before Class You'll Read…

"The Revolution Begins at Last," *The Economist,* Sept 30, *1995.*

Justine de Lacy, "The sexy computer", *The Atlantic*, July 1987, 18-26.

Meeting 10: The Long March to Profit over (your) Privacy

Before Class You'll Read…

Thomas Haigh, "Protocols for profit: web and e-mail technologies as product and infrastructure" in William Aspray and Paul Ceruzzi, eds, *The Internet and American Business.* (*Cambridge, Mass: MIT Press 2008*), 105-158.

Meeting 11: Surveillance Capitalism in London

Before Class You'll Read…

Shoshanna Zuboff, "Make Them Dance," *Surveillance Capitalism.* Public Books, 293-328.

Zadie Smith, "Generation Why," (review of *The Social Network* and *You Are Not a Gadget*, by Jason Lanier) *The New York Review of Books*, Nov. 25, 2010.

Meeting 12: Digital in the City
Before Class You'll Read…
Constance Carr & Markus Hesse, "Technocratic Urban Development: Large Digital Corporations as Power Brokers of the Digital Age" *Planning Theory & Practice* (2022): 476-485.

Alexander Tarr, "Cities, Computation and Capitalism" *City* 28 no. 5-6 (2024): 605-610.

Tom Schofield, "Everywhere I have Never Been Except There." (https://2023.xcoax.org/pdf/schofield.pdf)

Week 4:

Meeting 13: Walking as Method in the Smart City
Before Class You'll Read…
Vivien Butot, Gabriele Jacobs, Petra Baryerl, & Josue Amador, & Pendar Nabipour, "Making Smart Things Strange Again: Using Walking as a Method for Studying Subjective Experiences of Smart City Surveillance," *Surveillance & Society* 21 No. 1 (2023).

London – A Global Leader in Advanced Digital Technologies (2020)

Meeting 14: Walking As Method/London Museum of Brands Trip!

Meeting 15: London, Network Technology, Real Estate
Before Class You'll Read…
Gian M. Voplicelli, "How London's Silicon Roundabout Dream Turned into a Nightmare," *Wired,* July 2020.

Meeting 16: Conclusion
Before Class You'll Read…
Nothing! We will get together for some good food and good conversation about our takeaways from the course and the material we examined through it.

Assessments – DRAFT – Subject to some revision

Assessment	Detailed description	Weight
Field Reports	-3 Field Reports (each worth 25%) **First Field Report (750-1000 words)** You will select an archival object from the Oxford History of Science Museum's Marconi Collection. Drawing on methods readings (available before the beginning of the course) and class discussions, you will analyze the object's technological affordances. I.e.: how did it enable new forms of communication, what kind of information/data did it generate, how did it enable/constrain new kinds of social interactions. These are only a few examples!	75%

	Second Field Report (750-1000 words) You will select an archival object from the The National Museum of Computing. Drawing on methods readings (available before the beginning of the course) and class discussions, you will analyze the object's technological affordances. I.e.: how did it enable new forms of communication, what kind of information/data did it generate, how did it enable/constrain new kinds of social interactions. These are only a few examples! **Third Field Report (Photo Essay + 750-1000 Words)** Drawing on Meeting 13's assigned reading (Butot *et al's* "Making Smart Things Strange Again…"), you will undertake walking as a method for observing smart city surveillance during our Field Trip to the London Museum of Brands (located in Notting Hill). These reports will be assessed against the learning outcomes for the class. The **goal** of the reports is to demonstrate your mastery of course learning outcomes. You will do so via your analysis of your selected archival materials and your synthesis of course readings/discussions.	
Prototyping Precis	-This assignment can be completed alone or in a group of 3-5. -We will work on and discuss this project throughout the term as it will be directly connected to the central thematic inquiry of the class. -1,250 word (5-page) report with appendices Using their preferred combination of DH tools, students will produce some sort of analysis of materials held in one of the archives or museums we will be visiting during the course. The primary source data for this assignment must be drawn from collection materials at the Museums and must relate to our topic of study for this course. The **goal** of this assignment is <u>not</u> to produce a polished complete product. Rather, the goals are: (1) Interrogate how we might use DH tools to do research and analysis in a robust archive, and	15%

	(2) How these tools might help us better understand the social, economic, or political life of these historical communication technologies, and (3) What kinds of research questions does DH enable us to ask?	
Participation Key Terms	Each student will complete a recorded audio reflection iterating on key terms and concepts connecting the technologies discussed across our class. Your reflection should focus on both the similar affordances of technology (as demonstrated by the material examined in the course) as well as the important distinctions between each. The **goal** of this assignment is demonstrate a mastery of academic material connecting historical forms of telecommunication in digital and communications today.	10%
Engagement	Ongoing active engagement with course materials. Importantly, this is not determined by attendance. Your contributions to class discussions and activities must demonstrate the application of concepts from assigned pre-departure readings. Your engagement should signal that you are working towards mastering the learning outcomes for the class.	10%
		100%