MEDIA, TECHNOLOGY, AND SOCIETY

MCC-UE 1034.002.SP16 Class Number: 20137

Spring 2016

Department of Media, Culture, and Communication

Instructor: Luke Stark (luke.stark@nyu.edu)

Tuesday & Thursday, 4:30pm – 5:45pm 2 Metrotech Center, Room 813

Office: 206 East Building, 239 Greene Street

Office hours: By appointment

Course Description

What was the "Victorian Internet"? What do nuclear weapons have to do with Snapchat? And how does disco music explain animated GIFs? In this course, you'll learn the answers to these and many other questions to do with the co-construction of societies and media technologies.

Technologies like smartphones or the World Wide Web aren't merely a set of material artifacts with a straightforward impact on our world – they're the result of a complex set of practices, norms, and values reflecting *and* shaping our convictions about time, space, class, gender, labor, politics and the self. Because technologies often depend on the broader socio-economic, legal, and political contexts in which they develop, we'll spend time unpacking the hidden assumptions that drive popular understandings of technologies and their effects.

We'll focus on the media technologies of the last 150 years (the telegraph, telephone, computers, and the Internet) that have shaped today's interactive digital media. However, we will consider a number of other technologies (the railway, disco music, aviation, and more) that will serve as comparative touchstone to discuss the intersection of communication technologies with other technological systems, and suggest what is unique, and what isn't, about our digital present.

Course Goals

The goal of the course is not to arrive at the "right" theory of technology, but have you come away with a firm understanding of multiple methods and approaches by which to assess different technologies in various social and political terms. As such, we will be studying the ways in which scholars from different disciplines—computer science, history, sociology, philosophy, media studies, and

anthropology, for example—have approached questions about technology, society, and politics. We'll thus also learn about the different ways in which different disciplines weigh the value of different types of data. By the end of the course, you should be able to understand various ways by which to assess the mutual relationship between society and technology; to identify different theoretical approaches to the study of technology; and finally, begin to decide which questions and approaches you find most useful for analyzing contemporary issues and debates as they concern technology and society.

Course Format, General Requirements, Attendance, & Academic Integrity

I will begin each class with a short introductory lecture that examines the themes and readings for the week, which will be followed by class discussion and student-led conversations about the various readings. Because active participation in discussion is the cornerstone of the class, you should come prepared for discussion and with copies of the reading – printed if possible. Moreover, because this is a seminar course, regular class attendance is required. Three or more missed classes without prior notices or excuse will result in your grade being dropped by one half letter.

As part of your participation grade, all students will be responsible for posting one question regarding each class's readings to NYU Classes no later than 5pm on the day prior. These questions will help spark our discussion and shape the trajectory of my lectures – so please put some thought into them!

To further aid our discussion, you will each be required to **lead class discussion** at **least twice during the semester**. For the classes which you lead discussion, you will turn in a writing assignment where you will (1) provide a summary of the thesis and argument of each reading for that class, and (2) poses at least three conceptual question about the readings and/or topics under discussion. An inclass mid-term and a final exam will round out your evaluation.

Plagiarism or cheating on any assignment will not be tolerated under any circumstances and will result in a failure of the assignment and possibly failure of this class. Mutual trust, respect and responsibility are foundational requirements for learning. Thus, how you learn is as important as what you learn. A University education aims not only to produce high quality scholars, but to also cultivate honorable citizens

"Academic integrity is the guiding principle for all that you do.... You violate the principle when you: cheat on an exam; submit the same work for two different courses without prior permission from your professors; receive help on a take-home that calls for independent work; or plagiarize. Plagiarism, whether intended or not, is academic fraud. You plagiarize when, without proper attribution, you do any of the following: copy verbatim from a book, article, or other media; download documents from the Internet; purchase documents; paraphrase or restate someone

else's facts, analysis, and/or conclusions; copy directly from a classmate or allow a classmate to copy form you. " (See School of Education Bulletin, 2006/8, p. 172)

For a full statement of the Academic Integrity Policy governing this course see: http://steinhardt.nyu.edu/policies/academic_integrity.

Readings And Other Materials

There are two required course texts: *The Victorian Internet*, by Tom Standage, and *Computing: A Concise History* by Paul Ceruzzi. Both are available at the NYU Bookstore. All other readings will be posted on NYU Classes or distributed in class.

Grading

Attendance, Posting Questions and Class Participation: 15%

Please see above.

Class Discussion Leader: 30%

You will sign up to lead class discussion at least twice during the semester. For each instance you lead discussion, you will provide a short written assignment (two-pages, single-spaced). In this assignment, you will (1) provide a summary of the thesis and argument of each reading being discussed on the day you hand the piece in, and (2) pose at least three conceptual question about the readings and/or topics under discussion.

Your piece must summarize and engage with **all** the assigned readings for the day on which it is submitted – the best papers will work synthetically across all the readings to find common themes or points of comparison. **Assignments will be due at 5pm on the day prior to the day your lead discussion. You should post your summary for the class on NYU Classes, AND send a copy to me electronically – I will not accept assignments submitted late or on the day of. Each response will be marked on whether if fulfills both assigned criteria. During the class itself, you will participate in leading discussion and engaging your colleagues with the coarse material.**

In-Class Mid-Term Exam: 20%

The in-class exam will take place on **Thursday**, **March 10**th in class. The exam will have two components: short answer questions in which you will identify and state the historical significance of a concept, person or artifact; and a choice of long-form essay questions.

Final Exam: 35%

The final exam will take place on **Thursday**, **May** 5th in class, and will be similar in format to the mid-term.

Evaluation

Grade Appeals

Any grade appeals should be submitted via e-mail with "a short note explaining your concerns about the grade in question." Please wait AT LEAST 24 HOURS before contacting me with your concern, and please refer to the evaluation criteria when submitting an appeal.

Grading Rubric

(Plus and minus grades indicate the standing within the above grades)

A = Excellent (numerical equivalent: 90 – 100%)

Outstanding work in all respects: comprehensive understanding, thoughtful and creative interpretations, well-focused and original insights, well-reasoned commentary and analysis. Writing is clear, analytical, and organized. Arguments offer specific examples and concisely evaluate evidence. Class participation is consistent, insightful, and respectful of others.

B = Good (numerical equivalent: 80 - 89%)

Work demonstrates complete and accurate understanding of course materials, presenting a reasonable degree of insight and a competent level of analysis with proper evidence. Writing is easy to follow and well structured. Class participation is consistent and respectful of others.

C = Adequate (numerical equivalent: 70 - 79%)

Work demonstrates adequate understanding but may be incomplete, vague or contains some important errors or weaknesses. Work may lack concrete, specific examples and illustration. Writing may be awkward or hard to follow. Arguments are unorganized, without specific examples or analysis. Class participation is unreliable, off-topic, and/ or disrespectful of others.

D = Unsatisfactory (numerical equivalent: 60 - 69%)

Work demonstrates a lack of understanding and fails to express basic aspects of the course. This work is incomplete, and evidences little understanding of the readings or discussions. Arguments demonstrate inattention to detail, misunderstand course material and overlook significant themes. Class participation is spotty, superficial, and/or disrespectful of others

F = Failed. Work was not submitted or completed according to assigned

parameters or completely failed to express the most basic and elementary aspects of the course.

Miscellaneous

Student Resources

Students with physical or learning disabilities are required to register with the Moses Center for Students with Disabilities, 719 Broadway, 2nd Floor, (212-998-4980) and are required to present a letter from the Center to the instructor at the start of the semester in order to be considered for appropriate accommodation. In addition, if you're finding consistent problems with your writing I urge you to contact the **Writing Center**: 269 Mercer Street, Room 233. You can schedule an appointment online at www.rich15.com/nyu/ or just walk in.

Style Manuals

Students are strongly urged to purchase at least one style manual. A good style manual will help to improve the organization and composition of your written work and, used properly, should help ensure proper citation of sources. Please be consistent with the style you use.

Religious Observance

Students who observe religious holidays that may interfere with the class schedule should inform the course instructors well in advance of anticipated absences to ensure that appropriate arrangements are made for the completion of course work. See NYU's Policy on Religious Holidays at www.nyu.edu/student.affairs/students.guide/policies.html, for more information.

Special Circumstances. Considerations, Needs

If you have any special circumstances, considerations, or needs that you feel will either affect your ability to complete assignments or participate in recitation discussions, please let me know as soon as possible. Documentation is critical to processing special requests, and I will help facilitate this to the best of my abilities.

A Final Note

Ideas are important things, and people often feel passionately about them. This being said, please treat your fellow classmates, and your instructor, with respect, good humor and empathy. Trust is vital to a thoughtful, open and intelligent discussion – I hope we'll all be able to share a mutual trust this term.

Course Schedule

Please note that in addition to the readings below, short pieces on topical subjects may be added throughout the term.

Thursday, January 28 – Introduction

Short Film Clip: "The Gorilla Detector"

Tuesday, February 2 – Thinking Historically and Conceptually

- Marx, L. (2010). Technology: The Emergence of a Hazardous Concept. *Technology and Culture*, *51*(3), 561–577.
- Williams, R. (2005). A Historian's View. In M. Castells (Ed.), *The Network Society: A Cross-Cultural Perspective*. Northampton, MA: Edward Elgar.
- Winner, L. (1988). Do Artifacts Have Politics? In *The Whale and the Reactor* (pp. 19–39). Chicago: University of Chicago Press.

Thursday, February 4 - Space-Time Compression & The Telegraph

- Cowan, R. S. (1997). American Ideas about Technology. In *A Social History of American Technology* (pp. 201–219). New York: Oxford University Press.
- Standage, T. (2013). Forward, Preface and Chapters 1& 2 of *The Victorian Internet* (pp. xiii–40). New York: Bloomsbury.

Tuesday, February 9 – The Telegraph and the Railway

Schivelbusch, W. (1986). "The Mechanizaton of Motive Power," "The Machine Ensemble" and "Railroad Space and Railroad Time." In *The Railway Journey:* The Industrialization of Time and Space in the 19th Century (pp. 1–44). Berkeley: University of California Press.

Thursday, February 11 – Infrastructures: An Introduction

- Standage, T. (2013). Chapter 6 of *The Victorian Internet* (pp. 91-104). New York: Bloomsbury.
- Starosielski, N. (2012). "Critical Nodes, Cultural Networks: Re-mapping Guam's Cable Infrastructure," *Amerasia 37*, no. 3, 18-27.

Tuesday, February 16 – Electricity! Everywhere!

Hughes, T. P. (1987). The Evolution of Large Technological Systems. In W. E. Bijker, T. P. Hughes, & T. Pinch (Eds.), *The Social Construction of Technological Systems: New Directions in the Sociology and History of*

- Technology (pp. 51-82). Cambridge, MA.
- Standage, T. (2013). Chapters 3, 4, and 5 of *The Victorian Internet* (pp. 41-91). New York: Bloomsbury.

Thursday, February 18 – Sounds that Travel: The Telephone and Gender

- Fischer, C. S. (1988). Gender and the Residential Telephone, 1890-1940: Technologies of Sociability. *Sociological Forum*, *3*(2), 211–233.
- Standage, T. (2013). Chapter 8 of *The Victorian Internet* (pp. 127-144). New York: Bloomsbury.
- "Your Own Wireless Telephone" (Washington Post, 1910): http://paleo-future.blogspot.com/2007/05/your-own-wireless-telephone-1910.html

Tuesday, February 23 – Film & Television: Moving Pictures, Contested Spaces

- Cohen, L. (1989). Encountering Mass Culture at the Grassroots: The Experience of Chicago Workers in the 1920s. *American Quarterly*, *41*(1), 6–33.
- Hoffmann, A. L., & Stark, L. (2015, September 11). Hard Feelings Inside Out, Silicon Valley, and Why Technologizing Emotion and Memory Is a Dangerous Idea. Retrieved September 30, 2015, from https://lareviewofbooks.org/essay/hard-feelings-inside-out-silicon-valley-and-why-technologizing-emotion-and-memory-is-a-dangerous-idea
- Spigel, L. (1988). Installing the Television Set: Popular Discourses on Television and Domestic Space, 1948-1955. *Camera Obscura*, *6*, 11–46.

Thursday, February 25 – Phones: From Cellular to Smart

- Licoppe, C. (2008). The Mobile Phone's Ring. In *Handbook of Mobile Communication Studies* (pp. 139–152). Cambridge, MA: The MIT Press.
- Rafael, V. L. (2003). The Cell Phone and the Crowd: Messianic Politics in the Contemporary Philippines. *Public Culture*, *15*(3), 399–425.
- Stark, L., & Crawford, K. (2015). The Conservatism of Emoji: Work, Affect, and Communication. Social Media + Society, 1(2), 1–11.

Tuesday, March 1 – Technology, Imperialism, and Colonialism

- Philip, K. (2007). Nature, Culture Capital, Empire. *Capitalism Nature Socialism*, 18(1), 5–12.
- Salvatore, R. D. (2006). Imperial Mechanics: South America's Hemispheric Integration in the Machine Age. *American Quarterly*, *58*(3), 662–691.
- Standage, T. (2013). Chapter 9 of *The Victorian Internet* (pp. 127-144). New York: Bloomsbury.

Thursday, March 3 – Radio, Autonomy, and Politics

- Douglas, S. (1987). The Titanic Disaster and the First Radio Regulation, 1910-1912. In *Inventing American Broadcasting*, 1899-1922 (pp. 216–239). Baltimore, MD: The Johns Hopkins University Press.
- Kunreuther, L. (2006). Technologies of the Voice: FM Radio, Telephone, and the Nepali Diaspora in Kathmandu. *Cultural Anthropology*, *21*(3), 323–353.

Tuesday, March 8 – The More Things Change...

Standage, T. (2013). Chapters 11 & 12 and Epilogue of *The Victorian Internet* (pp. 181-213). New York: Bloomsbury.

Review for Midterm Exam

Thursday, March 10 – In-class Midterm Exam

SPRING BREAK

Tuesday, March 22 – Computers: Deaths and Births

- Ceruzzi, P. (2012). Introduction and Chapters 1 and 2 of *Computing: A Concise History*. Cambridge, MA: The MIT Press.
- Edwards, P. N. (1989). The Closed World: Systems discourse, military policy and post-World War II US historical consciousness. In L. Levidow & K. Robbins (Eds.), *Cyborg Worlds: The Military Information Society* (pp. 135–158). London: Free Association Books.

Galison, P. (2001). War Against the Center. *Grey Room*, 4, 6–33.

Thursday, March 24 – Computational Thinking and Creating

Bush, V. (1945). As We May Think. *The Atlantic* (July), available at

- http://www.theatlantic.com/magazine/archive/1945/07/as-we-may-think/303881/
- Ceruzzi, P. (2012). Chapters 3, 4, & 5 of *Computing: A Concise History*. Cambridge, MA: The MIT Press.
- Clark, D. D., Wroclawski, J., Sollins, K. R., & Braden, R. (2005). Tussle in Cyberspace: Defining Tomorrow's Internet. *IEEE/ACM Transactions on Networking*, *13*(3), 462–475. http://doi.org/10.1109/TNET.2005.850224
- Wing, J. M. (2006). Computational Thinking. *Communications of the ACM*, 49(3), 33–35.

Tuesday, March 29 – Society Seeps into Networking, Networking Seeps into Society

- Ceruzzi, P. (2012). Chapters 6 & 7 of *Computing: A Concise History*. Cambridge, MA: The MIT Press.
- Turner, F. (2005). Where the Counterculture Met the New Economy: The WELL and the Origins of Virtual Community. *Technology and Culture*, *46*(3), 485–512.

Thursday, March 31 – Information Privacy, Online and Off

- Gangadharan, S., & Sprague, A. (2013, December 11). Poor People Deserve Digital Privacy, Too. *Slate*. Slate. Retrieved December 12, 2013, from http://www.slate.com/blogs/future_tense/2013/12/11/low_income_privacy.ht ml
- Madden, M., Lenhart, A., Cortesi, S., Gasser, U., Duggan, M., Smith, A., & Beaton, M. (2013). *Teens, Social Media, and Privacy* (pp. 1–107). Pew Research Center & The Berkman Center for Internet & Society. Retrieved from http://pewinternet.org/Reports/2013/Teens-Social-Media-And-Privacy.aspx (peruse and note interesting findings)
- Solove, D. J. (2011, May 15). Why Privacy Matters Even if You Have "Nothing to Hide." *The Chronicle of Higher Education*. Retrieved June 10 2013, from https://chronicle.com/article/Why-Privacy-Matters-Even-if/127461/

Tuesday, April 5 – Networks and/of Labor: Then and Now

Downey, G. (2001). Virtual Webs, Physical Technologies, and Hidden Workers: The Spaces of Labor in Information Internetworks. *Technology and Culture*,

- *42*(2), 209–235.
- Lampinen, A. (2015). Deceptively Simple: Unpacking the Notion of "Sharing." Social Media + Society, 1–2.
- Rosenblat, A. (2015). Uber's Phantom Cabs. *Vice* (July 27), available at http://motherboard.vice.com/read/ubers-phantom-cabs
- Silberman, M. S., Irani, L., & Ross, J. (2010). Ethics and Tactics of Professional Crowdwork. *XRDS: Crossroads, the ACM Magazine for Students*, *17*(2), 39–43.
- Todisco, M. (2015). Share and Share Alike? Considering Racial Discrimination in the Nascent Room-Sharing Economy. *Stanford Law Review Online*, *67*, 121–129.

Thursday, April 7 – Intellectual Property and Digital Technology

- Hesse, C. (2002). The Rise of Intellectual Property, 700 B.C.-A.D. 2000: An Idea in the Balance. *Daedalus*, 131(2), 26–45.
- Moglen, E. (2003). "Freeing the Mind: Free Software and the Death of Proprietary Culture."

Tuesday, April 12 – Hackers, Makers and You

- Coleman, G. (2012). Introduction, *Coding Freedom: The Ethics and Aesthetics of Hacking*. Princeton, NJ: Princeton University Press (1-22).
- Gregg, M., & DiSalvo, C. (2013, November 21). The Trouble With White Hats. Retrieved November 21, 2013, from http://thenewinquiry.com/essays/the-trouble-with-white-hats/
- Standage, T. (2013). Chapter 7 of *The Victorian Internet* (pp. 105-126). New York: Bloomsbury.

Thursday, April 14 – Gender and Computing

- Haraway, D. J. (1991). A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century. In *Simians, Cyborgs and Women: The Reinvention of Nature* (pp. 149–181). New York: Routledge.
- Light, J. S. (1999). When Computers Were Women. *Technology and Culture*, 40(3), 455–483.

Tuesday, April 19 – Digital Poetics

- Eppink, J. (2014). A brief history of the GIF (so far). *Journal of Visual Culture*, 13(3), 298–306.
- Hughes, W. (1994). In the Empire of the Beat: Discipline and Disco. In Microphone Fiends: Youth Music, Youth Culture (pp. 147–157). New York & London: Routledge.
- Montfort, N. (2011). Narrative and digital media. In D. Herman (Ed.), *The Cambridge Companion to Narrative* (pp. 172–186).
- Stephens, P. (2015). Preface from *The Poetics of Information Overload*. Minneapolis, MN: University of Minnesota Press (pp. ix-xvi).

Thursday, April 21 – The Politics of Social Media

- Gillespie, T. (2015). Platforms Intervene. Social Media + Society, 1–2.
- Sifferlin, A. (2013, January 24). Why Facebook Makes You Feel Miserable. Retrieved December 13, 2015, from http://healthland.time.com/2013/01/24/why-facebook-makes-you-feel-bad-about-yourself/
- Standage, T. (2013). Chapter 10 of *The Victorian Internet* (pp. 164-180). New York: Bloomsbury

Tuesday, April 26 – (Post?)colonial Computing

- Lindtner, S. (2014). Making Subjectivities. The Journal of China Information.
- Medina, E. (2011). Preface, Prologue, and Introduction to *Cybernetic Revolutionaries: Technology and Politics in Allende's Chile*. Cambridge, MA: MIT Press.
- Wajcman, J., & Lobb, L. A. P. (2007). The gender relations of software work in Vietnam. *Gender, Technology and Development, 11*(1), 1-26.

Thursday, April 28 – Digital Worlds, Real Lives

- Brandt, M. (2013). From "The Ultimate Display" to 'The Ultimate Skinner Box': Virtual Reality and the Future of Psychotherapy" (pp. 1–22).
- Dibbell, J. (1999). A Rape in Cyberspace. *Imaginary Realities*, 2 (4). Retrieved from http://imaginaryrealities.imaginary.com/volume2/issue4

/rape_cyberspace.html

Tuesday, May 3 – Gamification and the Quantified Self

- Hatton, C. (2015, October 26). China 'social credit': Beijing sets up huge system. BBC News, available at http://www.bbc.com/news/world-asia-china-34592186
- O'Connor, M. (2013, December 2). Heartbreak and the Quantified Selfie. *New York Magazine*. Retrieved December 2, 2013, from http://nymag.com/thecut/2013/12/heartbreak-and-the-quantified-selfie.html
- Singer, E. (2011, June 9). Is "Self-tracking" the Secret to Living Better? *MIT Technology Review*. Retrieved December 8, 2013, from http://www.technologyreview.com/view/424252/is-self-tracking-the-secret-to-living-better.html
- Wolf, G. (2010, April 28). The Data-Driven Life. *The New York Times Magazine*, available at http://www.nytimes.com/2010/05/02/magazine/02self-measurement-t.html?_r=0

Review for Final Exam

Thursday, May 5 - FINAL EXAM IN CLASS