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## **CULS 5209**

### **Critical Media Infrastructures** (Special Topics in Intercultural Studies)

#### **Term 1, 2023-24**

Day and Time: Fridays, 6:45-9:30pm

Venue: SB 239

Language English

Instructor: Prof. Stephanie DeBoer

Teaching Assistant: TBA

#### **Course Description**

Often unseen in our daily lives and unacknowledged in our experiences of audio-visual content, our current media landscapes – their places, networks, and circulations – would not exist without media infrastructure. They depend upon such things as the maintenance of undersea cables and Internet data centers throughout the globe; the more local repurposing of old infrastructures (water towers) to support new infrastructures (mobile phone towers); mainstream film and television industry protocols for media transfer, compression, and distribution; as well as the more unofficial infrastructures of film and media piracy. As they influence the material forms, visualities, and experiences of film and media, media infrastructures impinge on local to global access to water, energy, and other material resources. They are also often linked to adjacent circulations of waste – from the e-waste of computers and cell phones to the celluloid that once was the bedrock of film stock and footage.

This course offers a critically interdisciplinary lens for understanding media infrastructure's impact upon our experiences, cities, and networks – both local and global – and how these impacts affect media's forms and experiences. In so doing, Critical Media Infrastructures calls attention to:

- the media infrastructures that network and distribute audio-visual content;
- the ways industries, institutions, and people imagine, organize, and use those infrastructures;
- the varied local to global scales at which they operate;
- the dynamics of power, control, and access through which they are negotiated;
- the ways in which they influence our visual and aural experiences of film and media;
- how they are entwined with the ecological pressures and perils of our time.

#### **Course Intended Learning Outcomes**

By the end of this course, students will be able to:

- understand their relationships – and that of others – to media infrastructures across a variety of scales, temporalities, networks, ecologies, and global/local locations.
- define and explain critical terms, theories, and comparative contexts through which the formations and processes of media infrastructure can be explicated.

- employ methods and formulate questions that enable them to analyze the dynamics through which media infrastructures are produced and operate.
- critically evaluate the powers and relations through which media infrastructures can both impact and be impacted by various institutions, industries, contexts, and people.
- effectively utilize writing, digital or photo mapping, and presentational tools and skills to analyze and critique the dynamics of media infrastructure.

### **Teaching & Learning Activities**

Lectures will be given weekly to introduce key terms, concepts, and questions, as well as offer examples and images for analysis. Guided reading and group discussions – as well as in-class infrastructure analog and digital mapping activities – will enhance students’ understanding of the key issues of the course. Students will be expected to write a short (two-page) reflection essay, do group presentations on topics of interest to them that relate to the course, and complete a final project of their choosing of relevance to the course. It is expected that students will use the (often global) theories and cases provided in this course to better understand the media infrastructures that more locally surround and impact them.

### **Assessment Methods**

#### **Class participation (10%)**

Class participation is a way of engaging with course material and ideas and respecting the classroom as well as the efforts your colleagues make in it. There are many ways to “engage:”

- Engagement can mean speaking and contributing one’s understanding or opinion to the class.
- At other times, it can mean listening respectfully and with interest.
- It may also mean taking part in small group conversations or infrastructure mapping activities assigned by your professor.
- Regardless of its form, participation honors our classroom learning process as a collaborative endeavor.

#### **Two-page reflection essay (10%)**

This short essay is to give you opportunity to (1) reflect upon the processes and relations that situate you within an infrastructural system of your own choosing and, (2) link your reflection to the central terms, concepts, and questions of the first few weeks’ lectures, readings, and discussions. A photo representing your chosen infrastructure should accompany your short essay. (Fuller instructions to be handed out in class).

#### **Group presentation (30%)**

Each week following week 3, a small group of students will offer a presentation that (a) chooses a case or example of media infrastructure outside of our course examples, (b) explains and analyzes this case/example in relation to select terms and concepts from the previous week, and (c) raises further questions for consideration. As they do so, students will present a mapping and comparison of 3-5 images of their chosen example of media infrastructure and argue for the analysis and questions that these images and their referenced infrastructures help us to understand. (Fuller instructions to be handed out in class).

#### **Final project (50%)**

This includes (a) a proposal in consultation with the professor, (b) a “work in progress” presentation to the class, and (c) final submission. Groups can be 2-3 people. The project will consist of a digitally based project – this can be creative to include video, animation, photo-essay; it can also incorporate an online written (genre such as diary or blog) form. This digital project will be accompanied by a 4-5 pages written statement that reflects upon and critically argues for the analysis and insight that your project offers. The project should base its analysis and effort in the terms of the class and reference readings from this syllabus. (Fuller instructions, including parameters for the scope and size of this project, will be handed out in class).

## **Weekly Schedule**

### **Week 1 (8 September): What is Media Infrastructure and the Infrastructural Disposition**

1. Lisa Parks and Nicole Starosielski, “Introduction.” In *Signal Traffic: Critical Studies of Media Infrastructures*, ed. Lisa Parks and Nicole Starosielski. Urbana, Chicago, and Springfield: University of Illinois Press, 2015. 1-27.
2. Brian Larkin, “The Politics and Poetics of Infrastructure,” *Annual Review of Anthropology* 42 (2013): 327-343.
3. Susan Leigh Star and Karen Ruhleder, “Steps Toward an Ecology of Infrastructure: Design and Access for Large Information Spaces.” *Information Systems Research* 7 (1996): 111–134.

### **Week 2 (15 September): On Touring and Mapping Media Infrastructure**

1. Shannon Mattern, “Infrastructural Tourism.” *Places Journal*. July 2013. <https://placesjournal.org/article/infrastructural-tourism/>
2. Susan Leigh Star, “The Ethnography of Infrastructure,” *American Behavioral Scientist* 43.3, 1999: 377-391.
3. Further frameworks for ethnographic, visual, and digital tools and methods for “touring” and “mapping” media infrastructure to be shared in class.

### **Week 3 (22 September): The Deep/Modern Times of Media Infrastructure**

1. Paul N. Edwards, “Infrastructure and Modernity: Force, Time and Social Organization in the History of Sociotechnical Systems,” *Modernity and Technology*, 185-223.
2. Shannon Mattern, “Deep Time of Media Infrastructure.” In *Signal Traffic: Critical Studies of Media Infrastructures*, ed. Lisa Parks and Nicole Starosielski. Urbana, Chicago, and Springfield: University of Illinois Press, 2015. 95-102.
3. Shannon Mattern, “Introduction: Ether/Ore.” In *Code and Clay, Data and Dirt: Five Thousand Years of Urban Media*. Minneapolis: University of Minnesota Press, 2017. vii-xl.

#### **Week 4 (29 September): Urban Media Infrastructures: Waves, Wires, Screens, Energy**

1. Shannon Mattern, "Waves and Wires: Cities of Electric Sound." In *Code and Clay, Data and Dirt: Five Thousand Years of Urban Media*. Minneapolis: University of Minnesota Press, 2017. 1-41
2. Stephanie DeBoer, "On Adjacency: Infrastructural Tactics for Urban Screens in Transit (Shanghai version)." In *Urban Interfaces: Media, Art and Performance in Public Spaces*, edited by Verhoeff, Nanna, Sigrid Merx, and Michiel de Lange. Leonardo Electronic Almanac 22, no. 4 (March 15, 2019).
3. Brian Larkin, "Ambient Infrastructure: Generator Life in Nigeria," *Technosphere Magazine*, Nov. 15, 2016.

#### **Week 5 (6 October): On Power: Technostruggles and Post/Colonial Media Infrastructures**

1. Brian Larkin, "Unstable Objects: The Making of Radio in Nigeria." In *Signal and Noise: Media, Infrastructure, and Urban Culture in Nigeria*. Durham: Duke UP, 2008. 48-72.
2. Lisa Parks, "Technostruggles and the Satellite Dish: A Populist Approach to Infrastructure." In *Cultural Technologies: The Shaping of Culture in Media and Society*, edited by G. Bolin. Routledge, 2012. 64-86.
3. Deborah Cowen, "Infrastructures of Empire and Resistance." *Verso Books Blog*, January 25, 2017.

#### **Week 6 (13 October): Shadow Infrastructures: Media Piracy and Informal Distribution**

1. Brian Larkin, "Degraded Images, Distorted Sounds: Nigerian Video and the Infrastructure of Piracy." In *Signal and Noise: Media, Infrastructure, and Urban Culture in Nigeria*. Durham: Duke UP, 2008. 217-241.
2. Brian Larkin, "Itineraries of Indian Cinema: African Videos, Bollywood, and Global Media." In *Multiculturalism, Postcoloniality, and Transnational Media*, 170-192.
3. Brian Larkin, "Immaterial Urbanism and the Cinematic Event." In *Signal and Noise: Media, Infrastructure, and Urban Culture in Nigeria*. Durham: Duke UP, 2008. 146-167.

#### **Week 7 (20 October): Undersea Cables and their Legacies**

1. Nicole Starosielski, "Fixed Flow: Undersea Cables as Media Infrastructure." In *Signal Traffic: Critical Studies of Media Infrastructures*, ed. Lisa Parks and Nicole Starosielski. Urbana, Chicago, and Springfield: University of Illinois Press, 2015. 53-70.
2. Jason Farman, "Invisible and Instantaneous: Geographies of Media Infrastructure from Pneumatic Tubes to Fiber Optics," *Media Theory*, May 18, 2018.
3. Carolyn Marvin, "Annihilating Space, Time, and Difference: Experiments in Cultural Homogenization," *When Old Technologies Were New: Thinking about Communications in the Late Nineteenth Century*, 191-231.

#### **Week 8 (27 October): Infrastructures of the Cloud**

1. Jennifer Holt and Patrick Vonderau, "'Where the Internet Lives': Data Centers as Cloud Infrastructure." In *Signal Traffic: Critical Studies of Media Infrastructures*, ed. Lisa Parks and Nicole Starosielski. Urbana, Chicago, and Springfield: University of Illinois Press, 2015. 71-93.
2. Sean Cubitt, Robert Hassan and Ingrid Volkmer, "Does Cloud Computing Have a Silver Lining?" *Media Culture Society* 33 (2011): 149-158.
3. Paul Dourish, "Protocols, Packets, and Proximity: The Materiality of Internet Routing." In *Signal Traffic: Critical Studies of Media Infrastructures*, ed. Lisa Parks and Nicole Starosielski. Urbana, Chicago and Springfield: University of Illinois Press, 2015. 183-204.

### **Week 9 (3 November): From Infrastructure to Platform and Back Again**

1. Jean-Christophe Plantin, Carl Lagoze, Paul Edwards, and Christian Sandvig. 2018. "Infrastructure Studies meet Platform Studies in the Age of Google and Facebook." *New Media & Society* 20.1, 293–310.
2. J. van Dijck, T. Poell, & M. de Waal, "The Platform Society as a Contested Concept." In *The Platform Society*. Oxford: Oxford University Press, 2018. 7- 30.
3. Jeroen de Kloet, Thomas Poell, Zeng Guohua, and Chow Yiu Fai, "The Platformization of Chinese Society: Infrastructure, Governance, and Practice," *Journal of Chinese Communication* 12.3 (2019), 249-256.

### **Week 10 (10 November): Labor, Repair, and Maintenance**

1. Shannon Mattern, "Maintenance and Care," *Places Journal*, November 2018. <https://placesjournal.org/article/maintenance-and-care/>
2. Dennis Tennen, "Right to Repair is Right to Interpret," <http://denten.plaintext.in/think.stack/repair>
3. Stephen Graham and Nigel Thrift, "Out of Order: Understanding Maintenance and Repair," *Theory, Culture & Society* 24 (May 2007), 1-25.
4. Mar Hicks, *Programmed Inequality: How Britain Discarded Women Technologists and Lost Its Edge in Computing*. MIT Press, 2018. [excerpt]

### **Week 11 (17 November): Infrastructural Inequality and Disruption**

1. Lisa Parks, "Water, Energy, Access: Materializing the Internet in Rural Zambia." In *Signal Traffic: Critical Studies of Media Infrastructures*, ed. Lisa Parks and Nicole Starosielski. Urbana, Chicago, and Springfield: University of Illinois Press, 2015. 115-136.
2. Mark Warschauer, "Economy, Society, and Technology: Analyzing the Shifting Terrains." In *Technology and Social Inclusion: Rethinking the Digital Divide*. MIT Press, 2003. 11-30.
3. Kate Crawford and Vladan Joler, *Anatomy of an AI System* (2018), <https://anatomyof.ai>

### **Week 12 (24 November): Material and Environmental Ecologies**

1. Jussi Parikka, "Introduction: The Materiality of Media and Waste." In *Medianatures: The Materiality of Information Technology and Electronic Waste*. Open Humanities Press, 2015.
2. Richard Maxwell and Toby Miller, *Greening the Media*. Oxford and New York: Oxford University Press, 2012. 22-41
3. Jean-François Blanchette, "A Material History of Bits," *Journal of the American Society for Information Science and Technology* 62. 6 (June 2011), 1042–1057.

### **Week 13 (1 December): Final Presentations**

#### **Honesty in Academic Work: A Guide to Students**

The Chinese University of Hong Kong places very high importance on honesty in academic work submitted by students, and adopts a policy of zero tolerance on cheating and plagiarism. Any related offence will lead to disciplinary action including termination of studies at the University. All student assignments in undergraduate and postgraduate programmes should be submitted via VeriGuide with effect from September 2008:[https://academic.veriguide.org/academic/login\\_CUSCS.jsp](https://academic.veriguide.org/academic/login_CUSCS.jsp)

Although cases of cheating or plagiarism are rare at the University, everyone should make himself/herself familiar with the content of this website and thereby help avoid any practice that would not be acceptable.