

## **GEO719: Digital Geographies – this version from August 22, 2017**

Fall 2017, Tuesdays 2:00 to 4:45 pm

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This seminar introduces students to the field of digital geographies<sup>1</sup> a very dynamic field of study that is very much in the process of defining itself. This seminar is roughly organized around background history (3 weeks), theories of code/space and big data (3 weeks), digital methods (1 week) and manifestations/phenomenon (7 weeks).

- History of the sub-discipline: In this seminar I trace it back to approximately the mid-1990s when the commercial internet emerged and geographers began to think about what this meant for space and place. Where was the internet? Can we measure/map it? How do we think about and theorize digital space (or cyberspace if you're feeling old school)? Fast forward ten years and GPS applications – most notably Google Earth/Maps – appeared alongside social media platforms creating opportunities for user-generated data, maps and applications. Human geography and GIScience coming together in really fascinating ways.
- Theories of code/space and big data: How does software (aka code) contribute to the creation and control of space and places? Why is everyone so excited by “big data” and is this excitement warranted? Where does code and big data come from, who controls it and how is it interacting with everyday life and research, social, cultural and business practices?
- Methods: How do we study digital geographies? How does it differ (or not) from studying “regular” topics? Is it worth doing? Should some topics, techniques and data sources be avoided?
- Manifestations/phenomenon: The second half of the semester is a survey of a range of “hot topics” within digital geographies to give you some sense of what currently is under study. To be sure, this is a partial list. The first three weeks – “Algorithms, Clouds and Risk”, “Privacy and Surveillance” and “Cities” – represent areas in which a fair number of people have worked although with lots of questions still to be asked and answered. The last four weeks – “Labor, Work and Robots”, “Intimacy”, “Platform Economies, Fintech and Blockchain” and “Resistance, Hacking and the Darknet” – are less well developed.

Most of the readings will be journal articles (accessible via the UK library or pdf from me) but it is worth getting your own copy of Kitchin, Rob, and Martin Dodge. 2011. *Code/Space: Software and Everyday Life*. The MIT Press for week 4. As our discussion evolves over the seminar, so will the set of reading. I am happy to take suggestions for readings (even off topic).

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<sup>1</sup> Btw, there are a lot of different names that have been used to label various parts of what this seminar covers: internet geography, cybergeographies, information geography, geographies of telecommunications, cyborg geographies, geoweb, GIS and society, critical GIS, crowd-sourcing, etc. etc. etc., At this moment, digital geography is a good catch-all term that has recently been used both within the AAG and RGS/IBG to form specialty groups.

## Requirements/Grading

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Each week lists Readings (required), Exhibits (things that are worth a quick skim) and Supplementary Readings (related to the topic and really good, but there's only so much time).

The Grading Scale is 100-90=A; 89-80=B; 79-70=C; <70 =F. Grades are based on:

- Class participation, response drafts, article summaries, and leading discussion (50%)
  - You are expected to do the readings, attend seminar and participate in the discussion.
  - In addition, everyone will submit (1) a short weekly response (2 paragraphs) that highlights disagreements/tensions within and between the readings and questions/critiques that arise during the reading. These are due by Monday evening before seminar. Note: earlier submissions will help your fellow participants with leading discussion.
  - Each participant will take the lead with discussion for two class meetings (usually with one other person). On your week that you should review the responses and summaries of your classmates and prepare an activity or set of questions to structure the seminar.
- Writing project (50%) A paper on related theme to the focus of this class. I'm happy with a range of different formats including (1) a literature review to be used as part of a thesis proposal or exam; (2) a regular seminar research paper; or (3) something more ambitious including some primary research with the ultimate goal of publishing. We will discuss in more details later in the semester. These will be due around December 12<sup>th</sup>.

## 1. Introduction (Aug 29)

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## 2. Studying/Theorizing/Mapping information/cyberspace (Sept 5)

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*Readings (suggested order)*

Massey, D. 1991. "A Global Sense of Place." *Marxism Today* 35(6), 24–29.

[http://www.aughty.org/pdf/global\\_sense\\_place.pdf](http://www.aughty.org/pdf/global_sense_place.pdf)

Batty M 1997. Virtual geography. *Futures* 29: 337–352.

Graham S 1998. The end of geography or the explosion of place? Conceptualising space, place and information technology. *Progress in Human Geography* 22: 165–185.

Thrift, Nigel, and Shaun French. 2002. "The Automatic Production of Space." *Transactions of the Institute of British Geographers* 27 (3): 309-335.

Sheppard, E. 2002. The spaces and times of globalization: place, scale, networks, and positionality. *Economic geography*, 78(3), 307-330.

Graham, Stephen. 2005. "Software-sorted geographies." *Progress in Human Geography* 29 (5): 562-580.

*Supplementary Readings*

Adams PC (1997) Cyberspace and virtual places. *Geographical Review* 87: 155–171.

- Barnes, Trevor J. 2008. "Geography's underworld: The military-industrial complex, mathematical modelling and the quantitative revolution." *Geoforum* no. 39:3-16
- Batty M, Barr B (1994) The electronic frontier: Exploring and mapping cyberspace. *Futures* 26: 699–712
- Haraway, Donna (1991). "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century". *Simians, Cyborgs and Women: The Reinvention of Nature*. Routledge
- Crang M, Graham S (2007) Sentient cities: Ambient intelligence and the politics of urban space. *Information, Communication and Society* 10: 789–817.
- Dodge M (2001) Cybergeography. *Environment and Planning B: Planning and Design* 28: 1–2.
- Dodge M, Kitchin R (2000) *Mapping Cyberspace*. London: Routledge.
- Froehling, Oliver. 1997. "The Cyberspace 'War of Ink and Internet' in Chiapas, Mexico." *Geographical Review* 87(2): 291–307.
- Introna, Lucas D., and Helen Nissenbaum. 2000. "Shaping the Web: Why the Politics of Search Engines Matters." *The Information Society* 16(3): 169–185.
- Kirsch, Scott. 1995. "The incredible shrinking world? Technology and the production of space." *Environment and Planning D: Society and Space* 13(5): 529–555.
- Zook, M.A. (2000). The web of production: The economic geography of commercial internet content production in the United States. *Environment and Planning A*. Vol. 32. 411-426.

### **3. Enter Google Maps, VGI, Crowdsourcing and the Geoweb (Sept 12)**

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#### *Readings (suggested order)*

- Goodchild, M. (2007). Citizens as sensors: The world of volunteered geography. *GeoJournal*, 6(4): 211-221.
- Elwood, Sarah. Geographic information science: emerging research on the societal implications of the geospatial web. *Progress in Human Geography*, June 2010; vol. 34, 3: pp. 349-357
- Leszczynski, A. 2012. Situating the geoweb in political economy. *Progress in Human Geography* 36(1): 72-89
- Haklay, Muki. "Neogeography and the delusion of democratisation." *Environment and Planning A* 45.1 (2013): 55-69.
- Warf, Barney, and Daniel Z. Sui. 2010. "From GIS to neogeography: ontological implications and theories of truth." *Annals of GIS* no. 16 (4):197-209.
- Zook, Matthew A., and Mark Graham. 2007. "Mapping DigiPlace: geocoded Internet data and the representation of place." *Environment and Planning B: Planning and Design* no. 34:466-482.

#### *Supplementary Readings*

- Crampton, J. W. (2009). Cartography: maps 2.0. *Progress in Human Geography*, 33(1), 91-100.

- Haklay M, 2010, "How good is volunteered geographical information? A comparative study of OpenStreetMap and Ordnance Survey datasets" *Environment and Planning B: Planning and Design* 37(4) 682 – 703
- Stephens, Monica. "Gender and the geoweb: Divisions in the production of user-generated cartographic information." *GeoJournal* 78.6 (2013): 981-996.
- Young, Jason C., and Michael P. Gilmore. "Subaltern Empowerment in the Geoweb: Tensions between Publicity and Privacy." *Antipode* 46.2 (2014): 574-591.
- Wilson, Matthew W. "Location-based services, conspicuous mobility, and the location-aware future." *Geoforum* 43.6 (2012): 1266-1275.
- Zook, Matthew, and Mark Graham. 2007. "The creative reconstruction of the Internet: Google and the privatization of cyberspace and DigiPlace." *Geoforum* 38 (6): 1322-1343.
- Zook, Matthew A., Mark Graham, Taylor Shelton, and Sean Gorman. 2010. "Volunteered geographic information and crowdsourcing disaster relief: A case study of the Haitian earthquake." *World Medical & Health Policy* no. 2 (2):7-33.

#### **4. Making the field of 'digital geography'? (Sept 19)**

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##### *Readings (suggested order)*

- Kinsley, S. (2014). The matter of 'virtual' geographies. *Progress in Human Geography*, 38(3), 364-384.
- Leszczynski, A. (2015). Spatial media/tion. *Progress in Human Geography*, 39(6), 729-751.
- Wilson, M. W. (2014). Continuous connectivity, handheld computers, and mobile spatial knowledge. *Environment and Planning D: Society and Space*, 32(3), 535-555.
- Leszczynski, A., & Elwood, S. (2015). Feminist geographies of new spatial media. *The Canadian Geographer/Le Géographe canadien*, 59(1), 12-28.
- Rose, G. (2016). Rethinking the geographies of cultural 'objects' through digital technologies: Interface, network and friction. *Progress in Human Geography*, 40(3), 334-351.
- Ash, J., Kitchin, R., & Leszczynski, A. (2016). Digital turn, digital geographies?. *Progress in Human Geography*, 0309132516664800.

##### *Exhibits*

- Top Ten Maps of Floatingsheep. <http://www.floatingsheep.org/>
- Rogers, S. (2013) Twitter's languages of New York mapped. *The Guardian*, 21st February 2013 <http://www.guardian.co.uk/news/datablog/interactive/2013/feb/21/twitter-languages-new-york-mapped>

#### **5. Code/Space (Sept 26)**

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##### *Readings*

- Kitchin, Rob, and Martin Dodge. 2011. *Code/Space: Software and Everyday Life*. The MIT Press.

## 6. Big Data – Part I (Oct 3)

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### *Readings (suggested order)*

- Savage M and Burrows R (2007) The coming crisis of empirical sociology. *Sociology* 41(5): 885–899. [compare to their 2014 article].
- Anderson, C. (2008) “The end of theory: The data deluge makes the scientific method obsolete,” *Wired*, 16.07.
- boyd, D. and Crawford, K. (2012) Critical questions for big data. *Information, Communication and Society* 15(5): 662-679
- Roger Burrows and Mike Savage. 2014. After the crisis? Big Data and the methodological challenges of empirical sociology. *Big Data & Society* April-June 2014  
doi:10.1177/2053951714540280  
<http://bds.sagepub.com/content/1/1/2053951714540280.full.pdf+html>
- Kitchin, Rob (2014) Big Data, new epistemologies and paradigm shifts. *Big Data and Society* (1): 1-12. DOI: 10.1177/2053951714528481.  
<http://bds.sagepub.com/content/1/1/2053951714528481>
- Mark Graham and Taylor Shelton. Geography and the future of big data, big data and the future of geography. *Dialogues in Human Geography* November 2013 3: 255-261,
- Miller, H. J., & Goodchild, M. F. (2015). Data-driven geography. *GeoJournal*, 80(4), 449-461.

### *Exhibits of Uncritical Boosterism of Big Data*

- Strom, D. (2012) Big data makes things better. *Slashdot*, August 3rd.  
<http://slashdot.org/topic/bi/big-data-makes-things-better/> (last accessed 24 October 2013)
- Clark, L. (2013) No questions asked: big data firm maps solutions without human input. *Wired*, 16 January 2013, <http://www.wired.co.uk/news/archive/2013-01/16/ayasdi-big-data-launch> (last accessed 28 January 2013)
- Dyche, J. (2012) Big Data "Eurekas!" Don't Just Happen *Harvard Business Review Blog*. Nov 20th. [http://blogs.hbr.org/cs/2012/11/eureka\\_doesnt\\_just\\_happen.html](http://blogs.hbr.org/cs/2012/11/eureka_doesnt_just_happen.html)
- Pentland, A. (2012) Reinventing society in the wake of big data. *Edge*, 30 August 2012, <http://www.edge.org/conversation/reinventing-society-in-the-wake-of-big-data>
- Steadman, I. (2013) Big data and the death of the theorist. *Wired*, 25th January 2013, <http://www.wired.co.uk/news/archive/2013-01/25/big-data-end-of-theory>

### *Supplementary Readings*

- Rob Kitchin. 2014. *The Data Revolution: Big Data, Open Data, Data Infrastructures and Their Consequences*
- Thatcher, J. (2016). The object of mobile spatial data, the subject in mobile spatial research. *Big Data & Society*, 3(2), 2053951716659092.

## 7. Big Data – Part II (Oct 10)

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### *Readings (suggested order)*

- Couldry, N., & Powell, A. (2014). Big data from the bottom up. *Big Data & Society*, 1(2), 2053951714539277.
- Dalton, C. M., Taylor, L., & Thatcher, J. (2016). Critical Data Studies: A dialog on data and space. *Big Data & Society*, 3(1), 2053951716648346.
- Leszczynski, A., & Crampton, J. (2016). Introduction: spatial big data and everyday life. *Big Data & Society*, 3(2), 2053951716661366.
- Trevor J Barnes. Big data, little history. *Dialogues in Human Geography* November 2013 3: 297-302,
- Cockayne, D. G. (2016). Affect and value in critical examinations of the production and 'prosumption' of Big Data. *Big Data & Society*, 3(2), 2053951716640566.
- Kitchin, R., & McArdle, G. (2016). What makes Big Data, Big Data? Exploring the ontological characteristics of 26 datasets. *Big Data & Society*, 3(1), 2053951716631130.

### *Supplementary Readings*

#### Special issue on Dialogues in Human Geography (and other early Geography takes on Big data)

- Rob Kitchin. Big data and human geography: Opportunities, challenges and risks  
*Dialogues in Human Geography* November 2013 3: 262-267
- Dalton CM and Thatcher J (2015) Inflated granularity: Spatial "Big Data" and geodemographics. *Big Data & Society* 2(2): 2053951715601144.
- Evelyn Ruppert. Rethinking empirical social sciences. *Dialogues in Human Geography* November 2013 3: 268-273,
- Michael Batty. Big data, smart cities and city planning. *Dialogues in Human Geography* November 2013 3: 274-279
- Michael F Goodchild. The quality of big (geo)data *Dialogues in Human Geography* November 2013 3: 280-284,
- Sean P Gorman. The danger of a big data episteme and the need to evolve geographic information systems *Dialogues in Human Geography* November 2013 3: 285-291,
- Sandra González-Bailón. Big data and the fabric of human geography. *Dialogues in Human Geography* November 2013 3: 292-296,

## **8. Digital research methods (Oct 17)**

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### *Readings (suggested order)*

- Crampton, Jeremy W., et al. "Beyond the geotag: situating 'big data' and leveraging the potential of the geoweb." *Cartography and Geographic Information Science* 40.2 (2013): 130-139.
- Kinsley, S. (2013). Beyond the screen: methods for investigating geographies of life 'online'. *Geography compass*, 7(8), 540-555.
- Wilson, M. W. (2015). Morgan Freeman is dead and other big data stories. *cultural geographies*, 22(2), 345-349.
- Leszczynski, A. (2017). Digital methods I: Wicked tensions. *Progress in Human Geography*, 0309132517711779.

- Duggan, M. (2017). Questioning “digital ethnography” in an era of ubiquitous computing. *Geography Compass*, 11(5).
- Zook, M., et al. (2017). Ten Simple Rules for Responsible Big Data Research. *PLOS Computational Biology*. March 31. <https://doi.org/10.1371/journal.pcbi.1005399>

#### *Supplementary Readings*

- Poorthuis, A., M. Zook, T. Shelton, M. Graham and M. Stephens. (2016). Using Geotagged Digital Social Data in Geographic Research. Book chapter *Key Methods in Geography* (3rd edition) Sage. Pp. 248-268.
- Zook, M., Barocas, S., boyd, d., Crawford, K., Keller, E., Gangadharan, S.P., Goodman, A., Hollander, R., Koenig, B., Metcalf, J., Narayanan, A., Nelson, A., and Pasquale, F. (2017). Ten Simple Rules for Responsible Big Data Research. *PLOS Computational Biology*. March 31. <https://doi.org/10.1371/journal.pcbi.1005399>
- Zwitter, A. (2014). Big data ethics. *Big Data & Society*, 1(2), 2053951714559253.
- Ford, H. (2014). Big Data and Small: Collaborations between ethnographers and data scientists. *Big Data & Society*, 1(2), 2053951714544337.
- BD&S society paper, Algorithmic Governance: Developing a Research Agenda through the Power of Collective Intelligence

## **9. Algorithms, Clouds and Risk (Oct 24)**

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#### *Readings (suggested order)*

- Amoore L (2011) Data derivatives: On the emergence of a security risk calculus for our times. *Theory, Culture & Society* 28: 24–43.
- Karen Yeung. Algorithmic regulation: A critical interrogation.  
<http://onlinelibrary.wiley.com/doi/10.1111/rego.12158/full>
- Amoore, L. (2016). Cloud geographies: Computing, data, sovereignty. *Progress in Human Geography*, 0309132516662147.
- Leszczynski, A. (2016). Speculative futures: Cities, data, and governance beyond smart urbanism. *Environment and Planning A*, 48(9), 1691-1708.
- Christin, A. (2017). Algorithms in practice: Comparing web journalism and criminal justice. *Big Data & Society*, 4(2), 2053951717718855.
- Amoore, L., & Raley, R. (2017). Securing with algorithms: Knowledge, decision, sovereignty. *Security Dialogue*, 48(1), 3-10.

#### *Supplementary Readings*

- Straube, T. (2016). Stacked spaces: Mapping digital infrastructures. *Big Data & Society*, 3(2), 2053951716642456.
- Special issue on the social power of algorithms in Information, Communication & Society (July 2017) <http://www.tandfonline.com/toc/rics20/20/1>

#### *Supplementary Readings in the related topic of infrastructure*

- Graham, S., & Marvin, S. (2001). *Splintering urbanism: networked infrastructures, technological mobilities and the urban condition*. Psychology Press.
- Kaika, M., & Swyngedouw, E. (2000). Fetishizing the modern city: the phantasmagoria of urban technological networks. *International Journal of Urban and Regional Research*, 24(1), 120-138.
- Wiig, A. (2013). Everyday landmarks of networked urbanism: Cellular antenna sites and the infrastructure of mobile communication in Philadelphia. *Journal of Urban Technology*, 20(3), 21-37.
- Hogan, M. (2015). Data flows and water woes: The Utah Data Center. *Big Data & Society*, 2(2), 2053951715592429.
- Pickren, G. (2016). 'The global assemblage of digital flow' Critical data studies and the infrastructures of computing. *Progress in Human Geography*, 0309132516673241.

## 10. Privacy and Surveillance (Oct 31)

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### *Readings (suggested order)*

- Goss, Jon. 1995. "We Know Who You Are and We Know Where You Live': The Instrumental Rationality of Geodemographic Systems." *Economic Geography* 71(2): 171-198.
- Dalton CM and Thatcher J (2015) Inflated granularity: Spatial "Big Data" and geodemographics. *Big Data & Society* 2(2): 2053951715601144.
- David Lyon. 2014. Surveillance, Snowden, and Big Data: Capacities, consequences, critique *Big Data & Society* July-September 2014 1 doi:10.1177/2053951714541861 <http://bds.sagepub.com/content/1/2/2053951714541861.full.pdf+html>
- Crampton, J. W. (2015). Collect it all: National security, big data and governance. *GeoJournal*, 80(4), 519-531.
- Jefferson, B. J. (2017). Predictable Policing: Predictive Crime Mapping and Geographies of Policing and Race. *Annals of the American Association of Geographers*, 1-16.
- Leszczynski A (2017) Geoprivacy. In Kitchin R, Wilson MW and Laurialt TP, *Understanding Spatial Media*. SAGE. pp. 235-244

### *Exhibits*

- Special Issue on "Surveillance and the Global Turn to Authoritarianism" in *Surveillance and Society* <https://ojs.library.queensu.ca/index.php/surveillance-and-society/issue/view/authority>

### *Supplementary Readings*

- Crampton, J. W., Roberts, S. M., & Poorthuis, A. (2014). The new political economy of geographical intelligence. *Annals of the Association of American Geographers*, 104(1), 196-214.
- Browne, S. (2015). *Dark matters: On the surveillance of blackness*. Duke University Press.
- Elwood, Sarah A., and Agnieszka Leszczynski. 2011. "Privacy, reconsidered: New representations, data practices, and the geoweb." *Geoforum* no. 42:6-15.



- Graham, S. and Wood, D. 2003. Digitizing surveillance: categorization, space, inequality. *Critical Social Policy* 23(2): 227-248.
- Jefferson, B. J. (2017). Digitize and punish: Computerized crime mapping and racialized carceral power in Chicago. *Environment and Planning D: Society and Space*, 0263775817697703.
- Morozov, Evgeny. 2011. *The Net Delusion: The Dark Side of Internet Freedom*. Public Affairs.
- Perkins, Chris, and Martin Dodge. 2009. "Satellite imagery and the spectacle of secret spaces." *Geoforum* no. 40:546-560.
- Rose-Redwood, Reuben Sky. 2012. "With Numbers in Place: Security, Territory, and the Production of Calculable Space." *Annals of the Association of American Geographers* no. 102 (2):295-319.

## 11. Cities (Nov 7)

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### *Readings (suggested order)*

- Graham, M, Zook, M. and A. Boulton. 2013. Augmented Reality in the Urban Environment: Distorted Mirrors and Imagined Reflections. *Transactions of the Institute of British Geographers*. Vol. 38(3), 464–479. DOI: 10.1111/j.1475-5661.2012.00539.x
- van Dijck, J. (2014) Datafication, Dataism, and Dataveillance: Big Data between scientific paradigm and ideology, *Surveillance & Society*, 12(2): 197-208. <http://www.surveillance-and-society.org>.
- Shelton, Taylor Matthew Zook and Alan Wiig. 2014. The ‘actually existing smart city’ *Cambridge Journal of Regions, Economy and Society*. Forthcoming.
- Shelton, T. (2017). The urban geographical imagination in the age of big data. *Big Data & Society*, 4(1), 2053951716665129.
- Rose, G. (2017). Posthuman Agency in the Digitally Mediated City: Exteriorization, Individuation, Reinvention. *Annals of the American Association of Geographers*, 107(4), 779-793.
- Mattern, Shannon. A City is Not a Computer. *Places* <https://placesjournal.org/article/a-city-is-not-a-computer/>
- Brauneis and Goodman. 2017. Algorithmic Transparency for the Smart City [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3012499](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3012499)

### *Supplementary Readings*

- Ashton, P. Weber, R and M. Zook. (2017). How New Data Practices Reconfigure Urban Governance. *Big Data and Society*. <http://journals.sagepub.com/doi/full/10.1177/2053951717706718>
- Batty, M. (2012) “Smart cities, Big Data,” *Environment and Planning B*, 39, 191–193.
- Crang M, Graham S, 2007, “Sentient cities: ambient intelligence and the politics of urban space”, *Information, Communication & Society* 10(6): 789-817
- Crutcher, Michael, and Matthew A. Zook. 2009. "Placemarks and waterlines: Racialized cyberscapes in post-Katrina Google Earth." *Geoforum* no. 40:523-534.

- Shelton, T., A. Poorthuis, Zook, M. (2015). Social media and the city: Rethinking urban socio-spatial inequality using user-generated geographic information. *Landscape and Urban Planning*, pp. 198–211 doi:10.1016/j.landurbplan.2015.02.020
- Nigel Thrift. 2014. The ‘sentient’ city and what it may portend Big Data & Society April-June 2014 1. doi:10.1177/2053951714532241  
<http://bds.sagepub.com/content/1/1/2053951714532241.full.pdf+html>
- Townsend, A. (2013) *Smart Cities: Big Data, Civic Hackers, and the Quest for a New Utopia*, Norton.

## 12. Labor, Work and Robots (Nov 14)

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### Readings (suggested order)

- Strauss, K. (2017). Labour geography 1: Towards a geography of precarity?. *Progress in Human Geography*, 0309132517717786.
- Richardson, L. (2017). Sharing as a postwork style: digital work and the co-working office. *Cambridge Journal of Regions, Economy and Society*, 10(2), 297-310.
- Richardson, L. (2015). Performing the sharing economy. *Geoforum*, 67, 121-129.
- Cockayne, D. G. (2016). Sharing and neoliberal discourse: The economic function of sharing in the digital on-demand economy. *Geoforum*, 77, 73-82.
- Del Casino Jr, V. J. (2016). Social geographies II: Robots. *Progress in Human Geography*, 40(6), 846-855.
- Bissell, D., & Del Casino, V. J. (2017). Whither labor geography and the rise of the robots?. *Social & Cultural Geography*, 18(3), 435-442.

### Exhibits

- Where Robots are Doing Factory Jobs. <https://www.citylab.com/life/2017/08/where-robots-are-doing-factory-jobs/537327/>

### Supplementary Readings

- Graham, M. 2014. Internet Geographies: Data Shadows and Digital Divisions of Labour. In *Society and the Internet: How Networks of Information and Communication are Changing our Lives*. eds. Graham, M., and Dutton, W. H. Oxford: Oxford University Press. 99-116.
- Fuchs, C. (2014). *Digital Labour and Karl Marx*. Routledge. <http://fuchs.uti.at/books/digital-labour-and-karl-marx/>

## 13. Intimacy (Nov 21)

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### Readings (suggested order)

- Haythornthwaite, C. (2005). Social networks and Internet connectivity effects. *Information, Community & Society*, 8(2), 125-147.
- Dyck, I. (2005). Feminist geography, the ‘everyday’, and local–global relations: hidden spaces of place-making. *The Canadian Geographer/Le Géographe canadien*, 49(3), 233-243.

- Richardson, L. (2016). Feminist geographies of digital work. *Progress in Human Geography*, 0309132516677177.
- Cockayne, D. Leszczynski, A. & M. Zook. (2017). #HotForBots: Sex, the non-human, and digitally-mediated spaces of intimate encounter. *Environment and Planning D: Society & Space*. 0263775817709018.
- Cockayne, D. G., & Richardson, L. (2017). Queering code/space: the co-production of socio-sexual codes and digital technologies. *Gender, Place & Culture*, 1-17.

#### *Supplementary Readings*

- McGlotten, S. (2013). *Virtual intimacies: Media, affect, and queer sociality*. Suny Press.
- Nash CJ, Gorman-Murray A (2016) Digital sexualities. In: Brown G, Browne K (eds) *The Routledge Research Companion to Geographies of Sex and Sexualities*, London: Routledge, pp. 353–358.
- Wilson HF (2016) On geography and encounter: Bodies, borders, and difference. *Progress in Human Geography*.
- Zook, M. A. (2003). Underground globalization: Mapping the space of flows of the Internet adult industry. *Environment and Planning A*, 35(7), 1261-1286.

### **14. Platform Economies, Fintech and BlockChain (Nov 28)**

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#### *Readings (suggested order)*

- MacKenzie D (2006) *An Engine, not a Camera. How Financial Models Shape Markets*, Cambridge: MIT Press
- MacKenzie D, Beunza D, Millo Y, (2012) Drilling through the Allegheny Mountains. *Journal of Cultural Economy* 5(3): 279–296.
- Zook, M., and M. Grote. (2016). The Microgeographies of Global Finance: High Frequency Trading and the Construction of Information Inequality. *Environment and Planning A*. DOI: 10.1177/0308518X16667298
- Langley, P., & Leyshon, A. (2016). Platform capitalism: the intermediation and capitalisation of digital economic circulation. *Finance and society*.
- Binbin Wang and Xiaoyan Li. Big Data, Platform Economy and Market Competition: A Preliminary Construction of Plan-Oriented Market Economy System in the Information Era. *World Review of Political Economy*. Vol. 8, No. 2 (Summer 2017), pp. 138-161

#### *Exhibits*

- When the Cookie meets the Blockchain - <https://freedom-to-tinker.com/2017/08/17/when-the-cookie-meets-the-blockchain/>
- Stephen Mason. Consultation on Making a Will  
<http://stephenmason.co.uk/homepage/consultation-on-ewills>

#### *Supplementary Readings*

### **15. Resistance, Hacking and the Darknet (Dec 5)**

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#### *Readings (suggested order)*

- John Perry Barlow, A Declaration of the Independence of Cyberspace.  
<https://projects.eff.org/~barlow/Declaration-Final.html>
- Elwood, S. and Leszczynski, A. (2013). New spatial media, new knowledge politics. *Transactions of the Institute of British Geographers*. 38 (4): 544-559.
- Dencik, L., Hintz, A., & Cable, J. (2016). Towards data justice? The ambiguity of anti-surveillance resistance in political activism. *Big Data & Society*, 3(2), 2053951716679678.
- Pybus, J., Coté, M., & Blanke, T. (2015). Hacking the social life of Big Data. *Big Data & Society*, 2(2), 2053951715616649.
- Zook, M. and M. Graham. (2017). Rethinking the Code of Global Capitalism: Relational Code/Spaces and Airline Hacking. (under revisions for *Transactions of the Institute of British Geographers*).

### *Supplementary Readings*

- Coleman, G., 2013. *Coding freedom: The ethics and aesthetics of hacking*. Princeton University Press.
- Coleman, G., 2014. *Hacker, hoaxer, whistleblower, spy: The many faces of Anonymus*. Verso Books.
- Coleman, G. 2016. Hackers and the Craftiness of Craft. *Digital Keywords: A Vocabulary of Information Culture and Society*. Benjamin Peters, ed. Princeton: Princeton University Press,
- Debord, G. (1955). Introduction to a critique of urban geography. *Critical Geographies A Collection of Readings*.
- Garrett, Bradley. *Explore everything: Place-hacking the city*. Verso Books, 2013.
- Lin, Wen. "Situating performative neogeography: tracing, mapping, and performing "Everyone's East Lake"." *Environment and Planning A* 45.1 (2013): 37-54.
- Lotan, Gilad, Erhardt Graeff, Mike Ananny, Devin Gaffney, Ian Pearce, & danah boyd. "The Arab Spring| The Revolutions Were Tweeted: Information Flows during the 2011 Tunisian and Egyptian Revolutions." *International Journal of Communication [Online]*, 5 (2011): 31. Web. 26 Aug. 2014
- Mott, C., & Roberts, S. M. (2014). Not everyone has (the) balls: Urban exploration and the persistence of masculinist geography. *Antipode*, 46(1), 229-245.
- Wark, McKenzie. 2004. A Hacker Manifesto  
[https://selforganizedseminar.files.wordpress.com/2011/07/wark\\_hacker\\_manifesto.pdf](https://selforganizedseminar.files.wordpress.com/2011/07/wark_hacker_manifesto.pdf)
- Wilmott, C. (2016). Small moments in Spatial Big Data: Calculability, authority and interoperability in everyday mobile mapping. *Big Data & Society*, 3(2), 2053951716661364.
- Woodyer, Tara. "Ludic geographies: Not merely child's play." *Geography Compass* 6.6 (2012): 313-326.
- Zook, M.A. (1996). The unorganized militia network: Conspiracies, computers, and community. *Berkeley Planning Journal*. 11(1): 26-48.

