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| **COMS 2200, Fall 2019**  **BIG DATA and SOCIETY**  Communication and Media Studies  School of Journalism and Communication  Sept. 9, 2019 – Dec. 06, 2019  Monday’s, 14:30 – 17:25, AT102 | Dr. Tracey P. Lauriault  [Tracey.Lauriault@Carleton.ca](mailto:Tracey.Lauriault@Carleton.ca)  <http://orcid.org/0000-0003-1847-2738>  4110b River Building  **Office Hours:**  Tuesdays 13:00 – 16:00 |



# Textbook & Readings:

* See the course schedule, CuLearn and ARES.
* COMS2200 DataViz & Writing Resources Display in the Library on the 1st floor also see resources listed here <https://traceyplauriault.ca/dataviz/>

### Communication:

* Updates and course information will be posted on [CuLearn](http://www.carleton.ca/culearn) and/or emailed to you.
* Emails must have **COMS2200 *in the subject line.***

### Course Description

The collection of data about us starts just before we are born, it continues after when we go to school, enter the labour force and register for a service. Data are also produced as we go about our daily activities –shopping, banking, making phone calls, ordering a taxi, posting to social media, navigating the city, voting, exercising, and filing taxes. Data are also collected as we do exceptional things such as crossing borders, checking into hospital, if we commit crimes, and when we die. We are datafied, we leave behind data shadows, our lifeworld’s are colonized by data and living a dataless lifestyle is nearly impossible and trying may alert authorities.

This course covers a wide range of topics, themes and concepts such as data infrastructures, smart cities, the internet of things (IoT), surveillance and sousveillance, algorithmic governance, predictive policing, the quantified self, location-based services, data collection devices, geodemographics and open data among many others. Together we will examine how data shape and are shaped by actions and the social and material world.

### Objectives:

The objectives of this course are to:

* distinguish big data from small data, and to recognize data types;
* conceptualize data as part of socio-technological and political processes, as a form of discourse and as media;
* recognize the interconnections between data, their infrastructures, collection and dissemination technologies, software, platforms and how data are produced and used;
* identify data politics to understand the construction of facts and the framing of the truth.

### Assignment submission instructions:

* Submit to cuLearn
* ***Format:*** .doc, .docx, .rtf (**NOT** .pdf or .Pages)
* Use 12 pt font, 1.5 line spacing, 1-inch margins and indent paragraphs
* Include page numbers
* ***Citation style:*** Chicago, Harvard, APA, etc. just be consistent.
* Include a document header as follows:

**COMS2200 Big Data and Society**, Submitted to: Dr. Tracey P. Lauriault, **Assignment #,** dd/mm/yyyy, Stéphane Perrault, 123456789

### File naming convention:

PerraultStéphane \_COMS2200\_Assignment#.docx

### Assessment:

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| There will be 12 very short in-class quizzes, best 10/12 count! | | | | ***10%*** |
| **Assignment 1** Data Description (2 pages) | | Week 2 | Sep. 16, 8AM | ***10%*** |
| **Assignment 2**, Remote Sensing & Human Rights (2 pages) | |  | Oct. 16, 8AM | ***10%*** |
| **Assignment 3:** Follow your Facebook data trail (1 page)  **Part 1:** Get your Facebook Data  **Part 2:** Write a2-page data trail reflection article | | Week 6 | Oct. 28, 8AM | ***5%*** |
| **Assignment 4:** Critical review of data-based news article (2 pages) | | Week 9 | Nov. 18, 8AM | ***5%*** |
| **Final Project:** Open Data Infographic  **Part 1:** Forum  **Part 2:** Peer review  **Part 3:** Write up (2 pages)  **Part 4:** Final Infographic | | Weekly  Week 9  Week 12  Week 12 | Nov. 18, 8AM  Dec. 6, 8AM  Dec. 6, 8AM | ***35%***  10%  5%  5%  15% |
| **Final Exam** Dec. 9-21 | | | | ***25%*** |
|  | **Total** | | | **100%** |

### Quizzes

There will be 12 in-class quizzes. The best 10 out of 12 count. They will be done in class, on paper and to be handed in during class. You do not get to redo a quizz if you missed that class.

### Infographic Final Project (35%):

You will produce an informative, relevant, accurate, purposeful, fun, and creative infographic about **data and smart cities**. This can be about smart city indicators, data collected from sensors, data produced by city data analytics teams, data dashboards, data in communication and control rooms, data applications, data collected by wearables, data in maps, crowdsourced data, sharing economy data, etc. We will look at many examples in-class and do exercises to get you ready. You can discuss a data process, findings in the data, produce a data flow line or a data model, a smart city data issues, you can compare smart city data, you can tell a story with a dataset, you can unpack the components of a dataset, discuss data found in a report, etc. Your infographic can be digital, or it can be done by hand.

* See the COMS2200 resources in the Map section of the Library and the eBooks listed in ARES.
* See curated resources for you here <https://traceyplauriault.ca/dataviz/>.
* See CULearn Description Infographic Project.

To ensure your success you will have a small activity every week to help you build up to the final project. These will be posted in the CULearn Class Forum or will be part of in-class activities.

### Final Exam (20%) Exams December 9-21:

The final exam will include a combination of multiple choice and short answer questions about concepts, topics, and issues raised in this class, and an essay question.

### Academic Year Calendar: <http://calendar.carleton.ca/academicyear/>

### Readings & Schedule

## Week 1 (Sept.9) – Introduction – What are Data and what is a Smart City?

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| **Welcome to the class!** We will get to know each other, go over the course outline, assessment, responsibilities, learning objectives and discuss a provocative short essay. You will meet your TAs & there will be an in-class datasets activity. Students will learn to critically read a dataset, describe it and discuss the social shaping qualities of data. | **Compulsory Reading:**  Bell, Genevieve, 2015, The Secret Life of Big Data, Chapter 2 in Boellstorff, T. and Maurer, B. Eds. In *Data, Now Bigger and Better*, Paradigm Press, (pp.7-26). |
| **In Class Activity Datasets**  1. US Mass Shootings, 1982-2019: Data From Mother Jones’ Investigation <https://www.motherjones.com/politics/2012/12/mass-shootings-mother-jones-full-data/>  2. Stanford Mass Shootings of America (MSA) data project <https://library.stanford.edu/projects/mass-shootings-america> 3. Gun Violence Archive <https://www.gunviolencearchive.org/reports/mass-shooting> 4. Mass Shooting Tracker <https://www.massshootingtracker.org/data> 5. RAND Mass Shootings: Definitions and Trends <https://www.rand.org/research/gun-policy/analysis/essays/mass-shootings.html> |
| **Infographic / Data Visualization Resources:**  UK Guardian, <https://www.theguardian.com/us-news/ng-interactive/2017/oct/02/america-mass-shootings-gun-violence>  Flowing Data Shootings <https://flowingdata.com/tag/shootings/>  CityLab The Ultimate Guide to American Gun Control Laws <https://www.citylab.com/equity/2018/03/the-ultimate-analysis-of-gun-control-policies-with-maps/554570/>  CBC Canada gun facts: Here are the latest stats on firearm deaths, injuries and crime <https://www.cbc.ca/news/canada/calgary/canada-gun-facts-crime-accidental-shootings-suicides-1.4803378> |
| **Assignment 1 - Data Description (Due Week 2 @ 8:00AM Sept. 16) (10 %) 2 pages:**  Look for **any dataset related to smart cities** and download the data. In 2 pages, report the download process, where you found these data (e.g. a portal, news blog, data library, etc.), and describe the dataset. Explain your interest in this dataset, what might you use the data for? Be sure to provide a full citation of the dataset. You are welcome to use screen captures and they will not go against your page count! The following is a list of ideas to help you write this short report, **but do not limit yourselves to these:** Who produced the data and for what purpose? How are the variables defined? Dates? Format? Geographic extent? Was there a manual, dictionary, or methodological guide? Any limitations with these data? Was there a cost? What rights do you have to use these data? Do you trust these data and if so why? | |
| **INFOGRAPHIC A – (Due Week 2 Sept. 16, 8:00AM)**  Go to the MacOdrum Library MAP section on the 1st Floor. Peruse the COMS2200/COMS4407 2019 display on top of the map cabinets. Examine the books & maps and pick 3 that you find interesting. Cite (use proper citation) these 3 resources in the **CULearn Forum** and explain how you think this will help you with your infographic project. Share any interesting or useful tips. You can include a picture if you want but you do not have to (note that if you do, all images require captions). | |

## Week 2 (Sept. 16) – Crowdsourcing You and Digital Humanitarianism

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| This week we will learn about user generated content (UGC), citizen science, crowdsourcing & volunteered geographic information (VGI). We will also discuss divergent views on data crowdsourcing. Student will learn what authoritative data are and about data platforms. | **International Internship Program:** [International Internship Program](https://carleton.ca/career/international-internship-program/) offered by the FPA at Carleton U. and Career Services at Carleton University  **Guest Lecturer:** Ryan Tucci, Communication Specialist Librarian  **Compulsory Reading:**  Meier, Patrick. 2015. The Rise of Digital Humanitarianism in Digital Humanitarians: How Big Data is Changing the Face of Humanitarian Response, CRC Press.  Resor, Elizabeth (2015) The Neo‐Humanitarians: Assessing the Credibility of Organized Volunteer Crisis Mappers, Policy & Internet, 8(1): 34-54 <https://doi.org/10.1002/poi3.112> |
| **In Class Resource:**  Bike Ottawa Strava: <https://www.strava.com/clubs/168195>  Canadian Cycling Magazine Strava to be used for urban planning in Ottawa and Gatineau <https://cyclingmagazine.ca/sections/news/strava-used-urban-planning/>  City of Ottawa Data and Bicycle Counters <https://ottawa.ca/en/residents/transportation-and-parking/cycling/data-and-bicycle-counters>  Open Street Map Ottawa <https://wiki.openstreetmap.org/wiki/Ottawa#Events>  Vignette: Williams, Sarah; Beijing Air Tracks: Tracking Data for Good, 32-39 in Offenhuber, Dietmar and Schechtner, Katja (2013) *Accountability Technologies: Tools for asking hard questions*, Vienna: Ambra |
| **INFOGRAPHIC B – (Due Week 3 Sept. 23)**  Find 2 infographics in the library, online or anywhere else about smart cities. The infographics can be about concepts, processes, a paper, a story, and **must include data**, etc. Cite and share an image of these in the **CULearn Forum**. In a few words, explain why you selected these, provide a source and a citation, why you think they are good, discuss if there is room for improvement? What kind of visualization techniques did they use? What would you do differently? | |

## Week 3 (Sept. 23) – You in the Smart City

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| This week students will learn about smart cities and data analytics. We will have a guest speaker from the City of Ottawa, who is the client for your smart city Infographic project. Students will gain knowledge about data operations, politics and strategies. | **Compulsory Reading:**  Coletta, C., Evans L., Heaphy, L. and Kitchin, R. (2019) Creating Smart Cities, Chapter 1 in Creating Smart Cities, Regional Studies Association, Routledge. pp.1-19. |
| **Guest Speaker:**  **Darrell Bridge**, Senior Data Analytics Strategist, Open Data Lead, City of Ottawa, Service Innovation & Performance Department (SIPD).  **City of Ottawa Resources:**   * City of Ottawa Smart City 2.0 <https://documents.ottawa.ca/sites/documents/files/smart_city_strategy_en.pdf> * City of Ottawa Smart Cities Challenge <https://www.youtube.com/watch?time_continue=79&v=gvpZdNpFLK4> * Beta Mobile App <https://ottawa.ca/en/news/help-city-beta-test-its-new-app> * Beta Open Data Website <https://open.ottawa.ca/> * Engage Ottawa - Digital Public Consultation <https://engage.ottawa.ca/> * Ottawa L5 Test Track <https://www.investottawa.ca/ottawal5/>   **City of Ottawa Open Data Resources:**   * City of Ottawa – Open Data Council Report (May 12, 2010) <http://ottawa.ca/calendar/ottawa/citycouncil/occ/2010/05-12/csedc/08-ACS2010-COS-ITS-0005-Open%20data%20(2).htm> * Municipal Freedom of Information and Protection of Privacy Act <https://www.ontario.ca/laws/statute/90m56> * City of Ottawa Accountability & Transparency Policy <https://ottawa.ca/en/city-hall/your-city-government/policies-and-administrative-structure/administrative-policies#accountability-and-transparency-policy> |
| **INFOGRAPHIC C – (Due Week 4 Sept. 30)**  Go to the infographics display in the library and/or scroll through the eBooks in ARES. Select 2 resources that include a section on visualizing data in maps, networks or flow diagram. Cite those 2 resources in the forum and share a couple of useful tips, include ideas or examples that were striking to you. Test drive some of the infographic apps [https://traceyplauriault.ca/dataviz/#Infographic & Visualization](https://traceyplauriault.ca/dataviz/%23Infographic%20&%20Visualization). You will have to create a free account. You can also use Google Draw, Google Spreadsheets, power point or any other graphical tool of your choice. In the **CULearn Forum**, let us know which tools you tried, if you might use it/them for your infographic project and list its strengths and limitations. | |

## Week 4 (Sept. 30) – Moving, Locating and Sensing You

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| In this class student learn about sensors and the work they do in augmenting places, transportation, and mobility. Students will explore drones, satellites, GPS, LIDAR point clouds, Geiger counters and location-based services (LBS) data. The study of sensors will be framed in the context of smart cities, IoT, autonomous cars, transportation. | **Compulsory Reading:**  Greengard, Samuel (2015) The Internet Changes Everything, *The Internet of Things*, Cambridge: MIT Press.  Pentland, Alex (2014) Sensing Cities: How Mobile Sensing is Creating a Nervous System for Cities, Enabling Them to Become More Healthy, Safe and Efficient, chapter 8 in *Social Physics*, The Penguin Press. |
| **Resources:**  3 Vignettes: IGiegie, Safecast, 48-49, Safecast, 50-53, On The Collection of Human Mobility Data, 54-57 in Offenhuber, Dietmar and Schechtner, Katja (eds.) (2012) *Inscribing a Square: Urban Data as Public Space*, New York: SpringerWien.  Pirokka, Michalis; Ellis, Erle C.; and Del Trecidi, Peter (2015) Personal Remote Sensing: Computer Vision Landscaped in *New Geographies 07, Geographies of Information*, Harvard University.  US Government Accountability Office (2013) *IN-CAR LOCATION-BASED SERVICES Companies Are Taking Steps to Protect Privacy, but Some Risks May Not Be Clear to Consumers*, Report GAO-14-81 <https://www.gao.gov/assets/660/659509.pdf> |
| **Assignment 2 - Remote Sensing (Due Oct. 16 @ 8AM) (10 %) 2 pages:**  Go to the American Association for the Advancement of Science (AAAS) website and select any of the EO human rights reports (<https://www.aaas.org/programs/scientific-responsibility-human-rights-law/past-projects/remote-sensing-human-rights> ). Explain how Earth Observation (EO) technologies were used to document a human rights issue. Include how the issues were reported, which organizations were involved, how were data accessed, data sources, and your reflections on this type of analysis and reporting. Why you think the organizations involved chose this type of reporting. | |
| **INFOGRAPHIC D – (Due Week 5 Oct. 7)**  In the **CULearn Forum** state your infographic topic, include a thesis question, suggest a target audience, create a catchy title to hook your viewers, outline your main argument in bullet points, and list a/some potential Smart City datasets. | |

## Week 5 (Oct. 7) – Social You and Elections

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| In this lecture students learn about the role of data and social media, facts, and influence in elections. | **Compulsory Reading:**  UK Information Commissioner’s Office (2018) *Democracy Disrupted: Personal information and political influence* <https://ico.org.uk/media/action-weve-taken/2259369/democracy-disrupted-110718.pdf>  Bellemare, A. (2019) So, you think you've spotted some 'fake news' — now what? *CBC* <https://www.cbc.ca/news/technology/fake-news-disinformation-propaganda-internet-1.5196964> |
| **Resources:**  A rough Guide to Spotting Bad Science <https://www.compoundchem.com/2014/04/02/a-rough-guide-to-spotting-bad-science/>  UK Guardian Cambridge Analytica Files <https://www.theguardian.com/news/series/cambridge-analytica-files>  Apathy is Boring Election Disinformation Resources <https://www.apathyisboring.com/disinfo>  Policy & Research, February 2018, Canadians’ Consumption and Trust of Traditional, Online and Social Media Sources <https://www.documentcloud.org/documents/4415413-Public-Opinion-Surveys-on-Media-and-Trust-2018.html>  Bellemare, A. (2019) The real 'fake news': how to spot misinformation and disinformation online, *CBC* <https://www.cbc.ca/news/technology/fake-news-misinformation-online-1.5196865>  Canadian Centre for Cybersecurity (2019) *Cyber Threats To Canada's Democratic Process* <https://cyber.gc.ca/en/guidance/cyber-threats-canadas-democratic-process>  Lauriault***,*** T. P. and O’Hara, Kathryn (2015) *2015 Canadian Election Platforms: Long-Form Census, Open Data, Open Government, Transparency and Evidence Based Policy and Science*, City Working Paper, <http://ssrn.com/abstract=2682638> Video Resources: WATCH: Cambridge Analytica whistleblower testifies before Senate <https://www.pbs.org/newshour/politics/watch-live-cambridge-analytica-whistleblower-testifies-before-senate>  C-Span: (2018) Cambridge Analytica Whistle-blower on Facebook Data and Election Interference <https://www.c-span.org/video/?443189-1/cambridge-analytica-whistleblower-christopher-wylie-casts-doubt-brexit-result> |
| **Assignment 3 – Follow Your Personal Facebook Data Trail (Due @ 8AM Week 6 Oct. 28), (5%) 1 page:**  **Part 1:** Read this *Wired* Article, https://www.wired.com/story/download-facebook-data-how-to-read/ and download your personal Facebook data.  **Part 2:** In 2 pages, discuss what you found? Any surprises? Will you change your settings? Does this change how you will use social media? How do these data relate to elections? | |
| **INFOGRAPHIC E – (Due Oct. 16)**  Sketch a rough draft of your infographic or use some sticky notes on a sheet of paper/table/wall to sort out your ideas or draw something in PowerPoint. Take a picture of the sketch and/or post it notes or include the document you created in PPT in the **CULearn Forum**, etc. You can also start trying any of the infographic tools listed here https://traceyplauriault.ca/dataviz/ or another tool of your choice and post an image of what you created. | |

# Thanksgiving Monday Oct. 14

# Study Break – Oct. 21 – 25

## Week 6 (Oct. 28) – Counting You

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| In this lecture students learn about infrastructures and institutions dedicated to counting them. They will discover why they matter to the nation and government administrations. They will begin to see the social shaping qualities of data and maps, and how they are part of social, technical and geographical imaginaries. The in-class discussion will focus on the Census of Canada, the cancellation of the long-form in 2010 and its reinstatement in 2016 and census and elections. Concepts such as governmentality, biopolitics, nation building, will be discussed. | **Compulsory Reading:**  Anderson, Benedict. (1991). Census, Map, Museum in *Imagined Communities: Reflections on the Origin and Spread of Nationalism.* Revised Edition, Verso, New York. 163-186.  Lo Wang, . (2019) Trump's Proposed Census Citizenship Question Bucks Centuries Of Precedent, *NPR* <https://www.npr.org/2019/05/22/719159163/has-the-u-s-census-ever-asked-about-everyones-citizenship-status> |
| **Resources:**  Elections Canada: <https://www.elections.ca/content.aspx?section=ele&document=index&lang=e>  Graham, Mark (2015) Information Geographies and Geographies of Information, in in *New Geographies 07, Geographies of Information*, Harvard University.  Statistics Canada Census program: <https://www12.statcan.gc.ca/census-recensement/index-eng.cfm>  Thompson, Debra (2008) Is Race Political? Canadian Journal of Political Science, 41(3): 525–547 doi:10.10170S0008423908080827  Viz: <http://www.nytimes.com/projects/census/2010/explorer.html> |
| **Assignment 4 Critical review of a data-based news article (Due Week 9 @ 8AM Nov. 18) (5%) 2 pages:**  Select any article that use data as a key part of the article from the *New York Times UpShot* (<https://www.nytimes.com/section/upshot>) or the *UK Guardian Data Blog* (<https://www.theguardian.com/data>) or Toronto Star Investigations (<https://www.thestar.com/news/investigations.html>). In 2 pages critically review this article and discuss how data were used to support the story. Be sure to introduce the story, the data used and their source, and how they were used. Could you access the data related to the article? What value did the data add to the story? Would the story have been as convincing without data? | |
| **INFOGRAPHIC F – (Due Week 7 Nov. 4 @ 8:00AM)**  Create a DRAFT infographic and upload an image of it to the **CULearn Forum**. In the Forum indicate the tool/s you used to create it. **2 peer reviewers** will be assigned to review this DRAFT infographic. | |

## Week 7 (Nov. 4) – Sorting You

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| This week students learn about the power of classification systems, segmentation techniques and social sorting. Students will discover that classified things are socially constructed, that there may not be ‘natural kinds’ of things yet things get sorted nonetheless, and once sorted it is hard to imagine those things in any other way. This will also include an examination of unique identifiers (UIDs), AI and methods by which data about you are collected to put you in your place. | **Compulsory Reading:**  Ferguson, Andrew Guthrie; (2017), Black Data: Distortions of Race, Transparency, and Law, Chapter 7 in *The Rise of Big Data Policing*, NYU Press.  Kobie, N. (20190 The complicated truth about China's social credit system: China's social credit system isn't a world first but when it's complete it will be unique. The system isn't just as simple as everyone being given a score though, *Wired*, <https://www.wired.co.uk/article/china-social-credit-system-explained>  *Video:* Algorithmic Justice Leagues Gender Shades <https://www.ajlunited.org/research> |
| **In Class Exercise:**  Do you match the profile? <https://www.environicsanalytics.com/en-ca/PRIZM> |
| **Resource:**  Smith, Michael D. (2016) Moneyball, Chapter 9 in *Streaming, Sharing, Stealing: Big Data and the Future of Entertainment*, MIT Press.  Turow, Joseph. (2006). The Customized Store, Chapter 6 in *Niche Envy: Marketing Discrimination in the Digital Age*. MIT Press. 125 – 147.  AI Now Institute <https://ainowinstitute.org/> |
| **INFOGRAPHIC G – (due Week 8 Nov. 11) (5%)**  Peer Reviewers review the 2 infographics assigned to you according to the Infographic rubric. You can mark up a document in pen and take a picture of it to send to your classmate, or you can edit directly in the document. Be constructive, honest, direct, and provide useful suggestions. Submit your peer review document to the **CULearn Assignment Area** and email each review your classmates. | |

## Week 8 (Nov. 11) – Identifying you

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| Unique identifiers (UID) are a big data enabling technology. These include biometrics, RFID, QRCodes, facial recognition software, barcodes, social-insurance-numbers, postal codes, credit card numbers and etc. UIDs not only identify you, and help you find things, they also link you to any number of other datasets, objects and locations including markets and into any number of platforms. | **Compulsory Reading:**  Mayer-schonberger, Viktor and Cukier, Kenneth (2013) Datafication, Chapter 5 in *Big Data: A Revolution That Will Transform How We Live, Work and Think*. London: John Murray Publishers. 73-97.  Castro, D. (2019) Are Governments Right to Ban Facial Recognition Technology? *Government Technology* https://www.govtech.com/products/Are-Governments-Right-to-Ban-Facial-Recognition-Technology.html  **Resource:**  EFF Biometrics <https://www.eff.org/issues/biometrics>  Kragh-Furto, Mette; Mckenzie, Adrian; Mort, Maggie and Roberts, Celia (2016) Do Biosensors Biomedicalize? Sites of Negotiations in DNA-Based Biosensing Data Practices, Chapter 1 in Nafus, Dawn (ed.) *Quantified: Biosensing Technologies in Everyday Life*, MIT Press. |
| **INFOGRAPHIC H - Refine your Infographic based on peer review** | |

## Week 9 (Nov. 18) – Watching you

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| State institutions are often engaged in surveillance activities. The Canadian Border Service is one such institution, and airports are a unique assemblage of surveillance technologies, data collection and systems. Sometimes surveillance is to reduce harm, detect fraud and cheating, and other times it is to monitor behaviour in order to either serve you better or to market to you. This week students will discover concepts such as dataveillance, sousveillance, counterveillance, and surveillance. | **Compulsory reading:**  Mann, S. and J. Ferenbok. 2013. New Media and the Power Politics of Sousveillance in a Surveillance Dominated World. *Surveillance & Society* 11(1/2): 18-34. <https://doi.org/10.24908/ss.v11i1/2.4456>  Chad, m. (2018) How to Stop ‘Smart Cities’ From Becoming ‘Surveillance Cities’, *ACLU* <https://www.aclu.org/blog/privacy-technology/surveillance-technologies/how-stop-smart-cities-becoming-surveillance-cities>  Cecco, L. (2019) 'Surveillance capitalism': critic urges Toronto to abandon smart city project, *UK Guardian* <https://www.theguardian.com/cities/2019/jun/06/toronto-smart-city-google-project-privacy-concerns>  **Resources:**  Schneier, Bruce (2015) *Data and Goliath: The Hidden Battles to Collect Your Data and Control Your World, New York: Norton and Company.*  • Chapter 2: Data as Surveillance, 20-32  • Chapter 3: Analyzing Our Data, 33-45 |
| **INFOGRAPHIC I – (Due Week 10 Nov. 25)**  Submit an image of the revised DRAFT of your infographic to the **CULearn Forum**. Be sure to include some notes about what you modified based on the peer review. Include a few words about what the peer review process taught you. | |

## Week 10 (Nov. 25) – Data Brokers, Big Data and You

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| In this lecture students explore what drives government and the private sector to embrace big data, especially data brokers and the political economy of data. Student will learn to distinguish big data from small data and the characteristics of big data. | **Compulsory Reading:**  Beer, D. (2019) Envisioning the Power of Data Analytics: The Data Imaginary, Chapter 2 in *The Data Gaze*, Sage, pp.14-35.  Pasquale, Frank (2015) Toward an Intelligible Society, Chapter 6 in *The Black Box Society: The Secret Algorithms That Control Money and Information*, Harvard University Press. |
| **Resources:**  60 Minutes, The end of privacy "The Data Brokers: Selling your personal information" https://www.youtube.com/watch?v=qAT\_ina93NY  **Report Resources:**  Canadian Internet Public Policy Interest Clinic (2016) On the Data Trail: How detailed information about you gets into the hands of organizations with whom you have no relationship, https://cippic.ca/sites/default/files/May1-06/DatabrokerReport.pdf  Cracked Labs, (2017) Corporate Surveillance In Every Day Life http://crackedlabs.org/dl/CrackedLabs\_Christl\_CorporateSurveillance.pdfKitchin, R. and McArdle, G. (2016) What makes Big Data, Big Data? Exploring the ontological characteristics of 26 datasets, *Big Data and Society*, <http://bds.sagepub.com/content/3/1/2053951716631130>.  Goodman, Marc (2015) *Future Crimes: Everything is Connected, everyone is Vulnerable, and What We Can Do About it*. Double Day Canada.  Chapter 4: You’re not the customer you’re the product  Chapter 5: The Surveillance Economy  Weigend, Andreas (2017) Seeing the Controls: Transparency for the People: What can you demand to see about your data? Chapter 5 in *Data for the People: How to make our post-privacy economy work for you*, Basic Books. |
| **INFOGRAPHIC J –Polish your infographic and ask for help on the forum if you need it.** | |

## Week 11 (Dec. 2) – Remembering and Recording You

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| This week students learn about the data collected by researchers, institutions and administrations, and what it means to not have a record or to be recorded in a way that is counter to what is beneficial. Students will learn about archives and why these remain critical infrastructures in the big data era. Student will study data as cultural artefacts, and as historical markers of key social, cultural and political events and will be exposed to the construction of data, who controls remembering and data sovereignty. | **Compulsory Reading:**  Halilovich, Hariz, 2014, Reclaiming erased lives: archives, records and memories in post-war Bosnia and the Bosnian diaspora, Archival Science, 14:231–247, DOI , 10.1007/s10502-014-9227-z.  Video: Gwen Phillips, (2017) Data Power 2017 Keynote: Indigenous Data Sovereignty and Reconciliation, Carleton University, Ottawa <https://www.youtube.com/watch?v=4I_3figC3B0> |
| **Resources:**  National Centre for Truth and Reconciliation <https://nctr.ca/archives-pages.php#access>  Global Resources Human Rights Archives and Documentation Program <https://www.crl.edu/programs/hradp>  First Nations Information Governance OCAP Principles <https://fnigc.ca/ocap> | |

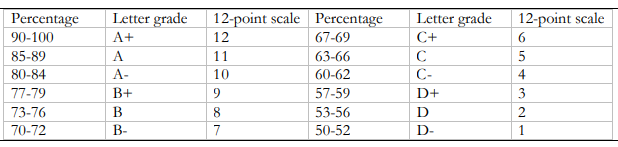
## Week 12 (Dec. 6) – Critical Data Studies and Review

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| **We made it**! It is the last week of class. We will assemble what we have learned, and we examine what critical data studies means. We will also conduct a thorough review in preparation for the exam and because of this date, we will revisit data on Mass Shootings in Canada. | **Compulsory Reading:**  Kitchin, Rob and Lauriault, Tracey P. (2014) *Towards Critical Data Studies: Charting and Unpacking Data Assemblages and Their Work*. The Programmable City Working Paper 2; pre-print version of chapter to be published in Eckert, J., Shears, A. and Thatcher, J. (eds) Geoweb and Big Data. University of Nebraska Press.  **Resource:**  Lauriault, T. P., Bloom Rachel, & Jean-Noe Landry (2018) Open Smart City Guide V1.0. http://www.opennorth.ca/open-smart-cities-guide |
| **INFOGRAPHIC K –** Submit FINAL infographic & text to CuLearn Assignment, also submit the final infographic to twitter with the title of your infographic, and the tags @ottawacity @ottawaville #SmartCity #COMS2200 #YOW | |

## Exams Dec. 9 – 21

### Grading

Standing in a course is determined by the course instructor, subject to the approval of the faculty Dean. Final standing in courses will be shown by alphabetical grades. The system of grades used, with corresponding grade points is:



Approval of final grades: Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by an instructor may be subject to revision. No grades are final until they have been approved by the Dean.

### Carleton E-mail Accounts

All email communication to students from the Communication and Media Studies Program will be via official Carleton university e-mail accounts and/or cuLearn. As important course and University information is distributed this way, it is the student’s responsibility to monitor their Carleton and cuLearn accounts.

### Statement on Plagiarism

The Carleton University Senate defines plagiarism as “presenting, whether intentionally or not, the ideas, expression of ideas, or work of others as one’s own”. This can include the following:

• Reproducing or paraphrasing portions of someone else’s published or unpublished material, regardless of the source, and presenting these as one’s own without proper citation or reference to the original source;

• Submitting a take-home examination, essay, laboratory report or other assignment written, in whole or in part, by someone else;

• Using ideas or direct, verbatim quotations, or paraphrased material, concepts, or ideas without appropriate acknowledgment in any academic assignment;

• Using another’s data or research findings;

• Failing to acknowledge sources through the use of proper citations when using another’s works and/or failing to use quotation marks;

• Handing in "substantially the same piece of work for academic credit more than once without prior written permission of the course instructor in which the submission occurs."

You should familiarize yourself with Carleton University’s policy on Academic Integrity, which can be found by following the link below: http://www.carleton.ca/studentaffairs/academic\_integrity/docs/Academic\_Integrity\_Policy.pdf

### Additional Student Support

The Centre for Student Academic Support (CSAS) is a centralized collection of learning support services designed to help students achieve their goals and improve their learning both inside and outside the classroom. CSAS offers academic assistance with course content, academic writing and skills development. Visit CSAS on the 4th floor of MacOdrum Library or online at: carleton.ca/csas.

### Requests for Academic Accommodation

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

### Pregnancy obligation

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: [carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf](http://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf)

**Religious obligation**  
Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: [carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf](http://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf)

### Academic Accommodations for Students with Disabilities

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or [pmc@carleton.ca](mailto:pmc@carleton.ca) for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. [carleton.ca/pmc](http://carleton.ca/pmc)

### Survivors of Sexual Violence

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and is survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: [carleton.ca/sexual-violence-support](http://carleton.ca/sexual-violence-support)

**Accommodation for Student Activities**   
Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. <https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

For more information on academic accommodation, please contact the departmental administrator or visit: [students.carleton.ca/course-outline](http://students.carleton.ca/course-outline)