Dispatch

From Data Ethics to Data Justice in/as Pedagogy

ANDREA ZEFFIRO McMaster University, Canada

This dispatch charts my trajectory from thinking about the ethics of social media research to a rearticulation of the same concerns through a data justice framework. By outlining the movement from ethics to justice, I consider how such a paradigm shift could register with the ways in which we seek to empower students through literacies for data justice.

Research Context

One of my research threads over the last few years has focused on social media research ethics. A project on this issue grew out of a particular context in which I observed how, short of clear guidelines, certain forms of social media research were required to undergo institutional review while others were not, which is not to say that all social media research should be exempt from institutional review, but rather that such inconsistencies designated exempted research as ethical by virtue of exemption (Zeffiro, 2019). This permissiveness for research norms is unsurprising given how conventional understandings of human research ethics are strained by the complexity of interactions between individuals, networks and technical systems in social media research (Zeffiro, 2019).

The first part of the project analyzed research ethics documents from all universities in Canada in order to identify the trends, standards and norms for working with social media data in a Canadian academic context. In 2017, there was not a single Canadian institution that had public facing ethics guidelines that applied specifically to social media research (Zeffiro, 2019). Documents that referred to digital data collection did so in terms of internet research and redirected readers to the requirements of the TCPS 2 (Canadian Institutes of Health Research et al., 2014). Increasingly more common in

Correspondence Address: Andrea Zeffiro, Department of Communication Studies & Multimedia, McMaster University, Hamilton, ON, L8S 4M4; Email: zeffiroa@mcmaster.ca





Canada are research data management (RDM) plans that outline protocols for data management and stewardship (Canadian Institutes of Health Research et al., 2016, 2018), which are by no means interchangeable with research ethics (Zeffiro, 2019).

The thrust of the project was to make an argument for the importance of having research communities develop ethical approaches for social media research, rather than allowing corporate entities that collect and grant access (or not) to public data establish the terms for research. Research ethics is a domain through which we can assess our responsibilities as researchers by parsing our approaches for creating new knowledge from public social media data, and by making transparent the strengths and limitations of emerging forms of research (see also Lee, 2017; Shilton, 2016; Taylor & Pagliari, 2017; Townsend & Wallace, 2015; University of Sheffield, 2016)

From Ethics to Justice

In the time between completing the pilot study and reflecting on the findings in scholarly venues. I have started to think profoundly about the limitations of research ethics as a domain for intervention beyond academic contexts. Because ethics is such a charged term, it can provoke an individualized response aimed at substantiating the ways in which our actions and practices abide by ethical codes and protocols. In certain instances, ethics is a box to tick in the research process. At other times, we might find ourselves relying on research ethics as a kind of moral ignition that absolves us from further deliberation. However, if "ethical purity" is an end goal of research ethics, then we are merely cementing "moral institutional self-concepts" that serve as a continuation of the collective myth about research as an antidote to conditions of injustice (Sabati, 2018; Simpson, 2017; Smith, 2012).

The need for research communities to confront ethics is all the more urgent given how Big Tech is shaping ethics in its own image. In the last few years, the establishment of corporate ethics charters and ethics boards have come to signal self-regulation as a policy response to calls for industry oversight. Ben Wagner (2018) explains how this amounts to an "ethics washing"; ethics are operationalized through public facing initiatives as a means to resist regulation. We are provided with the sense of an investment in questions and concerns of ethics, while little or nothing is done to achieve them.

If an ethics framework constrains how we come to understand the contradictions and challenges in social media research by regulating the purview of our engagement with ethics, then what is needed is a framework that invites a range of stakeholders and entry points (Metcalfe & Dencik, 2019) and that links social media to broader critiques of datafication (van Dijck, 2014). In their introduction to the special issue of *Information*, Communication & Society on Data Justice, Lina Dencik, Arne Hintz, Joanna Redden and Emiliano Treré write how, "we should use data justice as a form

of critique, a framework for shifting the entry-point and debate on datarelated developments in a way that foregrounds social justice concerns and ongoing historical struggles against inequality, oppression and domination" (Dencik et al., 2019, p. 876). The work of scholars who are situating data within existing social justice agendas by cultivating a data justice framework are effectively reorienting ethical concerns about datafication from purely moral, technocratic or technological purviews, and advocating instead for collaborations between different movements and groups that bring together technological, social, economic, cultural and ecological dimensions in defining both problems and solutions (Dencik et al., 2018).

Data justice emphasizes an understanding of data technologies and data-driven decision-making in relation to structural conditions that continue to create new inequalities and injustices (Dencik et al., 2019; Metcalfe & Dencik, 2019; Redden & Brand, 2018). However, rather than locate injustices in data systems as errors or biases that can be fixed with more data, data justice seeks to understand the interests driving the processes of datafication by decentering data in the examination of these processes (Dencik, 2019; Metcalfe & Dencik, 2019; Taylor, 2017). Thus, data justice is symptomatic of the complex ways in which data-driven processes permeate all facets of contemporary life and emphasizes how these technologies and processes reproduce, are reproduced by, and provoke a "matrix of domination" (white supremacy, heteropatriarchy, capitalism, and settler colonialism) (Costanza-Chock, 2018a, 2018b).

Literacies for Data Justice in/as Pedagogy

Inspired by data justice scholarship, I am motivated to consider additional ways in which we can enact data justice in academic work. More specifically, how can we integrate data justice in teaching and learning? I ask this question having taught two iterations of a graduate course called Data Cultures. As I write this dispatch, I am preparing to teach it for a third time. The course explores the ways in which contemporary life and the environments we inhabit are mediated through data-driven technologies and practices. Rather than emphasize the technical processes that enable datafication, the material considers instead the consequences of these processes and engages with intersecting issues of race, gender, class, ethnicity, ability, indigenous sovereignty, and climate crisis. For the upcoming term (Winter 2020), I am revamping the assignments in order to reorient learning outcomes to data justice literacies.

Taking a cue from Leslie Shade's work on digital policy literacy, which foregrounds digital policy as a key attribute of media and digital literacy (Shade, 2012; Shade & Shepherd, 2013), I use "data justice literacy" as an intervention to broaden the principles of social media literacy to encircle data justice as a crucial element (Shade, 2012). In this respect, in order for us to be

able to engage critically and effectively in personal, professional and social contexts through social media platforms, we need to understand how data is a key asset in our exchanges. Data literacy is applied elsewhere to advocate for the development of data analysis and statistical literacy. However, when couched in a data justice framework data literacy is decoupled from technical systems and engages instead with how data practices correspond to other social practices within social and political constellations (Metcalfe & Dencik, 2019).

In what follows, I explore design speculations for two assignments aimed at advancing data justice literacies. These include: (a) an autoethnography of a data analysis tool; and, (b) authoring the terms of service for a fictional social media platform.

Autoethnography of a Data Tool

The first assignment will require students to conduct an autoethnography as they learn a data analysis tool. Following Carolyn Ellis and Arthur Bochner (2000), autoethnography is a form of autobiographical writing and research that "displays multiple layers of consciousness, connecting the personal to the cultural" (p. 739). Autobiographical reflection can empower students to delve into their own learning processes as they acquire a new technical skill and connect the process of learning to broader assumptions about what it means to do data analytics. For instance, a few years ago a student in the course proposed a research project predicated on scraping five years' worth of data from the Twitter account of a Canadian political party. Without any prior experience with social media analysis, the student was surprised to learn that they would need to go through the Twitter API to access data and that they would be limited to accessing a few weeks of data. The student was unable to complete the project as originally intended, but it was the process of debunking the myth of social media analysis that was invaluable. Leveraging this myth busting impulse, this assignment aims to have students dabble in the technical side of data analytics while having them reflect on data-driven research processes through a data justice framework. As I write this, I have yet to select the specific tool, but as I detail below, the tool itself is secondary to the learning process.

The assignment will be organized as a semester-long exercise in which students teach themselves and each other a data analysis tool. Some class time will be devoted to instruction, but otherwise the bulk of learning will happen independently. To assist students with organizing their time, I will provide a timeline with milestones and dates of completion. The learning objective for the exercise is to have students move from "data literacy" to "data justice literacy." Indeed, an anticipated take-away of the assignment is for students to refine a technical skill, but the implicit aim is to have them engage deeply with data justice. For example, students will be asked to investigate the origins of the tool's development and to seek out other research projects that have been supported through its application. Questions guiding the written component will engage with data analysis broadly, and ask students to reflect on the neocolonial impulses of data analysis and extractivism (Vera et al., 2019), and how data analysis tools and approaches that support research and teaching can also reinforce digital redlining (Gilliard, 2017).

In this respect, students will be prompted to consider the asymmetrical relationships of power, but they will also be asked to imagine how they could apply the tool towards a data justice initiative. Thus, the objective of the assignment is not to have students "master" a tool, but rather to encourage them through autoethnography to bring to the surface the tacit assumptions about data analytics and to imagine a more equitable distribution of the tool's benefits and burdens (Costanza-Chock, 2018a, 2018b).

Speculative Terms of Service

The second assignment will have students work in groups to author terms of service for an imaginary social media platform committed to data justice. More specifically, students will employ "speculative design" as a methodology to assess (data) governance through a data justice lens. Why focus on data governance? Linnet Taylor and Hellen Mukiri-Smith (2019) encourage us to recognize data justice as connected also to thinking about how the governance of data technologies should be based on social justice principles. Disentangling the ways in which data governance perpetuates and opposes a matrix of oppression is pivotal to data justice. In turn, how can we encourage students to intervene in processes of data governance? And how can we encourage them to not only imagine alternatives, but to script alternate possibilities? (Dunne & Raby, 2013, p. 90).

The first part of the assignment will have groups select a social media platform and begin by reading its terms of service. Students will keep a reading journal and reflect on their immediate thoughts, surprising discoveries, and contemplate their affective responses to the terms of service. After a few weeks, students will regroup and share their reflections. Leveraging their individual responses as a starting point for collaboration, students will then work in their groups to rewrite the terms of service. The emphasis for this portion of the project is to translate the terms of service into non-technical language in order to make the document accessible to a general audience. Throughout the translation stage, each student will continue to keep a journal to record their observations and experience. A set of questions will guide students to reflect on the process of translating the document, including the practicalities that went into deciphering the text and rendering it legible. Students will be prompted to interrogate the discursive function of the terms of service, and the ways in which these documents are in effect governance

structures that promote and constrain opportunities for participation. Finally, students will be asked to consider how the terms of service reflect (or not) broader social, economic and political values.

Having worked through existing terms of service to understand not only the text itself, but also the ways in which these governance documents sustain (in)equities and (in)justices, students will then spend the second half of the semester rescripting the terms of service for an imaginary platform. This portion of the project will have two parts: (a) authoring terms of service for a fictional social media platform with data justice as its undergird; and, (b) a written reflection about the platform that will detail how its social justice ideology is sustained and affirmed by its terms of service. The written component will draw from appropriate academic literature (i.e., data justice, critical data studies) to support the analysis, and students will be asked to consider the differences and similarities between their fictional terms of service and the official document they translated. Through the written piece, students will have an opportunity to bridge their individual observations and experiences with collaborative work, and in turn, consider processes for encouraging and sustaining equitable and meaningful participation in governance decisions.

Finally, speculative design is key to this assignment because as a methodology, it will encourage students to step away from merely assessing how a social media platform exists now to focusing on authoring terms of service that envision how and what these platforms could be (Dunne & Raby, 2013, p. 69). The fictional terms of service provide an opportunity for students to engineer not only a social media platform that reproduces and is reproduced by data justice, but also reflect on the kind of society whose values and preoccupations would engender the conditions for such a platform to thrive.

Postscript

The origins of this dispatch began with a rather vague but charged question: what would it mean to prioritize (data) justice over (data) ethics in academic contexts? In reframing my thinking of data to be a matter of social justice, I have been motivated to integrate data justice literacies in teaching and learning. My hope is that the integration of creative and collaborative research-based assignments will encourage students to engage deeply with data justice, as both a framework and social movement, and empower them to continue to find ways to respond to prescriptive data paradigms.

Acknowledgements

The author wishes to thank Drs. Leslie Regan Shade and Karen Louise Smith for their invitation to submit to the special section. Additional thanks to Dispatches Editor Vanessa Farr and Editor-in-Chief David Butz for their helpful suggestions. Finally, the author would like to express gratitude to the graduate students enrolled in Data Cultures (2017-2021) for the enthusiasm, creativity, and care that they all brought into the learning space.

References

- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council. (2014). *Tri-Council policy statement: Ethical conduct for research involving humans*.
 - https://ethics.gc.ca/eng/policy-politique tcps2-eptc2 initiatives.html
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council. (2016). *Tri-agency statement of principles on digital data management*. http://www.science.gc.ca/eic/site/063.nsf/eng/h 83F7624E.html
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council. (2018). DRAFT: Tri-agency research data management policy for consultation.

 http://www.science.gc.ca/eic/site/063.nsf/eng/h 97610.html
- Costanza-Chock, S. (2018a, June 3). Design justice: Towards an intersectional feminist framework for design theory and practice. *Proceedings of the Design Research Society* 2018. https://ssrn.com/abstract=3189696
- Costanza-Chock, S. (2018b). Design justice, A.I., and escape from the matrix of domination. *Journal of Design and Science*, 3(5). http://dx.doi.org/10.21428/96c8d426
- Dencik, L., Hintz, A., Redden, J., & Treré, E. (2019). Exploring data justice: Conceptions, applications and directions. *Information, Communication & Society*, 22(7), 873-881.
- Dencik, L., Jansen, F., & Metcalfe, P. (2018, August 30). A conceptual framework for approaching social justice in an age of datafication. *DataJustice Project*. https://datajusticeproject.net/2018/08/30/a-conceptual-framework-for-approaching-social-justice-in-an-age-of-datafication/
- Dunne, A., & Raby, F. (2013). Speculative everything: Design, fiction and social dreaming. MIT Press.
- Ellis, C., & Bochner, A. P. (2000). Autoethnography, personal narrative, reflexivity. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of qualitative research (2nd Ed.) (pp. 733-768). Sage
- Gilliard, C. (2017, July 3). Pedagogy and the logic of platforms. *Educause Review*, 52(4), 64-65. Lee, S. (2017). 'Studying friends': The ethics of using social media as research platforms. *The American Journal of Bioethics*, 17(3), 1-2.
- Metcalfe, P., & Dencik, L. (2019). The politics of big borders: Data (in)justice and the governance of refugees. *First Monday*, 24(4). https://firstmonday.org/ojs/index.php/fm/article/view/9934/7749
- Redden, J., & Brand, J. (2018). Data harm record. https://datajusticelab.org/data-harm-record/ Sabati, S. (2019). Upholding "Colonial Unknowing" through the IRB: Reframing institutional research ethics. Qualitative Inquiry, 25(9–10), 1056–1064. https://doi.org/10.1177/1077800418787214
- Shade, L. (2012). Toward a model of digital policy literacy. *iConference '12: Proceedings of the 2012 iConference* (pp. 459-461). http://dx.doi.org/10.1145/2132176.2132247

- Shade, L., & Shepherd, T. (2013). Viewing youth and mobile privacy through a digital policy literacy framework. First Monday, 12(2).
 - https://firstmonday.org/ojs/index.php/fm/article/view/4807/3798
- Shilton, K. (2016). Emerging ethics norms in social media research. Big Data Ethics. https://bigdata.fpf.org/papers/emerging-ethics-norms-in-social-media-research/
- Simpson, L. B. (2017). As we have always done: Indigenous freedom through radical resistance. University of Minnesota Press.
- Smith, L. T. (2012). Decolonizing methodologies: Research and Indigenous Peoples. Zed Books.
- Taylor, J., & Pagliari, C. (2017). Mining social media data: How are research sponsors and researchers addressing the ethical challenges? Research Ethics, 14(2), 1-39.
- Taylor, L. (2017). What is data justice? The case for connecting digital rights and freedoms globally. Big Data & Society, 4(2), 1-14. https://doi.org/10.1177/2053951717736335
- Taylor, L., & Mukiri-Smith, H. (2019, February 14). Global data justice: Framing the (mis)fit between statelessness and technology. European Network on Statelessness. https://www.statelessness.eu/blog/global-data-justice-framing-misfit-between-statelessnessand-technology
- Townsend, L., & Wallace, C. (2015). Social media research: A guide to ethics. University of Aberdeen. https://www.gla.ac.uk/media/media 487729 en.pdf
- University of Sheffield. (2016). The ethics of internet-based and social media research. https://www.sheffield.ac.uk/polopoly fs/1.644904!/file/Report Ethics of Social Media R esearch Jul16.pdf.
- Van Dijck, J. (2014) Datafication, dataism and dataveillance: Big data between scientific paradigm and ideology. Surveillance & Society, 12(2): 197-208.
- Vera, L. A., Walker, D., Murphy, M., Mansfield, B., Siad, L., Ogden, J., & EDGI. (2019). When data justice and environmental justice meet: formulating a response to extractive logic through environmental data justice. Information, Communication & Society, 22(7), 1012-
- Wagner, B. (2018). Ethics as an escape from regulation: From 'ethics washing' to ethicsshopping? In E. Bayamlioglu, I. Baraliuc, L. Janssens & M. Hildebrandt (Eds.), Being profiled: Cogitas ergo sum – 10 Years of profiling the European citizen (pp. 84-89). Amsterdam University Press.
- Zeffiro, A. (2019). Provocations for social media research: Toward good data ethics. In A. Daly, K. Devitt & M. Mann (Eds.), Good Data (pp. 216-243). INC Theory on Demand Series.