

Critical Approaches to Data Structures

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"One of the ways that there is a continuing genocide" against American Indians/Alaska Natives is through data. When we are invisible in the data, we no longer exist. When I see an asterisk that says "not statistically significant," or they lump us together with Pacific Islanders and Asian Americans – you can't lump racial groups together. That is bad data practice."

Crosscut conversation with Manola Secaira, May 31, 2019

Purpose

- What do we do with data in research, in libraries, in other organizations?
- How do we structure, collect, clean, analyze, use data?
- What is the impact of decisions we make while doing data work?

Critical Data Studies

- Interrogates data practices, grew from concerns with big data
- Data are not neutral and have biases

"Data Body" (Our Data Bodies)

"[d]iscrete parts of our whole selves that are collected, stored in databases, the cloud, and other spaces of digitally networked flows, and used to make decisions or determinations about us."

Our Data Bodies, Digital Defense Playbook

Mona Chalabi, "Choices"

<u>Instagram post</u>





Mona Chalabi, "Choices" description

"There is a long history of excluding categories like 'Arab' or 'Middle Eastern and North African' from government surveys...helping to artificially increase those numbers for political gain."

Mona Chalabi, "Choices," Instagram post

Non-binary gender and data

- Binaries and hierarchies can lead to erasure of nonbinary identities in data
- "...we have an ethical and empirical imperative to tackle this complexity."
 - D'Ignazio, Catherine, "<u>A Primer on Non-Binary Gender</u> and Big Data," MIT Center for Civic Media

"Measurement counts"

"We need feminist data avengers. Measurement counts. What gets counted, counts. When it's not counted it's absent and invisible."

Joni Seager in an interview with Catherine D'Ignazio, "<u>Missing Women, Blank Maps, and Data Voids: What Gets Counted</u>
<u>Counts</u>," MIT Center for Civic Media, March 22, 2016

Navigating and using data

- Share the messiness of the data
 - Where/how is it messy?
 - How could trying to "clean" this messiness impact the interpretation and analysis of this data?
- Share complexity of data processes and structures

Solutions? + Limitations

- Use other practices, such as Indigenous and participatory methods, that create a substantive relationship in research and participant ownership of information
- Focus on local contexts
- Other fields to explore, such as critical algorithm studies

Bibliography

Chalabi, M. (2020, October 13). "Choices." Instagram. https://www.instagram.com/p/CGSUEFSF2q8/

D'Ignazio, Catherine. (2016), "A Primer on Non-Binary Gender and Big Data," MIT Center for Civic Media, https://civic.mit.edu/2016/06/03/a-primer-on-non-binary-gender-and-big-data/

D'Ignazio, C., Klein, L. (2020), Data Feminism, The MIT Press, Cambridge, MA, https://data-feminism.mitpress.mit.edu/

Iliadis, A., Russo, F. (2016), "Critical data studies: An introduction," *Big Data & Society* Vol. 3, https://doi.org/10.1177/2053951716674238

Lewis, T., Gangadharan, S. P., Saba, M., Petty, T. (2018), *Digital defense playbook: Community power tools for reclaiming data*, Our Data Bodies: Detroit, MI, https://www.odbproject.org/wp-content/uploads/2019/03/ODB DDP HighRes Single.pdf

Loukissas, Y.A. (2019), All Data Are Local: Thinking Critically in a Data-Driven Society, The MIT Press, Cambridge, MA.

Richterich, A. (2018), *The Big Data Agenda: Data Ethics and Critical Data Studies*, University of Westminster Press, London, United Kingdom, https://doi.org/10.16997/book14

Seager, Joni in an interview with Catherine D'Ignazio, "Missing Women, Blank Maps, and Data Voids: What Gets Counted Counts," MIT Center for Civic Media, March 22, 2016, https://civic.mit.edu/2016/03/22/missing-women-blank-maps-and-data-voids-what-gets-counted-counts/

Secaira, M. (2019), "Abigail Echo-Hawk on the art and science of "decolonizing data," *Crosscut*, https://crosscut.com/2019/05/abigail-echo-hawk-art-and-science-decolonizing-data