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Read the book at: datafeminism.io

“Data is the new oil.”

- The Economist, Intel CEO, Reliance Industries CEO, UAE Minister of Artificial Intelligence, Google execs, etc, mainly elite white men

“Data is the same old oppression.”

- BIWOC, white women, Indigenous people, immigrant communities, LGBTQ+ individuals, + more..





Dr. Timnit Gebru, until recently being fired, was Co-Lead of Ethical Artificial Intelligence (AI) team at Google

Go to <http://bit.ly/drgebru-petition> to sign the petition

KATLYN TURNER, DANIELLE WOOD, CATHERINE D'IGNAZIO

THE ABUSE AND MISOGYNOIR* PLAYBOOK

1 A BLACK WOMAN MAKES A CONTRIBUTION

- Uses tools of society
- Advances knowledge
- Reveals inequity, truth
- Changes status quo
- Is unacceptable in some way to dominant class & stakeholders

2 DOMINANT CLASS & STAKEHOLDERS RESPOND WITH **DISBELIEF**

- "How could you have done/made this?"
- "How can this be true?"
- "This can't be right."

3 CONTINUED ABUSE & MISOGYNOIR

- "This is..."
- "Move..."
- "Business..."
- "Ignore..."

4

5 REVISIONISM

- New narrative
- Negative reaction to reminders of contributions
- Loss of original knowledge over generations
- Leads to genuine unawareness over time of original events

*** Misogynoir, a term coined by Dr. Moya Bailey in 2010, describes the particular form of anti-Black sexism faced by Black women**

DR. TIMNIT GEBRU

The Abuse and Misogynoir Playbook

by Katlyn Turner, Danielle Wood and Catherine D'Ignazio


In the January 2021 State of AI Ethics Report from Montreal AI Ethics Institute

FEMINIST



Feminist: the person who believes in equal rights for men and women and non-binary people.

- Beyoncé (mostly)



Feminism: organized activity on behalf of women's and non-binary people's rights and interests.

- Merriam Webster (mostly)



Feminism: the theory of the
political, economic, and
social equality of the sexes.

- Merriam Webster

Intersectional feminism is not only about women and gender.

It is about power - who has it and who doesn't.

Intersectionality is a concept out of Black feminism, including the Combahee River Collective (1974-1981) and Kimberlé Crenshaw (1989).



In today's world,
data is power.

Intersectional feminism,
when applied to data science,
can help that power be challenged and changed.

7 Principles of Data Feminism

Examine power

Challenge power

Rethink binaries and hierarchies

Elevate emotion and embodiment

Embrace pluralism

Consider context

Make labor visible



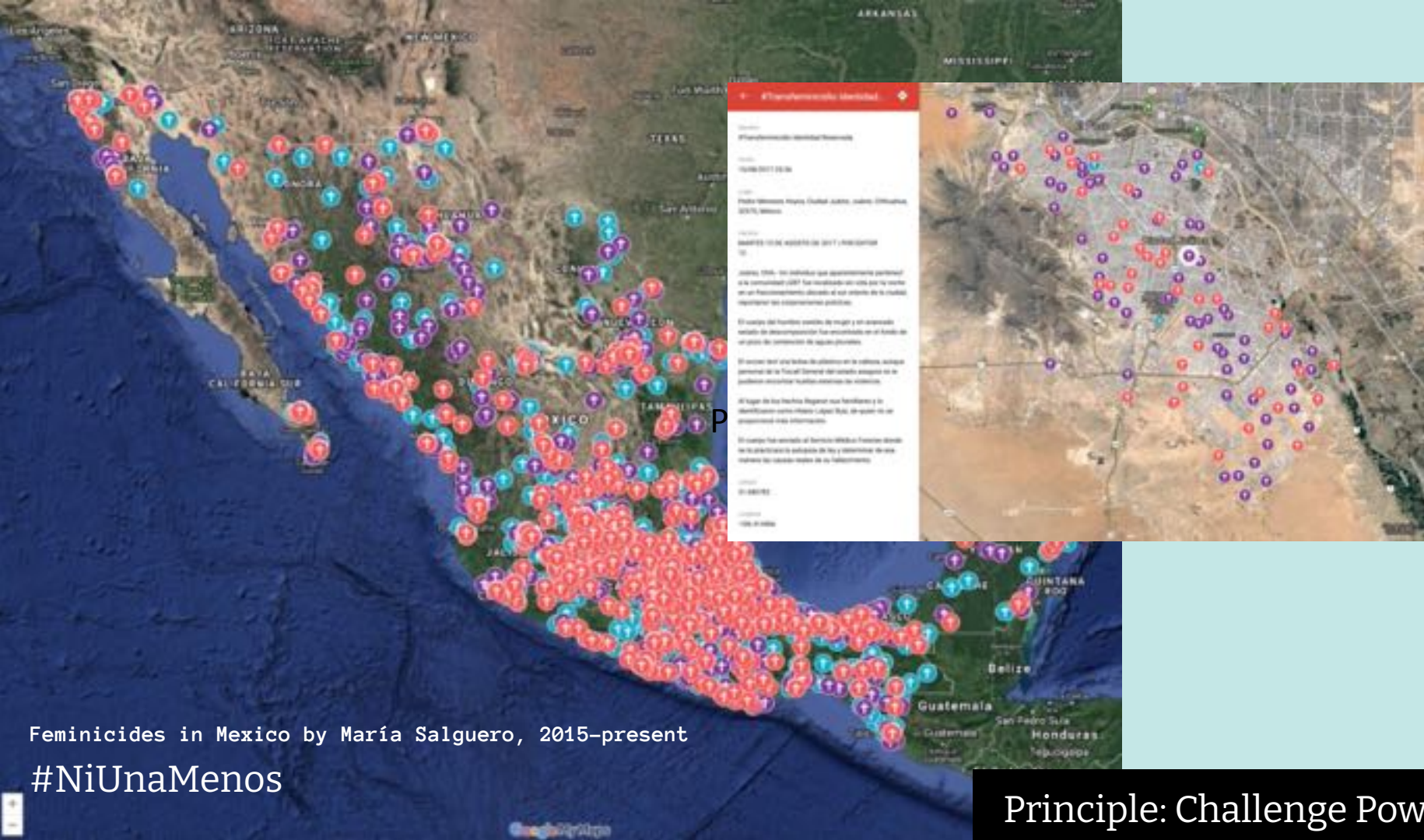
An Incomplete List of Missing Data Sets

This list will always be incomplete, and is designed to be illustrative rather than exhaustive. It is presented from the perspective of the U.S, though the complete list of datasets features

- Civilians killed in encounters with police or law enforcement agencies [
- Sales and prices in the art world (and relationships between artists and
- People excluded from public housing because of criminal records
- Trans people killed or injured in instances of hate crime (note: existing
- Poverty and employment statistics that include people who are behind
- Muslim mosques/communities surveilled by the FBI/CIA
- Mobility for older adults with physical disabilities or cognitive impairme
- LGBT older adults discriminated against in housing
- Undocumented immigrants currently incarcerated and/or underpaid
- Undocumented immigrants for whom prosecutorial discretion has been
- Measurements for global web users that take into account shared devic
- Firm statistics on how often police arrest women for making false rape
- Master database that details if/which Americans are registered to vote
- Total number of local and state police departments using stingray phor
- How much Spotify pays each of its artists per play of song
-

The Library of Missing Datasets by Mimi Onuoha, 2016.

Principle: Examine Power



Femicides in Mexico by María Salguero, 2015–present

#NiUnaMenos

Principle: Challenge Power

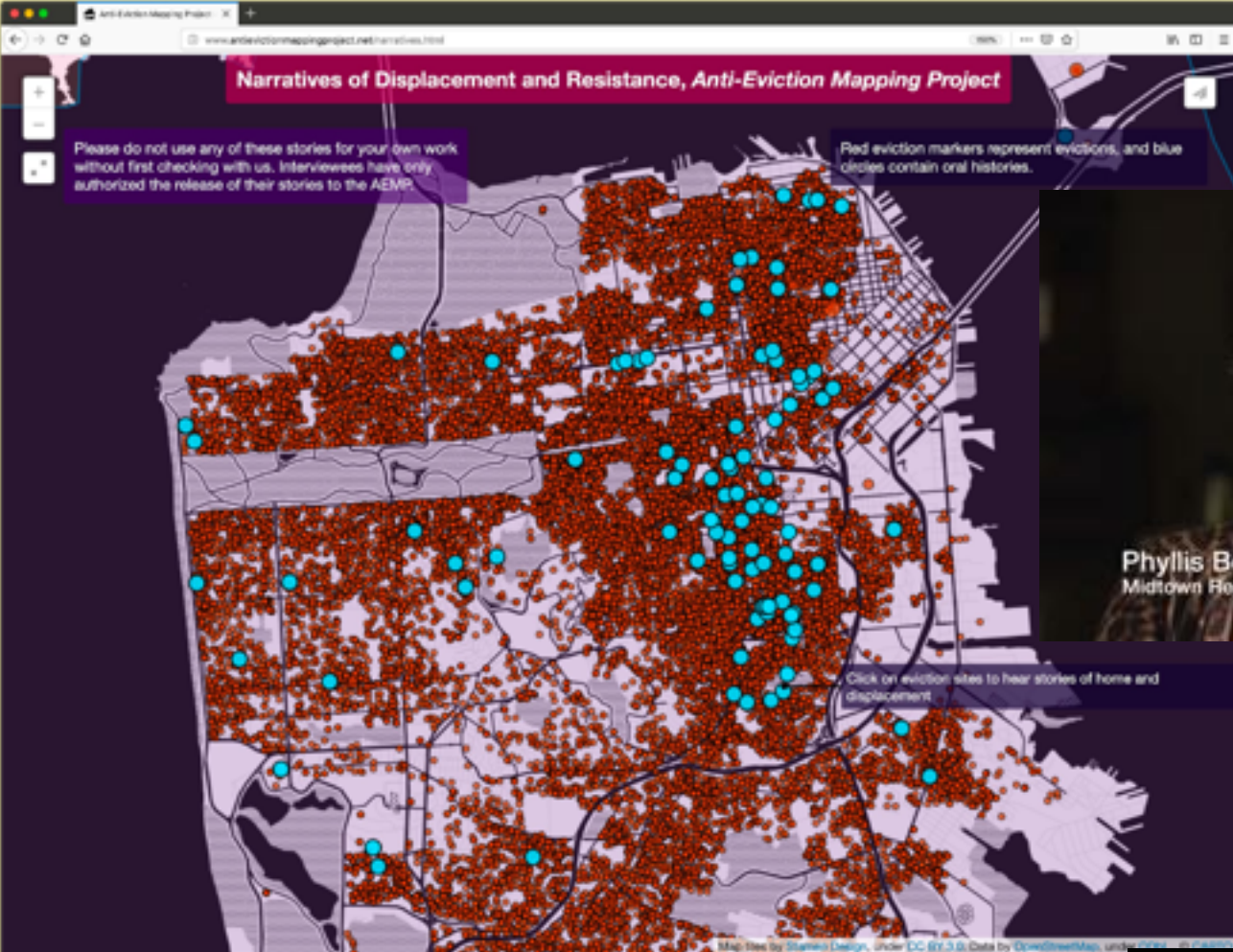


COVID19 & Counterdata (US)

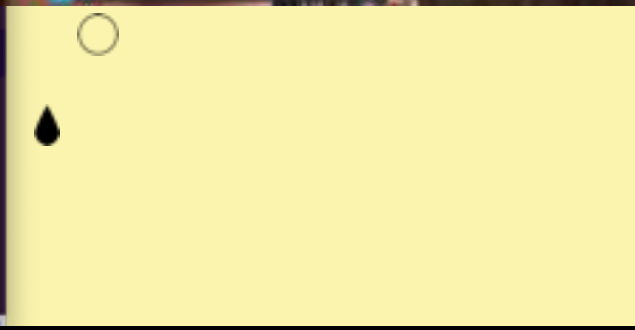


- **NYT Case Tracker**
- **The COVID Tracking Project**
- **Data for Black Lives** - cataloguing which states and counties are releasing data by race/ethnicity
- **Solutions Journalism Network** - Covid data by race/ethnicity at the state level
- **COVID-19 risk assessment in Indian Country** - (Rudolph Rýser)
- **Note: Sex/gender data are missing from all these efforts!**

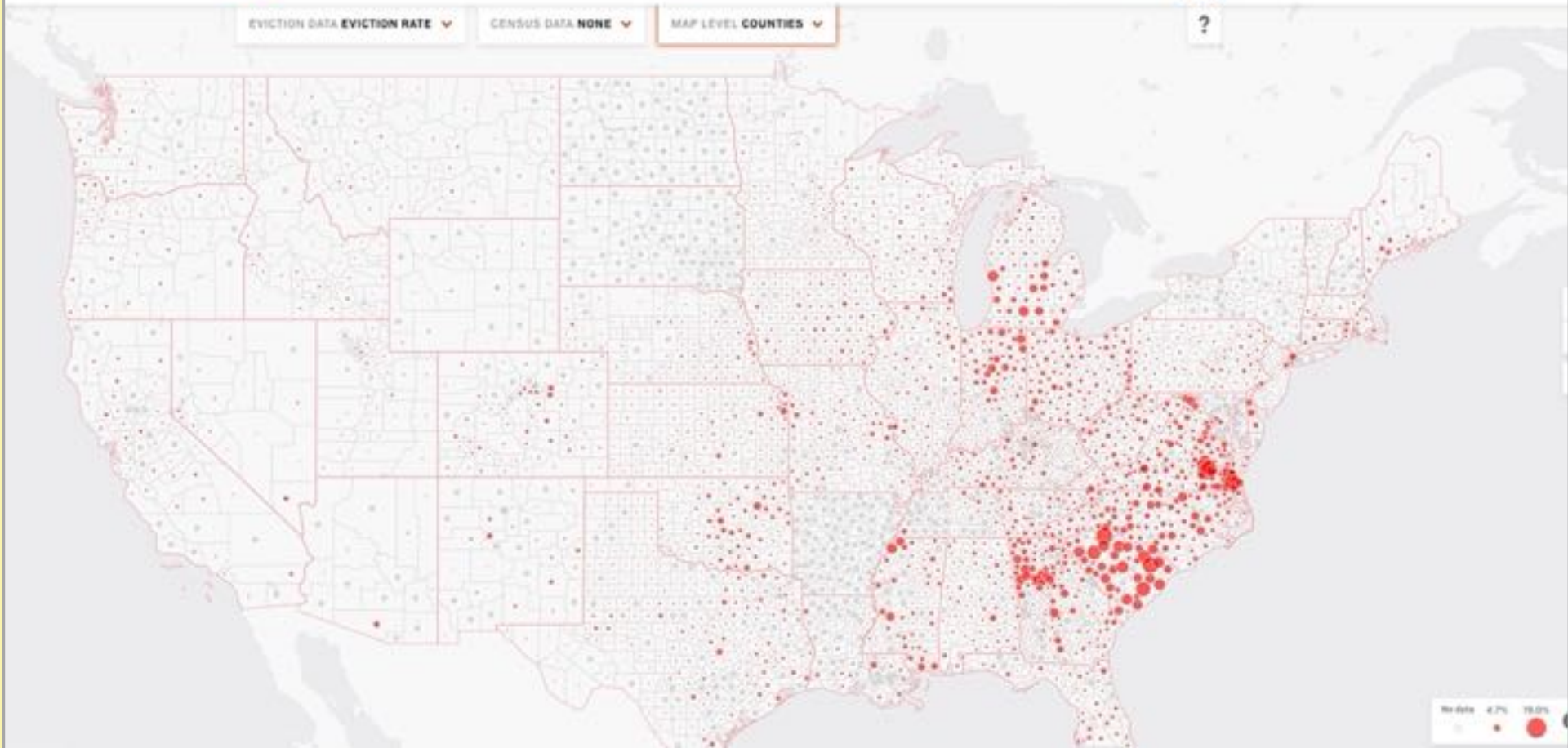




The Anti-Eviction Mapping Project, 2013 – present



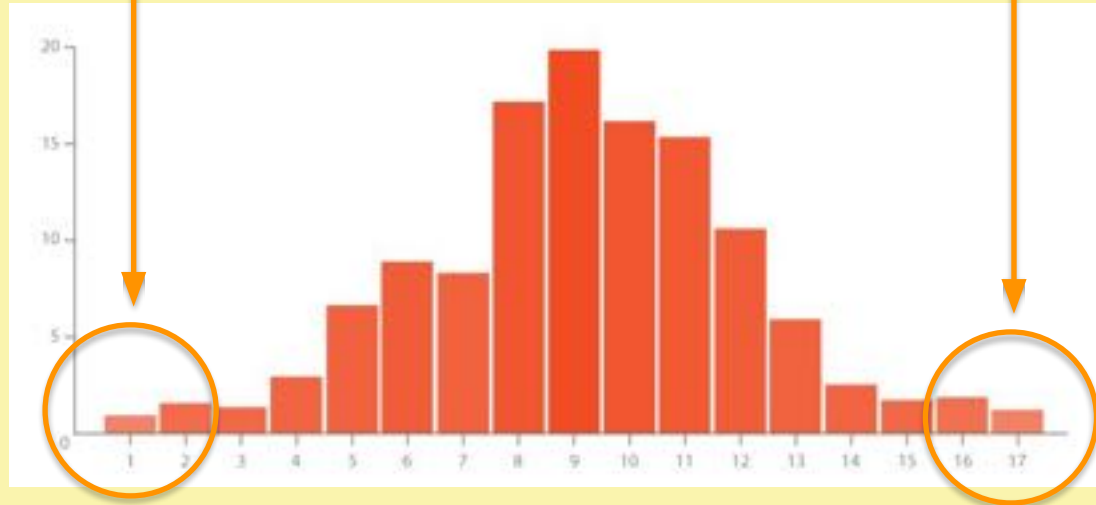
Principle: Embrace Pluralism



Participatory process for data science: Feminist design prioritizes the participation of people who have been most marginalized by the system

Feminist design

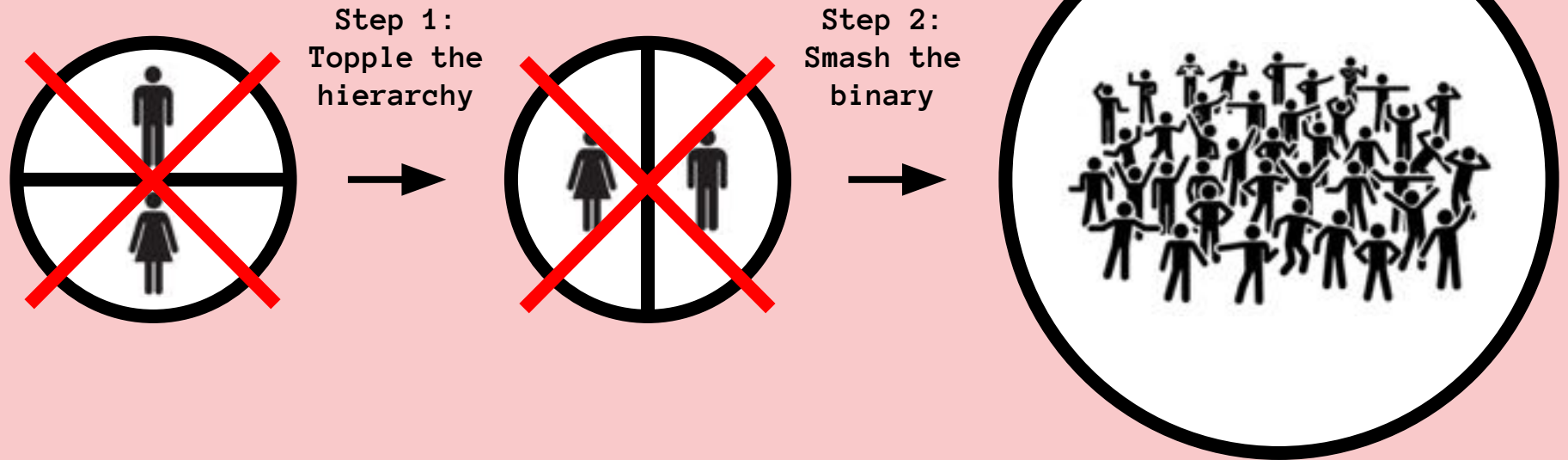
Feminist design



We center the voices of those who are directly impacted by the outcomes of the design process. – Design Justice Network

Principle: Embrace Pluralism

How to dismantle binary structures of power in two basic steps:

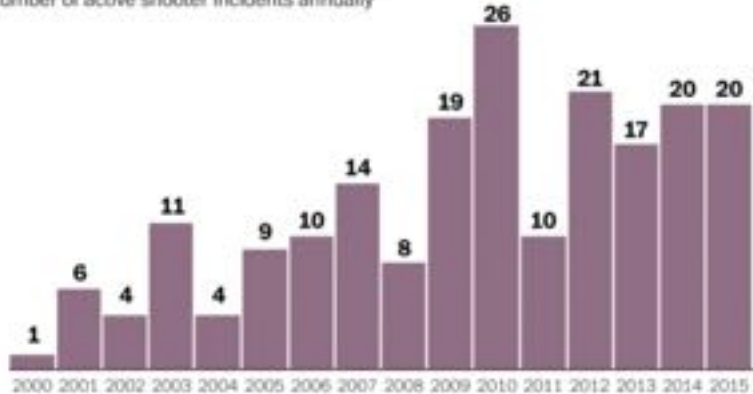


Principle: Rethink Binaries and Hierarchies

Data visualizations have an aura of objectivity

The era of “active shooters”

Number of active shooter incidents annually



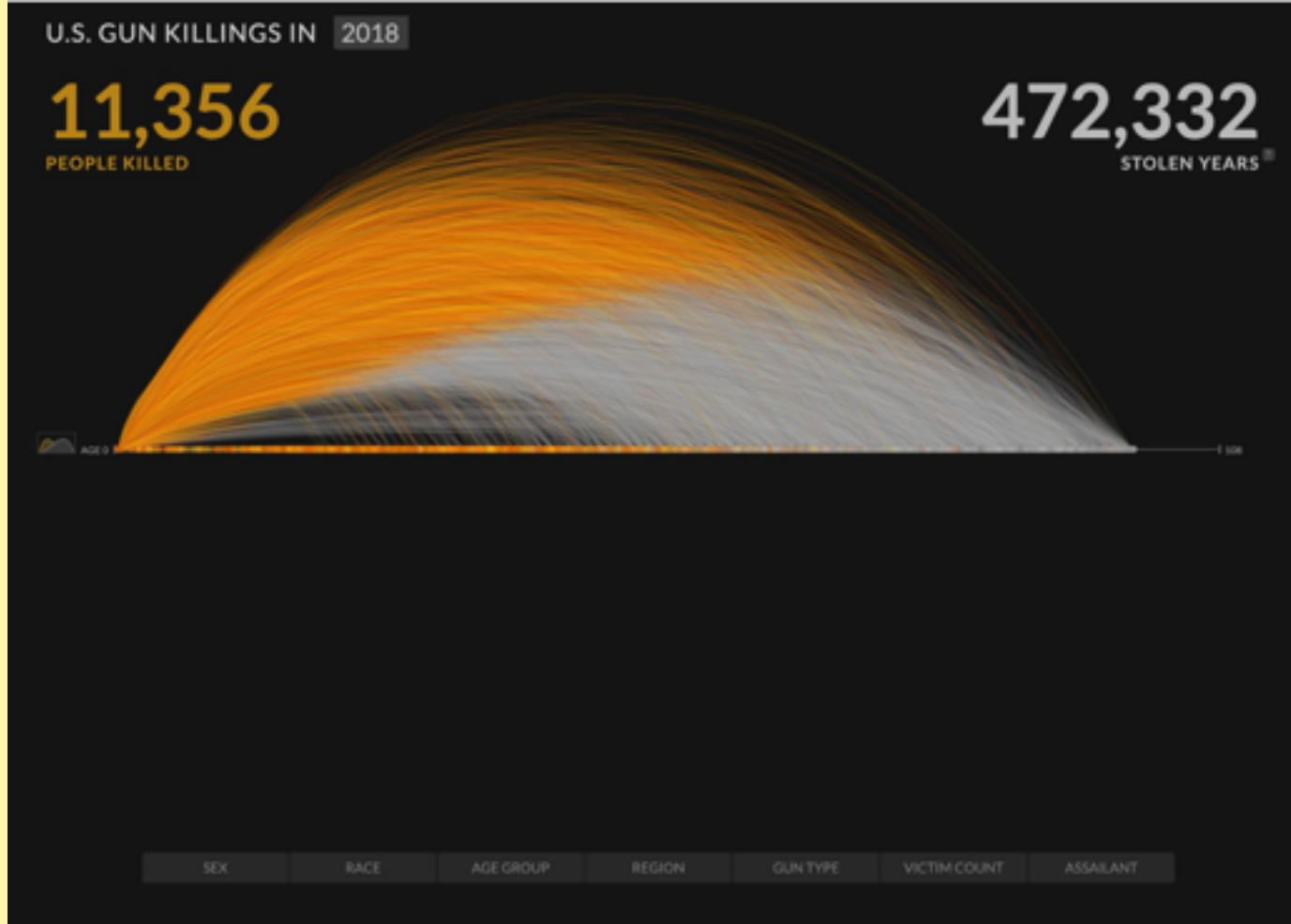
WFO'S WORKBLOG

Source: FBI

“We focus on four conventions which imbue visualisations with a sense of objectivity, transparency and facticity. These include: a) two-dimensional viewpoints; b) clean layouts; c) geometric shapes and lines; d) the inclusion of data sources.”

From Helen Kennedy, Rosemary Lucy Hill, Georgia Aiello, and William Allen. (2016) The work that visualisation conventions do. *Information, Communication and Society*, 19 (6). pp. 715–735. ISSN 1369–118X

U.S. Gun Deaths, by
Perisopic (2013–2018)
<http://guns.perisopic.com>



Principle: Elevate Emotion and Embodiment

**Q. when do you make
data science feminist?**

**FUNDING &
LEADERSHIP**

**research
questions**

**data
collection**

**processing &
cleaning**

analysis

deployment

**visualization/
communication**

**A. all the time and
everywhere in
the pipeline**

Data Feminism requires an expanded definition of data science

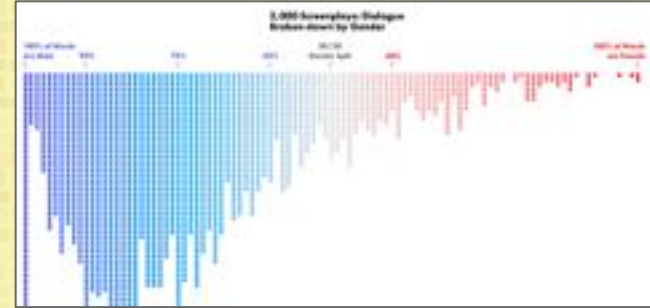
cs.CV 12 Apr 2016

**Seeing through the Human Reporting Bias:
Visual Classifiers from Noisy Human-Centric Labels**

Ihau Mires^{1*} C. Lawrence Zitnick¹ Margaret Mitchell² Ross Girshick²
¹Carnegie Mellon University ²Microsoft Research ³Facebook AI Research

Abstract

When human annotators are given a choice about what to label in an image, they apply their own subjective judgments on what to ignore and what to mention. We refer to these noisy "human-centric" annotations as exhibiting human reporting bias. Examples of such annotations include image tags and keywords found on photo sharing sites, or the captions containing image captions. In this paper, we use these noisy annotations for learning visually correct image classifiers. Our 8 annotations do not use conventional annotations, and show a significant amount of the information present in an image. Empirical analysis demonstrates that the noise in these annotations exhibits structure and can be modeled.



What You Can Do

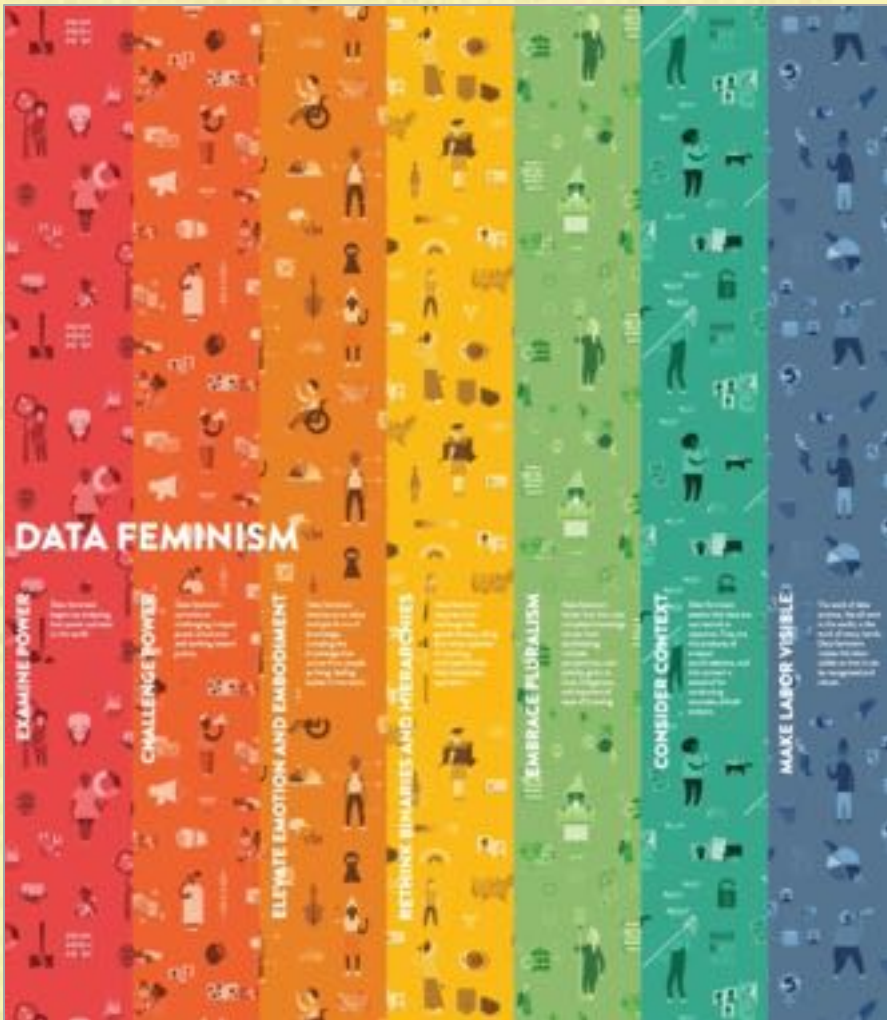
Examine power – Do work that interrogates and exposes sexism, racism, and other forces in data and in the world.

Challenge power – Collect counterdata, introduce new communities to data and digital tools, use data to advocate for equity at your workplace/institution.

Elevate emotion & embodiment – Experiment with creative forms of data presentation and communication (quilts, sculptures, murals, VR)

Embrace pluralism – Include more people in data projects – impacted communities, especially. Center the work of minoritized people and follow their leadership.

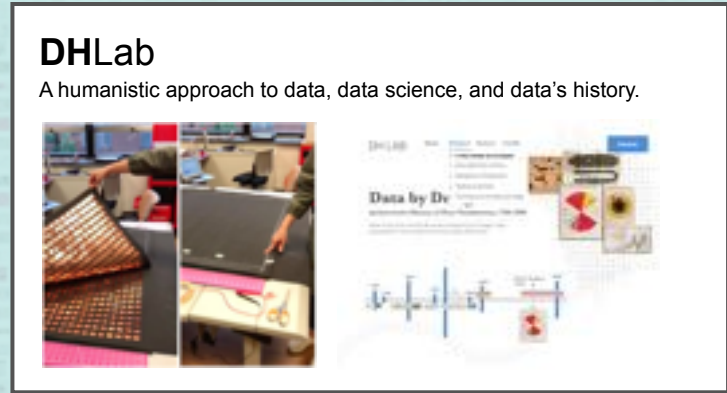
Make labor visible – Make sure you credit your data sources and research support staff, make your process transparent, and reflect on your own identity.



Data Feminism infographics – free downloads in 5 languages at:
<http://bit.ly/datafeminisminfographics>


thanks & be in touch!


More info about the book at: datafeminism.io



kanarinka.com


dataplusfeminism.mit.edu

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@kanarinkaprojects 

lklein.com

dhlab.lmc.gatech.edu (new url soon!)

@laurenfklein 

laurenfklein / EmoryDHLab 