# HIST C182C / STS C100: Human Contexts and Ethics of Data

University of California, Berkeley Fall 2018

# Data futures - perspectives from the present

Class 5, 8/31/18



Past visions of the future shape our present experience of datafied world

E.g. "touchstone texts" like Orwell's 1984 or Ridley Scott's *Blade Runner* (1982)

Value of futuring

- Inescapable aspect of being human
  - Useful tool for planning, strategizing, getting others on-board
  - Visceral dimension, to feel out

...how many visions of the future there are & how central S&T are to them

Keith Haring's mural, 1984. Collingwood Technical College, Melbourne

What does looking at contemporary visions of the future do for our understanding of human contexts and ethics of the datafied world?

*Imaginaries* are diagnostic tools of the present: they express society's shared commitments and ideas about what is valued, concerning, or lacking in the *present*.

# Today:

- Practice recognizing imaginaries by unpacking the four narratives of data futures we read for today
  - These narratives embed and (re-)produce imaginaries
- Introduce "sociotechnical imaginaries" analytical lens

# "Big Data: A Report on Algorithmic Systems, Opportunity, and Civil Rights" White House, 2016

# Why was this narrative written? What work is it doing?

Draws attention to the way opportunities of data can take away from "American values" by creating "unintended discriminatory consequences" (not something anyone wanted to create)

## How is it futuring?

Sets the agenda about the kinds of issues that are important for the country to pay attention to around data

### What is it committed to? What does it want to change?

American values and "democratic principles" (equal opportunity, equality); wants to change how data is employed in service of society (transparency, accountability, due process)

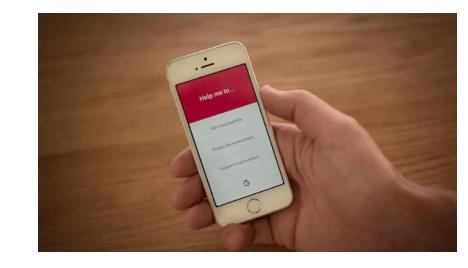
#### How is it more than an individual vision?

Institutionalized in government agencies (Big Data Working Group; President's Council of Advisors on Science and Technology; Federal Trade Commission); connected to Fairness, Accountability, Transparency (FAT) movement; development of Ethical Code for data scientists

# "The Selfish Ledger," Google, 2016

Why was this narrative created? What work is it doing?

To explore within Google what can be done with user data that the company is presently collecting.



# How is it futuring?

Draws up fictional scenarios of socio-technical reality that might take place in the future.

What is it committed to? What does it want to change?

Committed to using tech to pursue "collective good," which are also related to Google's values; wants to change individual's centrality.

How is it more than an individual vision?

Part of corporate vision, which is embedded in existing technological practices and designs

### "Dataism" Yuval Noah Harari, 2016

# Why was this narrative written? What work is it doing?

Draws attention to a latent ideology in society about how information drives social (and universal) change and to explore its similarities and differences with other ideologies, e.g. humanism

# How is it futuring?

Reads like science fiction because of the foreignness of the account although claims to be about present reality and tendencies already here and embraced.

# What is it committed to? What does it want to change?

Values grand narratives; wants to change individual human experience-centric value of human life

### How is it more than an individual vision?

Claims to be an ideology discussed or embraced by many (e.g. Ray Kurzweil, David Brooks, Adam Swartz); underlying idea that "information wants to be free" can be attributed to Stewart Brand (1984) anchored in Whole Earth Catalog, a Iso in imaginary of personal computing (e.g. Apple 1984 ad)

#### The Philosophy of Data



David Brooks FEB. 4, 2013

If you asked me to describe the rising philosophy of the day, I'd say it is data-ism. We now have the ability to gather huge amounts of data. This ability seems to carry with it certain cultural assumptions — that everything that can be measured should be measured; that data is a transparent and reliable lens that allows us to filter out emotionalism and ideology; that data will help us do remarkable things — like foretell the future.

## "Diana's OnLife World" Mireille Hildebrandt, 2015

# Why was this narrative written? What work is it doing?

To explore significance of data-driven agency -- "to imagine how everyday life may change if our environment becomes saturated with pre-emptive technologies that are always one step ahead of us" (8).

## How is it futuring?

Extends from reality of the present into fictional future where technologies exist that are close enough to our own and yet not quite here yet.

### What is it committed to? What does it want to change?

Narrative keeps central family relationships (husband-wife; mother-child; grandfather) and their respective obligations while introducing new element (and relationships with) Al assistants.

#### How is it more than an individual vision?

Builds on scenarios prepared by European research network on the "Future of Identity in the Information Society," 5-year research project by computer scientists, lawyers, social scientists, philosophers.

# Look across the narratives: what they have in common

- Combine fact and fiction in different ways (different degrees of extrapolation / projection)
  - More than just vanguard vision of the author -- enrolling, speaking for others, collectively held, institutionally stabilized, publicly performed
    - We celebrate imagination of visionary and seer, but imagination has intersubjective dimension as well that unites people in communities
- Interplay between positive and negative imaginings / combine utopia and dystopia (e.g. "problem/opportunity/challenge" framing in White House report)
  - More than just visions of what's attainable through science and technology, but also about how life ought or ought not be lived; Use the future to reflect on the past or on the present "normal" (on values, on where we've come from, on who we are)

# Each narrative embeds and (re-)produces a sociotechnical imaginary

"collectively held, institutionally stabilized, and publicly performed vision of a desirable future, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology" (4)

Jasanoff, in introduction to Jasanoff and Kim (Eds.)

Dreamscapes of Modernity:

Sociotechnical Imaginaries and the Fabrication of Power,
2015.

We said:

Imaginaries are diagnostic tools of the present. They express society's shared commitments and ideas about what is valued, concerning, or lacking in the *present*.

-- So what do the imaginaries of datafied world these narratives represent tell us about our present?

# Diversity of voices and perspectives on data futures & what's at stake in them

- public institutions, corporations, (public) intellectuals
- Debate about datafied world is not settled / competing imaginaries (e.g. dataism at the expense of national values or power of human experience and agency)
- Rift between
   data-centric and
   human-centric values &
   how to organize
   sociotechnical systems
   to support these values

# Data systems and devices develop their own agency

- Ledger determining how to fill its informational needs
- Jacob's PDA deciding not to reveal heart attack because of how Jacob will feel about it
- Dataism "venerates neither god nor man -- it worships data"

# Data reconfigures our relationship with the future

- "Pre-emptive technologies" (Hildebrandt)
- Data as future-oriented, predicting and guiding behavior (Ledger)
- Opportunity and challenge of using data to anticipate future behavior (e.g. credit score) in White House report cases
- Non-human timeline of data (Harari)

# Questions to ask about a sociotechnical imaginary

- What is the imaginary glossing over or erasing? (e.g. "Wikipedia written by all of us" Harari)
- How/by whom is the imaginary contested?
- Are there competing imaginaries?
- How does this imaginary compare across time, societies, cultures?
- What opportunities does the imaginary set up to refashion the world?
   Who does the imaginary empower to do the refashioning?
- Continuity and rupture
  - How does the imaginary work as "glue," allowing things to cohere across disruptions and thereby preserving continuity?
  - How do the imaginary work as "solvent" that upends stability and invites remaking?

# Conclusion

- Looked at four contemporary narratives of data futures -- will keep seeing diverse narratives throughout the semester
- Introduced analytical lens of "sociotechnical imaginaries" to help us derive analytical power from narratives about data futures
- Modeled how we can use this lens to see what collectives of people value and find lacking in the present

