

data-ppf.github.io apr 30 2019

lecture 14 of 14: future of data

chris wiggins + matt jones, Columbia

themes for today

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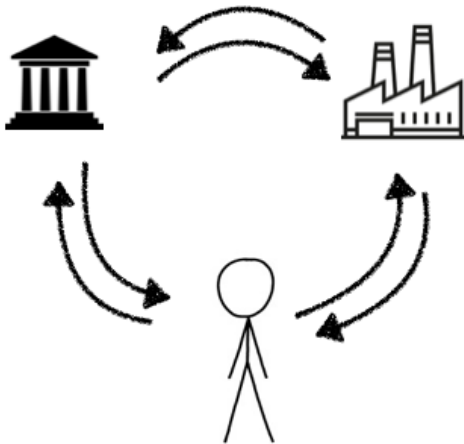


Figure 1: 3 player game

## student observations: data

```
....  
59 privacy  
32 fairness  
30 regulation/regulate  
21 power  
9  gdpr  
6  workers  
6  bluetooth  
....  
3  Fan
```

## student observations: some hope, some despair

*these readings gave me hope that there is a way to maintain ethical algorithmic practices.*

*it was refreshing to read articles that offered potential solutions to these problems.*

*I've never thought about why the U.S. government has had such a "hands-off" approach.*

*The reading on Apple and Google was really sobering to me*

## student observations: context

*It is clear that the solution to algorithmic biases and injustices cannot be solved without first solving the social conditions that create them in the first place.*

*fails to account for the preexisting societal injustices that underpin certain algorithms in the first place.*

## student observations: weapons

*In reality, it will take a combination of regulation from the state, from the people, and accountability within the companies*

*we need a multi-pronged solution*

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People power



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  2. “tech revolt”



## Corporate power

## Corporate power: privacy

1999, Sun: “you have zero privacy anyway. get over it” -McNealy

2010, Facebook: “Doing a privacy change for 350 million users is really it’s not about the type of thing that a lot of companies would do. . . .We decided that these would be the social norms now and we just went for it.”

2015, Apple: “privacy is a fundamental human right” -Tim Cook

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- ▶ Ethics without power is largely toothless, or at least too individualistic to push against the massive shifts in technology and power all around us.
- ▶ Power without ethics is directionless, or at least is likely to serve the interests with the most resources and influence if not directed otherwise.

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- ▶ interest? plea for “new regulatory approach” & “new regulatory agencies must be able to automatically audit algorithms at scale. . . already feasible at the scientific level”



*We . . . . believe that curtailing algorithmic misbehavior will itself require more and better algorithms—algorithms that can assist regulators, watchdog groups, and other human organizations to monitor and measure the undesirable and unintended effects of machine learning.*

Kearns & Roth, from their book, “The Ethical Algorithm: The Science of Socially Aware Algorithm Design” (2019), quoted in Zimmerman et al.

## Zimmerman et al. “Tech can’t fix. . .”

*We must resist the apocalypse-saturated discourse on AI that encourages a mentality of learned helplessness.*

*Developing algorithmic systems entails making many deliberate choices. . . The algorithm does not define these concepts itself; human beings—developers and data scientists—choose which concepts to appeal to, at least as an initial starting point*

- ▶ tech problems are bigger than loss functions

## Tech can't fix: it's on us

*it is high time for us as a public to take seriously our responsibilities for the present and looming social consequences of AI. Algorithmic bias is not a purely technical problem for researchers and tech practitioners; we must recognize it as a moral and political problem in which all of us—as democratic citizens—have a stake. Responsibility cannot simply be offloaded and outsourced to tech developers and private corporations.*

*But we will also have to ask uncomfortable questions about our own role as a public in authorizing and contesting the use of AI technologies by corporations and the state. Citizens must come to view issues surrounding AI as a collective problem for all of us rather than a technical problem just for them.*

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6. No Mission Creep — tracking should not outlive the COVID-19.

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inter-corporate power: setting tech against tech,  
firms against firms

# SOPA 2012

The Stop Online Piracy Act (SOPA): Hollywood promoted bills in the US Congress that would have created a “blacklist” of censored websites. Dramatic expansion of intellectual property enforcement

Coalition of tech firms and civil liberties organizations, culminating in...



Figure 2: Internet Blackout Jan. 18, 2012

Apple vs. Facebook, Google

Apple vs. US DOJ on encryption

not just “ethics” fundamentally different business models

## State power

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- ▶ “last substantial [USG] privacy law” 1986 ECPA

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- ▶ definition of obligations of corporations only to shareholders

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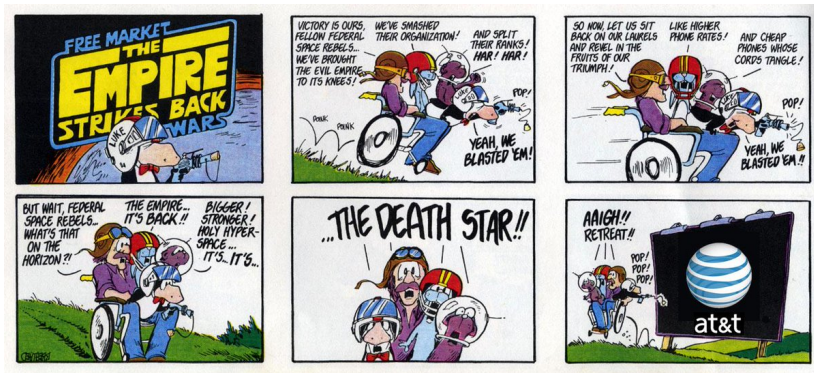


Figure 3: failed breakup of AT&T

using *all* scales of governance

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# GDPR

May 25, 2018, the General Data Protection Regulation Act came into effect in EU and for EU peoples worldwide

Article 22 states that Europeans “have the right not to be subject to a decision based solely on automated processing.”

states/provinces

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  - ▶ "A fine up to \$7,500 for each intentional violation and \$2,500 for each



## municipalities

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- ▶ Somerville, Mass. June 2019

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  - ▶ potential collateral benefit: security through multiplicity and smaller-scale diffusion
- ▶ related: “narrow changes to the 1996 Communications Decency Act (CDA) Section **230**”, 1996

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- ▶ “perhaps this will start a trend”



People power

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4. Nonprofit Organizations and Coalitions
5. Walkouts, esp GOOG 2018



## community organizing in highly tactical ways

ctrn is a space of convening for those organizing against the design, experimentation, and deployment of carceral technologies.

**CARCERAL  
TECH  
RESISTANCE  
NETWORK**

we build: community archives / community knowledge /  
community defense / community power

Figure 4: Sarah Hamid and the Carceral Tech Resistance Network

## People power: “The Tech Revolt”

*A sometimes pointed, sometimes resigned conversation with engineers, designers, research scientists, and job candidates who are pushing for a more ethical Silicon Valley*

*Interviews by Cameron Bird, Sean Captain, Elise Craig, Haley Cohen Gilliland, and Joy Shan*

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power and principles



how did new capabilities rearrange power? who can now do what, from what, to whom?

role of rights, harms, justice?

reminder of themes/big main takeaways

## reminder of themes/big main takeaways

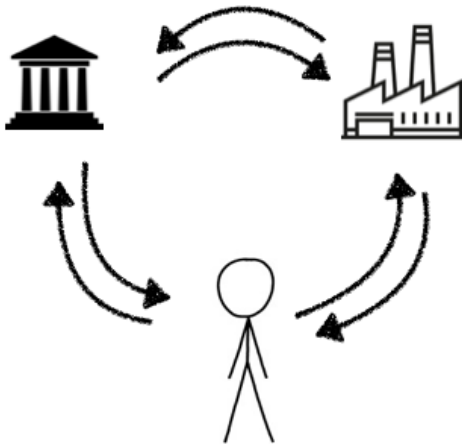


Figure 5: 3 player game

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