

[data-ppf.github.io](https://data-ppf.github.io) apr 23 2019

lecture 13 of 14: present problems: 'data, money, and power'

chris wiggins + matt jones, Columbia

themes for today

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- ▶ the advertising model

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- ▶ the vc model, esp for 'platforms'
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- ▶ vc+advertising=information platforms

student observations



readings: Goldhaber, O'Reilly, Grimmelmann,  
Tufekci

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(optional: Serra+Schoolman, Saxenian, Wiggins)

(optional) Serra + Schoolman, 3/30/1973

CORPORATIONS ARE NOT RESPONSIBLE.

CORPORATIONS ARE NOT RESPONSIBLE TO GOVERNMENT.

CORPORATIONS ARE NOT RESPONSIBLE TO THEIR EMPLOYEES.

CORPORATIONS ARE NOT RESPONSIBLE TO THEIR SHAREHOLDERS.

... you are the product

► Television Delivers Poeple, 1973

Goldhaber, 1977

First Monday, internet journal started 1996

## Scarcity=value

*Information, however, would be an impossible basis for an economy, for one simple reason: economies are governed by what is scarce, and information, especially on the Net, is not only abundant, but overflowing. . . . It is not in any way scarce, and therefore it is not an information economy towards which we are moving. . . . flowing in the opposite direction from information, namely attention.*

## attention, needs, and personalization

*If you are still paying attention, . . . . I am addressing some need or desire that you now have. Thus it appears, in a certain sense that I am paying each of you attention individually, even though I can't really be doing that. . . . I am offering you individually the illusion of my full attention.*

## attention and productivity

*There just is not enough work of the older kinds to keep us as busy as we once were. . . .*

*Yet strangely, we are all busier than ever. . . .*

*It is precisely because material needs at the creature comfort*

*level are fairly well satisfied for all those in a position to demand them that the need for attention . . . takes on increasing importance. In other words, the energies set free by the successes*

*of what I refer to as the money industrial economy go more and more in the direction of obtaining attention.*

# Organizations

- ▶ brand of employer -> brand of individual



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# Organizations

- ▶ brand of employer -> brand of individual
- ▶ money and attention:
  - ▶ substitution has not yet happened. . . .
  - ▶ . . . unless you count time (see ZT's point about phone minutes as currency)

## Misc: e-books

*At present, for instance, it is impractical to distribute books directly over the Net, though it is easy to foresee that need not be the case for long.*

*physical books will be seen as cumbersome and quaint*

## Misc: paywalls

*So in the case of a book, the Internet should now be viewed as a useful and free publicity mechanism. Let passages be freely copied and circulated on the Net, because only if physical most of the time, the more of copying that takes place, the more customers there will be is more convenient than e for the physical printed version. If you have a Web site, don't charge for it, because that will only reduce the attention it gets. If you can't figure out how to afford it without charging, you may be doing something wrong.*

# VC/“risk captial” as model

- ▶ private investment in future revenue

## VC/“risk captial” as model

- ▶ private investment in future revenue
- ▶ expection of risk+long term payout

## USG+VC: consequences, 1945-2001

- ▶ technical risk: can i use technology to differentiate my product in the marketplace?



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- ▶ monopoly risk: can i simply buy the marketplace?

## USG+VC: consequences, 1945-2001

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- ▶ market risk: is there demand in the marketplace for my product?
- ▶ monopoly risk: can i simply buy the marketplace?
- ▶ see Saxenian for more

## VC+PE: consequences, 2008-2019

- ▶ winner-take-all risk for new markets (including because of new tech)

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- ▶ winner-take-all risk for new markets (including because of new tech)
- ▶ e.g., iphone/GPS
- ▶ next week: revival of antitrust concerns, pre-Borkian

- ▶ founder

# O'Reilly

- ▶ founder
- ▶ funder



# O'Reilly

- ▶ founder
- ▶ funder
- ▶ author

## TO: VC in pursuit of monopoly

- ▶ how can  $v = \$120\text{bn}$ ,  $p < 0$ ?

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- ▶ how can  $v = \$120\text{bn}$ ,  $p < 0$ ?
- ▶ reflects American change: from competition to tolerated monopoly to monopoly by design

## TO chart

Percent of US IPOs with negative earnings per share (EPS)

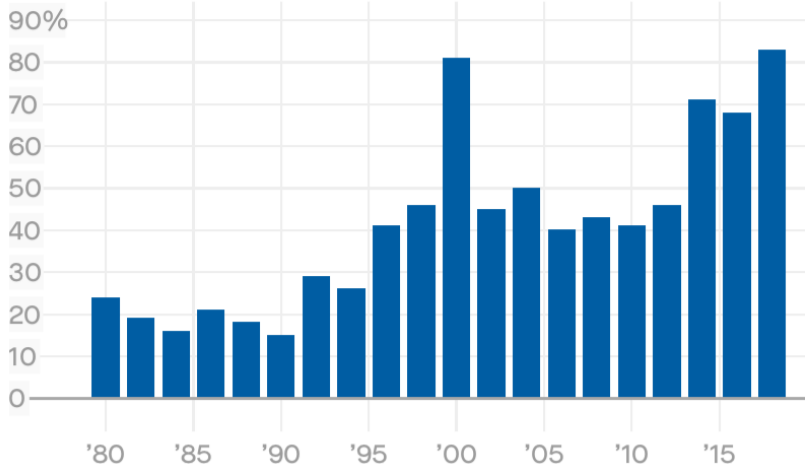


Figure 1: chart

claim: this is new

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- ▶ GOOG: VC=\$36mm ,  $p \gg 0$

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- ▶ AMZN VC=\$108m,



money is an engine not a camera

- ▶ “In the short run the market is a voting machine. In the long run it’s a weighing machine.”

## bryce quote on vc

*“Timely reminder that the VCs aren’t even in the home run business. They’re in the grand slam business.” i.e., designed to disrupt*

- ▶ most lose, .07 win big > \$1bn

## bryce quote on vc

*“Timely reminder that the VCs aren’t even in the home run business. They’re in the grand slam business.” i.e., designed to disrupt*

- ▶ most lose, .07 win big > \$1bn
- ▶ “The losses from the blitzscaling mentality are felt not just by entrepreneurs but by society more broadly.”

## TO on solutions

*The goal for Lyft and Uber—and for all the entrepreneurs being urged to blitzscale—should be to make their companies more sustainable, not just more explosive; more equitable, not more extractive. [emphasis added]*

# Grimmelman

- ▶ the platform is the message

## Grimmelman: advertising

The second is that since the platforms themselves are primarily advertising driven, they optimize their designs to maximize advertising revenue.<sup>32</sup> This typically means maximizing “engagement”: staying on the site for as long as possible, continuing to read and watch. And this in turn means that platforms are carefully, constantly watching to see which content beats out its rivals in drawing attention. They’re not neutral in this: they prioritize and promote the content most likely to grab users by the lapels. Facebook shuffles its News Feed; Twitter lists Trending Topics; YouTube suggests videos based on the current one and will even autoplay them after it ends.

Figure 2: advertising

## Grimmelman: taxonomy

Digital social media have a few characteristics that intensify this old tendency. The first is simply speed: sharing on Facebook or Twitter is instantaneous. A meme can go viral in a matter of hours simply because it loses so little time each trip around the sharing loop. A second is scale: a tweet or a video can be visible to the world, and be seen by as many people click on it. A third is fidelity: the ten-thousandth person to retweet a GIF will pass along the same one as the first, which brings a measure of coherence to a meme.<sup>27</sup> A fourth is accessibility: almost anyone with Internet access can cheaply and easily post to them, which means that billions of people are potential creators. And a fifth is personalization: by tailoring what each user sees to content they are more likely to find appealing and share, a platform helps memes achieve critical mass in a localized community of interested users, like the reflector around a nuclear reactor bouncing neutrons back into the radioactive core.

Figure 3: Taxonomy

## Grimmelman: poetic

Recommendation engines may only “supply” car crashes in the sense of suggesting that since you looked at that last one, here’s another one you may be interested in watching. But in a world where attention is money and platforms find and focus attention, that’s enough to incentivize others to go out and crash cars. Complaining about it doesn’t help, either. Hate clicks are still clicks. The new virality machines can see inside your head, and they will make whatever it is you can’t help thinking about. The Stay Puft Marshmallow Man comes for us all.

Figure 4: poem



## Grimmelman and 'content moderation'

- ▶ thin lines among thing, parody of thing, satire of thing

## Grimmelman: kayfabe politics

- ▶ violence of thing, parody of thing, satire of thing, and kinetic

# Tufekci

- ▶ problems and solutions

## “best minds” quote

*After a couple years at Facebook, Hammerbacher grew restless. He figured that much of the groundbreaking computer science had been done. Something else gnawed at him. Hammerbacher looked around Silicon Valley at companies like his own, Google (GOOG), and Twitter, and saw his peers wasting their talents. “The best minds of my generation are thinking about how to make people click ads,” he says. “That sucks.”*

<https://quoteinvestigator.com/2017/06/12/click/>

## ZT on the problem & power

*The few companies that control our digital public sphere — Facebook, Google, and Twitter — are all driven by the same fundamental business model, and it has only grown more pernicious over time. To microtarget individuals with ads, today's platforms massively surveil their users; then they use engagement-juicing algorithms to keep people onsite as long as possible. By now it's clear that this system lends itself to authoritarian, manipulative, and discriminatory uses: hiding job openings from minorities and older people; discouraging certain groups from turning out to vote; and allowing anyone with even a small budget to find audiences that are, say, anti-Semitic. It also creates an environment conducive to viral misinformation and hate speech.*

## advertising, politics, and 'Persuasion architectures'

*As for dissidents: Yes, online platforms offer important alternatives to censored mass media across the globe. But authoritarians have figured out how to defang most of these benefits for activists, while adroitly using social media for their own ruthless purposes. Like other politicians and world leaders, Filipino strongman Rodrigo Duterte has received guidance from Facebook's staffers on how to get the most out of the platform. He has also made an art of using Facebook to viciously hound and harass his opponents. -ZT, 2019*

# Reminder of ZT's earlier readings (week 2)

First Monday, Volume 19, Number 7 - 7 July 2014



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Engineering the public: Big data, surveillance  
and computational politics  
by Zeynep Tufekci

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Figure 5: ZT, week 2

# Engineering consent: PR and politics

The rise of broadcast media altered dynamics of politics in fundamental ways. Public relations pioneer Edward Bernays explained the root of the problem in his famous "Engineering of consent" article where, discussing the impact of broadcast on politics, he argued that the cliché "the world has grown smaller" was actually false (Bernays, 1947). The world is actually much bigger and today's leaders, he pointed out, are farther removed from the public compared to the past. The world feels smaller partly because modern communication allows these leaders, potent as ever, to communicate and persuade vast numbers of people, and to "engineer their consent" more effectively.

Figure 6: ZT, week 2



# Engineering consent: Bernays warned us

Bernays saw this as an unavoidable part of any democracy. He believed, like Dewey, Plato and Lippmann had, that the powerful had a structural advantage over the masses. However, Bernays argued that the techniques of "engineering of consent" were value-neutral with regard to message. He urged well-meaning, technologically and empirically enabled politicians to become "philosopher-kings" through techniques of manipulation and consent engineering.

The techniques can be subverted; demagogues can utilize the techniques for antidemocratic purposes with as much success as can those who employ them for socially desirable ends. The responsible leader, to accomplish social objectives, ... must apply his energies to mastering the operational know-how of consent engineering, and to out-maneuvering his opponents in the public interest. [2]

Figure 7: ZT, week 2

## Engineering consent: power, ZT warned us (2014)

Such effects are real and surely they are part of the story of the rise of the Internet. However, history of most technologies shows that those with power find ways to harness the power of new technologies and turn it into a means to further their own power (Spar, 2001). From the telegraph to the radio, the initial period of disruption was followed by a period of consolidation in which challengers were incorporated into transformed power structures, and disruption gave rise to entrenchment. There are reasons to think that the Internet's trajectory may have some differences though there is little reason to think that it will escape all historical norms.

Figure 8: ZT, week 2

# Engineering consent: targeting, ZT warned us (2014)

and marketers

Tufekci

Unsurprisingly, targeting individuals as individuals rather than as members of broadly defined aggregates has been the holy grail of political campaigns. Such efforts have been underway for decades. Culling information from credit cards, magazine subscriptions, voter registration files, direct canvassing efforts and other sources, political parties, as well as private databases, have compiled as much information as they can on all individual voters. However, until recently, the collection of individual level data was messy and fragmented, and targeting was still often done by aggregate groups, which were simply based on richer individualized data than before. Much of this has changed with the rise of the Internet, which greatly increases the type and amount of individual data, and computational analytics, altering what information can be gleaned from these sources.

Figure 9: ZT, week 2

## Engineering consent: 2017

There's no question that the marketing and advertising world is ahead of the political marketing the political communications world. And there are some things that I would definitely [say] I'm very proud of that we're doing which are innovative. And there are some things which is best practice digital advertising, best practice communications which we're taking from the commercial world and are bringing into politics.

Figure 10: quote

### **Nix:**

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Figure 11: quote

<https://techcrunch.com/2017/11/06/cambridge-analytica-ceo->



Nov 6 10:07a

# **Cambridge Analytica CEO talks to TechCrunch about Trump, Hillary and the future**

Figure 12: quote

power and principles

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



role of rights, harms, justice?

foreshadowing data for Thursday

reminder of themes/big main takeaways

themes

up next

- ▶ 4/30: our future

up next

- ▶ 4/30: our future
  - ▶ corporate power

up next

- ▶ 4/30: our future
  - ▶ corporate power
  - ▶ state power

up next

- ▶ 4/30: our future
  - ▶ corporate power
  - ▶ state power
  - ▶ people power



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