

AFD Ep 443 - Book Review: "Internet for the People" [Bill/Rachel] - Recording Oct 10, 2022

"Internet for the People" by Ben Tarnoff (2022, Verso)

[Bill] Preface:

- He reminds us that the Internet is physical and material by describing the undersea cables and notes that those cables tend to follow routes of earlier telephone and telegraph cables that had succeeded (thus demonstrating continuity)
 - <http://arsenalfordemocracy.com/2021/08/15/unlocked-the-transatlantic-telegraph-cable-arsenal-for-democracy-ep-367/>
- "internet reformers have some good ideas, but they never quite reach the root of the problem. The root is simple: the internet is broken because the internet is a business."
- This book focuses on the US public development of the internet and then its privatization in the 90s ("a process, not an event")
- "The real money didn't lie in monetizing access, but in monetizing activity..."

Part 1: The Pipes

[Bill] Chapter 1: A People's History of the Internet

- Anecdote from 1977 about field test of worldwide data packet transmission across mediums from a van transmitting via radio waves in Silicon Valley to an office building in Menlo Park, converting to electric signals traveling along copper telephone wires from the West Coast to the East Coast, then traveling via satellite across the Atlantic Ocean to Oslo, then to London, then to Goonhilly Satellite Earth Station in Cornwall, then to space and back to earth, landing at Etam Earth Station, West Virginia, ultimately traveling back to California, but not before stopping at Cambridge, Massachusetts (whew!).
- DARPA was buying mainframe computers for US universities that were doing contract research work (and other academic work) for the DOD, but they didn't want to spend an unlimited amount of money on buying mainframes, which had a limited computing capacity but weren't always in use. By proposing to link them together the universities would be able to share computing resources. This idea became ARPANET, launched in 1969, and rested on experimental "packet-switching" technology that could break down any message into constituent fractional data transmissions, send them all to the same place, and reassemble them. By breaking them down, they can be sent over multiple routes concurrently to save time or not overwhelm the capacity of a given transmission line if there were too many packets for a single line to handle.
- AT&T both refused to build ARPANET and refused to buy it from the government when it was completed. Because it remained in public hands, the government could impose certain conditions like requiring open source sharing of computer science & engineering research by those using the system, which helped it take off and advance faster.
- This led to the development in the mid 1970s of the Internet Protocol, a free, non-proprietary, universal common language for linking together any existing networks
- Although the ARPANET was useful for DOD university contracts, the DOD also really wanted to be able to connect troops in the field or overseas bases with live access to mainframe computing power back home ("strategic computing assets") wirelessly. The

Internet Protocol, designed in 1974, would link together all the existing global communications networks and mediums accessible to the US military so that packets could be seamlessly switched to and from troops on the far side of the world. The data packets had to be able to move across physical copper phone lines, radio or microwave arrays, and satellites instantly and without data getting lost on the way. They needed to be able to go to or from moving vehicles on land, sea, sky, or space. TCP/IP succeeded in delivering on this goal envisioned for the military and in doing so allowed the creation of a global internet that could communicate across technologies, countries, and cultures. Tarnoff argues that the only reason this developed was because the US military of the early to mid 1970s was physically operating all over the world. (In the preface he makes a note of the relationship between the British military and the spread of the telegraph worldwide across the oceans and continents.) However he also observes that the TCP/IP envisioned for connecting strategic mainframes back home to field assets on the move was actually initially just used by the DOD instead to link together their "growing assortment of fixed-line networks" and allow them to talk to each other. ARPANET didn't even adopt the protocol until 1983. That marks the real creation of the internet because ARPANET was just the crown jewel network and the protocol now allowed it to interconnect with other networks in an internet.

- Over the 1980s, academics had a growing interest in getting access to the internet and it was as a whole more useful the more stuff/people that got onto it, so the US Government's National Science Foundation beginning in 1986 subsidized the creation of regional networks of researchers who would then be nationally networked to each other. Most American researchers could easily access the internet by the end of the 1980s. But the plan was always to privatize the NSFNET after it had enough users to make that viable.
- The physical infrastructure couldn't handle the level of data traffic being sent over it, even with NSF restrictions on usage, and the establishment of the more user-friendly World Wide Web system for utilizing the internet was about to dramatically increase demand for data transmissions. (Does he come back to this?)
- When NSFNET privatization began after Congressional hearings in 1992, only 5 companies had "enough infrastructure to operate [part of] a backbone" of the internet, instead of the government. (The infrastructure hardware wasn't sold off, just closed down in favor of private infrastructure. Previously anyway the NSF had always merely subsidized and leased private hardware for its networks, rather than owning it directly.) There were no special conditions or regulations imposed on the new private operators. By 1995, the transfer to this oligopoly of companies was completed. (Does he mention them by name?)
- Al Gore, as a Senator, had championed government support for building out the internet infrastructure and had always articulated a public-private partnership of private contractors operating the networks under government control and supervision. But as Vice President he had to yield to the Clinton/DNC cozy relationship with the telecom companies. Billions of dollars in government investment into the internet was sold off (?) to these telecom companies because they had donated barely over \$100,000 to the DNC in late 1993. (Tarnoff is careful to note however that in 1992 and 1993 it was clear

that nearly everyone in a decision-making role was already assuming privatization as a foregone and good outcome.)

- Senator Daniel Inouye and the Telecommunications Policy Roundtable unsuccessfully promoted an alternative vision whereby the telecom operators of the internet would be required to reserve 20% of their data handling capacity for unrestricted "public uses" for free (!) by "qualifying organizations, such as libraries, nonprofits, and educational institutions" who would in turn have to make these internet resources freely available to the general public. This would have built on models already used by the Corporation for Public Broadcasting and the USPS. The bill was killed easily by lobbyists.
- Tarnoff also points out that the Internet itself under NSF control had been a network of nonprofit networks to begin with and if they had been allowed to sell access to private companies including telecoms or online commercial vendors they could have used these resources to continue building out the infrastructure and making it freely available to those same public benefit institutions the Inouye bill was aimed at.
- Briefly mentioned are some local nonprofit, free dialup internet access providers from the 80s and 90s, which couldn't continue without federal subsidies

[Rachel] Chapter 2: The Plunder Continues

- The current big six internet telecoms are mostly tied to the original big 5 of the early 90s privatization (he mentioned AT&T, Sprint, and Verizon)... he differentiates between the deep infrastructure companies and the ISPs although they're sometimes the same. 76% of internet service provider subscriptions are through Comcast, Charter, Verizon, or AT&T "and they actively collaborate to avoid competing with one another."
- The 1996 telecom bill created a distinction between companies offering "Telecommunications services" vs "Information services" and the latter were exempted from the old Common Carrier legal classification. Dialup internet over phone lines was under Common Carrier status and any company could offer internet access subscriptions over another company's phone infrastructure, but cable internet is not Common Carrier since 2002, so each company installs their own lines. A 2005 SCOTUS ruling affirmed this designation and thus put most little ISPs out of business because they couldn't build their own infrastructure to compete with the big dogs who no longer had to allow them access. However broadband was classified as common carrier in 2015 and then reclassified in 2017 as a non-common carrier.
- Net neutrality Yada Yada (if you're listening to this, you already know what that is, in basic terms, in all likelihood... so let's get into some more material details from Tarnoff)
 - The rise of major Platform Corporations by the 2010s (companies using the internet to sell goods and services to customers) works well with an oligopoly of providers and infrastructure owners, as they can sign contracts with each other (especially in the absence of net neutrality) to have designated servers and wiring etc to deliver data faster and more efficiently than simply letting it find its own way via the entire internet's possible pathways. Content delivery network (CDN) clouds also provide physical proximity of data to customers to enhance speed of access. Many of the big platform corporations now directly co-own and lay submarine data cables across the ocean to improve their delivery speeds. Half of all undersea cable bandwidth is now owned or leased by Google,

Facebook, Amazon, and Microsoft. This in-house build and use model differs from the older model of building physical communications infrastructure to sell bandwidth space to other companies/customers.

- "After decades of deepening private control, Americans pay some of the most expensive rates in the world in exchange for awful service. Average monthly internet costs are higher in the US than in Europe or Asia, according to a 2020 study conducted by researchers at the think tank New America, while the US ranks twelfth in average connection speeds, below Romania and Thailand. Not coincidentally, American ISPs regularly sit near the bottom of the annual American Customer Satisfaction Index, even lower than airlines and health insurers."
- ISPs = "internet slumlords", refusing to make upgrades to infrastructure while disbursing customer rate hikes to executive compensation, shareholder dividends, and stock buybacks
- A 2018 Microsoft study estimated nearly half the US population still lacks access to broadband speed internet, mostly rural and/or low income populations. In particular the low income non white populations. Even people who try to get broadband are sometimes provided inferior service speeds and reliability despite paying full price. "Digital redlining"
- 17% of US adults have no internet access other than smartphone data plans. Pew Research in 2015 found that smartphone-only internet users really struggled to perform key tasks like filling out job application forms.
- Tarnoff mentions the early pandemic crisis when people were crowding into parking lots of places offering free wifi in order to get things done, including unemployment filings and school class work or homework
- 2018 Pew study found almost a fifth of US teens had trouble with homework assignments due to lack of home internet access.
- Because democracy requires survival needs to be materially reachable, "Access to the internet is one of freedom's material preconditions. It is one of the resources that people need in order to rule themselves. A system that allocates this resource solely according to the logic of profit is incapable of providing it to everyone as a matter of right. If profit is the principle that determines how connectivity is distributed, millions will be forced to go without it – those who can't afford to pay, or those who live in places that aren't profitable enough to invest in. Many more will have only a precarious grasp on it, contingent on the size and regularity of their paychecks. Even the lucky ones, those who can consistently afford the extortionate fees of the broadband cartel, will endure the abysmal speeds caused by chronic underinvestment."
- End of chapter 2 has some great Marxian musings about the role of the individual capitalist being irrelevant to the larger forces of Capitalism. Sounds a lot like a Daniel DeLeon speech! Anyway his point is to show that profit motive in a socially necessary utility is inherently contradictory to the public need and to any democratic control (because it's entirely out of anyone's control on some level once the profit accumulation engine gets going)

[Bill] Chapter 3: The People's Pipes

- [Bill] Tarnoff opens by pointing out (which I didn't realize) that the nationally famous 2010 Chattanooga TN municipal gigabit internet project was undertaken by the city's public

power utility that had been launched alongside the Tennessee Valley Authority project in 1935! ([See our April 2022 episode on that.](#))

- The Chattanooga project was sort of a happy byproduct of government reinvestment in infrastructure: Because they received federal stimulus aid to install a fiber-internet-based "smart grid" system onto the existing power grid to help detect and correct for problems (something they were much more willing to undertake than most private power companies), they suddenly had an underutilized fiber internet grid in place all over their service area, including right up to people's homes! The latter point meant blistering "last mile" speeds at world quality standards. Rates were very reasonable since it was getting built either way, and the utility even offered a cheap somewhat slower service to low income residents – although there was a rate floor imposed by state law to protect private ISP companies from being undercut by the public provider.
- Although Chattanooga is famous for its project, the Institute for Local Self-Reliance believes some 900 US municipalities have quietly installed publicly owned or co-op internet networks. The co-op model is based on the rural electric and telephone co-ops that we talked about in our episode on Rural Electrification in the New Deal era.
- Three rural farm counties of North Dakota have provided a few thousand residents with such good universal fiber internet access that rural North Dakotans have more fiber internet proportionally than urban North Dakotans or even than all urban Americans! This was achieved on the back of work begun in the 90s by a group of ND telephone co-ops buying 60+ rural internet exchanges from one of the big for-profit telecoms that no longer wanted to be responsible for them. Such rural co-ops are 501(c)(12) organizations that operate at cost, return excess revenues to members, and elect board members
- [Rachel] In Detroit, more than 60 percent of low-income households have no home broadband, and 70 percent of school-age children have no home internet of any kind. To address this inequality, the Equitable Internet Initiative, a program under the Detroit Community Technology Project, uses money raised from foundations and a donated upstream broadband connection to bring broadband to hundreds of homes. A system of wireless transmitters connects the broadband to community groups in three different neighborhoods, and from there into people's homes. Not only do these households get free or reduced-cost internet access, they are also connected to each other by an intranet, where information on local resources can be exchanged. During the COVID-19 pandemic, EII also created Wi-Fi hotspots in these neighborhoods as internet access became essential for work and school. DCTP also trains people in the neighborhoods to help maintain and improve the network, and to help the community as "digital stewards." Not only is DCTP building and strengthening internet access, they are building and strengthening the community by connecting people and creating relationships.
- "Privatization does not just describe the political process whereby the internet became a business, but a social process whereby people's mode of interacting with the internet was engineered for business's benefit."
- "Municipal broadband is restricted or banned outright in eighteen states" due to ISP lobbying.
- "A highly contingent outcome [– 90s internet privatization –] became, through the alchemy of ideology, a necessary and natural one."

- Fiber internet is so cheap to run and maintain vs traditional wiring and cabling that it could be inexpensively given away for free to residents once installed... if that were legalized. To further reduce the tax funding of such a plan, revenues could come from compelling government and government-aided institutions (hospitals & universities) to subscribe to and pay full rates on the community fiber
- Tarnoff emphasizes that small community networks may be a starting point but are insufficient to the problem at hand. He acknowledges the advantages of localism but then raises all the usual problems with parochial and unequal American localism. Shades of [Patrick Wyman's essay on the local landed gentry](#), Tarnoff warns "Decentralization is not inherently democratizing: it can just as easily serve to concentrate power as to distribute it."
- Three of the four biggest ISP companies also own and operate Backbone/Core internet infrastructure through which nearly all non-local traffic must pass and this creates a significant risk that they will simply cut off or throttle access to local community ISPs that threaten their ISP business. However if a Green New Deal ever does upgrade the long-distance power grid to optimize renewable energy distribution nationally, there will be fiber lines and equipment laid all over the country on a national scale version of the Chattanooga situation, which means there is another window of opportunity for a nationalized (or federated community) fiber internet infrastructure.
- Tarnoff ends the chapter by saying that no experiment in democratic public internet locally will ever survive the unchecked national power of the private oligopoly and must therefore prevail against them with a national alternative or else be beaten back
- **[Rachel]**
<https://arstechnica.com/tech-policy/2022/08/man-who-built-isp-instead-of-paying-comcast-50k-expands-to-hundreds-of-homes/>
 - Jared Mauch, trying to get internet to his rural Michigan home, ran into overpriced and underperforming plans from AT&T and Comcast. Comcast even wanted to charge \$50,000 to expand cable to his house! In response, he built his own ISP, bringing fiber internet to about 30 homes. As of July 2022, *Mauch now has about 70 customers and will extend his network to nearly 600 more properties with money from the American Rescue Plan's [Coronavirus State and Local Fiscal Recovery Funds](#), he told Ars in a phone interview in mid-July.*
 - Under the terms of the contract he signed with Washtenaw County, he will provide 100Mbps download speeds at \$55/month to about 417 households in Freedom, Lima, Lodi, and Scio townships.
 - *Mauch said his installation fees are typically \$199. Unlike many larger ISPs, Mauch provides simple bills that contain a single line item for Internet service and no extra fees.*
 - *Mauch also committed to participate in the Federal Communications Commission's [Affordable Connectivity Program](#), which provides subsidies of \$30 a month for households that meet income eligibility requirements.*
 - Mauch is a network architect in his primary job, so he already had the technical know-how to embark on this project.

-On the other end of the ISP effectiveness spectrum:

<https://www.theverge.com/2022/8/10/23300301/fcc-rejects-starlink-spacex-application-885-million-rural-broadband-subsidies-elon-musk>

- *The Federal Communications Commission (FCC) [has rejected Starlink's application](#) for \$885 million in federal subsidies that it would use to provide satellite internet to broadband customers in rural areas. The FCC cites the SpaceX-owned company's \$600 dish and states that Starlink "failed to demonstrate" that it "could deliver the promised service."*
- *"Starlink's technology has real promise," FCC chair Jessica Rosenworcel explains. "But the question before us was whether to publicly subsidize its still developing technology for consumer broadband — which requires that users purchase a \$600 dish — with nearly \$900 million in universal service funds until 2032."*
- *[Starlink increased the price of its starter kit and internet service](#) earlier this year. To get set up, Starlink users now have to pay a \$599 upfront fee for the satellite dish (dubbed Dishy McFlatface) on top of the \$110 per month price for internet service. (It previously cost \$499 for the starter kit and \$99 per month.)*
- *Last year, [the FCC warned Starlink and other companies](#) that subsidies couldn't be used to add connectivity to "parking lots and well-served urban environments." A [report from the media policy organization Free Press](#) revealed that \$111 million of Starlink's funding was set to go to urban areas that don't need the additional connectivity. In an effort to "clean up" the program, the FCC asked providers to give up funding for areas that aren't in need of service.*

[Bill] Chapter 4: From Below

- This chapter focuses on political organizing and mobilization around new conceptions of an internet for the people
- Pages 63 & 64 have some great musings on Homo Economicus under Neoliberalism and the idea of consumer choice in the markets as a means of exercising political power and influence in the absence of anything real
- He also addresses the question of state authoritarianism over a public internet but dismisses it as an objection on 2 grounds: first that the US government is already happily doing all those terrible things on a private internet, and second that it is a political choice not a medium or ownership question as to whether the government will spy extensively on network communications because they do it vastly less with the postal service and are much more bound by laws and traditions going back to the beginning of the US Post

Notes on "Internet for the People" by Ben Tarnoff (2022, Verso) – Part II

Part II: The Platforms

[Bill] Chapter 5: Up the Stack

- The success of the internet/web platform companies wasn't what was sold on them but the monetization of social participation by the users, such as writing reviews of products or vendors that other users could read and even rate for helpfulness. The success

stories like eBay and Amazon included this while the dot-com bubble e-commerce failures were often trying to provide the same goods or services but without the social communication and community content

- Tarnoff describes eBay as an explicit fusion of market and community, which he looks at in capitalist terms and repeatedly describes as such. I am however more reminded of community markets in pre-capitalist medieval Europe often sponsored by a corporate or institutional entity like the Church or a craft guild, which would collect a fee for hosting it and which held a monopoly on the right to play host. These markets only worked because of community relationships. Tarnoff also refers to eBay linking buyers and sellers but not shipping and not warehousing, which again sounds more like a medieval market host than a capitalist, who is usually some kind of producer, cross-market arbitrage trade specialist, or banker... He describes eBay as a "middleman" but a middleman actually travels between a buyer and seller acting as a buyer in between them, whereas eBay was just hosting a market. He again approaches this realization and sails past it when he starts talking about how the platform company must hold a sovereignty over the community market, shaping the rules and intervening to adjudicate disputes in the market that could not be resolved by the forum.
- In the next chapter in passing he compares the eBay model to collecting commercial tenant rents

[Rachel] Chapter 6: Online Malls

- [Rachel] Monetization of data, he says, is similar in effect to harnessing coal for the industrial revolution
- Google was undergirded by public money from DARPA and the NSF, which wanted a reliable way to access useful and relevant web pages on an exploding web
- Every user and every search on Google left a piece of data that could be used, initially for fixing site/algorithm problems but by the early 2000s for selling ads more effectively
- In 2002, Google AdWords began auctioning ad space next to searches of popular words and applying a quality filter so that higher quality ads users actually engaged with would get better priority even over higher bidders, which helped filter out trashy ads users hated. This not only made the user experience better but it also generated more money for all involved (not the users)
- Tarnoff cites Shoshana Zuboff's concepts of "behavioral surplus" and "surveillance capitalism" – monetized data being a heretofore largely unexploited, basically free, highly lucrative raw material
 - [Bill] I am imagining if the industrial revolution had been powered by human and animal manure instead of mined coal
- Many other companies in the marketing and insurance spaces had previously spent enormous sums trying to extract or harvest small amounts of useful data about customers or potential customers that they might be able to profit from, but the Google breakthrough was collecting it basically for free as an incidental byproduct of their main product. And by collecting vastly more of it than anyone else, they could optimize faster toward further money-making opportunities.
- Today of course the data is very aggressively collected and collated from many different sources, not passively collected incidentally, but Google had proved how much this raw

material was actually worth, so that it suddenly made more sense to mine or harvest it on a larger scale than what the legacy companies had been doing on a smaller scale in the pre-internet decades of the postwar 20th century

- Today Google and Facebook together control 59% of the digital ad market. Both ad programs based on user data at the two companies were headed by Sheryl Sandberg sequentially.
- Engaging users enough to retain them on the site instead of leaving the site became an imperative, since it meant more ads served and more data generated or even willingly uploaded. Keeping users on the site by any means necessary. Internet companies are protected by Section 230 of the 1996 Communications Decency Act from liability for content other people post even though the companies actively encourage posting extreme or at least inflammatory content that will keep people on the site.
- Kind of hilarious in all of this is that online ads always actually proved quite tricky to get people to click on them or pay much attention to them if they saw them at all. The setup is destroying a lot of things for a pretty overvalued commodity. So far the platforms themselves haven't suffered financially from this problem, as the beneficiaries of the over-valuing of digital ads

[Rachel] Chapter 7: Elastic Empires

- [Rachel] Amazon's big breakthrough to profitability was not its costly warehouse and logistics networks that threatened to take it down in the late 90s but rather its launch of Amazon Marketplace in 2000, which was a platform technology like eBay where 3rd party sellers listed products and were responsible for their own shipping and could be reviewed by the buyer. This basically bought the company time to streamline their in-house logistics and warehouse operations to be more viable. (Another key change for the business was the shift in online purchase habits from rare items to everyday needs, the latter obviously enjoying the clear benefits of economies of scale.) Amazon Marketplace remains a huge feature of the site by sales volume but now the 3rd party vendors, which are often real and quite sizeable businesses not just Some Guy, are able to use Amazon delivery services instead of having to ship on their own. Amazon also started offering in-house business loans to these vendors. In a darker intrigue move, Amazon not only harvested customer data to enhance sales but also harvested 3rd party vendor data to figure out which arenas to kill off in favor of in-house focus on providing that to customers. "Amazon not only competes with sellers, in other words, it also uses their data against them."
- Data also proved crucial to cracking the nut on optimizing logistics and warehouse operations.
- Amazon also moved into enterprise product provision, especially Amazon Web Services.
 - Tarnoff argues that cloud storage services are effectively an update of networked mainframe timesharing in the 60s that helped lead to the internet being created in the first place. More narrowly, like an institution with a big IBM mainframe selling time to a company that couldn't afford a mainframe of its own, Amazon sells server space to companies that need vast data server centers but can't make those kind of capital investments or would prefer to rent them instead of owning them because of the flexibility

- [Bill] Tarnoff talks at length about the scalability of the Virtual servers Amazon was able to offer companies that were starting out and might or might not take off suddenly but didn't want to invest hugely in early physical assets or hiring computer engineers and technicians. I am reminded here of [the model of Just In Time shipping orders from small factories in Asia](#) that could spin up suddenly to complete a boutique order and then shut down just as quickly. This boutique factory capacity is often serving little boomlets and fads online, and Amazon Web Services is providing the matching digital infrastructure to support those bursts of activity. Later in the chapter, he discusses Uber being the data/platform company pioneering selling contract labor piece work, and although he talks about some of the implications of that itself, he misses an opportunity to connect to the piece work factories of Containerization, which to me still seems like a significant development in the Third Industrial Revolution because it is devolving away from the 19th century consolidation of labor into long-term physical plants with economies of scale. Uber is much more like a Cottage Industry purchaser specifying requirements of work to be performed but never guaranteeing the work or its longevity. Tarnoff does explicitly make a reference to the Shipping Container Revolution but only for comparing the outsourcing of call center type jobs overseas via the power of the internet (as well as the literal data entry jobs overseas that train machine learning for pennies). He purely uses it as a comparison or analog, but doesn't connect the dots as being the same process deforming parts of capitalism back toward their starting points with regard to commodification of remote labor. The closest he gets is identifying "a global archipelago of contractors bound together by fiber-optic cable" and commenting that now remote surveillance and discipline of remote workers is also possible (which I suppose is a fair and significant difference from the earliest phases of capitalism). He comments on these workers being discarded like a virtual cloud machine when no longer needed and again I am reminded of the discarded products of the container supply-chain boutique orders.
- As Big Data became an obsession with corporations and governments, it became imperative to have huge volumes of data storage and analysis capacity, and AWS was there to rent that capacity out to them
- Rise of smartphones and networked Internet of Things devices in the 2010s
 - He talks about the usual surveillance capitalism stuff here but also notes that an early DARPA internet project in the late 70s was to plug in a cargo plane to a network contacting a mainframe and get a 30 second calculation on the spot of how to load the plane correctly for various scenarios including landing under enemy fire to reduce the risk of crashing from cargo shifting in a difficult situation
- [Bill] Big Data as a speculative asset: Many companies collect data with the vague promise that it will some day be profitable or create such operational efficiencies that it makes a money-losing operation suddenly valuable. (The podcast Trashfuture calls this the principle of "A wizard will do it.") They are able to convince a lot of investors this is so manifestly true that they should accept losses on individual transactions (such as Uber rides) in order to gain more Data points for the Data mill and not just because they are

undercutting the competition in the market. A lot of early big investors actually did manage to cash out their shares in Uber at enormous profit just by letting the hype grow but selling before the bubble could pop on them. These were speculative profits, not operational profits, or I guess put another way: just a pump and dump Ponzi scheme... Big Data Collection being a key pump factor. "This is the baroque phase of the internet's privatization, in which capital is so abundant and the potential returns so immoderate that investors can live on hope alone."

[Rachel] Chapter 8: Inclusive Predators

- This chapter focuses on how the tech companies spread around the risk and impoverish people while concentrating wealth in fewer hands, but specifically it zeroes in on the predatory inclusion of hiring (or rather contracting) the marginalized peoples of the world at home or abroad to perform digital piece work under grueling conditions or even traumatizing conditions in the case of online content moderators. The companies can say they are giving opportunities to non-white would-be workers on the fringes (or poor women working from home) but these contracts are sub-poverty line here and pennies abroad. It is a false inclusion.
- The chapter also delves into algorithmic racism and how early internet culture "remastered" and reinforced existing offline racism or other bigotry, even before the rise of the algorithms. (e.g. Facebook allowing housing ads to show up for white people and not black people; Google Images showing Black women for "unprofessional hair styles".)
- There's a section on far-right radicalized people via social media and the internet overall...

[Bill] Chapter 9: Toward the Forest

- "New Brandeisian" ideology (which Tarnoff criticizes) believes that breaking up big tech conglomerates will solve most of the problems with big tech
- Cites Nick Srnicek criticizing for-profit competition in the internet because that drives the imperatives to maintain engagement and data gathering at all costs. (Tarnoff also mentions that for-profit shareholder obligations restrict how much can be spent on content moderation as an expense of running the service.)
- There is also an argument that smaller firms would have less dominance and capture of the regulatory process, but a counterargument is that the existence of regulation pushes small firms to consolidate or leave the market, thus returning big ones anyway
- Tarnoff argues that rule making and anti-monopoly strategies fall short of the lasting benefits of deprivatization
- [Bill] Tarnoff makes a comparison to prison abolitionism in the sense that a deprivatization of the platform companies would probably not just be a 1:1 replacement but totally new online social media spaces that grow organically out of different factors once profit motives aren't driving design decisions from the beginning. This doesn't quite make sense to me because it's more likely that the existing companies would get taken over as opposed to new ones being formed, at least initially. But this is also just a really challenging scenario to imagine at all, which is probably the point. He does say "Instead of Facebook, imagine millions of social media communities, each with their own rules and customs and cultures" and cites ideas from Ethan Zuckerman about specialization of public social media sites. So where I am picturing a national flag carrier Facebook or

Twitter, they are envisioning something more local or regional and decentralized, as well as fractured in purpose. I think that has some profoundly negative and disappointing implications...

- [Bill] Tarnoff believes that small public and community social media platforms are the only size that can be effectively governed in a participatory and democratic manner.
- [Bill] He mentions Mastodon, which always seemed like a joke to me. And I would argue he is really missing a key thing here about network effects: people prefer to join sites or communities with high participation and simply don't join if no one is there. See things like Google+
- [Bill] I do agree with him that the interconnection of email across email providers was crucial to the success of the internet and that the walled garden DM systems of each platform is a bad step backwards, but email is also extremely simple.
- Tarnoff imagines (citing Darius Kazemi) each public library in the country running an interoperable federated social media server that anyone with a library card can join (woops no anonymity). Librarians could also organize local information in a relevant and searchable way on a local server, helping to address the crisis in local media coverage. Now we're getting into actionable idea territory.
- **Co-op only use of app-based contracting services? (Like the recent co-op competitor to Uber in New York City that we've heard about.)**
- If data gathering and monetization continues, the book suggests, people should have the right to vote collectively on acceptable or unacceptable uses/sales/analysis of that Big Data... "These sketches are a good start, but they still bear the stamp of the internet they are trying to escape."
- Tarnoff advocates for bottom-up innovation for the internet, and cites as an example 1980s Labour's control of the Greater London Council and GLC's "Technology Networks". During this time of high unemployment of skilled labor due to deindustrialization, these Technology Networks provided space and tools for working on prototypes, similar to "makerspaces" of today. The designs for the things that were built went into a "product bank" that other people could use and riff on, and for-profit firms could license the designs for a fee that went back into financing the Networks. Similar to this model, Tarnoff calls for democratizing the development of internet technology, giving tools to working-class communities to make their own products to serve their needs rather than maximizing profit.
- This chapter is basically [anarcho-syndicalism](#) for the internet...
- Citation of Cory Doctorow concept of "adversarial interoperability" as a legal and regulatory strategy to start breaking tech monopoly power by forcing open walled gardens for more open source access

[Bill] Conclusion part: Future Nostalgia

- I like this section of the book because I strongly relate to the idea of looking to the past not for nostalgic mourning of the roads not taken but to get ideas from the paths that were almost taken or only briefly tried so that we can imagine a new future from our present...

- He also says that any movement can only succeed if it can "envision a different future with the force necessary to achieve it"...which means there are many good ideas from the past that were never forcefully adopted because their backers lacked the strength or organization or whatever to implement them...
- I also fully agree that if you don't understand the history of how we got to our present situation we cannot possibly accurately target and defeat our opposition because we need to attack and dismantle the actual basis of their support and power.
- *Up the stack, among the so-called platforms, the path to deprivatization is less linear. There is no equivalent of the community network. Here what's needed is the imaginative work of abolition. Two maneuvers are involved: first, shrinking the footprint of the online malls, which means making common cause with anti-monopoly advocates. Yet the goal of deprivatization is not an internet with more competitive markets, but an internet where markets matter less. This is why, while working to disassemble the online malls, we must also be assembling a constellation of alternatives that can lay claim to the space they currently occupy. And these must be real alternatives, not smaller or more entrepreneurial versions of the tech giants but institutions of a fundamentally different kind, engineered to curtail the power of the profit motive and to enshrine the practices and principles of democratic decision-making. Some are already emerging in rudimentary form - self-governing social media communities, worker-owned app-based services - but they will need to be refined and expanded through public investment. We will also need spaces that help new alternatives emerge, where people can collectively articulate their needs and construct the online worlds capable of meeting them.*
- *Making it possible for the world's computers to talk to one another was an impressive technical achievement. Making this machinic conversation serve an end other than infinite accumulation will be a political one. It may seem unlikely, but so was the internet. History is filled with improbable turns that look inevitable in retrospect. The future will be too.*

For more links we've look at in the past on this topic, see our notes from episode 205 (2017) and 212 (2018):

<http://arsenalfordemocracy.com/wp-content/uploads/2017/11/AFD-Ep-205-Net-Neutrality-Internet-Utilities-and-Nuclear-Constitutionalism.pdf>

<http://arsenalfordemocracy.com/wp-content/uploads/2018/01/AFD-212-Jan-30-Immigration-History-and-Municipal-Broadband-Links-and-Articles.pdf>