

DISCRIMINATING DATA

CORRELATION, NEIGHBORHOODS, AND THE NEW
POLITICS OF RECOGNITION

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INTRODUCTION: HOW TO DESTROY THE WORLD, ONE SOLUTION AT A TIME

The Internet has become a nightmare, the source—it is claimed—of almost everything bad in this world. It has given rise to worldwide surveillance networks, coproduced by states and corporations; social media algorithms, powered by military-grade psychological operations (PSYOPs) that spread lies and conspiracy theories, polarize society, provoke violence, prolong pandemics, and foster planet-wrecking levels of consumption; and artificial intelligence (AI) programs that exacerbate existing inequalities and threaten humanity's future.

The irony is that the Internet and artificial intelligence were promised to be and do the opposite. Cyberspace, the Internet of the late twentieth century, was to usher in a new era of global democracy, equality, and prosperity. Artificial intelligence was to produce docile machine servants that would spread the perks of “the 1%”—chauffeurs, personal assistants, expert advisors—to “the 90%.” AI would also eliminate discrimination because its machines could not “see” race, sex, age, or infirmities.¹ Similarly, cyberspace would free individuals from oppression and national sovereignty because it was “the new home of the Mind”:² an electronic frontier in which physical bodies and identities literally did not matter. In the mid-1990s, Vice President Al Gore and members of the U.S. judiciary described the Internet as the ultimate public sphere because it gave everyone a soapbox from which to speak.³ Bill Gates, then CEO of Microsoft,

argued that the information superhighway enabled “friction-free capitalism” because it melted away brick and mortar obstacles.⁴ John Gilmore, cofounder of the Electronic Frontier Foundation (EFF), is reported to have said that the Internet “interprets censorship as damage and routes around it.”⁵ As late as 2010, the Internet was celebrated as a “liberation technology,” responsible for democratic uprisings in the Middle East.⁶ By freeing our minds, the Internet would help fix all problems, from racism to political suppression.

During the early twenty-first century, the questions for those who still sold hope were: How can the dream be reclaimed from the nightmare? What information should be leaked, what new business plans devised, what apologies proffered to make technology great again?

However well-intentioned, these impulses were also misguided, for the promise and the threat were, are, and have always been two sides of the same coin. In seeking technological solutions to political problems, they assume that the best way to fight abuse and oppression is by ignoring difference and discrimination.⁷ They undermine solidarity by concentrating on individual, neighborhood or “tribal” empowerment. They presume that “good” technology is slavish and thus inevitably invoke fears of absolute dependence and rebellion. Hopeful ignorance is not the solution but the problem: it perpetuates discrimination and inequality, one solution at a time. The problem is not that giant technology monopolies have disrupted habits, institutions, and norms in order to create new, unforeseen futures. The problem is that, in the name of “creative disruption,” they are amplifying and automating—rather than acknowledging and repairing—the mistakes of a discriminatory past.

To counter this threat, I propose the following five-step program:

1. Expose and investigate how ignoring differences amplifies discrimination, both currently and historically.
2. Interrogate the default assumptions and axioms that form the basis for algorithms and data structures.
3. Apprehend the past, present, and future machine learning algorithms put in place to determine when, why, and how their predictions work.
4. Use existing AI systems to diagnose current inequalities and to treat discriminatory predictions as evidence of past discrimination.

5. Draw from struggles for and practices of desegregation and equality to displace the eugenic and segregationist defaults embedded within current network structures and to devise different algorithms and modes of verification.

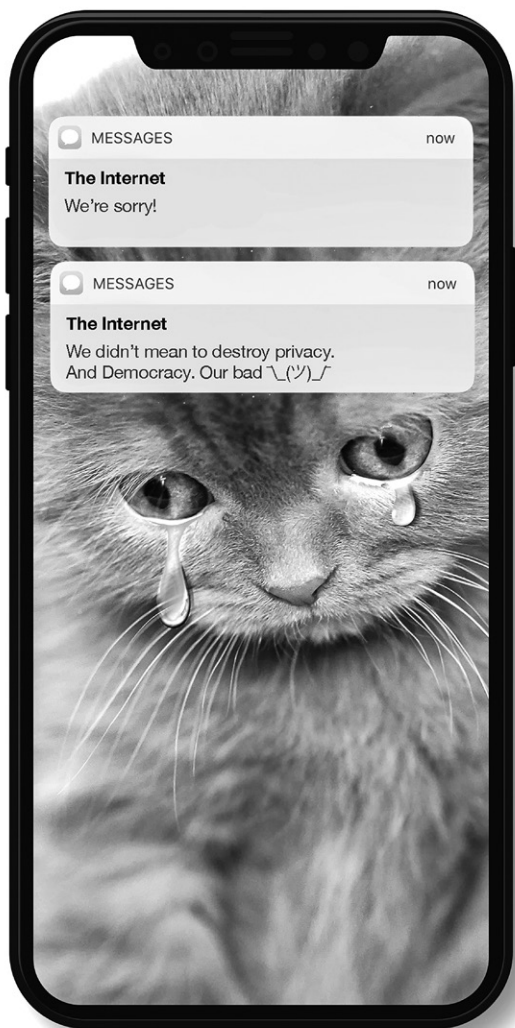
Most fundamentally, I call for a “we” to take this on. The views expressed in this book thus strike a chord with those voiced by Ruha Benjamin, Jodi Byrd, Meredith Broussard, Kate Crawford, Virginia Eubanks, Kara Keeling, Tara McPherson, Lisa Nakamura, Safiya Noble, Cathy O’Neil, Frank Pasquale, and Fred Turner among many others, creating a powerful chorus against hopeful ignorance and the endless apologies it engenders, and for a world that resonates with and in difference.⁸

AGAINST HOPEFUL IGNORANCE, AGAIN

In the early decades of the twenty-first century, technology companies responded to Internet-related disasters by asking for forgiveness and promising technological fixes for their sins. In 2018, Mark Zuckerberg, the founder of Facebook, apologized publicly for the “leak” of 87 million personal profiles to Cambridge Analytica.⁹ The Cambridge Analytica incident, however, as Kate Crawford and Meredith Whitaker of the AI Now Institute emphasized in the institute’s 2018 annual review, was only one of many.¹⁰ Scandals and outrage dominated that year: from revelations that U.S. Immigration and Customs Enforcement (ICE) had “upgraded” its risk assessment software to always recommend detention, to news that Amazon had scrapped its AI hiring software because it discriminated against women, to reports that IBM’s supercomputer Watson had recommended cancer treatments that were “unsafe and incorrect.”¹¹

Noah Kulwin captured the state of affairs in his *New York* magazine article, “The Internet Apologizes” It led with a picture of a cute cat who texted: “We’re sorry. . . . We didn’t mean to destroy privacy. And democracy. Our bad” (figure 1).¹²

Kulwin offered the following list of “How It Went Wrong, in 15 Steps,” based on his interviews with a dozen prominent network architects, Silicon Valley product developers and tech gurus, such as Jaron Lanier and Richard Stallman:



1 Cute crying cat from Noah Kulwin, "The Internet Apologizes . . . : Even Those Who Designed Our Digital World Are Aghast at What They Created," *New York*, April 13, 2018, <http://nymag.com/intelligencer/2018/04/an-apology-for-the-internet-from-the-people-who-built-it.html>. Photo illustration by Joe Darrow; image recreated by Joshua Cameron.

1. Start with Hippie Good Intentions . . .
2. . . . Then mix in capitalism on steroids
3. The arrival of Wall Streeters didn't help . . .
4. . . . And we paid a high price for keeping it free.
5. Everything was designed to be really, really addictive.
6. At first, it worked—almost too well.
7. No one from Silicon Valley was held accountable . . .
8. . . . Even as social networks became dangerous and toxic.
9. . . . And even as they invaded our privacy.
10. Then came 2016.
11. Employees are starting to revolt.
12. To fix it, we'll need a new business model . . .
13. . . . And some tough regulation.
14. Maybe nothing will change.
15. . . . Unless, at the very least, some new people are in charge.

The basic story line was this: naive hippies fall in love with libertarians, hook up with Wall Street sharks, and inadvertently destroy the world in their attempt to keep it free. As Jaron Lanier told Kulwin, they were caught between two loves: “We wanted everything to be free, because we were hippie socialists. But we also loved entrepreneurs, because we loved Steve Jobs. So you want to be both a socialist and a libertarian at the same time, which is absurd.”

Clickbait advertising resolved this “absurdity” by paving the road to hell. Capturing and exploiting Internet user clicks magically enabled “free” yet profitable content. It also seemed to answer the question that dogged mass print and broadcast advertising: How effective is an ad? By tracking user clicks and mouseovers, advertisers could “measure” engagement, and thus overcome what social theorist Jean Baudrillard had presciently and perversely called the “silent power of the majority.”¹³ To optimize performance, platforms encouraged advertisers to amalgamate related but bespoke microaudiences, that is, to create a crowd of users by consolidating rhyming groups. As chapter 3 further elaborates, to create affectively charged clusters who would take the clickbait, advertisers and platforms targeted users by focusing on their divisive or boundary views. ProPublica’s 2017 investigation into Facebook, for example, revealed

that Facebook “helpfully” suggested that their reporters add “How to burn Jews” and “Second Amendment” to “Jew hater” in order to boost their ad’s target audience size.¹⁴ The fact that the price per ad generally decreased per click further promoted shocking and manipulative advertisements. Soon, the actual product no longer mattered, for monetized user clicks generated their own wealth: outrage—or anything that piqued curiosity—had become profitable. Most infamously, hackers from Moldova produced right- and left-wing fake political news during the 2016 U.S. elections in order to profit from a combination of Facebook click throughs and Google ad auctions.¹⁵ Kulwin argues that the success of clickbait advertising resulted both in further polarization of “what had already seemed, during the Obama years, an impossibly and irredeemably polarized country” and, quoting Jaron Lanier, in “continuous behavior modification on a mass basis, with everyone under surveillance by their devices”¹⁶—what Shoshana Zuboff has called “surveillance capitalism.”¹⁷ The cure had become worse than the disease: the collateral damage was democracy and freedom, sacrificed on the altar of the free.

Reforming “the Valley” and redressing mass surveillance and behavior modification programs are important, and Lanier’s observations are perceptive and engaging, but Lanier’s assumptions threaten to undermine his argument and the success of the proposed reforms. Socialism does not equal free information: the fundamental tenet of socialism is not that everything should be free, but that workers should share equally in the profits. **The urge to make things free and profitable is wholly libertarian, and the misidentification of libertarianism as socialism erases labor.**¹⁸ Tellingly, the subtitle of Kulwin’s article reads: “Even Those Who Designed Our Digital World Are Aghast at What They Created,” which raises the question: How did these twelve architects, designers, and tech executives become “the Internet”? During the heyday of Web 2.0, users were celebrated *as* the Internet: *Time* magazine declared “You” the 2006 Person of the Year for “You control the Information Age”; Web 2.0 was driven by what Silicon Valley entrepreneurs called “collective intelligence” and what Tiziana Terranova diagnosed as “free labor.”¹⁹ The difference between these two visions is telling, for each reveals the lie of the other: the Internet was never YOU or cute cat socialist hippies.²⁰

This “apology” also misrepresents history, which compromises its call for critical reflection and action. To distinguish this critique as “new,”

Kulwin dismisses prior critiques as irrelevant and marginal, made by “outsiders” whose voices have been consistently drowned out by “the oohs and aahs of consumers, investors, and journalists.” The year 2018, however, was not the first year—and will certainly not be the last—that journalists, consumers, and investors have found the Internet to be, as Lisa Nakamura has put it, “a trash fire.”²¹ Just five years earlier, international news organizations reveled in Edward Snowden’s leaks exposing worldwide and comprehensive surveillance systems.²² After the events of September 11, 2001, headlines such as *Newsweek*’s “Tech’s Double-Edged Sword” dominated the news.²³ The fact that the 9/11 terrorists used the Internet and electronic communications (as well as “sneaker nets”) to plan their attack sparked this reevaluation. And just the year before that, articles had somberly or gleefully documented the transformation of dot-coms into dot-bombs.²⁴ This, of course, followed on the heels of earlier warnings about the coming Y2K apocalypse,²⁵ which itself was preceded by dire warnings of cyberporn.²⁶ The “revelations” of 2018 were thus not so much revelations as they were literal “revolutions,” for they spun obvious facts 360 degrees.

DYSTOPIA IS THE GOAL, NOT AN ERROR

To escape this tailspin, we need to remember that cyberspace was never meant to be a happy place. Emerging from gritty cyberpunk fiction, cyberspace was imagined as a trash fire in response to a trash fire. William Gibson coined the term “cyberspace” in 1983, although he first elaborated on it in his 1984 novel *Neuromancer*.²⁷ Described as a “consensual hallucination,” this notion of cyberspace was inspired by the 1980s Vancouver arcade scene and visions of a dystopian techno-Orientalist future, dominated by Japanese corporations and mafia.²⁸ The world of *Neuromancer* would not seem particularly uplifting to any U.S. group espousing socialism, however confused. In post-World War III *Neuromancer*, inequality and violence predominate; a criminal underclass has replaced the working class; and the United States is no longer a nation-state. So how did this apocalyptic vision—written in the shadows of the Cold War, the coming nuclear annihilation, and the “Japanification” of the world—become utopian? What made it so attractive to those who would become “the Internet”? How did a 1970s routing technology, Transmission

Control Protocol/Internet Protocol (TCP/IP), become “new media” in the 1990s by embodying disembodied 1980s dystopian science fiction?

Inherent technical similarities did not drive the rebirth of the Internet as cyberspace, but rather “a *desire* to position Gibson’s fiction as both an origin of and end to the Internet,”²⁹ which stemmed from cyberspace’s seductive Orientalist “orientation” and navigability. For all of *Neuromancer*’s grimness, it portrayed cyberspace as an addictive consensual hallucination dominated by American outlaw console cowboys, who overcame Japanese control by transcending the physical limitations of their bodies and their circumstances. Cyberspace was the Wild West meets speed meets Yellow Peril meets capitalism on steroids. This bodiless exultation and stealthy, rebellious power explain why “pioneers” mislabeled the Internet “cyberspace.”

Written to coincide with the Davos Forum and “24 Hours in Cyberspace,” a 1996 media event, John Perry Barlow’s “Declaration of the Independence of Cyberspace” is perhaps the most iconic description of the Internet reborn as cyberspace. Cofounder of the Electronic Frontier Foundation (EFF) and lyricist for the Grateful Dead, Barlow asked the “governments of the Industrial World, you weary giants of flesh and steel,” to leave cyberspace, “the new home of Mind,” alone. Even though these governments, in particular the U.S. government, had built its infrastructure, Barlow insisted that they, as representatives of the past, had “no sovereignty where we [the future] gather.” In the place of governments stood individual voices of freedom—“I’s”—who by authority of liberty, spoke on behalf of a “we” to

declare the global social space we are building to be naturally independent of the tyrannies you seek to impose on us. You have no moral right to rule us nor do you possess any methods of enforcement we have true reason to fear. . . .

We are creating a world that all may enter without privilege or prejudice accorded by race, economic power, military force, or station of birth.

We are creating a world where anyone, anywhere may express his or her beliefs, no matter how singular, without fear of being coerced into silence or conformity.

Your legal concepts of property, expression, identity, movement, and context do not apply to us. . . .

Our identities have no bodies, so, unlike you, we cannot obtain order by physical coercion.

We believe that from ethics, enlightened self-interest, and the commonwealth, our governance will emerge.³⁰



2 Still frame from Apple's "1984" Macintosh commercial, YouTube, January 22, 1984, <https://youtu.be/VtvjbmoDx-I>.

This declaration of independence conceptually transformed a military-educational network, built by the U.S. government, into a bodiless—thus “privilege free”—space of freedom, escape, and libertarian self-interest. It also portrayed Silicon Valley elites as militant rebels. Like the woman runner who in the mythic Apple “1984” commercial freed white men shackled in rows before a large monochrome screen (à la Plato’s cave), they were hero-rebels who fought to free their “enslaved” peers by escaping mainstream media and technology (figures 2 and 3). They were different: in color, in motion, and in drag.

But Barlow’s “we” erased so many people—not only researchers within the U.S. military-academic complex who had built the infrastructure and were the earliest users, but also people of color who, as Anna Everett has shown, were on the early Internet and who were celebrating it not as a “race-free” zone, but rather as a space for cultural and political community.³¹

By becoming cyberspace, the Internet became an “electronic frontier” and thus a wilderness ripe for settler colonialism and exploitation, and, as Jodi Byrd has argued, for the reemergence of “natives” without natives.³² John Perry Barlow, Lotus founder Mitch Kapor, and early Sun Microsystems employee John Gilmore founded the Electronic Frontier



3 Still frame from Apple's "1984" Macintosh commercial, YouTube, January 22, 1984, <https://youtu.be/VtvjbmoDx-I>.

Foundation (EFF) in response to the prosecution of "crackers," hackers whose knowledge of how to break into secure systems dwarfed their own and most others. Their goal was to "settle" the Wild West of cyberspace: to share a "sense of hope and opportunity with those who feel that in Cyberspace they will be obsolete eunuchs."³³

This rhetoric may seem dated, yet its power and hopeful ignorance remain and make themselves felt in statements that conflate empowerment with bodily escape, and it drives an endless game of hide-and-seek, rebellion, and punishment.³⁴ It misidentifies Silicon Valley acolytes as rebels or underdogs, regardless of their actual circumstances or obscene wealth. As Lanier told Kulwin in the full interview: "We run everything. We are the conduit of everything else happening in the world. We've disrupted absolutely everything. Politics, finance, education, media, relationships—family relationships, romantic relationships—we've put ourselves in the middle of everything, we've absolutely won."³⁵ The problem, though, is that "we" don't act as if "we" have won—"we" refuse to take responsibility for "our" actions because, in "our" view, "we" are still idealistic underdogs. The solution: to wake up and take responsibility.

Hmmmm.