5

Retooling Solidarity, Reimagining Justice

The power of the New Jim Code is that it allows racist habits and logics to enter through the backdoor of tech design, in which the humans who create the algorithms are hidden from view. In the previous chapters I explored a range of discriminatory designs – some that explicitly work to amplify hierarchies, many that ignore and thus replicate social divisions, and a number that aim to fix racial bias but end up doing the opposite. In one sense, these forms of discriminatory design – engineered inequity, default discrimination, coded exposure, and technological benevolence – fall on a spectrum that ranges from *most obvious* to *oblivious* in the way it helps produce social inequity. But, in a way, these differences are also an artifact of marketing, mission statements, and willingness of designers to own up to their impact. It will be tempting, then, to look for comparisons throughout this text and ask: "Is this approach better than that?" But in writing this book I have admittedly been more interested in connections rather than in comparisons; in how this seemingly more beneficent approach to bypassing bias in tech relates to

that more indifferent or avowedly inequitable approach; in entangling the seeming differences rather than disentangling for the sake of easy distinctions between good and bad tech.

On closer inspection, I find that the varying dimensions of the New Jim Code draw upon a shared set of methods that make coded inequity desirable and profitable to a wide array of social actors across many settings; it appears to rise above human subjectivity (it has impartiality) because it is purportedly tailored to individuals, not groups (it has personalization), and ranks people according to merit, not prejudice (or positioning) – all within the framework of a forward-looking (i.e. predictive) enterprise that promises social progress. These four features of coded inequity prop up unjust infrastructures, but not necessarily to the same extent at all times and in all places, and definitely not without eliciting countercodings that retool solidarity and rethink justice.

These forms of resistance are what I think of as abolitionist tools for the New Jim Code. And, as with abolitionist practices of a previous era, not all manner of *gettin' free* should be exposed. Recall that Frederick Douglass, the philosopher of fugitivity, reprimanded those who revealed the routes that fugitives took to escape slavery, declaring that these supposed allies turned the underground railroad into the *upperground* railroad.[1] Likewise, some of the efforts of those resisting the New Jim Code necessitate strategic discretion, while others may be effectively tweeted around the world in an instant.

Thirty minutes after proposing an idea for an app "that converts your daily change into bail money to free black people," Compton, California-born Black trans

Figure 5.1 Appolition

Source: Twitter @fakerapper July 23, 2017 at 2:58 p.m.

tech developer Dr. Kortney Ziegler added: "It could be called Appolition" (Figure 5.1).[2] The name is a riff on *abolition* and a reference to a growing movement toward divesting resources from policing and prisons and reinvesting in education, employment, mental health, and a broader support system needed to cultivate safe and thriving communities. Calls for abolition are never simply about bringing harmful systems to an end but also about envisioning new ones. After all, the etymology of "abolition" includes Latin root words for "destroy" (*abolere*) and "grow" (*olere*).

And, lest we be tempted to dismiss prison abolition as a far-fetched dream (or nightmare, depends), it is also worth considering how those who monopolize power and privilege already live in an abolitionist reality! As executive director of Law for Black Lives, Marbre Stahly-Butts, asserts:

> There's a lot of abolitionist zones in the US. You go to the Hamptons, its abolitionist. You go to the Upper West Side, its abolitionist. You go to places in California

> where the medium income is over a million dollars, *abolitionist*. There's not a cop to be seen. And so, the reality is that rich White people get to deal with all of their problems in ways that don't involve the police, or cages, or drug tests or things like that. The reality is that people actually know that police and cages don't keep you safe, if it's your son or your daughter.[3]

As a political movement, prison abolition builds on the work of slavery abolitionists of a previous era and tools like Appolition bring the movement into the digital arena. Days after the original tweet first circulated, Ziegler partnered with Tiffany Mikell to launch the app and began collaborating with the National Bail Out movement, a network of organizations that attempt to end cash bail and pretrial detention and to get funds into the hands of local activists who post bail. In September 2017 Ziegler was planning a kickoff event with the modest goal of enrolling 600 people. But after the launch in November the project garnered 8,000 enrollments, which landed Appolition in the top ten most innovative companies in 2018.[4]

More important for our discussion is that Appolition is a technology with an emancipatory ethos, a tool of solidarity that directs resources to getting people literally free. In fact, many White people who have signed up say that they see it as a form of reparation,[5] one small way to counteract the fact that the carceral system uses software that codes for inequity. To date, Appolition has raised $230,000, that money being directed to local organizations whose posted bails have freed over 65 people.[6] As the National Bail Out network explains, "[e]veryday an average of 700,000 people are condemned to local jails and separated from their families. A majority of them are there simply because they cannot afford to pay bail."[7]

When Ziegler and I sat on a panel together at the 2018 Allied Media Conference, he addressed audience concerns that the app is diverting even more money to a bloated carceral system. As Ziegler clarified, money is returned to the depositor after a case is complete, so donations are continuously recycled to help individuals. Interest in the app has grown so much that Appolition has launched a new version, which can handle a larger volume of donations and help direct funds to more organizations.

But the news is not all good. As Ziegler explained, the motivation behind ventures like Appolition can be mimicked by people who do not have an abolitionist commitment. He described a venture that the rapper Jay-Z is investing millions in, called Promise. Although Jay-Z and others call it a "decarceration start-up" because it addresses the problem of pretrial detention, which impacts disproportionately Black and Latinx people who cannot afford bail, Promise is in the business of tracking individuals via the app and GPS monitoring. And, whereas a county can spend up to $200 a day holding someone in jail, Promise can charge $17.[8] This is why the organization BYP100 (Black Youth Project 100) issued a warning that Promise

> helps expand the scope of what the Prison Industrial Complex is and will be in the future. The digital sphere and tech world of the 2000's [*sic*] is the next sector to have a stronghold around incarceration, and will mold what incarceration looks like and determine the terrain on which prison abolitionists have to fight as a result.[9]

BYP100 extends the critique of abolitionist organizations like Critical Resistance, which describes "the

overlapping interests of government and industry that use surveillance, policing, and imprisonment as solutions to what are, in actuality, economic, social, and political 'problems'" under the description prison–industrial complex (PIC).[10] The Corrections Project has created a map of all these interests, with prisons and jails at the core and extending to law enforcement, prison guard unions, prison construction companies and vendors, courts, urban and rural developers, corporations, the media, and more.[11]

It is important to note that there is debate about whether "PIC" is an accurate and useful descriptor. Some prefer "*corrections* industrial complex," to draw attention to probation and surveillance as the fastest growing part of the industry. Others offer a more far-reaching critique by questioning *how industrial* and *complex* the PIC really is since the corrections arena is still overwhelmingly public – the budget is less than 1 percent of the GDP, less than 0.5 percent of the incarcerated being employed by private firms. It is also an overwhelmingly decentralized enterprise, run at the local, county, and state levels rather than masterminded by a central government entity, as is for example the Pentagon vis-à-vis the military–industrial complex.[12]

Even so, the term "PIC" has been useful as a rhetorical device for drawing widespread attention to the exponential growth of prison and policing since 1980 and for highlighting the multiple investments of a wide range of entities. Profit, in this context, is made not only in cash, but also in political power, property, TV ratings, and other resources from economic to symbolic, including the fact that many companies now invest in e-corrections as a fix for prison overcrowding.

If both Appolition and Promise apply digital tools to helping people who cannot afford bail to get out of cages, why is Promise a problem for those who support prison abolition? Because it creates a powerful mechanism that makes it easier to put people back in; and, rather than turning away from the carceral apparatus, it extends it into everyday life.

Whereas the money crowdfunded for Appolition operates like an endowment that is used to bail people out, Promise is an investment and collaborates with law enforcement. The company, which received $3 million in venture capital, is not in the business of decarceration but is part of the "technocorrections" industry, which seeks to capitalize on very real concerns about mass incarceration and the political momentum of social justice organizing. Products like Promise make it easier and more cost-effective for people to be tracked and thrown back into jail for *technical* violations. One "promise" here is to the state – that the company can keep track of individuals – and another to the taxpayer – that the company can cut costs. As for the individuals held captive, the burden of nonstop surveillance is arguably better than jail, but a digital cell is still a form of high-tech social control.

Promise, in this way, is exemplary of the New Jim Code; and it is dangerous and insidious precisely because it is packaged as social betterment. This, along with the weight of Jay Z's celebrity, will make it difficult to challenge Promise. But if this company is to genuinely contribute to decarceration, it would need to shrink the carceral apparatus, not extend it and make it more encompassing. After all, prison conglomerates such as Geo Group and CoreCivic are

proving especially adept at reconfiguring their business investments, leaving prisons and detention centers and turning to tech alternatives, for instance ankle monitors and other digital tracking devices. In some cases the companies that hold lucrative government contracts to imprison asylum seekers are the same ones that the US Immigration and Customs Enforcement (ICE) hires to provide social services to these very people, as they continue to be monitored remotely.[13] While not being locked in a cage is an improvement, the alternative is a form of coded inequity and carceral control; and it is vital that people committed to social justice look beyond the shiny exterior of organizations that peddle such reforms.

A key tenet of prison abolition is that caging people works directly against the safety and well-being of communities because jails and prisons do not address the underlying reasons why people harm themselves and others – in fact they exacerbate the problem by making it even more difficult to obtain any of the support needed to live, work, and make amends for harms committed. But in the age of the New Jim Code, as BYP100 noted, this abolitionist ethos must be extended beyond the problem of caging, to our consideration of technological innovations marketed as supporting prison reform.

Coding people as "risky" kicks in an entire digital apparatus that extends incarceration well beyond the prison wall.[14] Think of it this way. Yes, it is vital to divert money away from imprisonment to schools and public housing, if we really want to make communities stronger, safer, and more supportive for all their members. But, as Critical Resistance has argued, simply diverting resources in this way is no panacea, because

schools and public housing as they currently function are an *extension* of the PIC: many operate with a logic of carcerality and on policies that discriminate against those who have been convicted of crimes. Pouring money into them *as they are* will only make them more effective in their current function as institutions of social control. We have to look beyond the surface of what they say they do to what they actually do, in the same way in which I am calling on all of us to question the "do good" rhetoric of the tech industry.

For prison abolitionists, "we don't just want better funded schools (although that might be an important step). We also demand the power to shape the programs and institutions in our communities"[15] and to propose a new and more humane vision of how resources and technology are used. This requires us to consider not only the ends but also the *means*. How we get to the end matters. If the path is that private companies, celebrities, and tech innovators should cash in on the momentum of communities and organizations that challenge mass incarceration, the likelihood is that the end achieved will replicate the current social order.

Let us shift, then, from technology as an outcome to toolmaking as a practice, so as to consider the many different types of tools needed to resist coded inequity, to build solidarity, and to engender liberation. Initiatives like Appolition offer a window into a wider arena of "design justice" that takes many forms (see Appendix), some of which I will explore below. But first allow me a reflection on the growing discourse around technology and *empathy* (rather than equity or justice).

Selling Empathy

Empathy talk is everywhere. I have used it myself as shorthand, as a way to index the lack of social cohesion and justice, and as a gentler way to invoke the need for solidarity. Empathy is woven more and more into the marketing of tech products. I participate in a lot of conferences for primary and secondary school educators and I see how the product expos at these events promise these teachers that gadgets and software will cultivate empathy in students. Virtual reality (VR) technology in particular is routinely described as an "empathy machine" because of the way it allows us to move through someone else's world. Perhaps it does, in some cases.[16] But, as some critics emphasize, this rhetoric creates a moral imperative to sell headsets and to consume human anguish, and in the process "pain is repurposed as a site of economic production":[17]

> Imagine a VR live stream of a police killing. This, tragically, will soon cease to be science fiction: within years, you will be able to experience an extremely convincing simulation of what it's like to be murdered by a cop. Will this lead to the cop's conviction, or to meaningful criminal justice reform? Recent history suggests the answer is no. But the content will probably go viral, as its affective intensity generates high levels of user engagement. And this virality will generate revenue for the company that owns the platform.[18]

Empathy makes businesses grow. In the first quarter of 2016 alone, venture capitalists invested almost $1.2 billion in VR technologies, almost 50 percent more than

in the previous quarter.[19] In 2017, following the devasting hurricane in Puerto Rico, Facebook founder Mark Zuckerberg used the company's VR app to "visit" the island as part of Facebook's partnership with the Red Cross recovery effort. While Zuckerberg was immersed in the scene, those watching the live feed saw his cartoon avatar touring through the wreckage alongside another company executive who, at one point, comments: "it's crazy to feel like you're in the middle of it."[20] In response to criticism, Zuckerberg apologized by saying:

> One of the most powerful features of VR is empathy. My goal here was to show how VR can raise awareness and help us see what's happening in different parts of the world. I also wanted to share the news of our partnership with the Red Cross to help with the recovery. Reading some of the comments, I realize this wasn't clear, and I'm sorry to anyone this offended.[21]

While some observers said the problem was that Zuckerberg's immersive experience was not reflected in the cartoonish portrayal that viewers were witnessing, others have called into question the very idea of VR as empathy-inducing. As in other "awareness-raising experiences where viewers get a firsthand view of war, sickness, or other forms of suffering,"[22] good intentions are no safeguard against harm or exploitation. As one critic observed:

> The rhetoric of the empathy machine asks us to endorse technology without questioning the politics of its construction or who profits from it . . . Do you really need to wear a VR headset in order to empathize with someone? Can't you just fucking listen to them and believe them? You need to be entertained as well? Are you sure this

> isn't about *you*? . . . *I don't want your empathy, I want justice!*"[23]

When I ask my students to question their assumptions about various issues, I often use the analogy of "lenses" – encouraging a different lens so that we may look anew at all that we take for granted. Well, now the lenses are no longer metaphorical. But, as anthropologist John L. Jackson has noted, "seeing through another person's eyes is not the same thing as actually seeing that person. In fact, one precludes the other, by definition, unless the gaze is (tellingly) merely into a mirror."[24] *Being* the other, conceived of in this way, is an extension of what bell hooks calls "eating the other."[25] Tech designers have created actual headsets that we can don, our physical body in one world as our mind travels through another. Or is that really how it works? By simply changing what (as opposed to how) we see, do we really leave behind all our assumptions and prior experiences as we journey into virtual reality? Perhaps we overestimate how much our literal sight dictates our understanding of race and inequity more broadly?

I am reminded of a study by sociologist Osagie Obasogie, author of *Blinded by Sight*, in which he interviewed people who were blind from birth, asking them about their experiences of race. He found that, like everyone else, they had learned to "see" – that is, *perceive* – racial distinctions and hierarchies through a variety of senses and narratives that did not depend on actual sight. From this, Obasogie compels us to question two things: sight as an objective transmitter of reality and colorblindness as a viable legal framework and social ideology. *If blind people admit to seeing race,*

why do sighted people pretend not see it? In his words, "our seemingly objective engagements with the world around us are subordinate to a faith that orients our visual experience and, moreover, produces our ability to see certain things. *Seeing is not believing*. Rather, to believe, in a sense, is to see."[26]

So how can we apply this lesson to the promises surrounding VR? Even as we are seeing and experiencing something different, we do not simply discard our prior perceptions of the world. One of the problems with VR is that it can present another opportunity for "poverty porn" and cultural tourism that reinforces current power dynamics between those who do the seeing and those who are watched.

Even so, what makes and will continue to make VR and other empathy machines so appealing, not just for big business but also for numerous NGOs, the United Nations, and UNICEF, which are using it to fundraise for human rights campaigns,[27] is that they seem to offer a technical fix for deep-seated divisions that continue to rip the social fabric.

For instance, there is growing buzz around using VR for "immersive career and vocational training" for prisoners to gain job and life skills prior to release.[28] At first glance, we might be tempted to count this as an abolitionist tool that works to undo the carceral apparatus by equipping former prisoners with valuable skills and opportunities. But what will the job market be like for former prisoners who have used VR? Research shows that there is widespread discrimination in the labor market, especially against African Americans convicted of a felony. And the labor market is already shaped by a technology that seeks to sort out those who are

convicted of crimes, or even arrested, regardless of race. A US National Employment Law Project report shows that a staggering number of people – 65 million – "need not apply" for jobs from the numerous companies who outsource background checks to firms that, reportedly, look "just" at the facts (arrested? convicted?).[29] When such technological fixes are used by employers to make hiring decisions in the name of efficiency, there is little opportunity for a former felon, including those who have used VR, to garner the empathy of an employer who otherwise might have been willing to ponder over the circumstances of an arrest or conviction.

Given the likelihood that many of those who have been incarcerated will be discriminated against in the labor market as it currently operates, the question remains: who is actually profiting from VR-training for prisoners? And how does this technical fix subdue the call for more far-reaching aims, such as to weaken the carceral apparatus or to reimagine how the labor market operates?

In fact, VR is more likely employed to generate greater empathy for officers than, say, for people who are the object of police harassment and violence. According to a report published by a website geared to law enforcement, VR is a "public relations tool for strengthening public opinion of law enforcement because the technology allows a user to virtually walk in a cop's shoes . . . police agencies could bring VR into classrooms and community centers so the public can experience firsthand the challenges police officers face on patrol."[30] If even empathy machines are enrolled in the New Jim Code, what do abolitionist tools look like? What does an emancipatory approach to tech entail?

Rethinking Design Thinking

Now keep in mind that empathy is the first of five steps in an approach called "design thinking": empathize; define; ideate; prototype; test. Although there are different versions of this methodology, this is the one most commonly cited as the basis of "human-centered design." But, as we think about coded inequity and discriminatory design, it is vital to question *which humans* are prioritized in the process. Practically speaking, the human paying the designer's bill is the one most likely prioritized. But more people are speaking out about problems and pitfalls in the world of design, where the assumptions and methods of designers do not receive nearly as much critical engagement as they should.

Graphic designer Natasha Jen puts it bluntly in her talk "Design Thinking is Bullsh*t," urging design practitioners to avoid the jargon and buzzwords associated with their field, to engage in more self-criticism, to base their ideas on evidence, and to stop assuming that their five-step process is needed for anything and everything. On that last point, she notes a number of activities (such as surrounding a children's MRI machine with a cartoon mural) as examples of obvious ideas that do not require the input of professional designers.

If Jen is wary about the proliferation of design thinking, others are concerned with who is left out. At the 2018 meeting of the Design Research Society, the top ranked questions on Slido (an audience engagement tool that allows people to pose questions in real time) were: "Why is #DesignSoWhite?" "To do design for good don't we have to talk about the oppressive systems of

white supremacy, heteropatriarchy, capitalism, we need to dismantle or transform?" "Are designers still mainly occupied with design that makes people want things? What kind of a future this implies?"[31] The panelists awkwardly ignored the questions for some twenty minutes until eventually the session ended with no response. Author of two of the questions, Sasha Costanza-Chock, a professor at the MIT, has developed the idea of "design justice" with Allied Media Network collaborators, to get us thinking more about the *process* and power dynamics of design across multiple axes of oppression.[32] They define design justice as "a field of theory and practice that is concerned with how the design of objects and systems influences the distribution of risks, harms, and benefits among various groups of people," and is focused on procedural and distributive justice:

> We have an ethical imperative to systematically advance the participation of marginalized communities in all stages of the technology design process; through this process, resources and power can be more equitably distributed.[33]

Sounds good, right? But if the "justice" used here is meant to augment dominant notions of design as a universal good, I wonder how justice itself might be altered by its proximity to design as a buzzword and brand. Is this not what we are seeing with Jay Z's Promise and other such products?

How, then, might we think critically about the assumptions of design, as well as about those of justice? In a recent workshop I participated in on "subversive design," we tried to grapple with this question. The facilitators asked participants to throw out terms and phrases that described what we thought design was:

- the expression of a value system
- how we create space
- solving a problem
- visually shaping something
- tool for maintaining power
- intentional creation
- *and more!*

As I sat there looking up at the screen, trying to think of what to add, it struck me that maybe the growing list was a problem. But, good student that I am, I still raised my hand to chime in – *design is a colonizing project*, I offered, to the extent that it is used to describe anything and everything.[34] The affirming nods and groans from the facilitators and others in the room suggested that this critique resonated with them.

What, I wonder, are the theoretical and practical effects of using design-speak to describe all our hopes, dreams, qualms, criticisms, and visions for change? What is gained and by whom in the process of submerging so much heterogeneity under the rubric of design? I can see how it might work as a way to draw out commonalities and build coalitions, as when Costanza-Chock writes: "Design justice as a theoretical framework recognizes the *universality of design* as a human activity."[35] In enrolling so many issues and experiences as design-related, maybe this could build a foundation for solidarity . . . but it could also sanitize and make palatable deep-seated injustices, *contained* within the innovative practices of design.

If, in the language of the workshop, one needs to "subvert" design, this implies that a dominant framework of design reigns – and I think one of the reasons

why it *reigns* is that it has managed to fold anything and everything under its agile wings. I am not the first to raise this concern.

In a recent set of essays, science and technology studies scholar Lee Vinsel warns that "design thinking is a kind of syphilis" and that its overblown claims are "boondoggle."[36] If it were just another fad, that would be one thing. The problem is how it envelops ideas and practices that have been around for a while, across a number of fields, while throwing in vague and unsubstantiated claims about the efficacy of design thinking for other fundamental institutions. Vinsel, for his part, is especially frustrated with the application of design thinking to "transform" higher education. He takes special issue with Stanford University d.school, whose executive director, Sarah Stein Greenberg, recently proscribed some "radical ideas for reinventing college." Her talk starts by discussing how lecture halls, in the way they are designed, reflect certain assumptions about learning even as they shape the very possibilities for doing so.

Vinsel's criticism includes a photo of one of my favorite pedagogues, Brazilian educator Paulo Freire, with a fictional thought bubble that reads, "Dear Sarah, The first 2 minutes of your talk is the same critique of education I made in 1968."[37] My own teaching philosophy draws heavily from Freire's *Pedagogy of the Oppressed*, in which he writes, "if the structure does not permit dialogue, the structure must be changed."[38] So . . . was Freire a design thinker? Or is Greenberg a Freirian? *Or does it matter?* I would argue that how we chronicle the connection between ideas is what matters. Genealogies reflect and reproduce power relations.

Citational practices are political, especially when we start talking about "innovation" – oppressed people and places are rarely cited for their many inventions.

Lilly Irani and M. Six Silberman contend: "What if the problem is not how we design in a highly unequal world, but the very fact that we are read as designers at all? Designers are more than those who seek to move from current states to preferred ones. Designers also occupy a relatively high rung in hierarchies of 'knowledge economy' projects."[39] Irani and Silberman's query grows out of their experience as developers of Turkopticon, an activist tool for workers that aims to help "the people in the 'crowd' of crowdsourcing watch out for each other – because nobody else seems to be."[40] And what they found was that, in public depictions of their work, designers were elevated while workers were cast as being "without agency and capacity to change their situation." Even though they themselves were guided by a solidaristic relationship with the workers, the public granted them, as "designers," a higher status than to their laboring counterparts.

If design as a *branded* methodology is elevated, then other forms of *generic* human activity are diminished. As Irani and Silberman put it, "workers who powered these platforms appeared as exploited cogs in other people's plans, toiling in digital sweatshops with little creativity or agency."[41] To the extent that design as brand colonizes all things – even the brainchild behind liberatory movements gets subsumed under a single approach precisely because it is set up to encompass anything and everything – who benefits and to what end? Is this umbrella philosophy the one best suited for the violent storms we face?

Whether or not design-speak sets out to colonize human activity, it is enacting a monopoly over creative thought and praxis. Maybe what we must demand is not liberatory *designs* but just plain old liberation. *Too retro*, perhaps? And that is part of the issue – by adding "design" to our vision of social change we rebrand it, upgrading social change from "mere" liberation to something out of the box, "disrupting" the status quo. *But why?* As Vinsel queries, "would Design Thinking have helped Rosa Parks 'design' the Montgomery Bus Boycott?"[42] It is not simply that design thinking wrongly claims newness, but in doing so it erases the insights and agency of those who are discounted because they are not designers, capitalizing on the demand for novelty across numerous fields of action and coaxing everyone who dons the cloak of design into being seen and heard through the dominant aesthetic of innovation.

Along with this, my critical engagement with the various forms of discriminatory design in the previous pages needs therefore to question not only the "discriminatory" part of the equation but also the seeming goodness of design itself. In Safiya Noble's incisive words, "an app will not save us."[43] The design framework often requires us to move ahead and to treat this as progress. It is also in sync with the maintenance of capitalism, even as some might push for reforms to the labor market or for the regulation of the economy. But, in the current technological environment, the quickness with which someone can design "an app for that" marvels. As Ziegler's Appolition makes clear when contrasted with products from the growing "technocorrections" industry, the politics and purposes of design matter.

Put simply, forward movement, the ethos of design,

matters, of course, but rarely does such an approach allow us to slow down and let ourselves breathe in ways that may be useful. Elsewhere I have urged readers to consider how Eric Garner's last words, "I can't breathe," spoken as officer Daniel Pantaleo choked him to death, compel us to reflect on the epistemic and political dimensions of breathing.[44] "Under these conditions, the individual's breathing is an observed, an occupied breathing. It is a combat breathing," Fanon wrote.[45] In the breathless race for newer, faster, better technology, what ways of thinking, being, and organizing social life are potentially snuffed out? If design is treated as inherently moving forward, that is, as the solution, have we even agreed upon the problem?

Beyond Code-Switching

When people change how they speak or act in order to conform to dominant norms, we call it "code-switching." And, like other types of codes we have explored in this book, the practice of code-switching is power-laden. Justine Cassell, a professor at Carnegie Mellon's Human–Computer Interaction Institute, creates educational programs for children and found that avatars using African American Vernacular English lead Black children "to achieve better results in teaching scientific concepts than when the computer spoke in standard English." But when it came to tutoring the children for class presentations, she explained that "we wanted it [*sc.* the avatar] to practice with them in 'proper English.' Standard American English is still the code of power,[46] so we needed to develop an agent that

would train them in code switching."[47] This reminds us that whoever defines the standard expression exercises power over everyone else, who is forced to fit in or else risks getting pushed out. But what is the alternative?

When I first started teaching at Princeton, a smart phone app, Yik Yak, was still popular among my students. It was founded in 2013 and allowed users to post anonymously while voting "up" and voting "down" others' posts, and was designed to be used by people within a five-mile radius. It was especially popular on college campuses and, like other social media sites, the app reinforced *and* exposed racism and anti-Black hatred among young people. As in Internet comments sections more broadly, people often say on Yik Yak what they would not say in person, and so all pretense of racial progress is washed away by spending just five minutes perusing the posts.

But the difference from other virtual encounters is that users know that the racist views on Yik Yak are held by people in close proximity – those you pass in the dorm, make small talk with in the dining hall, work with on a class project. I logged on to see what my students were dealing with, but quickly found the toxicity to consist overwhelmingly of . . . racist intellectualism, false equivalences, elite entitlement, and just plain old ignorance in peak form. White supremacy upvoted by a new generation . . . truly demoralizing for a teacher. So I had to log off.

Racism, I often say, is a form of *theft*. Yes, it has justified the theft of land, labor, and life throughout the centuries. But racism also robs us of our relationships, stealing our capacity to trust one another, ripping away the social fabric, every anonymous post pilfering

our ability to build community. I knew that such direct exposure to this kind of unadulterated racism among people whom I encounter every day would quickly steal my enthusiasm for teaching. The fact is, I do not need to be constantly exposed to it to understand that we have a serious problem – exposure, as I discussed it in previous chapters, is no straightforward good. My experience with Yik Yak reminded me that we are not going to simply "age out" of White supremacy, because the bigoted baton has been passed and a new generation is even more adept at rationalizing racism.

Yik Yak eventually went out of business in 2017, but what I think of as NextGen Racism is still very much in business . . . more racially coded than we typically find in anonymous posts. Coded speech, as we have seen, reflects particular power dynamics that allow some people to impose their values and interests upon others. As one of my White male students wrote – in solidarity with the Black Justice League, a student group that was receiving hateful backlash on social media after campus protests:

> To change Yik Yak, we will have to change the people using it. To change those people, we will have to change the culture in which they – and we – live. To change that culture, we'll have to work tirelessly and relentlessly towards a radical rethinking of the way we live – and that rethinking will eventually need to involve all of us.[48]

I see this as a call to rewrite dominant cultural codes rather than simply to code-switch. It is a call to embed new values and new social relations into the world.[49] Whereas code-switching is about fitting in and "leaning in" to play a game created by others, perhaps what we

need more of is to stretch out the arenas in which we live and work to become more inclusive and just.

If, as Cathy O'Neil writes, "Big Data processes codify the past. They do not invent the future. Doing that requires moral imagination, and that's something only humans can provide,"[50] then what we need is greater investment in socially just imaginaries. This, I think, would have to entail a socially conscious approach to tech development that would require prioritizing equity over efficiency, social good over market imperatives. Given the importance of training sets in machine learning, another set of interventions would require designing computer programs from scratch and training AI "like a child,"[51] so as to make us aware of social biases.

The key is that all this takes time and intention, which runs against the rush to innovate that pervades the ethos of tech marketing campaigns. But, if we are not simply "users" but people committed to building a more just society, it is vital that we demand a slower and more socially conscious innovation. The nonprofit AI research company Open AI says, as a practical model for this approach, that it will stop competing and start assisting another project if it is value-aligned and safety-conscious, because continuing to compete usually short changes "adequate safety precautions" and, I would add, justice concerns.[52]

Ultimately we must demand that tech designers and decision-makers become accountable stewards of technology, able to advance social welfare. For example, the Algorithmic Justice League has launched a Safe Face Pledge that calls on organizations to take a public stand "towards mitigating the abuse of facial recognition analysis technology. This historic pledge prohibits lethal

use of the technology, lawless police use, and requires transparency in any government use"[53] and includes *radical* commitments such as "show value for human life, dignity, and rights." Tellingly, none of the major tech companies has been willing to sign the pledge to date.

Nevertheless, there are some promising signs that the innocent do-good ethos is shifting and that more industry insiders are acknowledging the complicity of technology in systems of power. For example, thousands of Google employees recently condemned the company's collaboration on a Pentagon program that uses AI to make drone strikes more effective.[54] And a growing number of Microsoft employees are opposed to the company's contract with the US Immigration and Customs Enforcement (ICE): "As the people who build the technologies that Microsoft profits from, we refuse to be complicit."[55] Much of this reflects the broader public outrage surrounding the Trump administration's policy of family separation, which rips thousands of children from their parents and holds them in camps reminiscent of the racist regimes of a previous era.

The fact that computer programmers and others in the tech industry are beginning to recognize their complicity in making the New Jim Code possible is a worthwhile development. It also suggests that design is intentional and that political protest matters in shaping internal debates and conflicts within companies. This kind of "informed refusal" expressed by Google and Microsoft employees is certainly necessary as we build a movement to counter the New Jim Code, but we cannot wait for worker sympathies to sway the industry.[56]

Where, after all, is the public outrage over the systematic terror exercised by police in Black neighborhoods

with or without the aid of novel technologies? Where are the open letters and employee petitions refusing to build crime production models that entrap racialized communities? Why is there no comparable public fury directed at the surveillance techniques, from the prison system to the foster system, that have torn Black families apart long before Trump's administration? The selective outrage follows long-standing patterns of neglect and normalizes anti-Blackness as the weather, as Christina Sharpe notes, whereas non-Black suffering is treated as a disaster. This is why we cannot wait for the tech industry to regulate itself on the basis of popular sympathies.

Audits and Other Abolitionist Tools

To cultivate the ongoing practice of unflinching accountability, a number of organizations are encouraging the development and implementation of *coded equity audits* for all new and existing technologies (see Appendix). "Auditing" is most commonly associated with the world of finance, but audit experiments have also been used to demonstrate continued discrimination in real estate and hiring practices in the post civil rights era. It is also an established methodology in the social sciences, where researchers set up field experiments that expose the persistence of racial discrimination in employment. "Equity audits," too, are employed in educational settings, in which teachers and administrators use established criteria for determining whether equity standards are being met in schools and classrooms.[57]

A recent initiative called Auditing Algorithms is developing a research community around the practice

of auditing, and they released a white paper in August 2018 that outlines a way forward.[58] To date, the Data & Society Research Institute offers the most thorough elaboration of "algorithmic accountability," noting that "there are few consumer or civil rights protections that limit the type of data used to build data profiles or audit algorithmic decision-making."[59] Advancing this effort, danah boyd and M. C. Elish pose three crucial questions that are a starting point for any tech equity audit as it relates to AI systems:

- What are the unintended consequences of designing systems at scale on the basis of existing patterns in society?
- When and how should AI systems prioritize individuals over society and vice versa?
- When is introducing an AI system the right answer – and when is it not?

Crucially, such audits need to be independent and enforceable. Currently there are not even any industry-wide standards for social impact that fully account for the way in which algorithms are used to "allocate housing, healthcare, hiring, banking, social services as well as goods and service delivery."[60] Google's AI ethics principles, created in the aftermath of the controversy over the company's Pentagon contract, are a good start but focus too narrowly on military and surveillance technologies and, by relying on "widely accepted principles of international law and human rights," they sidestep the common practice of governments surveilling their own citizens. Nor do these principles ensure independent and transparent review; they follow instead a pattern current

in corporate governance that maintains "internal, secret processes" that preclude public accountability.[61]

This is why the work of Stop LAPD Spying Coalition and other efforts to enact what Simone Browne calls "sousveillance . . . an active inversion of power relations that surveillance entails" are an essential part of any abolitionist toolkit.[62] In their workshop on these different approaches, organizers were clear to distinguish their efforts from carceral reforms such as police body cameras, which one presenter called "an empty reform to extend the stalker state."[63] Like Jay-Z's Promise app, these technical fixes give the illusion of progress but reinforce the power of state actors over racialized groups.

The European Union recently instituted the General Data Protection Regulation (GDPR), a law that covers many different facets of data protection and privacy. Among the provisions is the right to object to the processing of one's personal data at any time, the right not to be subject to automated decisions, and the right to *data portability*, in which the "data subject shall have the right to receive the personal data concerning him or her."[64] Even Jack Dorsey, Twitter's CEO, supports data portability: "I do believe that individuals should own their data and should have the right to have the controls over how a company might utilize that and how a service might utilize that and be able to pull it immediately."[65]

But individual-level rights such as those implemented by the European Union and espoused by tech entrepreneurs do not by themselves address the New Jim Code. In fact, a major exception built into Europe's law is that these rights do not apply if personal data are processed by "competent authorities for the purposes of the *prevention, investigation, detection or prosecution of criminal*

offences or the execution of criminal penalties, including the safeguarding against and the prevention of threats to *public security*."[66] This provision offers wide latitude for government officials to revoke data rights in an instant. It reminds us how coded inequity builds, and even deepens, existing inequities of race, class, nationality, and more. What looks like an expansion of data rights for individuals rests on the ability of governments to revoke those rights from anyone deemed a public threat.[67]

As we discussed before, automated systems are in the business of not simply "predicting" but *producing* crime. In Europe as elsewhere, already racialized and criminalized groups that try to exercise their newfound right to avoid data dragnets simply by opting out become doubly suspect: "What do you have to hide anyway?" (Recall the assumption of guilt for those who refused DNA collection by the United Kingdom's Human Provenance Pilot Project, discussed in chapter 3.) In this way, data portability, like other forms of movement, is already delimited by *race as a technology* that constricts one's ability to move freely.

Efforts to combat coded inequity cannot be limited to industry, nonprofit, and government actors, but must include community-based organizations that offer a vital set of counternarratives about the social and political dimensions of the New Jim Code. Too often, "inclusion" is limited to the visible representation of people of color and presumes that those who have been excluded want to be part of a tech future envisioned by others. As one reviewer put it, "Microsoft 'Improves' Racist Facial Recognition Software" – a win for inclusion! A loss for justice?[68]

Abolitionist toolmaking must entail the democratization of data – both its design and its application. For example, the DiscoTech ("discovering technology") model developed by the Detroit Digital Justice Coalition is a replicable approach that aims to demystify tech as a first step toward mobilizing community participation in questioning and shaping "data-driven" decisions that impact people's lives.[69]

Similarly, the Our Data Bodies (ODB) project retells stories of surveillance and data-based discrimination from the perspectives of those who are typically watched but not seen. The ODB team recently published a Digital Defense Playbook – an abolitionist tool based on in-depth interviews with community research participation in three US cities.[70] The Playbook presents some of the strategies that individuals and organizations are using; but, in the spirit of Frederick Douglass' admonishment about the upperground railroad, not everything that the team knows is exposed. Detroit-based digital justice activist Tawana Petty put it bluntly: "Let me be real, y'all gettin the Digital Defense Playbook, but we didn't tell you all their strategies and we never will, because we want our community members to continue to survive and to thrive and so . . . the stuff that's keepin' them alive, we keepin' to ourselves."[71]

If we come to terms with the fact that all data are necessarily partial and potentially biased, then we need long-term approaches that optimize for justice and equity. Timnit Gebru, computer scientist and founder of Black in AI, urges companies to give more information not just to users, but also to researchers. For any set of data, they can include "recommended usage, what the pitfalls are, how biased the data set is, etc." She says: if "I'm just taking your off-the-shelf data set or

off-the-shelf model and incorporating it into whatever I'm doing, at least I have some knowledge of what kinds of pitfalls there may be. Right now we're in a place almost like the Wild West, where we don't really have many standards [about] where we put out data sets."[72]

Akin to the "organic" label on food that signals how items were sourced, I could imagine an "equity" label that demonstrates how data and machine learning programs were produced. In fact there is a Dataset Nutrition Label project that riffs off nutrition labels found on food, measuring and presenting the key ingredients of a dataset – for instance where, when, and by whom the data were produced. The project team aims to create standard quality measures that can be widely used as a prerequisite to developing more inclusive datasets.[73] As some observers have pointed out, we need to implement approaches that extend beyond the initial design. With machine learning, systems can become more discriminatory over time, as they learn to interact with humans. Thus avoiding discrimination requires that we scrutinize how "systems operate in practice."[74] This, in turn, requires transparency and accountability, which is why democratic oversight and engagement are vital.

Allied Media Network, mentioned previously, has been at the forefront of collaborating with community-based initiatives, as has the Detroit Community Tech Portal, for twenty years.[75] As the organization Stop LAPD Spying Coalition, which is engaged in participatory action research to understand community members' experiences of intensifying surveillance, the Detroit initiative crafted digital justice principles after surveying its members. Among other important shifts, "Digital justice demystifies technology to the point where we

can not only use it, but create our own technologies and participate in the decisions that will shape communications infrastructure."[76] And it is not only concerned with access to technology, however important, but also with participation and common ownership designed to foster healthy communities.[77] This is also something I have come to appreciate more in my engagement with Data for Black Lives, a growing collective of organizers, scholars, data scientists, and more.[78] In the aftermath of the scandal surrounding Russia's use of social media to steer the 2016 presidential election, Data for Black Lives cofounder, Yeshimabeit Milner, wrote an open letter to Mark Zuckerberg, calling on Facebook to "commit anonymized Facebook data to a Public Data Trust, to work with technologists, advocates, and ethicists to establish a Data Code of Ethics, and to hire Black data scientists and research scientists."[79] A key tenet of the Data for Black Lives movement is that the data justice issues we are dealing with today are predicated on a much longer history of systematic injustice, in which those in power have employed data *against* Black lives. But not only that.

The history of data disenfranchisement has always been met with resistance and appropriation in which scholars, activists, and artists have sharpened abolitionist tools that employ data for liberation. In my talk at the inaugural Data for Black Lives conference in 2018, I started with an ancestral roll call to draw attention to this legacy. From W. E. B. Du Bois' modernist data visualizations – dozens of graphs, charts, and maps that visualized the state of Black life[80] – to Ida B. Wells-Barnett's expert deployment of statistics in *The Red Record* (1895), which illustrated the widespread

practice of lynching and White terrorism, there is a long tradition of employing and challenging data for Black lives. But before the data there were, for Du Bois, Wells-Barnett, and many others, the political questions and commitment to Black freedom. Today this commitment continues in the work of numerous organizations that are not content with simply reforming a system that "never loved us," that is, was designed against us.

An abolitionist toolkit, in this way, is concerned not only with emerging technologies but also with the everyday production, deployment, and interpretation of data. Such toolkits can be focused on computational interventions, but they do not have to be. In fact, *narrative tools* are essential. In a recent study, a Stanford research team introduced people to shocking statistics about racial disparities in policing and incarceration and found that exposure to the data led those surveyed to become more punitive and less supportive of policies that might counteract the criminalization of Black people.[81]

Data, in short, do not speak for themselves and don't always change hearts and minds or policy. To address this phenomenon, the Stanford team encouraged researchers to offer more context, challenge stereotypical associations, and highlight the role of institutions in producing racial disparities. And while this more holistic approach to framing is vital, the problem extends well beyond retooling social science communication. It calls for a justice-oriented, emancipatory approach to data production, analysis, and public engagement as part of the broader movement for Black lives.

If, as many have argued, the rhetoric of human betterment distorts an understanding of the multifaceted interplay between technology and society, then a

thoroughgoing commitment to justice has the potential to clarify and inspire possibilities for designing this relationship anew. Justice, in this sense, is not a static value but an ongoing methodology that can and should be incorporated into tech design.[82] For this reason, too, it is vital that people engaged in tech development partner with those who do important sociocultural work honing narrative tools through the arts, humanities, and social justice organizing.[83] As Kamal Sinclair – emerging media researcher and artist – posits:

> Story and narrative are the code for humanity's operating system. We have used stories to communicate knowledge, prescribe behavior, and imagine our futures since our earliest days. Story and narrative inform how we design everything from technology to social systems. They shape the norms in which we perform our identities, even perhaps the mutations of our DNA and perceptions of reality. Stories are the first step in the process of how we imagine our reality; they literally make our reality.[84]

But too often the story that dominates is the one that purports to rise above the genre, becoming *the* story of reality because it deploys the language of big data, thereby trumping all other accounts. This master narrative must be abolished – including the subplot that says "that technology is loyal to the master."[85] Abolitionist and decolonial technologies tell a different story: emancipatory designs are not only possible, they already exist.

Perhaps most importantly, abolitionist tools are predicated on solidarity, as distinct from access and charity. The point is not simply to help others who have been less fortunate but to question the very idea of "fortune": Who defines it, distributes it, hoards it, and how was

it obtained? Solidarity takes interdependence seriously. Even if we do not "believe in" or "aspire to" interdependence as an abstract principle, nevertheless our lived reality and infrastructural designs connect us in seen and unseen ways. This is why, as Petty insists, oppressed people do not need "allies," a framework that reinforces privilege and power. Instead, "co-liberation" is an aspirational relationship that emphasizes linked fate.[86]

In her study of how automated decision-making impacts welfare recipients in the United States, Virginia Eubanks recounts a conversation she had with a young mother who, in 2000, alerted Eubanks to the fact that caseworkers were using electronic benefit transfer (EBT) cards to track people's spending. With prescience about the pervasive "electronic scrutiny" that now embraces many more people across the class spectrum, the young woman urged: "You should pay attention to what happens to us. You're next."[87] By deliberately cultivating a solidaristic approach to design, we need to consider that the technology that might be working just fine for some of us (now) could harm or exclude others and that, even when the stakes seem trivial, a visionary ethos requires looking down the road to where things might be headed. *We're next.*

Reimagining Technology

It is easy to get caught off guard by new "killer apps" that are developed and marketed, sometimes as "reform." It is vital, therefore, to experiment with speculative methods, so that analysts, artists, and activists alike may better anticipate and intervene in new racial formations

that, like shiny new gadgets, may appear to be a kind of radical alternative but may very well entail their own logics of subjugation. Writer Arundhati Roy expresses this struggle over the future:

> One particular imagination – a brittle, superficial pretense of tolerance and multiculturalism (that morphs into racism, rabid nationalism, ethnic chauvinism, or war-mongering Islamophobia at a moment's notice) under the roof of a single overarching, very unplural economic ideology – began to dominate the discourse. It did so to such an extent that it ceased to be perceived as an ideology at all. It became the default position, the natural way to be . . . From here it was a quick, easy step to "There is no alternative."[88]

But there are many alternatives beyond the default settings. In countering the overwhelming Whiteness of the future in most popular representations of Hollywood films and science fiction texts, we can point to Afrofuturist and Chicanofuturist visions that not only center on people of color, but grapple with racism and related axes of domination.[89] This work has a lot to teach us about reimagining the default settings – codes and environments – that we have inherited from prior regimes of racial control, and how we can appropriate and reimagine science and technology for liberatory ends.[90]

Likewise, critical race studies has long urged scholars to take narrative seriously as a liberating tool, as when legal scholar Derrick Bell urges a radical assessment of reality through creative methods and racial reversals, insisting that "[t]o see things as they really are, you must *imagine* them for what they might be."[91]

Figure 5.2 White-Collar Crime Risk Zones

Source: App created by Brian Clifton, Sam Lavigne, and Francis Tseng for *The New Inquiry Magazine*, Vol. 59, "Abolish," March 2017

Take, for instance, a parody project that begins by subverting the anti-Black logics embedded in new high-tech approaches to crime prevention (Figure 5.2). Instead of using predictive policing techniques to forecast street crime, the White-Collar Early Warning System flips the script by creating a heat map that flags city blocks where financial crimes are likely to occur.

The system not only brings into view the hidden but no less deadly crimes of capitalism and the wealthy's hoarding of resources, but includes an app that alerts users when they enter high-risk areas to encourage "citizen policing and awareness." Taking it one step further, the development team is working on a facial recognition program meant to flag individuals who are likely perpetrators, and the training set used to design the algorithm includes the profile photos of 7,000 corporate

executives downloaded from the popular professional networking site LinkedIn. Not surprisingly, the "averaged" face of a criminal is White and male. In this sense, the narrative of what we consider to be a crime and of whom we consider to be a criminal is being challenged. But it remains to be seen whether such initiatives can help generate a different social order when it comes to criminalization. And creative exercises like this one are comical only if we ignore that all their features are drawn directly from actually existing proposals and practices "in the real world," including the use of facial images to predict criminality – all techniques that tend to target racialized groups.

By deliberately and inventively upsetting the techno status quo in this manner, analysts can better understand and expose the many forms of discrimination embedded in and enabled by technology. And the process of refashioning the relationship between race and technology may entail actual fashion. Hyphen-Labs, an international team of women of color who work at the intersection of technology, art, science, and futurism, experiments with a wide array of subversive designs – including earrings for recording police altercations, and visors and other clothing that prevent facial recognition.[92] This work, as I see it, recasts what counts as technoscience and whom we think of as innovators.[93]

If we take all its elements together, an emancipatory approach to technology entails an appreciation for the aesthetic dimensions of resisting the New Jim Code and a commitment to coupling our critique with creative alternatives that bring to life liberating and joyful ways of living in and organizing our world.[94]