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Ruha Benjamin

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RACE AFTER  
TECHNOLOGY  
Abolitionist Tools for the  
New Jim Code

polity

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## Engineered Inequity

between haves and have-nots, between the deserving and the undeserving – rusty value judgments embedded in shiny new systems.

Interestingly, the MIT data scientists interviewed by anthropologist Kathleen Richardson

were conscious of race, class and gender, and none wanted to reproduce these normative stereotypes in the robots they created . . . [They] avoided racially marking the “skin” of their creations . . . preferred to keep their machines genderless, and did not speak in class-marked categories of their robots as “servants” or “workers,” but companions, friends and children.<sup>45</sup>

Richardson contrasts her findings to that of anthropologist Stefan Helmreich, whose pioneering study of artificial life in the 1990s depicts researchers as “ignorant of normative models of sex, race, gender and class that are refigured in the computer simulations of artificial life.”<sup>46</sup> But perhaps the contrast is overdrawn, given that colorblind, gender-neutral, and class-avoidant approaches to tech development are another avenue for coding inequity. If data scientists do indeed treat their robots like children, as Richardson describes, then I propose a race-conscious approach to parenting artificial life – one that does not feign colorblindness. But where should we start?

## *Automating Anti-Blackness*

As it happens, the term “stereotype” offers a useful entry point for thinking about the default settings of technology and society. It first referred to a practice

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in the printing trade whereby a solid plate called a “stereo” (from the ancient Greek adjective *stereos*, “firm,” “solid”) was used to make copies. The duplicate was called a “stereotype.”<sup>47</sup> The term evolved; in 1850 it designated an “image perpetuated without change” and in 1922 was taken up in its contemporary iteration, to refer to shorthand attributes and beliefs about different groups. The etymology of this term, which is so prominent in everyday conceptions of racism, urges a more sustained investigation of the interconnections between technical and social systems.

To be sure, the explicit codification of racial stereotypes in computer systems is only one form of discriminatory design. Employers resort to credit scores to decide whether to hire someone, companies use algorithms to tailor online advertisements to prospective customers, judges employ automated risk assessment tools to make sentencing and parole decisions, and public health officials apply digital surveillance techniques to decide which city blocks to focus medical resources. Such programs are able to sift and sort a much larger set of data than their human counterparts, but they may also reproduce long-standing forms of structural inequality and colorblind racism.

And these default settings, once fashioned, take on a life of their own, projecting an allure of objectivity that makes it difficult to hold anyone accountable.<sup>48</sup> Paradoxically, automation is often presented as a solution to human bias – a way to avoid the pitfalls of prejudicial thinking by making decisions on the basis of objective calculations and scores. So, to understand racist robots, we must focus less on their intended uses and more on their actions. Sociologist of technology

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Zeynep Tufekci describes algorithms as “computational agents who are not alive, but who act in the world.”<sup>49</sup> In a different vein, philosopher Donna Haraway’s (1991) classic *Simians, Cyborgs and Women* narrates the blurred boundary between organisms and machines, describing how “myth and tool mutually constitute each other.”<sup>50</sup> She describes technologies as “frozen moments” that allow us to observe otherwise “fluid social interactions” at work. These “formalizations” are also instruments that enforce meaning – including, I would add, racialized meanings – and thus help construct the social world.<sup>51</sup> Biased bots and all their coded cousins could also help subvert the status quo by exposing and authenticating the existence of systemic inequality and thus by holding up a “black mirror” to society,<sup>52</sup> challenging us humans to come to grips with our deeply held cultural and institutionalized biases.<sup>53</sup>

Consider the simple corrections of our computer systems, where words that signal undue privilege are not legible. The red line tells us that only one of these phenomena, underserved and overserved, is legitimate while the other is a mistake, a myth (Figure 1.3).

But power is, if anything, relational. If someone is experiencing the underside of an unjust system, others, then, are experiencing its upside. If employers are passing up your job application because they associate negative qualities with your name, then there are more jobs available for more appealing candidates. If, however, we do not have a word to describe these excess jobs, power dynamics are harder to discuss, much less intervene in. If you try this exercise today, your spell-check is likely to recognize both words, which reminds us that it is possible to change technical systems so that

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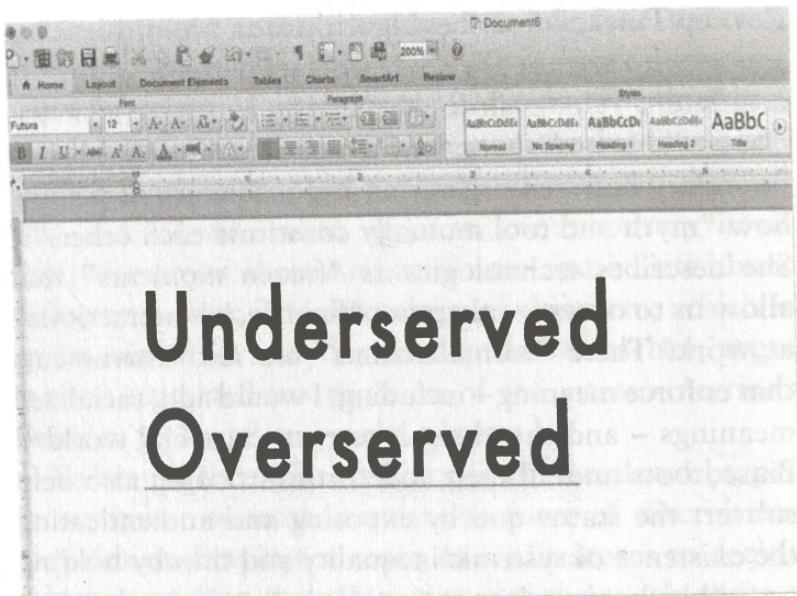


Figure 1.3 Overserved

they do not obscure or distort our understanding and experience of social systems. And, while this is a relatively simple update, we must make the same demand of more complex forms of coded inequity and tune into the socially proscribed forms of (in)visibility that structure their design.

If we look strictly at the technical features of, say, automated soap dispensers and predictive crime algorithms, we may be tempted to home in on their differences. When we consider the stakes, too, we might dismiss the former as relatively harmless, and even a distraction from the dangers posed by the latter. But rather than starting with these distinctions, perhaps there is something to be gained by putting them in the same frame to tease out possible relationships. For instance, the very idea of hygiene – cleaning one's hands and “cleaning

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up” a neighborhood – echoes a racialized vocabulary. Like the Beauty AI competition, many advertisements for soap conflate darker skin tones with unattractiveness and more specifically with dirtiness, as did an ad from the 1940s where a White child turns to a Black child and asks, “Why doesn’t your mama wash you with fairy soap?” Or another one, from 2017, where a Black woman changes into a White woman after using Dove soap. The idea of hygiene, in other words, has been consistently racialized, all the way from marketing to public policy. In fact the most common euphemism for eugenics was “racial hygiene”: ridding the body politic of unwanted populations would be akin to ridding the body of unwanted germs. Nowadays we often associate racial hygienists with the Nazi holocaust, but many early proponents were the American progressives who understood eugenics to work as a social uplift and a form of Americanization. The ancient Greek etymon, *eugeneia* (εὐγένεια), meant “good birth,” and this etymological association should remind us how promises of goodness often hide harmful practices. As Margaret Atwood writes, “Better never means better for everyone . . . It always means worse, for some.”

Take a seemingly mundane tool for enforcing segregation – separate water fountains – which is now an iconic symbol for the larger system of Jim Crow. In isolation from the broader context of racial classification and political oppression, a “colored” water fountain could be considered trivial, though in many cases the path from segregated public facilities to routine public lynching was not very long. Similarly, it is tempting to view a “Whites only” soap dispenser as a trivial inconvenience. In a viral video of two individuals, White and

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Black, who show that their hotel soap dispenser does not work for the latter, they are giggling as they expose the problem. But when we situate in a broader racial context what appears to be an innocent oversight, the path from restroom to courtroom might be shorter than we expect.

That said, there is a straightforward explanation when it comes to the soap dispenser: near infrared technology requires light to bounce back from the user and activate the sensor, so skin with more melanin, absorbing as it does more light, does not trigger the sensor. But this strictly technical account says nothing about why this particular sensor mechanism was used, whether there are other options, which recognize a broader spectrum of skin tones, and how this problem was overlooked during development and testing, well before the dispenser was installed. Like segregated water fountains of a previous era, the discriminatory soap dispenser offers a window onto a wider social terrain. As the soap dispenser is, technically, a robot, this discussion helps us consider the racism of robots and the social world in which they are designed.

For instance, we might reflect upon the fact that the infrared technology of an automated soap dispenser treats certain skin tones as normative and upon the reason why this technology renders Black people invisible when they hope to be seen, while other technologies, for example facial recognition for police surveillance, make them hypervisible when they seek privacy. When we draw different technologies into the same frame, the distinction between “trivial” and “consequential” breaks down and we can begin to understand how Blackness can be both marginal and

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focal to tech development. For this reason I suggest that we hold off on drawing too many bright lines – good versus bad, intended versus unwitting, trivial versus consequential. Sara Wachter-Boettcher, the author of *Technically Wrong*, puts it thus: “If tech companies can’t get the basics right . . . why should we trust them to provide solutions to massive societal problems?”<sup>54</sup> The issue is not simply that innovation and inequity can go hand in hand but that a view of technology as value-free means that we are less likely to question the New Jim Code in the same way we would the unjust laws of a previous era, assuming in the process that our hands are clean.

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In one of my favorite episodes of the TV show *Black Mirror*, we enter a world structured by an elaborate social credit system that shapes every encounter, from buying a coffee to getting a home loan. Every interaction ends with people awarding points to one another through an app on their phones; but not all the points are created equal. Titled “Nosedive,” the episode follows the emotional and social spiral of the main protagonist, Lacie, as she pursues the higher rank she needs in order to qualify for an apartment in a fancy new housing development. When Lacie goes to meet with a points coach to find out her options, he tells her that the only way to increase her rank in such a short time is to get “up votes from quality people. Impress those upscale folks, you’ll gain velocity on your arc and there’s your boost.” Lacie’s routine of exchanging five stars with service workers and other

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