Catching Our Breath:
Critical Race STS and the Carceral Imagination

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Our lungs are gradually being depleted of oxygen.
Perhaps it's time to use whatever breath remains in our bodies to say:
Open the bloody gates.
–Arundhati Roy[2]

What is so astonishing about the fact that our prisons
resemble our factories, schools, military bases, and hospitals –
all of which in turn resemble prisons?
–Michel Foucault[3]

Abstract

This article draws together science and technology studies and critical race theory to examine the proliferation and intensification of carceral approaches to governing human life. It argues for an expansive understanding of "the carceral" that extends well beyond the domain of policing, to include forms of containment that make innovation possible in the contexts of health and medicine, education and employment, border policies and virtual realities. In interrogating the relationship between innovation and containment, it urges scholars to consider, *who and what are fixed in place*—classified, corralled, and/or coerced—*to enable technoscientific development*? Finally, it proposes the cultivation of an *abolitionist consciousness* that fosters human agency and freedom with and against sciences and technologies.

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[2] From *Capitalism: A Ghost Story* (2014), p. 66

[3] From Droit (1975) "Michel Foucault, on the Role of Prisons." Accessed 18 June 2016: https://www.nytimes.com/books/00/12/17/specials/foucault-prisons.html.

Introduction

Los Angeles, 1963. The American Sociological Association meetings are taking place on the very day of the March on Washington. Everett Hughes is delivering the American Sociological Association presidential address, and in a kind of public confessional, he poses the question, "Why didn't sociologists foresee the explosion of collective action of Negro Americans toward immediate and full integration in American society?" (c.f. Steinberg 2007, 6). In the introduction to his book, *Race Relations: A Critique* (2007), Stephen Steinberg explains, "not only did sociology fail to anticipate the civil Rights Revolution [sic], not only did it give scant attention to the historic events that were occurring in Washington as sociologists convened for their annual meeting, but even in the aftermath of the civil rights upheaval, sociology stayed the course" (19). Steinberg asks, "What role did the field play while Rome burned, when the grievances of blacks erupted in to a movement demanding elementary rights of citizenship, and the entire nation was thrown in to crisis?" (5) It is difficult to escape the conclusion, Steinberg declares, "that, in so far as mainstream sociology is concerned, the Civil Rights Revolution failed to produce a corresponding revolution in the realm of ideas" (15).

Chicago, 2015. The Science, Knowledge, and Technology section of the American Sociological Association is meeting to reflect on the trajectory of the field in relation to other intellectual and political developments. Pace Steinberg, it is imperative that those gathered situate their collective reflection in the context of social uprisings that have been shaking US cities and suburbs, campuses and communities, over the last two years. At the very moment when the field pauses to catch its breath and take stock of its contributions to scholarly understandings of society, the political refrain "I Can't Breathe" is the clarion call of a renewed movement for social justice. In light of this convergence, this essay engages work at the nexus of science and technology studies (STS) and critical race theory, to explore what I call "the carceral imagination," with the aim of urging a sustained, field-wide commitment to incorporating critical race approaches in the study of science and technology.

STS is, after all, a field concerned with the construction of matter, whether physical matter, matters of fact, or matters of concern. And so I think it behooves us to explicitly engage

the contested terrain of Black Lives *Mattering*. To begin, how might Eric Garner's last words, "I Can't Breathe"—as he was being choked by Officer Daniel Pantaleo—compel us to think about epistemic and political processes together? This is a refrain, after all, echoing throughout the country—from Ferguson, Missouri to Baltimore, Maryland, to Chicago, Illinois—galvanizing protest in the face of police harassment and repression, which itself is a symptom of wider economic and political disenfranchisement. As such, it is a refrain that speaks to less visible forms of suffocation—shaped by structural violence and systemic inequality—in which the slow, preventable deaths of tens of thousands of people are linked, for example, to asthma each year.

Racism and capitalism burrowing under the skin—whether by bullets or environmental toxins—cause premature death: "an estimated 83,570 excess deaths each year could be prevented in the United States if this black-white mortality gap could be eliminated" (Satcher et al 2005). To put it more starkly, "that's the equivalent of a major airliner filled with Black passengers falling out of the sky every single day, every year."[4] And in Garner's murder, in a police officer choking a person with asthma, we witness the convergence of direct and indirect forms of violence that are often already connected. As Anne Pollock argues in an essay about two African American sisters who received double life sentences for armed robbery yielding eleven dollars, "The ethics of the event should not be extricated from an ethics of the uneventful—the routine structural violence of mass incarceration" (Pollock 2015, 253). In the case of these sisters, they were released in 2011 after serving 16 years on the condition that one donate her kidney to the other. The routineness and, as I will argue, *reasonableness* presumed above, is precisely what makes STS so well suited to interrogating the carceral underpinnings of neoliberalism (Wacquant 2010), and the racial logics embedded therein.

Historian Lundy Braun's fantastic book, *Breathing Race into the Machine* examines how "cultural notions of race became embedded in the architecture of an apparently ordinary instrument," the spirometer (a device built to assess lung function), and the widespread implications of this process—from research to clinics to medical school training to insurance claims (Braun 2014). In 1999, for example, the world's largest insulation manufacturer was busily trying to limit disability claims in a class-action lawsuit brought by 15,000 asbestos workers, by drawing upon the long-standing belief among pulmonologists that racial groups differed in the capacity and the function of their lungs. Drawing upon the widely accepted practice of "race correction"—so normalized that there is a button for it, the company made it more difficult for black workers to qualify for workers' compensation. The latter would have to demonstrate worse

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[4] Unnatural Causes: Is Inequality Making Us Sick? Produced by California Newsreel with Vital Pictures. Accessed 8 Jan 2016: http://www-tc.pbs.org/unnaturalcauses/assets/resources/in_sickness_and_wealth_transcript.pdf.

lung function and more severe clinical symptoms than those for white workers due to this feature of the spirometer, whose developer, Dr. John Hutchinson, was employed by insurance companies in the mid-1800s to minimize payouts. Such *discriminatory design*, as I call it, normalizes racial hierarchies—not as an ideological aberration from business-as-usual, but as an economic imperative that is built in to the machine.[5] One need not harbor any racial animus to exercise racism in this and so many other contexts; rather, when the default settings have been stipulated, simply doing ones job—clocking in, punching out, turning the machine on and off—is enough to ensure the consistency of white domination over time. Likewise, changing individual sentiment from animus to tolerance, or even affection, will not transform the status quo so long as the underlying design of our socio-technical world is left in place.

Whether it is in the architecture of machines like the spirometer, or in the architecture of legal technologies, STS scholars should train our analytic tools on the different forms of "racial correction" that underwrite a pernicious form of knowledge construction. Consider a recent court decision in the case against one Mr. Henry Davis, who was charged with destruction of property for bleeding on police uniforms *after* officers incorrectly identified him as having an outstanding warrant and then beat him in to submission:

> On and/or about the 20th day of Sept. 20, 2009 at or near 222 S. Florissant within the corporate limits of Ferguson, Missouri, the above named defendant did then and there unlawfully commit the offense of "property damage" to wit did transfer blood to the uniform (Daly 2014).

When Davis sued the officers, the judge tossed out the case, saying, "… a reasonable officer could have believed that beating a subdued and compliant Mr. Davis while causing a concussion, scalp lacerations, and bruising with almost no permanent damage, did not violate the Constitution" (Daly 2014). The Judge, in short, "race corrected" our reading of the US Constitution as applicable to the likes of Mr. Davis—a reminder that whatever else we think racism is, it is not simply ignorance, or a *not* knowing. It is also (at the very least) a logic, a reason, a justification, and a way of knowing the world and other human beings that is always violent, routinely deadly, and brilliantly codified in the very thing we would turn to for justice. Until we come to grips with the *reasonableness* of racism, we will continue to look for it on the bloody floors of Charleston churches and the dashboard cameras on Texas highways, and overlook it in the

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[5] For an elaboration of "discriminatory design", see Benjamin (2015), "From Park Bench to Lab Bench: What kind of future are we designing?" TEDx Baltimore, Accessed 1 June 2016: https://www.youtube.com/watch?v=_8RrX4hjCr0

smart sounding logics of textbooks, policy statements, court rulings, science journals, and cutting edge technologies (Bliss 2012; Epstein 2007; Fujimura and Rajagopalan 2010; Hatch 2016; Morning 2011; Nelson 2016; Roberts 2012; Shim 2014).

As I have argued elsewhere, we can conceptualize race *itself* as a kind of technology,[6] one that creates parallel social universes and premature death, and which requires routine maintenance and upgrade:

> Homemade nooses are upgraded for state-issued firearms. Violent voter intimidation tactics are replaced with voter ID laws. Government-sanctioned redlining is succeeded by predatory lending. Top down eugenic policies give way to reproductive technologies that allow consumers to select "socially desirable" traits. These postracial upgrades appear necessary and even empowering, which is precisely what makes them so effective at exacerbating inequality (Benjamin 2016a).

Technology is not only a metaphor for race, but one of the many conduits by which past forms of inequality are upgraded. For that reason, it is vital that scholars routinely take stock of the conceptual tools we use to understand racial domination.

Visions of development and progress are too often built upon forms of social and political subjugation that require upgrading in the form of novel techniques of classification and control. When scholars set out to study the values, assumptions, and desires that shape science and technology, we must also remain attentive to the racial anxieties and fears that shape the design of technoscience. The era of Big Data, for example, is intertwined with the fabrication of Big Deviance—the unprecedented "explosion of punitive crime policy" (Murakawa 2014: 113).[7] In a recent report on "machine bias," Angwin and colleagues illustrate how computer-generated risk assessment tools are biased against black Americans: "the formula was particularly likely to falsely flag black defendants as future criminals, wrongly labeling them this way at almost twice the rate as white defendants" (2016). This "algorithmic discrimination" is not limited to police work (boyd, Levy, Marwick 2014); rather, the suffocating tentacles of the carceral state embrace

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[6] See Coleman (2009) for a formulation of "race as technology." But whereas Coleman asks the reader to disconnect race from "the biological and genetic systems that have historically dominated its definition," my approach to race as a technology is concerned with how contemporary technoscientific practices coproduce racial classifications (Reardon 2004), often in the name of "helping" the underserved. Despite the charitable logic and seeming discontinuity with past forms of racial science, analysts must rigorously attend to the normative and political dimensions of technoscience in situ, that is, without knowing in advance all the norms and politics which coproduce such techniques.

[7] As Naomi Murawaka explains in her book *The First Civil Right: How Liberals Built Prison America* (2014), "Even in the context of falling crime rates… lawmakers hardened carceral machinery" (113).

schools, hospitals, and other institutions that seek to control poor and racialized people (Perry 2011, Taylor 2016).

In attending to the ongoing crisis of incarceration in the United States, I build upon Jasanoff and Kim's notion of *sociotechnical imaginaries*, or collective imaginations of the future that "encode not only visions of what is attainable through science and technology, but also of how life ought, or ought not, to be lived; in this respect they express a society's shared understandings of good and evil" (Jasanoff and Kim 2015, 4). As Jasanoff and Kim rightly note, competing imaginaries can very well coexist; in racialized societies in which representations of (white) good and (black) evil come conveniently color-coded in a range of cultural artifacts from children's cartoons to religious iconography, it is not simply that competing imaginaries exist. Rather, black people routinely are either degraded in popular representations of progress or completely written out of futuristic visions (Nelson 2002), a kind of temporal penitentiary in which oppressed people are locked in to a dystopic present.

In moving forward, several features of carceral imaginaries are worth highlighting as a basis for ongoing research. This conceptual lens is not only applicable to those processes that are directly tied to prisons and police; rather, I propose an expansive understanding of containment that trains scholarly attention to the underside of technoscientific development—*who and what are fixed in place*—classified, corralled, and/or coerced, to enable innovation? In the postracial era, subjugation is hardly ever the explicit objective of science and technology; instead, noble aims such as "health" and "safety" serve as a kind of moral prophylaxis for newfangled forms of classification and control. For example, medical hot spotting is a practice that started in Camden, New Jersey, in 2007, which "uses Geographic Information Systems (GIS) technologies and spatial profiling to identify populations that are medically vulnerable ('health care's costliest 1%') in order to provide preemptive care at home and lower hospital admissions and health care costs" (Krupar and Ehlers 2015, 4). In the process, those targeted "are often classified as 'socially disintegrated,' as dependent, and as unable to self-care" (4). The purported aim of medical hot spotting, to "help the underserved" reproduces the very forms of classificatory stigma that restrict people's life chances in the first place.[8] And racialized populations are not the only ones who are routinely "fixed" (purportedly helped and held in place) by the benevolent aims of

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[8] For further elaboration on medical hot spotting, see also Krupar and Ehlers (2017)

technoscience.[9]   Recent advances in human genetic engineering, for example, are hardening ableist definitions of "lives worth living" with the potential to stifle disability justice approaches to biotechnology (Benjamin 2016b).

A critical race STS agenda builds upon feminist, postcolonial, and critical disability approaches, which in turn would benefit from greater consideration of how carceral imaginaries seek to contain individual bodies *and* collective visions of the future. This leads to a final point: despite the overwhelming diffusion of ideas and institutional practices that seek to limit the freedoms of dispossessed groups well beyond the prison walls, subjugation necessarily produces a range of responses. For example, individuals who have had any type of contact with the carceral system, even those who have only been stopped but not charged for a crime, avoid surveilling institutions such as schools, banks, places of employment, and hospitals, even in cases where they require medical attention (Brayne 2014). So as scholars examine the development and deployment of carceral imaginaries, we must remain attentive to the many forms of subversion and resistance that also take shape, along with the sometimes-deleterious byproducts of those responses. In her book *Dark Matters: On the Surveillance of Blackness,* sociologist Simone Browne elucidates the idea of a *critical biometric consciousness*, which is an understanding of biometric technology as, first and foremost, a human technology "where the ownership and access to one's own body data and other intellectual property must be understood as a right" (Browne 2015, 86). Here, thinking in relation to expansions of the carceral, I propose we consider how an *abolitionist consciousness* is a way of conceptualizing efforts to exercise freedom and agency with and against sciences and technologies.

Returning to Everett Hughes standing before the members of the American Sociological Association in 1963, and his dismay that sociologists seemed so removed from the mounting social crisis, let us not inherit the blurred spectacles of the past. Instead, it is possible to build upon existing work at the nexus of STS and the carceral, sharpening our analytic tools with the assistance of critical race approaches to science and technology. Browne (2015) for example, puts questions at the heart of surveillance studies into conversation "with the enduring archive of transatlantic slavery and its afterlife" (11). Building upon so-called "new surveillance studies" that seek to shift analysis from maximum-security prisons to a more pervasive maximum-security society (13), Browne notes that "surveillance is nothing new to black folks"; from slave

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[9] See Pollock, Anne (2012), for an elaboration of the multiple valences of "fixed" in the context of black heart failure: "by rendering race identifiably stable, by focusing attention upon it, and by promising easy repair. […] One aspect of this process is that race is a difference that is imagined to be fixed enough for action, but that is at the same time potentially able to be medically mitigated" (174).

ships and slave patrols to airport security checkpoints and stop-and-frisk policing practices, she points to the "facticity of surveillance in black life" (7):

> [R]ather than seeing surveillance as something inaugurated by new technologies… to see it as ongoing is to insist that we factor in how racism and antiblackness undergird and sustain the intersecting surveillances of our present order (Browne 2015, 8-9).

Browne's work, in turn, builds upon the Fanonian notion of "epidermilization," or "the imposition of race on the body" (7), by theorizing what Browne terms "digital epidermilization." This is "what happens when certain bodies are rendered as digitized code" (109) through such techniques as "facial recognition, iris and retinal scans, hand geometry, fingerprint templates, vascular patterns, gait and other kinesthetic recognition, and increasingly, DNA" (109). All of these ultimately treat the body *as evidence* that trumps individuals' accounts of who they are and whether and where they belong. The use of DNA tests to vet tribal membership in the US, for example, has caused individuals to be dis-enrolled despite their longstanding association with the tribe, and so technoscience has the potential to displace the socio-cultural underpinnings of indigenous identity and also undermine political sovereignty (TallBear 2013).

Sociologist Oliver Rollins' work examines how the neurosciences are used to understand crime and violent behavior, with a focus on the reactions, rebuttals, and methodological steps taken by bio-criminologists to address critiques of their field (Rollins 2014). He builds upon the work of Troy Duster (2006), Nikolas Rose (2000), Aaron Panofsky (2014), and Joe Dumit (2004)—as well as the biomedicalization literature pioneered by Adele Clarke and colleagues (Clarke et al. 2010). Whether it has to do with the ways in which the "new" bio-criminology is transforming how we think about and manage "risk"; or the ongoing production and cultural value of visual technologies and the making of neuro-identities in and outside the courtroom, this body of work is vital to our understanding of what we might term "bio-criminalization." This is a world in which statisticians like Richard Berk (University of Pennsylvania) have designed "crime prediction software to help anticipate when people on probation or parole, are most likely to commit murder or be murdered" (Johnson 2011). This is the pre-emptive carceral imagination popularized in films like "Minority Report" that is slowly being rolled out under the cover of mitigating risk.

Finally, moving beyond the US context, Richard Tutton and colleagues examine how biotechnologies are put to use in UK border surveillance, specifically aimed at African asylum seekers (Tutton et al. 2014). If, over the course of a standard interview, a border agency official grows suspicious of an applicant's story, s/he can request samples of saliva, nails, and hair to test

for "nationality swapping," using isotope analyses and genetic ancestry tests. And although the Human Provenance Pilot Program was eventually put on hold, the allure of objectivity that such tests offer in the face of popular xenophobia throughout the world suggests that many more such biotechnical fixes for social crises are in the pipeline.[10]

Taken together, this body of scholarship applies STS sensibilities to carceral practices, and responds to Laura Mamo and Jennifer Fishman's reminder that, "STS has engaged justice as a matter of concern, but must go further to examine justice frameworks more explicitly and to participate in efforts that seek justice in ways that are associated with, yet distinct from, the study of ethics." Likewise, I encourage scholars of race-ethnicity to take up STS insights in advancing knowledge about the remarkable durability and dexterity of racial ideologies and practices. After all, social inequality is legitimized by cultural mythologies about human difference—stories that are made to matter through science, technology, and biomedicine, and which implicate race within a complex intersectional web of classifications that include class, gender, sexuality, disability, and citizenship among other axes of domination (Collins 2000). Whether in the context of race-based pharmaceuticals, genetic ancestry tests, designer babies, or police databases, socio-political categories are reproduced and reconstituted through techno-scientific practices that act on, with, and against human bodies. It is my hope that as the field catches its collective breath we continue to foster scholarship that is not only *about* racialized processes, but also applies a critical race STS lens to all those aspects of social life that are currently suffocated by carceral logics. In that way we would contribute to "a revolution in the realm of ideas" in and outside the academy.

Acknowledgements

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[10] In 2009 the UK Border Agency began the Human Provenance Pilot Project with the aim of using genetic ancestry tests and isotope analysis to vet asylum claims. Alec Jeffreys, one of the pioneers of human DNA fingerprinting, wrote that "The Borders Agency is clearly making huge and unwarranted assumptions about population structure in Africa; the extensive research needed to determine population structure and the ability or otherwise of DNA to pinpoint ethnic origin in this region simply has not been done. Even if it did work (which I doubt), assigning a person to a population does not establish nationality - people move! The whole proposal is naive and scientifically flawed" (Travis 2009).

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