

Tech-washing policing: obfuscation, misdirection, and retrenchment

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Among a range of other domains, the deployment of automating technologies in policing has led to an intensification of pre-existing inequalities and harms while complicating attempts at redress. Amid claims that new technologies produce radical transformations, the institution of policing and its agents further shield their actions from public scrutiny, giving rise to a phenomenon formalized here as *tech-washing*. While already circulating in popular discourse as an intuitively graspable term, this article synthesizes literature on digital policing, critical race studies, and information ethics to identify three mechanisms of tech-washing occurring at moral, rhetorical, and structural dimensions. Formalizing this tripartite structure enables analysts and impacted constituencies to identify when tech-washing is occurring, trace what its effects are, and imagine how to push back against it.

keywords: carceral, data, algorithms, surveillance, abolition

Coming to coherence in the United States (US) after a 2009 National Institute of Justice symposium, “predictive” policing refers to a range of approaches where police rely on algorithmically mediated data analysis to predict either spaces or individuals where crime is presumed to occur.ⁱ With both spatial and person-specific predictions available, mid-level managers use these outputs to inform deployment decisions of where to send officers on patrol, while individual officers still exercise some discretion as to how closely they follow these directives. Proponents suggest algorithmic tools and big data analysis reduce or even eliminate the subjective – and harmful – elements of policing, while conceptual and empirical works highlight the unavoidable persistence of historical biases and systemic inequalities in these practices. It is in this context that Kade Crockford, director of the American Civil Liberties Union (ACLU) Technology for Liberty project, identified that what predictive policing offers is a “tech-washing of racially discriminatory law-enforcement practices,” going on to say that predictive policing is “merely tinkering around the edges of the criminal justice system and calling it revolutionary reform.”ⁱⁱ

Five years after these comments, sociologist Sarah Brayne notes the pattern again in her ethnographic investigation of the Los Angeles police department (PD) and its use of big data analytics for predictive policing. Brayne identifies that beyond sensationalist language “‘Techwashing’ inequality means appearing to replace subjectivity and legally contestable bias with ‘objective,’ ‘neutral,’ ‘color-blind’ numbers produced through quantification, computation, and automation,” further arguing that “‘data-driven’ decision-making techwashes, both obscuring and amplifying social inequalities under a patina of objectivity.”ⁱⁱⁱ While Brayne does not go on to further develop the concept, in her given context we see again that tech-washing is not only appearances and rhetoric, it also involves the evocation, implementation, and production of

values and hierarchy. Tech-washing morally sanctions the processes of embedding social inequalities into technologies, turning abstract values into concrete forms, which police continue to enact and enforce. While the use of these tools is meant to standardize, rationalize, and ultimately depoliticize the provision of services, the actual effect is to bury the politics of these decisions underground and out of sight.^{iv} The task of this article is to formalize tech-washing as a productive process that, through study, can reveal these subterranean politics.

Drawing on insights from critical race theory and science and technology studies, I introduce and formalize tech-washing through a critical review of “predictive” policing – the context in which the term was popularly introduced. Reflecting attention to moral, rhetorical, and structural dimensions, I further braid work from information ethics, media studies, and data feminisms in order to establish the mechanisms of tech-washing which extend beyond the policing context. Tech-washing is a strategic practice associated with the deployment of automated technology, through which an institution and its agents reinforce their position of power, and justify their social choices and moral values by directly undermining counter-claims. It is not the mere presence of a supposedly-neutral technology that enables these effects, but instead a trio of concomitant mechanisms: *agency laundering*, where an automated decision-making system is used to obfuscate responsibility; *spotlighting technology*, where public attention is misdirected and social influence is obscured; and *increasing lock-in*, whereby the imbalance of power is reinforced with the distribution of resources along predetermined lines.

By clarifying these mechanisms and their consequences, scholars and impacted constituencies will be able to identify how tech-washing happens, to trace the effects of these practices, and to exercise their own agency within sociotechnical systems that seek to wash away any threats to dominant power. This analysis adds to studies of predictive policing by contributing a way to

reorient solutions beyond the criminal-legal system, while the formalization of tech-washing will be of interest to wider audiences in critical and social studies of technology. Overall, this work contributes a novel way to understand how the politics of technology proceeds, by identifying the underlying mechanisms that help perpetuate and justify harmful outcomes of automation.

The non-neutrality of technology

Despite being introduced with claims of producing structural or transformative change, the deployment of new technologies most often subsumes social and public infrastructure investments while automating existing inequalities. Tracing how these technologies cement racialized, political, and class-based assumptions of worthiness in the context of government assistance programs, Eubanks identifies that “For all their high-tech polish, our modern systems of poverty management [...] retain a remarkable kinship with the poorhouses of the past.”^v That is, unequal systems of the past persist, only with the exterior appearance of novelty. The arrival of new technologies not only reinforce, but also reshape inequalities, as the interaction between social and technical elements produces new sociotechnical ensembles that evade traditional lenses of critique. As she goes on to show, automated models meant to benefit those in need intensify historical patterns of discrimination and inequality, with systems denying benefits, access to housing, and separating families while further confounding attempts at legal restitution. This is not a novel phenomenon. Eubanks’ work echoes findings four decades earlier when the first automated information and referral system for welfare agencies in the US appeared: these systems did not revolutionize or tangibly change the welfare application/reception experience as advocates claimed it would, but did increase “administrative attractiveness,” marking the agency using the technology as more legitimate and worthy of funding in the eyes of auditors and regulatory groups.^{vi} As these works illustrate, what determines the “success” of automated

systems is how well they fit the political economies of the groups that use them. As such, the expansion of these technologies means the extension of the political economic system, both reproducing and expanding historical exploitation and inequality.

Given all this, we must recognize computation “as not a mere technical emergence but the practical result of an ongoing and bloody struggle between the would-have-it-alls and the to-be-dispossessed.”^{vii} Decisions about what to calculate and how in the world computer system of racial capitalism drive development, while oppressive logics are encoded into and sustained by programming practices that replay and renew eugenic, segregationist, and settler-colonial beliefs into digital forms.^{viii} With their foundations in social difference, new technologies continue to enable value extraction and dispossession through novel strategies of social differentiation. While qualities of neutrality and a syllogistic equality are imposed and associated with the newest tools called “AI,” it is only by acknowledging and engaging with differences – rather than claiming to transcend them – that technologies and their deployments can create the structural change that is presumed by default.

Within this landscape, Black feminist scholarship has recently done much to raise attention to this dynamic through charismatic concepts of “the New Jim Code” which identifies the existence of “new technologies that reflect and reproduce existing inequities but that are promoted and perceived as more objective or progressive than the discriminatory systems of a previous era”; “technological redlining,” which illustrates how algorithms in the neoliberal era “reinforce oppressive social relationships and enact new modes of racial profiling,” acting as “algorithms of oppression”; and the “coded gaze” which is used to “describe the ways in which discrimination and other harms are embedded into algorithmic systems.”^{ix} While these works sensitize us to the outcomes of digital technologies on data subjects, studying tech-washing places attention on how

positive benefits flow to those deploying these technologies, and the ways in which such deployments are used to undermine counter-claims or attempts at transformative change. That is, tech-washing is a key process through which the structures of harm identified via the concepts above come into being and are maintained. Tech-washing both provides institutional benefits that can be traced by analyzing its three mechanisms, while its outcomes result in new discriminatory techniques and algorithmic structures of violence.

In the case of policing and the digitalization of society broadly, we are seeing the subsumption of politics into the newest technologies, with the outcome that we are now surrounded by digital infrastructures which facilitate and structure our daily lives and social worlds with little recourse available. The profusion of attention towards phenomena like Algorithms of Oppression and the New Jim Code attest to this, while avenues of redress remain underdeveloped. Developing tech-washing as a workable concept enables an important gestalt shift, producing the analytic friction or “torque” that is required to make this infrastructure visible while also identifying further points for intervention.^x In the next sections, I outline the landscape of predictive policing and the contours of its debate between liberal reformists and abolitionists. I then illustrate an analysis of the mechanisms through which tech-washing occurs, via an assessment of predictive policing in the US. Following this, I offer reflections on how alternative systems and schools of thought offer inspirations for breaking free from the trap of tech-washing.

While my focus here is on policing, I proffer tech-washing as a broader phenomenon that operates in any domain where the logic of technological rationality takes hold. Through the mechanisms analyzed here, tech-washing has become a highly effective process by which institutions and their agents evade responsibility for intensifying harms and violence, distract

from alternative paths for framing and resolving problems, and entrench the hegemonic power of specific technological systems and ideologies.

The landscape and logic of digital policing

Of special focus here are automated decision systems (ADS) – technologies used in decision-making processes, characterized by algorithms working through big data collections to identify trends and predict certain behavior or outcomes. While police have long relied on a variety of media to increase their control and force, the combination of quantification and following algorithmic rule-based schema in digital policing seems to lend the newest tools a particular ideal, signifying an ability to achieve “mechanical objectivity” to the point of obviating human subjectivity.^{xi} Today, police departments enroll an array of automated technologies in order to enforce their own construction of meaning as to which areas or individuals are criminogenic, arguing this digital identification will enable a greater reduction in social disorder (i.e. crime). This motif appears as the combination of algorithms and data produces new approaches of “data-driven,” “intelligence-led,” and “predictive” policing across the country.

These approaches are lauded as providing previously inaccessible (technological) insights into factors that produce crime, but they are less techniques for keeping safe the whole population, and instead act foremost for internal efficiencies and external appearances: “as a management tool for increasing the productivity of the police and reinforcing the sense of political legitimacy of policing among the population.”^{xii} Data-driven practices most often refers to the use of a system known as Compstat, a “proactive” form of policing first used by the New York PD in the early 1990s, which today’s “predictive” systems continue to extend in more deeply digital and algorithmic forms. The deployment of Compstat is strongly linked to the use of stop-and-frisk

and quota-based policing, and while predictive systems were developed in part to respond to these concerns, they have brought their own effects of discriminatory over-policing.^{xiii}

Inspired by corporate use of data analytics, predictive policing in the US relies on the use of algorithms and big data collections to “predict” individuals or geographic spaces where crime is presumed to occur.^{xiv} The output of the latter approach – which I focus on here – are digitally rendered maps which are either color-coded (red, yellow, green) or marked off with boxes where crime may be expected. These outputs are then used to determine where to allocate officers and other policing resources. Connecting disparate sources of crime and non-crime data such as bus routes, census data, weather forecasts, and more into analyzable collections, advocates of this approach suggest it increases efficiency and accountability among police departments, by revealing previously unknown patterns or trends that enable a greater reduction in crime. In public commentary, this approach has been identified as one of the “50 best inventions” by TIME magazine, while others, though acknowledging structural problems in policing exist, claim it is “an unprecedented opportunity for racial justice” as we can “fight bias with predictive policing.”^{xv} In the face of scrutiny for ongoing violence and calls for transformation, policing advocates hold up ADS as a kind of antidote, suggesting this approach is the future of 21st century policing, with “the use of mapping technologies that allow unbiased evaluation of crime and ‘hot spots,’ as well as the ability to deploy resources both spatially and temporally to increase effectiveness.”^{xvi} However, leveraging technology as a neutralizing tool meant to reduce the harms of policing also introduces novel obfuscations that distance PDs and their officers from responsibility for their actions, while neglecting the racialized nature of policing and technology itself.

Emphasizing a mythic kind of “race-neutral” computation, predictive policing systems do not rely on race or arrest records as explicit variables in their analysis – which is often held up as one of the factors meant to emphasize their neutrality.^{xvii} Instead, actuarial techniques are used to predict outcomes from a variety of data depending on the system’s underlying epistemology, though all build on the common assumption that discriminatory policing arises from either explicit or implicitly biased individual decision-making, which standardization and quantification can resolve.^{xviii} At the same time, it is important to note that individual officers continue to express an agency of resistance by sometimes choosing to avoid these predictive directives, or even destroying the equipment which is used to ensure they follow-up in areas they are pointed to.^{xix} Even if we recognize the problems of policing do not rest solely with individuals, within this narrowed perspective of proponents, the technologically determinist view that ADS would solve such issues remains unfounded.

Claiming the presence of the technology enables efficiency, accountability, and transparency suggests a neutralizing of policing subjectivity, while public messaging links these implicit notions into explicit claims for fighting bias and revolutionary innovation. Without accounting for the productive and constitutive role of policing in society, even scholarly criticisms of policing are unable to “set a political horizon beyond regulative, police-preservationist reforms.”^{xx} But this is a fundamental element that must be grappled with. The roots of US policing are linked to the dispossession of Indigenous lands and 18th century slave patrols, and this logic of social control continues to show up in the digitalization of policing where racial and information capitalism meet, and “are encoded in digital police mapping, crime forecasting, and surveillance.”^{xxi} In this, the institution of policing is helped by a technical community which, by one anonymous respondent’s own admission, has “a tendency to not fundamentally question

certain technologies or discuss in what contexts they're (in)appropriate [...] instead it exhibits a tendency to incrementally improve such technologies.”^{xxii} Alongside this lack of critical reflexivity, the methods and assumptions which form the ground truths for these technologies presume the perpetuation of systems of discrimination and inequality as proper functioning.^{xxiii}

While ADS are introduced to policing as a way to increase accountability and internal control, they also serve to intensify existing racial dynamics, since “Algorithms cannot ‘code out’ race from American policing because race is an originary policing technology, just as policing is a bedrock racializing technology.”^{xxiv} Digital policing continues the social differentiating project and functioning of the world computer system. As the National Association of Criminal Defense Lawyers concludes, today’s digital policing is “ineffective, costly, lacks scientific validity, replicates and exacerbates racial biases, hyper-criminalizes BIPOC individuals, families, and communities, and further disintegrates the already corroded relationships between law enforcement and communities.”^{xxv} While the success of these technologies is still determined by the PDs that purchase and use them, the synthesis of old policing into new forms of digital policing continues to perpetuate institutional and structural dynamics that have and continue to be challenged, only under a guise of transformative change.

Studying programmers of these systems in the US and UK, and identifying how they are limited in their attempts to change the practice of police with predictive software, Lally concludes that “In the end, predictive policing’s most enduring contribution might not be its ability to change policing, but rather, in its ability to show how policing resists change, which might lead us to imagine other ways to organize the spaces of the city.”^{xxvi} This sentiment is shared by others studying the broader digitalization of criminalization, where conclusions explicitly amplify the call for prison industrial complex abolition: pointing to the possibility of moving away from

policing and prisons as the solution to social problems, asking instead for the redirection of resources and attention towards alternative social relationships, restructuring social systems and geographic spaces.^{xxvii} Rather than requiring further technology to predict, monitor, and control, or seeking to ‘fix’ the data collections and algorithms used by PDs, this perspective seeks investment into community services and social bonds instead. That is, to fully reckon with “the problems of (big data) policing requires a paradigm shift that expands the parameters of discussion” beyond liberal reform towards a “positive politics” oriented towards systems and structural change.^{xxviii} The novelty of sociotechnical ensembles offer the appearance of transformation and do introduce incremental changes, but the persistence of inequalities in the digitalization of policing is tied to the fundamental role of police and technology in society itself, and as such, will always be limited.

While these critical works show the incorporation and instantiation of discrimination within the newest policing technologies, how these deployments further shield the institution and its agents remains underdeveloped. Seeking to shift “the parameters of discussion,” I use the next section to explore predictive policing as a form of tech-washing. The purpose is not to further detail the resulting outcome of changed appearances and persistence of bias, but rather to pick apart the sociotechnical relationships which enable such effects, while further detailing how tech-washing shortcuts calls for radical transformation. How may a focus on tech-washing put these elements into greater relief and direct our attention to more imaginative solutions?

As we will see, there is a moral obfuscation which occurs when institutions employ an ADS to affect some domain they control, appearing to transfer agency to the technology itself, and assigning it some morally desirable quality such as objectivity, transparency, or reliability. This enables outcomes from before to occur, while shifting blame away from responsible parties

towards the ADS (agency laundering). The arrival and role of the technology in that domain is also valorized, often suggesting some new, revolutionary potential that moves beyond previous human-based limitations. Emphasizing the ADS as a revolutionary, objective force for change focuses attention to technical elements like data and algorithms, and directs attention away from the involvement of new actors and the recognition that the institutional practice, or logic underlying the practice, remains the same (spotlighting technology). Simultaneously, the technological solution dominates the problem-definition process, redirecting calls and resources for reform to new technologies rather than institutional practices. Suggesting that a problem of human agents is resolved by a “neutral” technology serves to retrench existing arrangements of power, while subsuming calls for systemic change (increasing lock-in). Identifying and recognizing these mechanisms, new forms of critique can emerge which both accept sociotechnical ensembles while continuing to assert demands for human accountability and structural change that exists beyond liberal reform.

Tech-washing with predictive policing

As a sensitizing concept, tech-washing directs our attention to the moral, rhetorical, and structural dimensions of ADS deployments and how agency laundering, spotlighting technology, and increasing lock-in performatively shape outcomes. The institutional goal of tech-washing is to overdetermine how (social) problems and their (technological) solutions are framed, thus undermining and eliminating other competing frames. Studying tech-washing as an analytical phenomenon opens the space to question how accountable institutions and their agents are able to evade responsibility for intensifying autonomy harms and violence, by identifying how the valorized presence of the technology distracts from alternative paths of resolution. Exploring tech-washing through the mechanisms of agency laundering, spotlighting technology, and

increasing lock-in enables such a questioning in the case of policing. Though not always empirically distinct, we can analytically separate these dimensions to more fully consider the dynamics being produced between institutions and their agents, automating technologies, and publics seeking structural change.

Agency laundering

As ADS are claimed to move beyond human limitations, there is a difficulty in assigning responsibility when harmful outcomes occur, due to the increasing entanglement between both the social and technical elements of the systems. In these situations, the responsibility of knowing becomes a question of “who is to blame: designers, users, the technologies or rather the distributed and entangled socio-technical systems?”^{xxix} I take the position that non-human entities cannot be held responsible, because responsibility requires intentionality and relational obligation. An ADS cannot itself intentionally claim to know its reasoning process or outcomes, as any meaning or value of knowledge put onto the process or output of the system is a result of what human agents have constructed. As such, “it is our [human] duty to assume responsibility for our interrelated ways of knowing, being and doing.”^{xxx} While we may attribute some of the unwanted effects we see to the technology in a certain domain, the human owners and users of the system are those who are morally responsible for explaining their actions in ways we can understand, and should be accountable for the actions and omissions of their system.

Engaging this same conception of moral responsibility, Rubel et al. introduce agency laundering as the deployment of an ADS to produce certain desired outcomes while also obfuscating a party’s causal responsibility in producing those outcomes. The result of agency laundering is that others are unable to demand an account for the harms or bad actions that occur. That is, by placing an ADS in a central decision-making position, “invoking the complexity or automated

nature of a decision system to explain an outcome allows a party to imply that the action is something for which she is not morally responsible.”^{xxxix} Across the US, agency laundering occurs as PDs increasingly claim to use predictive outputs to determine where to allocate officers, to justify their presence and patrol in particular neighborhoods, and to suggest these outcomes are technological directives outside the bounds of their own responsibility. In an ironic inversion, PDs frame themselves in instrumental terms: becoming mere tools of the technology, and executing the decisions made by automated systems.

Since the ADS may be used to disguise responsibility, analysis hinges not on what work the technology is doing, but which causal responsibilities it obfuscates. Rather than suggesting we need to move past the technology to understand its tech-washing effects, this analytical approach challenges us to look for the human influences comprising (both surrounding and within) the ADS. The power of predictive policing is based on its claims to objectively mark certain geographic regions as criminogenic zones deserving of intensified scrutiny. Yet, these predictions are built on data about previous police activity and interactions produced in the specific area. In part due to their heightened presence and the increased number of surveillant devices in certain geographic regions, PDs produce reinforcing feedback loops where the ADS continues to send them to neighborhoods they have been in before, while the data analyzed by the system is further skewed by falsified records and other illegal officer practices.^{xxxix} By evoking the ADS as the reason for their presence in certain areas, “geographic-based crime prediction furnishe[s] police with an ostensibly evidence-based justification to immerse devalued areas with patrol units,” continuing to hyper-target areas they have been before, now under the appearance of independently computed directives.^{xxxix}

Agency laundering not only obfuscates causal responsibility, it also complicates attempts at accountability by using the ADS as a scapegoat.^{xxxiv} In Milwaukee, WI, for example, the arrival of data-driven policing correlated with “blanketing certain geographic areas in which residents are predominantly people of color with ‘saturation patrols’ by MPD officers, who conduct high-volume, suspicionless stops and frisks throughout the area,” which the then-police chief justified by referencing digital mapping outputs as “data the police department is obligated to respond to.”^{xxxv} By placing the ADS outputs in a causally responsible position, the chief obfuscates the role which the MPD has in enacting these discriminatory patterns, and responds to lawsuits by suggesting the system – not the PD – should be held accountable. The data is placed in a position of superior authority, which the PD then has a moral obligation to heed and enforce.

As this example illustrates, agency laundering further extends the logic that police are the only solution to deterring social harms while obscuring the harms that policing itself causes. This assumption justifies the notion that overpoliced areas must continue to be heavily scrutinized and under greater surveillance (the reinforcing feedback loops of the ADS), while discounting historical and structural factors such as segregation and exclusionary housing covenants which shape the ongoing availability of resources, social support, experiences of stigmatization, and prevalence of poverty within the region.^{xxxvi} Promoting the idea that a technological solution neutralizes bias by somehow providing an objective visual representation of communities, PDs use technology to obscure historic and structural factors as well as their own role in the creation of these ‘criminal’ spaces. The technology does not dissolve these responsibilities and practices of social differentiation; it operationalizes them into digital forms. The language of policing geographic space that the ADS affords further obscures it is not only spaces that are being targeted, but those who reside within them. This allows police officers to be rewarded for the

benchmarks they achieve and numbers they generate, while overlooking the physical and emotional harms their high numbers of interaction have on residents. While the system may suggest certain geographic hotspots, the decision of whom to stop and how remains the officers' responsibility, and is structured by institutional knowledge and practices.

A core mechanism of tech-washing, agency laundering enables PDs to justify their social choices and existing practices by making appeals to a technology which supposedly provides objective directives which they then follow. Causal responsibility for outcomes becomes obfuscated, while demands for accountability are aimed at modifying the technology rather than the practice of policing itself. This is then intensified through the rhetorical dimension of tech-washing: spotlighting technology.

Spotlighting technology

Central to the framing and understanding of an issue, "A spotlight casts a narrow beam, illuminating a specific element of the story, while leaving much else in shadow."^{xxxvii} In the domain of public discourse and controversy, this narrow coverage can impose a unitary language focused on the abstract and disembodied, rather than the situationally specific and particular. Spotlighting technology occurs when it is rhetorically claimed that the deployment of a technology is revolutionizing a particular practice by overcoming previous limitations which are usually human-based constraints, like the superior insight or pattern recognition capacities that an ADS allows. Narrowing attention to the system and its abstracted components of data and algorithms, the particular actors developing and deploying these systems and co-producing their harmful effects are overlooked. While agency laundering sensitizes us to the moral dimension of causal responsibility and how attempts at accountability can be obstructed, spotlighting

technology focuses on the rhetorical work which accompanies the deployment of a technological solution, asking where attention is being drawn away from and how.

Holding up the kind of data-driven decision-making that automated systems afford as a way to increase accountability, a spotlight narrows onto the presence of the technology, its technical capacities to make predictions, and the perceived potential of even larger data collections. Claims about the supposedly superhuman insight of algorithmic analysis “paired with the inability to fully explain how those results are produced” contributes to the further mystification and myth-making about technology, producing a kind of “enchanted determinism.”^{xxxviii} Responding to the presence of ADS, critiques can also amplify the narrative focus on technology by emphasizing the role of data collections and algorithms as sources of discriminatory outcomes. That is, the problems are framed around spotlighting a specific technology and its features, rather than challenging the factors that create structural harms. For example, furor around a 2016 ProPublica article showing disproportionate outcomes in bail sentencing for Black vs. white defendants revolved around technical questions instead of questioning the persistence of the cash bail system itself.^{xxxix} While ProPublica raised these issues in their articles, responses from both the private company producing the courtroom algorithm and academics weighing in on the fray focus instead on the problem of two different mathematical definitions of fairness. Importantly, neither are these statistical techniques neutral were they to be relied upon. The success of these tools is predicated on placing the past onto the future, ensuring the segregation, devaluation, and differentiation of certain neighborhoods and peoples continues.^{xl} This narrowing spotlight reinforces the continuation of the ADS as the sole object of consideration, with the result that the practices and actors which facilitate the persistence of pre-trial detention inequalities continue to operate in shadows outside of public debate. By spotlighting the ADS, its abstracted technical

elements center and retain public attention, while responsible actors and structures operate with little public awareness or oversight.

In predictive policing, directing attention towards an ADS's supposed ability to identify criminogenic zones and reduce crime most notably draws awareness away from system owners and developers: those who possess the social, epistemic, and digital capital to determine what constitutes "risk," who should be considered "risky," and to decide what data should be included in these evaluations.^{xli} Outside of police officers themselves, predictive policing today includes new discretionary roles for data vendors, data-entry specialists, and crime analysts who all help construct a particular understanding of crime and law enforcement.^{xlii} The values and beliefs about criminality that these groups subscribe to (e.g. identifying poverty and 'quality of life' non-violent offences as primary targets for arrest), are embedded into the problem-framing and solutions sought by the technology, further drawing attention away from the role of structural factors and the institution of policing in perpetuating harm.^{xliii} When presented to the public as authoritative sources for knowledge, the data maps generated by place-based predictive policing offer a highly effective method for "adapt[ing] public perceptions of crime to that of the policing apparatus, and mobiliz[ing] the public as appendages of police surveillance."^{xliv} With attention directed towards these mapping outputs, crime comes to be treated as a scientific and technical problem while crime rhetoric becomes increasingly spatialized, limiting public discussions on root causes and alternative harm reduction approaches to what predictive policing outputs display, or what newer technologies can provide. This then drives public commentaries which suggest that predictive policing could advance social justice if only more attention were given to appropriate collections of data and more transparent algorithms, rather than structural change.

As was noted with the first automated welfare system in the US, and is echoed by recent ethnographic work on the LAPD, claims about the capacity of ADS to revolutionize policing “overlooks the basic fact that even new analytic platforms and techniques are deployed in preexisting organizational contexts and embody the purposes of their creators.”^{xlv} As empirical work shows, crime analysts rely on institutional knowledge about hotspots rather than statistical techniques (of which they have limited knowledge) to shape their analysis.^{xlvi} Even with the ADS in place and providing a public justification for officer deployment outcomes, it is still the knowledge and interpretation of an institutionally-privileged few being digitally instantiated and put into action. With the spotlight on the technology as a supposedly neutral tool, not only are actors overlooked, so too are the conditions which shape the practice of policing, while attention continues to be directed towards elements like data, algorithms, and mapping outputs without interrogating their ground truths. Spotlighting the capacity of the ADS to make predictions distracts from the recognition that the same fundamental logic is still at play.

In addition to the moral obfuscation of agency laundering, spotlighting technology adds another dimension to the practice of tech-washing. By narrowing public attention and misattributing causal mechanisms of harm towards the data, maps, and algorithms, attempts to challenge the fundamental practices of policing are obstructed. The success of these tech-washing mechanisms facilitates the structural retrenchment of the institution itself, limiting public engagement by increasing lock-in.

Increasing lock-in

The final dimension of tech-washing occurs at a structural level and solidifies institutional power while undermining counter-claims. Public political agency is circumscribed by the institutional domination of resources and narrowing of possibilities, increasing lock-in to the status quo. The

development of ADS is heavily influenced by social forces, and once in-the-world, these technologies exert their own influence too. Technological systems act as “bureaucracies reinforced by technical, or physical infrastructures which give them even greater rigidity and mass than social bureaucracies,” allowing them to build “technological momentum.”^{xlvi} As ADS build up momentum, they attract increasing investment by organizations and agents committed to the interests served by the system, like the data vendors and analysts noted above. The momentum is not only material, but also ideological, as this mechanism of tech-washing works by locking publics into certain sociotechnical imaginaries, “collectively held, institutionally stabilized, and publicly performed visions of desirable futures, animated by shared understandings of forms of social life and social order.”^{xlvi} ADS dominate how problems are defined in the first place and foreclose the possibility of structural change by limiting consideration of reform within the existing status quo. Suggesting that a structural problem is resolved by a “neutral” technology fortifies hegemonic arrangements of power, while subsuming calls for systemic change. By increasing lock-in, imaginaries are stabilized in ways which continue to support the existence of the institution being challenged, while ADS reinforce the positions of those with decision-making power, providing greater resources and tools to bolster their public legitimacy.

Across the nation, predictive policing ADS and other forms of technology dominate the problem-definition of crime reduction and police reform, subsuming calls for systemic change into incremental shifts towards more data or more technologies for those already in control. Former president Obama’s “President’s Task Force on 21st Century Policing,” for example, states that “Implementing new technologies can give police departments an opportunity to fully engage and educate communities in a dialogue about their expectations for transparency, accountability, and

privacy,” and though how this would actualize remains unclear, the many mentions of body-worn cameras, social media, unmanned aircraft, and “smart technology” reflect a strong and persistent presence of technologies as a proposed reform.^{xlix} Even if a “dialogue” is to emerge, the balance of power and decision-making lies in the hands of the system owners and developers, not the public. The sociotechnical reality has already been decided upon. More recently, former president Biden’s “American Rescue Plan Act,” meant as an economic stimulus bill to support recovery as the country moved through the COVID-19 pandemic, included specific directives for police to use these funds to bolster their own resources. Across the country, police departments have purchased a range of technologies, ranging from tasers, rifles, and cars, through to armored vehicles, body scanners, gun ranges, and “gunshot detection” software.^l The close linkages in the public consciousness of public safety and policing, as well as the momentum of using technologies to find efficiencies and apparent reforms within policing continues to serve the institution while creating new opportunities for moral obfuscation and rhetorical misdirection.

In the face of repeated calls for structural change or a reinvestment of resources away from PDs into community and public services, the appearance of technologies as a solution continues to endure and shapes the collective imaginary. Place-based predictive policing is now being wrapped into platforms which also include audio-detection and a range of other surveillant practices. However, we should not mistake the presence of technology with little public input as a metric to assess whether the state or police are moving towards more transparency, objectivity, or accountability in their approach to crime. The deployments of technologies in these organizations are highly valorized, while the private companies who provide the solutions use non-disclosure agreements to limit how much information the public receives.^{li} While this secrecy obscures the flow of resources, the problem persists as technological solutions continue

to be advanced in the face of calls for institutional change. The focus on technologies that police can use distracts again from a more fundamental reckoning: if we do not address the structural factors and inequal dynamics at play between police and the public, more technologies will mean little change beyond the intensification of what is already there. The problem is not the ADS itself, but the ways in which attention to the technology and a fixation on data occupies interest, and distracts from the causes of ongoing harms. Solutions must move beyond decisional corrections towards distributive justice that addresses the status quo.^{lii}

To tackle tech-washing? Reframe, reconstruct, and other refusals

As noted earlier, critical scholars and activists are increasingly calling for investment into community services and social bonds rather than the newest tools of predictive policing. Emphasizing a social response rather than a technical one can be seen as a splitting of the problem at hand, reducing the complexity of what are sociotechnical relations. However, as Naomi Klein noted on the pandemic doctrine during the COVID-19 lockdowns, “we face real and hard choices between investing in humans and investing in technology. Because the brutal truth is that, as it stands, we are very unlikely to do both.”^{liii} It is not that humans and technologies are separate, but that the current development, deployment, and the operations of technologies themselves, furthers the dehumanizing and anti-human processings of the world computer. At an institutional-organizational level, this results in technocratic responses that successfully define complex social issues in ways which prefigure only a technological solution, overlooking possible alternatives as well as the structural and intersecting factors which cause inequality and impact human rights.^{liv}

In the case of policing, differential responses to tech-washing emerge in the principles of abolition. Representing an alternative sociotechnical imaginary and prefiguring solutions in

which technologies are used to support the autonomy of communities, resolutions from this space include using data to scrutinize those in power, replacing surveillance with community care and resources, democratizing data, and emancipatory design.^{lv} There are also possibilities of moving towards mutual aid; redirecting billions of dollars towards health care, housing, education and jobs; having community care workers performing mental-health checks; and banning unjust technology usages.^{lvi} These practices work to push back against each dimension of tech-washing, and in their success, support the creation of life-affirming practices and institutions for our communities. While these responses are necessarily contextually and situationally specific, we can identify emergent tactics which support this work.

Reframing

Reframing involves the creation, revision, or expansion of the overarching sensemaking framework in order to address the problem at hand.^{lvii} It effects taking a step back and reintroducing the possibility of public participation on the deliberation of an issue, and can include a “decentering” of technology in ongoing discussions.^{lviii} One productive reframe is visible in the *Green Chairs, Not Green Lights* community safety campaign. Responding to Detroit PD’s “Project Green Light” surveillance project in which businesses contracted direct surveillance from the PD, the community determined through collaborative research, “that law enforcement and organizations who create, organize, enforce, or innovate from a security or surveillance mindset, tend to make community members less safe.” Instead of further surveillance, the community commits to collectively sitting on their porches and seeing the “humanity in one another,” rather than relying on facial recognition and automated surveillance to address neighborhood concerns.^{lix}

As elaborated in the shared art exhibit *Observed: Hypervisibility and Reclamation*, through these practices it is possible to “deconflate safety from surveillance,” and to assert community responses that ensure collective and communal safety.^{lx} What the community did with their porches, these artists did so by juxtaposing police surveillance lighting to that of light by a communal bench, overlaying maps to reveal the neighborhoods lacking infrastructure receiving the most surveillant investment and more, affectively curating the distinct experience of surveillance and safety for participants, showing the value and need of relationships to address quality of life concerns which also reduce those instances of “crime.” Once able to question the story of “safe/unsafe” neighborhoods that policing maps and surveillant tools produce, we can look to alternative paths for resolution. As elaborated in a different symposium, the “Tools of Restorative Practices” affect a similar reframe – by challenging dominant understandings of punishment, occurrences of harm, and how to respond to them, we can elevate repair and community involvement over further digitalization of the criminal-legal system.^{lxi}

By reframing, it is possible to reintroduce elements or concerns first obviated or overlooked in an earlier problem definition. When practiced in response to tech-washing, this can tackle the moral, rhetorical, and structural dimensions, by identifying those responsible, reintroducing those parties among others in analysis, and questioning where resources should flow collectively.

Reconstructing

Reconstruction occurs when impacted constituencies produce an alternative ideology around the technology and actively reshape the technological production processes or artifacts in way which are meant to negate or reverse the political implications of the dominant system.^{lxii} Stop LAPD Spying Coalition’s watchthewatchers.net is an important example of reconstruction, where the community used “surveillance methodologies and technologies,” to enact a copwatching site

built on community observation and documentation. Enabling the public to easily search for and identify police officers causing harm in their neighborhoods, the project still operates today even after being sued by the city of Los Angeles twice for this work. As they note themselves, “The website’s ease of use also makes it a political statement, flipping the direction of surveillance against the state’s agents. Police have vast information about all of us at their fingertips, yet they move in secrecy.” This sousveillance practice reverses the gaze while empowering community members in their attempts to hold police accountable.

Reconstruction need not only be digital. As the African American Roundtable’s “LiberateMKE” project illustrates, public budget surveys are also a successful tool to limit police technology. Informed by their survey of residents in communities across the city, AART led a successful multi-year campaign to divest almost \$4 million from the Milwaukee PD and reinvest into public housing, library, and youth summer employment programs for the community.^{lxiii} In

Philadelphia, Philly Tech Justice is currently trying to “Use the [city] budget process to disclose and evaluate the technology Philadelphia buys and schedule a hearing on how the city’s use of AI and other technologies may harm communities,” with a special focus on protecting communities from surveillance. This work is informed by power mapping and budget analysis work done by community members, and builds on the previous *Safety We Can Feel* city-wide survey which identified “very clearly that Philadelphians know that directly investing in communities is how we make them strong, healthy, and safe—not investing in policing.”^{lxiv} In these instances, the budget is reconstructed to assert community demands and restrictions on policing technology.

By reconstructing, communities are able to enact some of the same tools used against them in their own projects of (counter)surveillance and reclamation. As a response to tech-washing, reconstruction also produces systems which are informed by community values and constructed

through collaborative production. These tools identify rather obscure responsible parties, draw attention to intersecting and structural factors, and are an investment of resources that help challenge the status quo.

Refusing

Each of the proposals raised by these examples of reframing and reconstructing address structural inequalities at play in the context of policing, and increase the capacity for those most affected to build their autonomy. Outright refusals such city and statewide bans on facial recognition, biometric analyses, and other surveillance tools are also important generative tactics, creating resistance and re-centering the margins.^{lxv} Rooted in a challenge of the status quo, through tactics of reframing, reconstructing, and further refusals, it is possible to tackle tech-washing, both by identifying when it is happening and what its productive effects are, as well as crafting and advocating for systems-changing alternatives. Just as with the horizon of abolition, tackling tech-washing is equifinal, reachable by many paths and tactics.

Conclusion

The deployment of new technologies subsumes social and public infrastructure investments, automating existing inequalities without creating structural change. With a focus on the moral, rhetorical, and structural dimensions emergent with these technological deployments, analyses of tech-washing can counter such narrowing tendencies by emphasizing alternative perspectives and questioning what is overlooked or omitted by those advocating such a solution. Rather than questioning how the digitalization of a practice affects impacted constituencies, by studying tech-washing, analytic attention is trained towards the institutions and agents deploying the technology. The ADS is included in analysis, while its status and role continues to be questioned in assessing responsibility, identifying influential players, and questioning problem definitions.

Alongside approaches which emphasize critical perspectives in the design of digital tools and critically interrogating the sociopolitical consequences of data and algorithms, tech-washing emphasizes attention to how institutions and their agents are able to evade responsibility for intensifying harms and violence through the valorized presence of a technology which distracts from alternative paths of resolution. In this way, studies of tech-washing contribute to the project of interrogating structural dynamics and hierarchies of inequality put forward by those in critical studies of technology, highlighting the possibility of alternatives and refusal as another pressing area of social concern.

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ⁱ Pearsall, “Predictive Policing”

ⁱⁱ Quoted in Burrington, “What Amazon Taught the Cops.” para. 10.

ⁱⁱⁱ Brayne, *Predict and Surveil*, 6, 16.

^{iv} Agre, “Real Time Politics”; Winner, “Do Artifacts Have Politics?”

^v Eubanks, *Automating Inequality*, 16; Gilman, “Poverty Lawgorithms.”

^{vi} Kling, “Automated Welfare Client-Tracking and Service Integration”

^{vii} Beller, *World Computer*, 10.

^{viii} Chun, *Discriminating Data*; Radin, “Digital Natives”

^{ix} Benjamin, *Race After Technology*, 5; Noble, *Algorithms of Oppression*, 1; Buolamwini, “Facing the Coded Gaze,” 2.

^x Bowker and Star, *Sorting Things Out*

^{xi} Porter, *Trust in Numbers*; Reeves and Packer, “Police Media”

^{xii} Benbouzid, “To Predict and to Manage,” 11.

^{xiii} e.g. Ensign, Neville, and Scheidegger, “Runaway Feedback Loops”; Lum and Isaac, “To Predict and Serve?”; Richardson, Schultz, and Crawford, “Dirty Data, Bad Predictions”

^{xiv} Burrington; Pearsall

^{xv} Grossman et al., “The 50 Best Inventions”; Siegel, “How to Fight Bias with Predictive Policing,” 1.

^{xvi} Burch II and Geraci, “Data-Driven Approaches to Crime and Traffic Safety,” 34.

^{xvii} Ugwu-dike, “Digital Prediction Technologies in the Justice System”

^{xviii} Hälterlein; Hirschman and Bosk, “Standardizing Biases”

^{xix} Brayne

^{xx} McQuade, “World Histories of Big Data Policing,” 114.

^{xxi} Jefferson, *Digitize and Punish*, 9.

^{xxii} quoted in Laufer et al., “Four Years of FAccT” 410.

^{xxiii} Chun; Mayson, “Bias In, Bias Out”

^{xxiv} Scannell, “This Is Not Minority Report,” 108.

^{xxv} Lee, Musa, and Pinard, “Garbage in, Gospel out” 23.

^{xxvi} Lally, ““It Makes Almost No Difference Which Algorithm You Use”” 15.

^{xxvii} Minocher and Randall, “Predictable Policing”; Benjamin

^{xxviii} McQuade, 129.

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- xxix Simon, “Distributed Epistemic Responsibility” 145.
- xxx Simon, 146; Kroll, “Fallacy of Inscrutability”
- xxxi Rubel, Castro, and Pham, “Agency Laundering and Information Technologies,” 5.
- xxxii Richardson et al.; Ensign et al.
- xxxiii Jefferson, 123.
- xxxiv Nissenbaum, “Accountability in a Computerized Society.”
- xxxv “Collins et al. v. The City of Milwaukee et al., 81; “Milwaukee Police Chief Refutes Claims”
- xxxvi Loyd and Bonds, “Where Do Black Lives Matter”
- xxxvii Baym, *The Evolution of Broadcast News*, 52.
- xxxviii Campolo and Crawford, “Enchanted Determinism” 1.
- xxxix Angwin et al., “Machine Bias”; Barabas et al., “Studying up”
- xl Chun
- xli Ugwu-dike
- xlii Brayne and Christin, “Technologies of Crime Prediction”
- xliii Mohapatra and Kuo, “The Institutional Capture of Abolitionist Dissent”
- xliv Jefferson, 775; Minocher and Randall
- xlvi Brayne, 100.
- xlvi Weathington, “A CRITICAL STUDY OF GEOSPATIAL ALGORITHM USE”
- xlvi Hughes, “Technological Momentum,” 113.
- xlvi Jasanoff, “Future Imperfect” 4.
- lix “Final Report of The President’s Task Force on 21st Century Policing,” 2.
- ¹ Valeeva, Weihua, and Cagle, “Rifles, Tasers and Jails”
- ^{li} Joh, “The New Surveillance Discretion.”
- ^{lii} Harris, “Whiteness as Property.”
- ^{liii} Klein, “Screen New Deal” para 43.
- ^{liv} Lee, “The Rise of Technocracy and the COVID-19 Pandemic”
- ^{lv} Benjamin; Jefferson
- ^{lvi} e.g. Kaba, *We Do This 'Til We Free Us*.
- ^{lvii} Henne, “Framed and Framing Inquiry”
- ^{lviii} Gangadharan and Niklas, “Decentering technology in discourse”; Egbert and Mann, “Discrimination in Predictive Policing”; A major distinguishing factor appears to be that reframing does not necessitate “seeing through” the technology, and in fact, can re-center the technical system and its elements in important ways for a human rights-based discussion.
- ^{lix} <https://greenchairsnotgreenlights.org/>, para 1.
- ^{lx} <https://www.artsy.net/show/cantor-fitzgerald-gallery-haverford-college-observed-hypervisibility-and-reclamation>
- ^{lxi} <https://www.haverford.edu/center-arts-and-humanities/events/tools-of-restorative-practices>
- ^{lxii} Minocher, “Technological Drama of AI”; Pfaffenberger, “Technological Dramas”
- ^{lxiii} <https://aartmke.org/liberate-mke>
- ^{lxiv} <https://phillytechjustice.org/>; <https://safetywecanfeel.org/overview/>, para 4
- ^{lxv} Barabas, “Refusal in Data Ethics”; Benjamin “Informed Refusal”

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