

Editorial | Algorithmic Fetishism

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Abstract

Surveillance-infused forms of algorithmic discrimination are beginning to capture public and scholarly attention. While this is an encouraging development, this editorial questions the parameters of this emerging discussion and cautions against algorithmic fetishism. I characterize *algorithmic fetishism* as the pleasurable pursuit of opening the black box, discovering the code hidden inside, exploring its beauty and flaws, and explicating its intricacies. It is a technophilic desire for arcane knowledge that can never be grasped completely, so it continually lures one forward into technical realms while deferring the point of intervention. The editorial concludes with a review of the articles in this open issue.

In January 2018, New York City enacted a law—the first of its kind in the USA—aimed at curbing algorithmic discrimination (New York City Council 2018). The law will support the creation of a task force to survey the use of algorithms by city agencies, look for instances of discriminatory outcomes, and communicate those findings to the public (Kirchner 2017). These are clearly steps in the right direction, as the software processes that govern people’s lives and life chances are almost entirely black-boxed and propagating quickly; they are also prone to bias (Barocas and Selbst 2016; Noble 2018), as is the case with all sociotechnical systems.¹ The overlaps with the criminal justice system are especially troubling. For instance, judges depend increasingly on algorithmic predictors of recidivism—or “risk assessments”—when making decisions about sentencing or granting bail, yet those risk assessments have been shown to deliver significantly lower risk scores for white than for black defendants, even in the face of commonsense empirical evidence to the contrary (Angwin et al. 2016; Eubanks 2017). Such consequential scoring of individuals can manifest in just about any encounter individuals have with organizations, determining who gets financial credit, who gets a job, who is admitted to universities, who is given medical treatment, and so on (Gandy Jr. 2009; Richardson 2017). Surveillance studies scholars would rightly call these forms of social sorting (Lyon 2003), marginalizing surveillance (Monahan 2010), or racializing surveillance (Browne 2015), but what I want to trouble here is the reflexive reach for transparency—algorithmic or otherwise—as a solution.

In the case of algorithmic discrimination, as with so many other cases surrounding surveillance problems, transparency is heralded as a vital first step in correcting social injustices spawned by algorithmic decision

¹ It should also be pointed out that algorithms used by public agencies are barely the tip of the iceberg, as the systems operated by the private sector, especially those that constitute digital platforms such as Amazon, Google, or Facebook, are vast and radically reshaping social norms and functions, perhaps becoming markets or forms of governance in their own right (Pasquale 2017; Srnicek 2017).

making. As the ACLU declares, “Algorithms are not inherently evil. . . . But without transparency and a clear plan to address their flaws, they might do more harm than good” (Richardson 2017: n.p.). The logic is unsettling, though, because it does not exactly contest the integration of algorithmic systems into institutions or probe their infrastructural politics.² Instead, it suggests that any offending algorithm could be replaced with a more fair or just substitute, provided that we shed sufficient light on the code to properly identify—and fix—its flaws.

Just as proponents of new technological systems are disposed to fetishize them, I worry that scholars and civil society groups run a similar risk when calling for algorithmic transparency (e.g., ACM 2017; EPIC 2015). From an academic perspective, even a critical one, *algorithmic fetishism* manifests in the pleasurable pursuit of opening the black box, discovering the code hidden inside, exploring its beauty and flaws, and explicating its intricacies.³ It is a technophilic desire for arcane knowledge that can never be grasped completely, so it continually lures one forward into technical realms while deferring the point of intervention. Following from other critiques of transparency projects, it is essential to bear in mind transparency’s roots in scientific epistemic cultures that were from the start limiting and exclusionary (Ananny and Crawford 2016; Haraway 1997; Knorr-Cetina 1999). More than that, calls for transparency resonate strongly with modern scientific rationalities that invite surveillance, quantification, and data analysis as the basis for decision making (Giddens 1990; Porter 1995; Scott 1998). It is a call for surveillance as a corrective to surveillance, which is an iterative mode that never breaks the cycle even when it repeatedly fails to actualize progressive social change (Brucato 2015; Hetherington 2011).

While it is critical to open up the black box of algorithmic production, that will always be an insufficient response to the forms of discrimination engendered by them because algorithms cannot be separated from the context of their production and use. They do not act independent of social context, despite alarmist, deterministic narratives about their automated capacities. Racialized algorithmic violence, for instance, cannot be eradicated by tracing down the offending code and splicing it with an uncorrupted variant, as if the domain of computer code was or ever could be a pure dimension free from human prejudices and politics, as if “purity” were not an entirely bankrupt concept in the contemporary conjuncture. Clearly, the violence and prejudice of algorithms is, and always was, an extension of those qualities in societies. So, fetishizing algorithms, even from a critical position, risks sidelining the *harder* empirical, theoretical, and political work of tracing those links and creating a space for the emergence of more just alternatives.

Overview of Articles

Although the papers in this open issue are not about algorithms directly, they nicely demonstrate the strengths of surveillance studies to attend to the social and cultural contexts within which surveillance systems are deployed. They offer a counterpoint to the gravitational pull of algorithmic fetishism in a time when stories of data abuses by digital platforms (e.g., Facebook’s data sharing with Cambridge Analytica) dominate public attention.

In the first article in the issue, Christoph Musik (2018) illustrates how smart cameras are not only black-boxed but also discursively constructed as mystical entities whose functions defy conventional understanding. In emphasizing the agency of discrete artifacts like smart cameras, media outlets further occlude the wider sociotechnical systems that make such cameras operational, the norms enforced by the

² I am thinking here of the insight from science and technology studies (STS) that categories and classification schemes possess a politics by their very design, in their structure and institutionalization, regardless of—or in addition to—their content (Bowker and Star 1999). Making the content or code transparent, or even altering that content or code, would not necessarily transform the social orders produced by such systems.

³ Writing in a slightly different register, Kate Crawford (2016) also enjoins scholars to look “beyond algorithms as fetishized objects” (89) so that they could study the many actors involved in algorithm production and mediation.

systems, and especially the human agency and choices involved in designing, training, and maintaining the systems. In Musik's case, the technology under investigation is an automatic toll sticker detection system that has been deployed on Austrian highways. He reveals that the scant media attention given to the system emphasized economic gain and the enforcement of laws—casting it in a positive light—not the elements of the system that purportedly make it “smart.” Through a process of familiarization, the innovative aspects of the system are downplayed: it is just another camera, albeit a somewhat “smarter” one than previous generations. The effect, though, is inoculation against public concern, cultivating tacit consent to ubiquitous surveillance systems with obscure, polyvalent functions. Technological somnambulism, to invoke Langdon Winner's (1986) felicitous phrase, is not a natural state but rather one constantly, meticulously produced, even if unintentionally so.

Mark A. Wood and Chrissy Thompson's (2018) article on “crowdsourced countersurveillance” investigates roadway surveillance from another angle: that of citizens using publicly generated social-media data to circumvent police camera traps and random breath-testing stations in Australia. As the authors illustrate, social media sites do not simply collect and convey information; rather, they play a vital role in the construction of public perceptions of and reactions to state surveillance ceremonies. At the same time, I would add, the creation of such shared online archives falls into the register of *digital positivism*. The amassing of visual photographic evidence, geotagged maps, and timestamps conveys an aura of robust empirical truth claims. These modes of engagement sidestep questions about the politics or indeterminacy of such positivistic representational practices. In other words, in this instance, countersurveillance efforts seek to combat the knowledge claims of the police (e.g., about speeding or intoxication) with alternative knowledge claims (e.g., about police locations) without pausing to reflect on the epistemological underpinnings or systemic outcomes of these evidentiary practices. Data imperatives and platform monopolies prevail, with all parties—even antagonistically positioned ones—contributing to their reproduction.

At the same time, as Mike Zajko (2018) asserts in his article, there are fundamental tensions between the security objectives of different institutions and institutional actors. Intelligence agencies (e.g., NSA, GCHQ) generally seek to undermine security protections, while information technology (IT) security providers attempt to thwart such efforts. These insights are important in making sense of the wider ecology of national security. Seamless public-private partnerships may be a strategic intelligence goal (Regan, Monahan, and Craven 2015; Ball et al. 2015), but mission conflicts persist and can generate disjunctures that point toward both resistance possibilities *and* limitations. As Zajko posits: “IT security has become a means of resistance . . . [but] resistance should be a means to an end” (47-48). Privacy-enhancing technologies and encryption efforts will always be insufficient without altering the political conditions that frame security imperatives in zero-sum terms, where the destabilization of others is perceived as necessary for self-protection.

Josh A. Hendrix and his colleagues (2018) draw upon multiple quantitative datasets to argue that racial asymmetries between police departments and communities are an important factor in police adoption of surveillance systems. When mostly white police departments do not demographically represent the communities they serve, they are more likely to view racial minorities as dangerous outsiders in need of additional scrutiny. Thus, perceived social distance may be more important than policing objectives, crime rates, or budgets in determining the use of surveillance. As I would add, whether the surveillance systems are algorithmically driven or not, police perspectives on the need for such surveillance systems are infused with biases that motivate their adoption and guide their application. This empirically grounded article traces the outlines of such patterns and uncovers some of the likely reasons for them.

In his piece on compulsory identification cards for Italian football (soccer) fans, Alberto Testa (2018) questions the implications of new state surveillance systems intended to prevent hooliganism in and around sporting events. Whereas there may be strong public safety rationales for excluding populations

deemed potentially dangerous, Testa argues that identity card schemes contribute to larger patterns in state governance regimes founded on legal exception. Fan identification cards may be normalized if symbolically associated with commercial loyalty cards, yet they require fans to submit to another layer of state surveillance operating on a quasi-legal parallel track. For Testa, the very fact of a system that requires one to furnish his or her papers (or cards) to authorities upon demand should disquiet anyone concerned about civil liberties and freedom.

In the final article in this issue, Jeesan Gazi (2018) performs a close reading of the 1998 experimental Japanese film *Love & Pop*. Shot with many digital cameras from a variety of angles (e.g., upskirt shots), this film—directed by Hideaki Anno—follows a Japanese schoolgirl engaging in disturbing encounters of “compensated dating” with older men. For Gazi, the film provides an early depiction of the kinds of self-surveillance that characterize social media use today, particularly for women and girls who might internalize an awareness of the constant threat of being objectified. As Gazi writes, “the attempt to curate one’s virtual self depends on a self-management informed by paranoia” (97). Although I am not convinced that the film resists being read as an enactment of the misogynistic male gaze, as Gazi suggests, it can direct our attention and critiques to the formation and negotiation of gendered subjectivities in social-media saturated environments.

References

- ACM. 2017. Statement on Algorithmic Transparency and Accountability. *ACM US Public Policy Council*, May 25. Available from https://http://www.acm.org/binaries/content/assets/public-policy/2017_joint_statement_algorithms.pdf [accessed March 29, 2018].
- Ananny, Mike, and Kate Crawford. 2016. Seeing without knowing: Limitations of the transparency ideal and its application to algorithmic accountability. *New Media & Society* 20 (3):973-989
- Angwin, Julia, Jeff Larson, Surya Mattu, and Lauren Kirchner. 2016. Machine Bias. *ProPublica*, May 23. Available from <https://http://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing> [accessed March 29, 2018].
- Ball, Kirstie, Ana Canhoto, Elizabeth Daniel, Sally Dibb, Maureen Meadows, and Keith Spiller. 2015. *The Private Security State?: Surveillance, Consumer data and the War on Terror*. Copenhagen: Copenhagen Business School Press.
- Barocas, Solon, and Andrew D. Selbst. 2016. Big Data’s Disparate Impact. *California Law Review* 104 (3):671-732
- Bowker, Geoffrey C., and Susan Leigh Star. 1999. *Sorting Things Out: Classification and its Consequences*. Cambridge, MA: MIT Press.
- Browne, Simone. 2015. *Dark matters: On the surveillance of blackness*. Durham: Duke University Press.
- Brucato, Ben. 2015. The New Transparency: Police Violence in the Context of Ubiquitous Surveillance. *Media and Communication* 3 (3):39-55
- Crawford, Kate. 2016. Can an algorithm be agonistic? Ten scenes from life in calculated publics. *Science, Technology & Human Values* 41 (1):77-92
- EPIC. 2015. Algorithmic Transparency: End Secret Profiling. *Electronic Privacy Information Center*, February 25. Available from <https://http://www.epic.org/algorithmic-transparency/> [accessed March 29, 2018].
- Eubanks, Virginia. 2017. *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor*. New York: St. Martin's Press.
- Gandy Jr., Oscar H. 2009. *Coming to Terms with Chance: Engaging Rational Discrimination and Cumulative Disadvantage*. Burlington, VT: Ashgate.
- Gazi, Jeesan. 2018. Soiveillance: Self-Consciousness and the Social Network in Hideaki Anno’s *Love & Pop*. *Surveillance & Society* 16 (1):84-111.
- Giddens, Anthony. 1990. *The Consequences of Modernity*. Stanford, Calif.: Stanford University Press.
- Haraway, Donna J. 1997. *Modest_Witness@Second_Millennium.FemaleMan_Meets_OncoMouse: Feminism and Technoscience*. New York: Routledge.
- Hendrix, Josh A., Travis A. Taniguchi, Kevin J. Strom, Kelle Barrick, and Nicole J. Johnson. 2018. The Eyes of Law Enforcement in the New Panopticon: Police-Community Racial Asymmetry and the Use of Surveillance Technology. *Surveillance & Society* 16 (1):53-68.
- Hetherington, Gregg. 2011. *Guerrilla auditors: the politics of transparency in neoliberal Paraguay*. Durham, NC: Duke University Press.
- Kirchner, Lauren. 2017. New York City moves to create accountability for algorithms. *Ars Technica*, December 19. Available from <https://arstechnica.com/tech-policy/2017/12/new-york-city-moves-to-create-accountability-for-algorithms/> [accessed March 29, 2018].

- Knorr-Cetina, K. 1999. *Epistemic Cultures: How the Sciences Make Knowledge*. Cambridge, Mass.: Harvard University Press.
- Lyon, David, ed. 2003. *Surveillance as Social Sorting: Privacy, Risk, and Digital Discrimination*. New York: Routledge.
- Monahan, Torin. 2010. *Surveillance in the Time of Insecurity*. New Brunswick: Rutgers University Press.
- Musik, Christoph. 2018. It's the Camera! A Special One: The Smartboxing of Image Processing Algorithms and their Uncertainties in Media Representations of Surveillance Technology. *Surveillance & Society* 16 (1):6-19.
- New York City Council. 2018. Automated decision systems used by agencies. *Legislative Research Center*, January 11. Available from <http://legistar.council.nyc.gov/LegislationDetail.aspx?ID=3137815&GUID=437A6A6D-62E1-47E2-9C42-461253F9C6D0> [accessed March 29, 2018].
- Noble, Safiya Umoja. 2018. *Algorithms of Oppression: How Search Engines Reinforce Racism*. New York: New York University Press.
- Pasquale, Frank. 2017. From Territorial to Functional Sovereignty: The Case of Amazon. *Law and Political Economy*, December 6. Available from <https://lpeblog.org/2017/12/06/from-territorial-to-functional-sovereignty-the-case-of-amazon/> [accessed January 5, 2018].
- Porter, Theodore M. 1995. *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*. Princeton, NJ: Princeton University Press.
- Regan, Priscilla M., Torin Monahan, and Krista Craven. 2015. Constructing the Suspicious: Data Production, Circulation, and Interpretation by DHS Fusion Centers. *Administration & Society* 47 (6):740-762
- Richardson, Rashida. 2017. New York City Takes on Algorithmic Discrimination. *American Civil Liberties Union*, December 12. Available from <https://http://www.aclu.org/blog/privacy-technology/surveillance-technologies/new-york-city-takes-algorithmic-discrimination> [accessed March 29, 2018].
- Scott, James C. 1998. *Seeing Like a State: How Certain Schemes to Improve the Human Condition have Failed*. New Haven: Yale University Press.
- Srnicek, Nick. 2017. *Platform Capitalism*. Malden, MA: Polity.
- Testa, Alberto. 2018. The All-Seeing Eye of State Surveillance in the Italian Football (Soccer) Terraces: The Case Study of the Football Fan Card. *Surveillance & Society* 16 (1):69-83.
- Winner, Langdon. 1986. *The Whale and the Reactor: A Search for Limits in an Age of High Technology*. Chicago: University of Chicago Press.
- Wood, Mark A., and Chrissy Thompson. 2018. Crowdsourced Countersurveillance: A Countersurveillance Assemblage? *Surveillance & Society* 16 (1):20-38.
- Zajko, Mike. 2018. Security against Surveillance: IT Security as Resistance to Pervasive Surveillance. *Surveillance & Society* 16 (1):39-52.