



**Intervention Symposium – Algorithmic Governance
Organised by Jeremy Crampton and Andrea Miller**

Data-Driven or Data-Justified?

Emily Kaufman
University of Kentucky
emily.kaufman@uky.edu

The FBI investigation of Hilary Clinton’s emails, her choice to plead technological incompetence, and the success of that strategy bring to light several questions relevant to any case of technological securitization gone wrong: is ineptitude by government officials or departments preferable to calculated illegality? If the effects are the same, does it matter whether the breach was caused by intelligence or lack thereof? And what are the consequences of these competing discourses themselves? These questions, basic to any consideration of algorithmic governance, arise with particular force when we examine police profiling programs and technologies.

In 2011, at the height of the Stop-and-Frisk epidemic in New York City, I began fieldwork in two Brooklyn neighborhoods, Brownsville and East New York, which housed a pilot program called Operation Impact, concentrating police in areas perceived as particularly difficult to control. Though I began with a focus on overt racial profiling, I found instead a constellation of profiling tactics and technologies that could not be analyzed independently. Thus I developed the analytic I call bio-spatial profiling,¹ which highlights the symbiotic relationships

¹ Biospatial profiling builds upon and shifts the focus from Ronen Shamir’s (2005) biosocial profiling; for more, see Kaufman (2016).

between biometric, biopolitical, and spatial profiling tactics, illuminates the lived experience of those subjected to a constellation of profiling metrics, and opens space for understanding the immobilizing fear this kind of policing creates in the so-called Impact Zones. Race is not listed separately as a profiling metric because it is implicated in each of the others and strategically hidden behind those more acceptable metrics.

Bio-spatial profiling relies first of all on biometric profiling, which takes two forms. One is *physiological* (e.g. fingerprints, palm, iris, retina, and face scans) and takes place not only in prisons and precinct offices but also on the street. For example, in 2010, the NYPD began deploying handheld fingerprint scanners and gave each officer a scanner in 2015. The other is *behavioral*, relying on indirect measurements of bodily characteristics (e.g. voice, keystroke, and signature scans), which require neither consent nor even awareness from the subject. In Impact Zones, a common behavioral biometric is to eyeball a person's movement and label it suspicious or not, a judgement preserved in the record of the stop; in fact, the most common reason given for police stops in New York is "furtive movement".

Bio-spatial profiling also relies on spatial profiling, or the designation of blocks and neighborhoods as difficult to control. In New York, this is encompassed mainly by crime mapping using CompStat, a crime-report database introduced in 1994 and housed since 2005 in an elaborate "Real Time Crime Center" equipped with an integrated data management and data mining system designed to aid in the "rapid algorithmic analytics of emergent crime scenes" (Orr 2013). Much of the data that feeds the databank derives from the records of police street stops; whether or not suspects are charged with a crime, their data is fed back into the system and used to determine spatial strategies such as Impact Zones. Thus the stop becomes the co-constitutive embodied encounter of profiling technology and daily life. In turn, this spatial data fuels the technocratic feedback loop (Kaufman 2016:77).

The lived experience of bio-spatial profiling, as my fieldwork reveals, is one of everyday mobilities policed through fear. Respondents spoke of having to keep moving to avoid loitering regulations, giving up cycling or driving due to repeated police harassment, changing what they wore in public so as not to trigger police suspicion. At times, bio-spatial profiling even determined whether or not participants reached their destinations: children commuting to school late were picked up for truancy, a father was prevented from picking up a prescription for his sick daughter when police ticketed him for riding his bike the wrong way, and a grandmother reported not to go outside much anymore, to avoid the hassle of dealing with the police. Participants felt that these constraints were racialized, a conclusion fully supported by the data on Stop-and-Frisk (CCR 2012).

Bio-spatial profiling is a form of algorithmic governance: algorithms are written into biometric data gathering, storage, and transportation, as well as the crime mapping that determines Impact Zones. But what is the algorithm's role, exactly? Moreover, what work does it do to imbue this ever-shifting mess of profiling metrics, tactics, and technologies with the orderly technocratic connotations of algorithmic governance? In doing so, do I reify the NYPD's claim to data-driven precision? A decade ago, Louise Amoore (2006:338) warned against allowing our critiques of biopolitical systems to "inadvertently reproduce the certainties and assurances of the technical matrix that has become the mainstay of the homeland security programmes". The dangers of such a slippage are clear: "the place of science and technology in fighting the war on terror"—or the war on the poor, on drugs, or on crime—"is ever more secured if we overstate the coherence of the grip it has on life itself" (ibid.). Yes, police officers prowl the streets foraging for biometric data. They store it, send it flying across borders and devices, visualize it in crime maps, throw up code-reliant technologies like mobile surveillance stations and cameras affixed to public housing, turning whole neighborhoods into coded spaces (Kitchin and Dodge 2011:18). But what coherence, what certainty, do the resulting data give?

Whether a flaw in data gathering, storage, or analysis, or in the algorithms themselves, something is not adding up. For one thing, the Stop-and-Frisk database has been paper-based since 2010,² filed in local precincts, and possibly written on by typewriters (Durkin 2015). The nominal privacy protections that typewriters and paper-filing lend do not ameliorate the violence of the street stop. In a department-wide memo, then-commissioner Ray Kelly (quoted in Del Signore 2010) expressed his desire to keep it: “The law does not affect an officer’s ability to collect identification information at the scene of a street encounter.” Thus paper-filing and typewriters may do little to protect civilians from government overreach, but they do call into question the NYPD’s efficacy at fighting crime.

The NYPD’s data gathering practices comprise an even less efficient use of government resources. Quantitatively, Stop-and-Frisk is an embarrassment. Its hit-rate—the number of stops in which an officer makes an arrest, issues a summons, or finds contraband—is low: between 2009 and 2012, only about 6% of stops resulted in arrest. The percentage is even lower for Black “suspects”; on average it took police 142 stops to make one seizure of illicit goods, while they only stopped 27 White “suspects” per seizure. Ignore for a moment your well-founded suspicions of racial bias and assess the program by its own standards: bio-spatial profiling algorithms appear somewhat inefficient when dealing with White suspects, but they fall apart when encountering a Black New Yorker.

Crucially, it was this statistical imprecision that decided the federal class action lawsuit against New York’s Stop-and-Frisk in 2013. The case alleged that Stop-and-Frisk was *statistically unreasonable*, thereby violating New Yorkers’ Fourth Amendment rights against *unreasonable* stop and seizure, and their Fourteenth Amendment rights to equal protection under the law. In keeping with the court’s findings, my participants experienced policing as inaccurate, unpredictable, and nonsensical. They laughed at some aspects, like routine stops and searches of

² Governor Patterson signed legislation responding to privacy concerns over the swelling records of largely Black and Latino subjects (Del Signore 2010).

their bags walking out of a bodega: “What they think I’m a buy drugs at the store? Like ‘yo, can I have a soda and some crack?’.” The same participant explained: “if you’re Black you get stopped; it’s just that simple.” That *sounds* like a fairly straightforward algorithm; that’s the Boolean logic of “if X, then Y” that defines an algorithm. But it isn’t a logical *crime* algorithm, as the low hit-rates make abundantly clear. Furthermore, participants often experience bio-spatial profiling as random, describing police logic as: “You’re just standing there at the time, why not mess with you?” As far as algorithms go, this one can lead to more stops in less time, which is an efficient way to gather a random sample but not to detect criminality. Finally, one resident said: “No matter how you look, how old you are, they just stop you. I don’t understand it. I never understood that. We’re not doing anything, why would you just run up and jump out?” Algorithmically, this style of policing would be expressed as “if A, B, C, D, etc., then Z.” This algorithm is not only dysfunctional but also expends a great deal of police resources. Meanwhile, far from critiquing the datafication of policing, some residents were calling on police to let data, not convenience, fear, or bias, drive their policing—to make use of the department’s purported technological prowess and get better at preventing crime.

Thus this intervention has mapped both my “way in” to questions of algorithmic governance—though years of writing about the NYPD’s sinister, black-boxed, data-driven, tech-savvy profiling, as well as my way *out* of such discourse. It is time to reveal biometric technology’s claim to objective accuracy as no more than “political obfuscation and myth” (Graham 2011:128), which “serves to categorize bodies with a dangerous discriminatory logic” (Murray 2007:359). To reveal that much like social reproduction, algorithmic governance too is both “a set of structured practices” *and* “the fleshy, messy, and indeterminate stuff of everyday life” (Katz 2001:711). This is not to anthropomorphize the algorithm but to acknowledge that its interactions with human bodies constitute the input and output; algorithms are themselves “embodied and haptic in their relations with humans”. I heed Amoore’s (2016) advice to “take

with us in our research on algorithms a sense of the limits of calculability and computability. We should be attentive to worlds of doubt, and difficulty and uncertainty that dwell within the algorithm itself”. We should recognize algorithmic governance’s non-digital side, from paper filing systems to mental calculations, while being careful to resist equating non-digital with non-threatening. Finally, we must recognize that many of the linchpins of algorithmic governance are simply not new. Much contemporary securitization of risk has roots in World War II rationing accounting (Amoore 2013:35), with sovereign data gathering dating back to the Roman Census. And just as risk-profiling is not new, neither is government surveillance, “either in the sense of digital surveillance ... or of the old fashioned panopticon”—rather it can be seen as part of a longstanding governmental rationality (Crampton 2003:140).

Often such calls as mine to “reveal” use the black-box metaphor. I wonder if, in this case, the black-box reifies the idea of data-driven calculations inside, when it may be that bio-spatial profiling is not so much data-driven as data-justified. Perhaps a point of contestation could be to recognize it as such, to see bio-spatial profiling less as a set of logical, data-driven algorithms hiding in a black box, and more as something absurd, nonrational, and insecure hiding behind a screen of algorithmic precision.

References

- Amoore L (2006) Biometric borders: Governing mobilities in the war on terror. *Political Geography* 25:336-351
- Amoore L (2013) *The Politics of Possibility: Risk and Security Beyond Probability*. Durham: Duke University Press
- Amoore L (2016) Panel Session, “Algorithmic Governance”, Annual Meeting of the American Association of Geographers, San Francisco



- CCR (2012) *Stop and Frisk: The Human Impact*. New York: Center for Constitutional Rights
- Crampton J (2003) *The Political Mapping of Cyberspace*. Chicago: University of Chicago Press
- Del Signore J (2010) NYPD Chief: Let us at least keep Stop 'n' Frisk data for one year.
Gothamist 13 July
http://gothamist.com/2010/07/13/nypd_chief_let_us_at_least_keep_sto.php (last accessed 2 May 2017)
- Durkin E (2015) NYPD still uses typewriters, but City Councilman proposes bill to switch to computers. *New York Daily News* 25 February <http://www.nydailynews.com/new-york/councilman-nypd-scrap-typewriters-article-1.2129481> (last accessed 2 May 2017)
- Graham S (2011) *Cities Under Siege: The New Military Urbanism*. London: Verso
- Katz C (2001) Vagabond capitalism and the necessity of social reproduction. *Antipode* 33(4):709-728
- Kaufman E (2016) Policing mobilities through bio-spatial profiling in New York City. *Political Geography* 55:72-81
- Kitchin R and Dodge M (2011) *Code/Space: Software and Everyday Life*. Cambridge: MIT Press
- Murray H (2007) Monstrous play in negative spaces: Illegible bodies and the cultural construction of biometric technology. *The Communications Review* 10(4):347-365
- Orr J (2013) A possible history of oblivion. *Social Text Periscope* 17 June
https://socialtextjournal.org/periscope_article/a-possible-history-of-oblivion/ (last accessed 2 May 2017)
- Shamir R (2005) Without borders? Notes on globalization as a mobility regime. *Sociological Theory* 23(2):197-213