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## From the Legal Literature: Automating Police

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# From the Legal Literature

Francesca Laguardia\*

## AUTOMATING POLICE

### I. INTRODUCTION

The movement to defund police has gained new momentum in the wakes of the killings of George Floyd and Breonna Taylor.<sup>1</sup> While some activists focus only on reducing funding for and corresponding uses of police forces,<sup>2</sup> others suggest fully abolishing police and building something entirely new.<sup>3</sup> At a minimum, however, the movement calls for a reduction in spending on police departments, investment in social programs and resources that reduce crime, reducing the role of police and replacing them (in many situations) with social workers and community involvement, and reducing spending on military equipment for police forces.<sup>4</sup>

Opposition to this call tends to focus on the risk of increased crime if police budgets are cut and there are fewer police on the street.<sup>5</sup> Police officers and others argue that increased police presence is responsible for decreases in crime rates, which will reverse

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<sup>1</sup>E.g., Rashawn Ray, *What Does 'Defund the Police' Mean and Does It Have Merit?* BROOKINGS (June 19, 2020), <https://www.brookings.edu/blog/fixgov/2020/06/19/what-does-defund-the-police-mean-and-does-it-have-merit/>; Patrick Sharkey, *Why Do We Need the Police?*, WASH. POST (June 12, 2020), <https://www.washingtonpost.com/outlook/2020/06/12/defund-police-violent-crime/>; Taylor Miller Thomas & Beatrice Jin, *As U.S. Crime Rates Dropped, Local Police Spending* <https://www.politico.com/interactives/2020/police-budget-spending-george-floyd-defund/>.

<sup>2</sup>E.g., Ray, *supra* note 1; Zachary Siegel, *'Starve the Beast': A Q&A With Alex S. Vitale on Defunding the Police*, NATION (June 4, 2020), <https://www.thenation.com/article/society/alex-vitale-defund-police-interview/>.

<sup>3</sup>Ruairi Arrieta-Kenna, *The Deep Roots—and New Offshoots—of 'Abolish the Police'* POLITICO (June 12, 2020, 7:30 PM), <https://www.politico.com/news/magazine/2020/06/12/abolish-defund-police-explainer-316185>; Sean Illing, *The 'Abolish the Police' Movement, Explained By 7 Scholars and Activists*, VOX (June 12, 2020, 11:00 AM), <https://www.vox.com/policy-and-politics/2020/6/12/21283813/george-floyd-blm-abolish-the-police-8cantwait-minneapolis>; Mariame Kaba, *Yes, We Mean Literally Abolish the Police*, N.Y. TIMES (June 12, 2020), <https://www.nytimes.com/2020/06/12/opinion/sunday/floyd-abolish-defund-police.html>.

<sup>4</sup>E.g., Ray, *supra* note 1; Sharkey, *supra* note 1; Siegel, *supra* note 2.

<sup>5</sup>E.g., Sharkey, *supra* note 1.

if police departments are defunded.<sup>6</sup> There has been a consistent stream of research supporting this idea,<sup>7</sup> although the issue is far from settled.<sup>8</sup>

But even if it is true that police presence deters crime, there remains the question of whether it must be police that are present, as opposed to community representatives, cameras, or other forms of technology. The impact of increased police officers appears to be a deterrent effect associated with increased certainty of arrest.<sup>9</sup> This suggests that automated measures—such as surveillance cameras, red light cameras, and other digital policing methods—may lessen

<sup>6</sup>E.g., Joshua Rosario, *Jersey City Officials Balk at Concept of Defunding the Police*, THE JERSEY J. (June 9, 2020), <https://www.nj.com/hudson/2020/06/as-calls-to-defund-police-departments-ramp-up-jersey-city-officials.html> (quoting Jersey City Mayor Steve Fulop, “I would highlight the fact that we have seen historic decreases in crime because we invested in young officers that live in the community and reflect the diversity of the community”); Wall St. J. Ed. Bd., *Defund Police, Watch Crime Return*, WALL ST. J. (June 8, 2020), <https://www.wsj.com/articles/defund-police-watch-crime-return-11591658454>.

<sup>7</sup>DON STEMEN, RECONSIDERING INCARCERATION: NEW DIRECTIONS FOR REDUCING CRIME 10 (2007) (summarizing literature); Steven D. Levitt, *Using Electoral Cycles in Police Hiring to Estimate the Effects of Police on Crime*, 87 AM. ECON. REV. 270 (1997) (finding a 10% increase in the size of a city’s police force resulted in an 11% reduction in violent crime and a 3% reduction in property crime); Thomas Marvel & Carlisle Moody, *Specification Problems, Police Levels, and Crime Rates*, 34 CRIMINOLOGY 609 (1996) (finding a 10% increase in the size of a city’s police force resulted in a 3% reduction in index crime rates); Steven Mello, *More Cops Less Crime* 172 J. OF PUB. ECON. 174 (2019) (finding “[e]ach additional police officer prevented 4 violent crimes and 15 property crimes”); Jihong Solomon Zhao, Matthew C. Scheider & Quint Thurman, *Funding Community Policing to Reduce Crime: Have COPS Grants Made a Difference?*, 2 CRIMINOLOGY & PUB. POL’Y 7 (2002–2003) (finding that each dollar in hiring grants resulted in a reduction of more than five violent crimes and twenty-one property crimes per 100,000 residents).

<sup>8</sup>E.g., John Eck & Edward Maguire, *Have Changes in Policing Reduced Violent Crime?: An Assessment of the Evidence*, in THE CRIME DROP IN AMERICA 207 (Alfred Blumstein & Joel Wallman eds., 2000); JUST. POL’Y INST., RETHINKING THE BLUES: HOW WE POLICE IN THE U.S. AND AT WHAT COST 16–20 (2012), [http://www.justicepolicy.org/uploads/justicepolicy/documents/rethinkingtheblues\\_final.pdf](http://www.justicepolicy.org/uploads/justicepolicy/documents/rethinkingtheblues_final.pdf) (noting that crime declines often began prior to funding increases, that several studies that have found no association between grants and crime reduction, and that states with smaller police budgets do not necessarily have less crime) [hereinafter “JPI, RETHINKING”]; John Worrall & Tomislav V. Kovandzic, *COPS Grants and Crime Revisited*, 45 CRIMINOLOGY 159 (2007) (reanalyzing prior data to find that grants had no effect on crime rates); see also Anthony A. Braga, *Crime and Policing Revisited*, NEW PERSPECTIVES IN POLICING BULL. (Harv. Kennedy Sch. Gov’t & Nat’l Inst. Just.), Sept. 2015, at 9, <https://www.ncjrs.gov/pdffiles1/nij/248888.pdf>.

<sup>9</sup>Raymond Paternoster, *How Much Do We Really Know about Criminal Deterrence*, 100 J. CRIM. L. & CRIMINOLOGY 765, 789–94 (2010).

the need for police interaction; indeed, calls to replace police presence with digital substitutes have been appearing for several years.<sup>10</sup>

In the renewed push to decrease the number of social functions performed by police (in order to limit police interactions that might turn violent), the question of automating policing intensifies. In June, for example, the Los Angeles City Council heard a proposal to automate traffic enforcement in order to reduce unnecessary (and often biased) interactions between police and the public.<sup>11</sup> Additionally, proponents for defunding police regularly point to Camden, New Jersey, as a model for the positive results that severe limiting of police functions can have.<sup>12</sup> Notably, Camden's policing innovations largely relied on automating police functions.<sup>13</sup>

But the size of the digital surveillance apparatus created to reduce interactions with police in Camden has led to criticisms and resent-

<sup>10</sup>E.g., Bennett Capers, *Crime, Surveillance, and Communities*, 40 FORDHAM URB. L.J. 959 (2012–2013); Nancy G. La Vigne, Samantha S. Lowry, Joshua A. Markman, & Allison M. Dwyer, *Evaluating the Use of Public Surveillance Cameras for Crime Control and Prevention—A Summary*, JUST. POL.'S CTR. BRIEF (Urban Inst.), Sept. 2011, <https://www.urban.org/sites/default/files/publication/27546/412401-Evaluating-the-Use-of-Public-Surveillance-Cameras-for-Crime-Control-and-Prevention-A-Summary.PDF>; see also Conor Friedersdorf, *End Needless Interactions With Police Officers During Traffic Stops*, ATLANTIC (July 8, 2016), <https://www.theatlantic.com/politics/archive/2016/07/end-needless-interaction-with-cops-during-traffic-stops/490412/>.

<sup>11</sup>David Graham-Caso, *Los Angeles Council Tackles “Driving While Black,”* SANTA MONICA DAILY PRESS (Jul. 04, 2020), <https://www.smdp.com/los-angeles-council-tackles-driving-while-black/193824>; Indeed, the Chief of Police for Lansing, Michigan, recently sent out an internal memo stating that police officers should not stop drivers for “regulatory violations such as, cracked windshields, loud exhaust, inoperable license plate lamp, cracked taillights, dangling ornaments, and window treatments” in an attempt to “eliminat[e] any aspect, inferred or otherwise, of bias-based traffic policing practices.” Memorandum from Chief of Police Daryl Green on New Guidelines for Traffic Stops 1 (July 1 2020), <https://www.lansingmi.gov/DocumentCenter/View/10271/New-Traffic-Stop-Guidelines->.

<sup>12</sup>E.g., Chris Megerian, *Disband the Police? Camden Already Did That*, L.A. TIMES (June 10, 2020), <https://www.latimes.com/politics/story/2020-06-10/disband-the-police-camden-already-did-that>; James Doubek, *Former Chief of Reformed Camden, N.J., Force: Police Need ‘Consent of the People’*, NPR.ORG (June 8, 2020, 7:21 PM), <https://www.npr.org/sections/live-updates-protests-for-racial-justice/2020/06/08/872416644/former-chief-of-reformed-camden-n-j-force-police-need-consent-of-the-people>; Khaleda Rahman, *Minneapolis Is Not the First City to Disband Its Police Department—the Lessons Learned From Camden, New Jersey*, NEWSWEEK (June 8, 2020), <https://www.newsweek.com/minneapolis-not-first-disband-police-department-1509327>; Ray, *supra* note 1.

<sup>13</sup>Brendan McQuade, *The “Camden Model” Is Not a Model. It’s an Obstacle to Real Change*. JACOBIN MAG. (July 4, 2020), <https://jacobinmag.com/2020/07/camden-new-jersey-police-reform-surveillance> [hereinafter “McQuade, JACOBIN”]; Brendan McQuade, *The Camden Police Department Is Not a Model for Policing in the Post-George Floyd Era*, THE APPEAL (June 12, 2020), <https://theappeal.org/camden-police-george-floyd/> [hereinafter “McQuade, THE APPEAL”].

ment from residents.<sup>14</sup> The digital developments Camden relied on included “121 cameras that monitor the entire city; 35 ShotSpotter microphones to detect gunshots; automated scanners that read license plates; and SkyPatrol, a mobile observation post that can scan six square blocks with thermal-imaging equipment.”<sup>15</sup> Critics suggest that such developments lead to residents feeling “they are more ‘watched’ than protected by the police,” and that an inability to fight automated tickets and other sanctions undermines residents’ feeling that the system is fair or legitimate.<sup>16</sup>

In this manner, digital policing methods subtly but ominously hang over the debate on defunding police and reducing their physical presence in communities. As in all industries, automation is a popular method by which to respond to budget deficits (as might exist if police are defunded).<sup>17</sup> The simultaneous push to reduce funding and reduce police contact easily lends itself to increases in digital policing methods, as well as the criticisms attendant to them such as those now present in Camden. Yet, despite the increasing prevalence and intensity of automation in modern policing, and despite its hovering like a sword of Damocles over the head of the defunding debate, the implications of automating policing have received relatively little attention.<sup>18</sup>

Elizabeth Joh, Professor at U.C. Davis School of Law, has stepped in to begin closing this gap.<sup>19</sup> In her article, *The Consequences of Automating and Deskilling the Police*, she highlights the seep of automation into policing and some of the ramifications of that progress.<sup>20</sup> She primarily focuses on the ramifications to police of-

<sup>14</sup>JPI, RETHINKING, *supra* note 8, at 30–32; McQuade, JACOBIN, *supra* note 13; McQuade, THE APPEAL, *supra* note 13; Megerian, *supra* note 11.

<sup>15</sup>McQuade, THE APPEAL, *supra* note 13.

<sup>16</sup>JPI, RETHINKING, *supra* note 8, at 30, 32.

<sup>17</sup>Elizabeth Joh, *The Consequences of Automating and Deskilling the Police*, 67 UCLA L. REV. DISCOURSE 133, 156 (2019) (“Technological solutions have looked increasingly more attractive as ‘force multipliers’ to police administrators faced with layoffs and cutbacks.”).

<sup>18</sup>*But see* Elizabeth Joh, *Automated Seizures: Police Stops of Self-Driving Cars*, 94 N.Y.U. L. REV. ONLINE 113 (2019); Elizabeth Joh, *Automated Policing*, 15 OHIO ST. J. CRIM. L. 559 (2018). *See also* ANDREW G. FERGUSEN, THE RISE OF BIG DATA POLICING: SURVEILLANCE, RACE, AND THE FUTURE OF LAW ENFORCEMENT (2018); Richard Silbergliitt, et al., VISIONS OF LAW ENFORCEMENT TECHNOLOGY IN THE PERIOD 2024–2034: REPORT OF THE LAW ENFORCEMENT FUTURING WORKSHOP (2015), <https://www.ncjrs.gov/pdffiles1/nij/grants/248718.pdf>; Nicky Woolf, *RoboCop Is Real — and Could Be Patrolling a Mall Near You*, GUARDIAN (May 20, 2016), <https://www.theguardian.com/us-news/2016/may/20/robocop-robot-mall-security-guard-palo-alto-california>.

<sup>19</sup>Joh, *supra* note 17.

<sup>20</sup>Joh, *supra* note 17, at 140–46.

ficers' skill sets,<sup>21</sup> as well as the implications for the deference police officers receive in criminal procedure doctrine.<sup>22</sup> She only briefly touches on the implications of changing the social relationship between police and communities.<sup>23</sup> Written well before the murder of George Floyd and the protests that ensued, Joh's description of these changes is almost wholly negative. In the current context readers must ask—are there also positive aspects to these changes that have been ignored up until this point?

**II. ELIZABETH JOH, THE CONSEQUENCES OF AUTOMATING AND DESKILLING THE POLICE, 67 UCLA L. REV. DISCOURSE 133 (2019).**

Joh begins by clarifying and highlighting the areas in which policing is likely to be replaced by automation.<sup>24</sup> As she points out,

most police patrol is . . . trivial, noncriminal, and boring. The average police officer rarely fires his gun. Arrests are infrequent. [Most police work involves] directing traffic, responding to accidents, resolving disputes with non-legal methods, addressing matters of homelessness and mental illness, and sometimes just driving around.<sup>25</sup>

These tasks lend themselves to automation through options such as automatic license plate readers and even robot security guards which currently “record information and relay possible threats,” but may soon carry electric shock weapons and options such as “weapons detection [and] facial recognition technology.”<sup>26</sup> Police involvement in traffic stops and traffic accidents may no longer be necessary once self-driving cars are in use.<sup>27</sup> In fact, self-driving cars may cut down police work by transporting arrestees and even “testing . . . for alcohol or drugs, scanning for weapons, conducting records checks for outstanding warrants, reading the arrestee *Miranda* rights, and even arranging for defense attorneys, arraignments, and bail payments.”<sup>28</sup> Most ticketing for traffic offenses can likely be completed through cameras, license plate readers, and automatic billing.<sup>29</sup> And corporations are already exploring the pos-

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<sup>21</sup>Joh, *supra* note 17, at 146–48.

<sup>22</sup>Joh, *supra* note 17, at 149–53.

<sup>23</sup>Joh, *supra* note 17, at 159–60; 161–66.

<sup>24</sup>Joh, *supra* note 17, at 136, 140–46.

<sup>25</sup>Joh, *supra* note 17, at 138–39.

<sup>26</sup>Joh, *supra* note 17, at 139.

<sup>27</sup>Joh, *supra* note 17, at 141.

<sup>28</sup>Joh, *supra* note 17, at 141, 142–43.

<sup>29</sup>Joh, *supra* note 17, at 141–42.

sibility of automating police paperwork through transcription from police body cameras.<sup>30</sup>

Joh also points out that the very action of developing suspicion is being taken over by predictive artificial intelligence, which lessens both the number of people needed to find and analyze evidence and the number of people the police need to interact with (as they focus their attention on “hot spots”).<sup>31</sup> Even the use of lethal force may be automated eventually, as we are seeing in the military context.<sup>32</sup>

The positive aspects of this development, according to Joh, include “lower crime rates, greater transparency through data gathering, and less unnecessary police violence,” as well as the possibility of a shift in the doctrines of reasonable suspicion and probable cause.<sup>33</sup> But, she cautions, it will also almost surely result in “deskilling,” as police lose their ability to perform tasks that are increasingly performed by machines instead.<sup>34</sup> Moreover, police are likely to lose employment opportunities,<sup>35</sup> which is likely to result in hostile and adversarial relations with police unions.<sup>36</sup>

Expanding on these ideas, Joh first turns to criminal procedure. She recounts the history of the professionalization of policing, which culminated in the U.S. Supreme Court’s recognition of (and deference to) police “expertise.”<sup>37</sup> As Joh notes, a great deal of the broad deference that is accorded to police in the areas of determining probable cause and reasonable suspicion is based on the idea that police have special training, experience, and knowledge due to their profession.<sup>38</sup> If suspicion is automated through algorithms that trawl through social media and other connections to compile a list of suspects, and police merely read that output, how can this claim of expertise remain?<sup>39</sup> This may be a significant and positive change

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<sup>30</sup> Joh, *supra* note 17, at 142.

<sup>31</sup> Joh, *supra* note 17, at 143–45.

<sup>32</sup> Joh, *supra* note 17, at 145.

<sup>33</sup> Joh, *supra* note 17, at 147–48. Joh further explores the possibility of a sea change in criminal procedure doctrine. Joh, *supra* note 17, at 149–51.

<sup>34</sup> Joh, *supra* note 17, at 146–48.

<sup>35</sup> Joh, *supra* note 17, at 149, 154, 157.

<sup>36</sup> Joh, *supra* note 17, at 157.

<sup>37</sup> Joh, *supra* note 17, at 149–50.

<sup>38</sup> Joh, *supra* note 17, at 150–51. For philosophical and constitutional critiques of the move toward predictive policing, see Jackson Polansky & Henry F. Fradella, *Does ‘Precrime’ Mesh with the Ideals of U.S. Justice? Implications for the Future of Predictive Policing*, 15 CARDOZO PUB. L., POL’Y, & ETHICS J. 253 (2017).

<sup>39</sup> Joh, *supra* note 17, at 151.

since, as Joh notes, the amount of deference accorded police has been the subject of a great deal of criticism.<sup>40</sup>

Joh discusses the reorganization that might be expected to come from police automation. She suggests that

small police agencies might rely heavily on automated systems while retaining a core group of officers and administrators as systems operators. The result would be very thinly staffed agencies . . . large urban departments may also embrace replacing many of its people with machines, but . . . [p]olice automation may increase the overall policing presence in cities. When the activity of policing becomes cheaper through technology, police presence may grow exponentially.<sup>41</sup>

This warning of exponential growth in police presence is the only nod that Joh gives to the general U.S. dislike of the concept of a surveillance state.

Joh also discusses the structural forces that are likely to lead to this broad reorganization of police departments, based on innovations in technology.<sup>42</sup> These structural forces include budgets and the public responses to racial bias (creating the dynamic discussed in the introduction to this review).<sup>43</sup> But while Joh acknowledges that a great deal of momentum in digital policing comes from a desire to lessen opportunities for racial discrimination, her discussion of these issues is momentary.<sup>44</sup> She focuses instead on the possible repercussions of the digital surveillance state (as discussed below).

Along with the questions of general deskilling, as possible negatives Joh highlights the ethical implications of the impending use of lethal force by machines.<sup>45</sup> She briefly refers to the moral considerations, and general incomprehensibility, of allowing lethal decisions to be made by machines.<sup>46</sup> This issue may be rectified, she suggests, by keeping a human decisionmaker “in the loop.”<sup>47</sup> She notes, however, that even this may not fix the problem, as the military experience shows humans have become deskilled, “increasingly dependent on . . . machines . . . lack[ing] the ability to perceive all the factors the machine observes, react as quickly as a machine does, or even determine whether an error is being made.”<sup>48</sup>

Finally, Joh turns to the issues highlighted by the Camden

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<sup>40</sup> Joh, *supra* note 17, at 150.

<sup>41</sup> Joh, *supra* note 17, at 157.

<sup>42</sup> Joh, *supra* note 17, at 155–60.

<sup>43</sup> Joh, *supra* note 17, at 155.

<sup>44</sup> Joh, *supra* note 17, at 149, 155.

<sup>45</sup> Joh, *supra* note 17, at 145, 152–54, 156–57.

<sup>46</sup> Joh, *supra* note 17, at 156.

<sup>47</sup> Joh, *supra* note 17, at 156.

<sup>48</sup> Joh, *supra* note 17, at 156–57.



example, which she refers to as “desocialization of the police.”<sup>49</sup> When such a large portion of policing is overtaken by automation, the police lose the opportunity to engage in community policing, because police-public contacts decrease.<sup>50</sup> Losing these interactions may also result in a decrease in police legitimacy, and sanctions that stem from machine decisions may be looked at suspiciously, as they can be difficult to understand or debate with.<sup>51</sup> For all these reasons, Joh warns us to be careful about automating police work.

### III. CONCLUSION

Joh offers a useful window into the ongoing process of automation of policing, its causes, and several of its risks and benefits. She does not, however, directly engage with some of the larger positives and negatives of the process—such as the legitimate interest in reducing police contact in overly policed areas, and the larger aversion to overwhelming surveillance. Hopefully, as the debate surrounding the future of policing continues, this issue will also be carried into the broader realm of legal scholarship, so that these vital concerns can be explored and considered before the process of automation takes off on its own.

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<sup>49</sup> Joh, *supra* note 17, at 159.

<sup>50</sup> Joh, *supra* note 17, at 161–62.

<sup>51</sup> Joh, *supra* note 17, at 162–63.