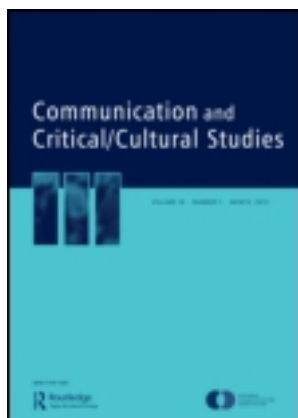


This article was downloaded by: [University North Carolina - Chapel Hill]

On: 30 October 2013, At: 18:29

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Communication and Critical/Cultural Studies

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/rccc20>

Police Media: The Governance of Territory, Speed, and Communication

Joshua Reeves & Jeremy Packer

Published online: 16 Sep 2013.

To cite this article: Joshua Reeves & Jeremy Packer (2013) Police Media: The Governance of Territory, Speed, and Communication, *Communication and Critical/Cultural Studies*, 10:4, 359-384, DOI: [10.1080/14791420.2013.835053](https://doi.org/10.1080/14791420.2013.835053)

To link to this article: <http://dx.doi.org/10.1080/14791420.2013.835053>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

Police Media: The Governance of Territory, Speed, and Communication

Joshua Reeves & Jeremy Packer

The work of the modern police apparatus is highly dependent upon media technologies. This article traces crucial developments in this history, analyzing the central role that media have played in policing practices since the advent of the modern patrol in the late eighteenth century. We trace how the governmentalized police force has used media to govern efficiently what Foucault calls the three great variables: territory, speed, and communication. In conclusion, we consider the possibilities for resistance in a time when digital police media have given rise to alarming strategies for surveilling populations, stifling dissent, and exerting control over public and private space.

Keywords: Governmentality; Police; Foucault; Surveillance; Media History; Digital Media

Critical/cultural scholarship addressing media and the police has largely been an affair of ideology critique featuring the analysis of police officers as characters in popular culture fare.¹ As this work has pointed out, popular police dramas have a long history that includes radio,² film,³ and television,⁴ and they have tended to support a “law and order” imperative that has been quite at home in times of neo-conservative rule,⁵ during wars on (and of) terror,⁶ and while a generalized state of exception perpetually lingers.⁷ However, that is not the police media addressed in this essay. Rather, what follows is a historical look at how the modern police force has been constituted through its capacities for human and technological mediation. This is to say that policing, the work done by the modern police apparatus, has from its outset been imagined to be accomplishable in part through media.⁸ When we say *media*, we lean heavily upon German media theorist Friedrich Kittler⁹ to consider all technologies used for the collection, storage, and processing of data that, amongst other things, create new capacities for manipulating the time/space axis.¹⁰ As such, police media encompass the technical and bureaucratic means by which intelligence,

Joshua Reeves is at the Department of Communication, The University of Memphis. Jeremy Packer is at the Department of Communications, North Carolina State University. Correspondence to: Joshua Reeves, Department of Communication, The University of Memphis, 212 Art & Communication Bldg, Memphis, TN 38152-3150. E-mail: jreeves4@memphis.edu.

personnel, resources, and patrol coordinates are collected, stored, processed, and transmitted through time and across space.

Media have long been envisioned as solutions to what Foucault saw as the “three great variables—territory, speed, and communication”¹¹—that challenged modern forms of rule from the nineteenth century on. The rise of these variables marks a shift in governmental rationality from one based upon an architectural model of the city to one understood as a technological and infrastructural problem dealing with how best to organize and regulate flows of people, commodities, and risks.¹² This emergent and at times contentious shift in governance is broadly characterized by Foucault as a shift from a disciplinary model to one of security.¹³ According to Foucault, disciplinarity attempts to “isolate a space,”¹⁴ to “prevent everything,”¹⁵ and “allows nothing to escape.”¹⁶ Security, on the other hand, involves “ever-wider circuits” in which “freedom is nothing else but the correlative of the deployment of apparatuses of security,”¹⁷ organized through the “option of circulation.”¹⁸ The different goals to which police media have been oriented provide a means for elaborating the historical ambivalence between an ideal disciplinary police power that seeks to control everything and a governmentalized police force that works to manage risks most efficiently.¹⁹ Because the technologization of police communications has allowed the modern force to “police at a distance,”²⁰ police media have helped mediate between the police force’s disciplinary tendencies and the liberal political economies in which it has taken form. In the words of Kelly Gates, this is a “balancing act that has consistently posed a challenge to liberal democracies and one that seems to lean, in the present climate, toward expanding police power.”²¹ As we will show, media have often been the tightrope on which this balancing act has been carried out.

These logistical facets of police media highlight the fact that modern policing consists of more than just cops walking (or driving) their beat. Law and order must reign on the streets, to be sure, but media also play an essential role in a number of less dramatic activities that are constitutive of the modern policing apparatus. Media provide a necessary condition for police departments and criminal scientists to produce knowledge: the surveillance, measurement, and analysis of insecure spaces and human subjects can scarcely be undertaken without media that inform, constrain, and process that data. And not only are police interventions imagined and designed through existing technological capacities, they have historically been carried out by various logistical media, from the whistle²² and callbox²³ to the “Wanted” poster²⁴ and police radio.²⁵ For the purposes of this essay, then, we will divide police media into two functional categories: *police intelligence* and logistical *telecommunications*. The first addresses the role of media as mechanisms for producing databases, as police intelligence derives from the ability to amass, store, and process increasing amounts of data. These media work to solve the problem of time by extending the life of previously fleeting forensic information and opening it up to an ever-expansive field of criminology. The second function involves the extension, interactivity, and translatability of transmissions in order to initiate citizen-surveillance and monitor and coordinate increasingly vast and mobile police

forces. Such *logistical media*²⁶ solve the problem of organizing control over territory. Our analysis, then, will pivot upon what Peter Miller and Nikolas Rose have recognized as the essential interwoven procedures of governmentality: *representing* and *intervening*.²⁷ According to Miller and Rose:

The specificity of governmentality, as it has taken shape in “the West” over the last two centuries, lies in this complex interweaving of procedures for representing and intervening. . . . We suggest that these attempts to instrumentalize government and make it operable also have a kind of “technological” form. . . . If political rationalities render reality into the domain of thought, these “*technologies of government*” seek to translate thought into the domain of reality, and to establish “in the world of persons and things” spaces and devices for acting upon those entities of which they dream and scheme.²⁸

From this theoretical lens, the ways in which modern policing is constituted by technologies of government—i.e., the coordinated use of media as technologies for intelligence-gathering (representing) and logistics (intervening)—come sharply into view.

Most previous work on media and governmentality has fallen into two categories: first, a number of scholars have focused on the way that governmental interventions are made via representational media content and the attendant guidance for spectatorship which teaches the audience how to view.²⁹ Second, several scholars have described the role of media technologies in the spatial and epistemological procedures essential to liberal government.³⁰ While the work of this latter group is sensitive to certain functions often associated with policing (e.g., surveillance and biometrics), we would like to focus on how media have functioned in the modern police force: specifically, we are interested in how media are used by to govern the police and police the population. We hope this alternative take on media, governmentality, and police will open new avenues for considering the role of media in the exercise and resistance of police power.

While doing justice to the history of police media would require at least a full-length book, in this article we hope to provide several brief but illustrative glimpses into this history. In this historical overview, then, we will look at a small cluster of police rationalities and procedures from four crucial periods and trends in policing history. Our analysis begins with a look at how media, like the police gazette, were central to the fledgling liberal police project in the late eighteenth and early nineteenth centuries. Next we examine how anthropometric science and rogues’ galleries provided two complementary media strategies for the mid-nineteenth-century police force. Third, we trace the relationship between automobility and the police, considering how the radar gun, the Breathalyzer, the two-way radio, and other police media have been used to govern citizens’ and patrols’ automobility. Finally we delve into digital police media, which serve as a telos to the narrative of technological development we have been tracing throughout the essay. The digital ideal—the ideal of the rapid and flawless storage, translation, and dissemination of evidence and other data—has long preoccupied the police imagination, and well-equipped urban

police departments have often been on the very cutting edge of technological developments. In conclusion we argue that further analyses of the logistical aspects of police media allows for an understanding that may prove useful to contemporary political struggles, as the point of contact between police and resistant movements is largely organized and orchestrated by the use of police media in the streets.

Media and the Birth of the Police

In the middle of the eighteenth century, the classical school of penology initiated widespread reforms in punishment and policing. Foremost among these theorists was Cesare Beccaria, whose Enlightenment ideals spawned a new penological science based upon reasoned, economical deterrence rather than brutal retribution. Beccaria plays a bit part in Foucault's *Discipline and Punish* as a penological reformer,³¹ but his ideas on police and punishment span beyond Foucault's gloss. Whereas Foucault is interested in Beccaria's utilitarian theory of punishment, which instead of wreaking bodily retribution sought to discourage potential criminals into inaction, we are more interested in the policing implications of Beccaria's axiom that "It is better to prevent crimes than to punish them."³² Describing an alternative economy of crime prevention, Beccaria writes:

It is not possible to reduce the turbulent activity of men to a geometric order devoid of irregularity and confusion. Just as the constant and very simple laws of nature do not prevent perturbations in the movements of the planets, so human laws cannot prevent disturbances and disorders among the infinite and very opposite forces of pleasure and pain. . . . Do you want to prevent crimes? Then see to it that enlightenment accompanies liberty.³³

By attributing the criminal impulse to human nature, Beccaria resigns society to a certain degree of criminality. It is better to accept the fact of crime, he writes, than to impose upon broad society an overtly disciplinary geometry of control that attempts to stifle human "nature": "What would we be reduced to," he asks, "if we were forbidden everything that might tempt us to crime?"³⁴ Thus we see an evolution in criminal response from retribution to surveillance and deterrence, such that the liberal policing apparatus is imagined in its capacity to prevent and detect crime while protecting citizens' "liberty." As we will show, Beccaria's enlightened liberalism—and the economic theory of intervention and resources that accompanies it—helps thrust media to the fore of the modern policing project, as it is used as a means to mediate between disciplinary control and liberal governance.

Beccaria had a profound influence on the development of utilitarian thought, and he was especially influential on Jeremy Bentham's theories of policing.³⁵ Hence in the 1790s, when Bentham was commissioned to develop a policing method to prevent theft on the Thames River, he developed it upon the foundation of a Beccarian police economy based in preventive surveillance. With magistrate Patrick Colquhoun and Justice of the Peace John Harriot, Bentham devised a policing system that was unlike anything that existed in England, and indeed the rest of Europe, at that time. While amateur bands of watchmen armed with clubs and organized by horns and shouts

had policed England's communities since the Middle Ages,³⁶ the idea of a sovereign, salaried patrol of police officers was unheard of; in 1798, there were fewer than 100 police employees in all of England, and the majority of these were privately employed by West Indian merchants.³⁷ The advent of the public police force, then, was a pivotal and unprecedented development in European governance, and its exercise was at first severely constrained: in their early days, officers were even prevented from carrying weapons. The three principal factors that restricted the size and vocation of the early police force were: first, the rise of a liberal political order that transferred economic rationalities to the domain of governance; second, the fearful opposition that English citizens voiced to the rise of a sovereign police force³⁸; and third, the profound demand that patrols made on public resources, forcing experts like Bentham and Colquhoun to devise ways in which technological and human resources could be maximized to ameliorate the time/space challenges faced by a sparse, liberal police patrol.³⁹

The rationality that undergirded the rise of the new police force was made clear in Colquhoun's treatise on one of the earliest policing experiments in England, the Thames River Police. Colquhoun used this 1800 work, *A Treatise on the Commerce and Police of the River Thames*, to explore how the increasingly restless working class could be better governed:

The mass of labourers became gradually contaminated... The mind thus reconciled to the action, the offence screened by impunity, and apparently sanctioned by custom, the habits of pillage increased: others seduced by the force of example, and stimulated by motives of avarice, soon pursued the same course of Criminality, while the want of apposite Laws, and the means of carrying into execution those that existed, gave an extensive range to Delinquency. New Converts to the System of Iniquity were rapidly made.⁴⁰

Faced with the upheavals in politics and labor that occurred in the late eighteenth century, Colquhoun and Bentham devised an economy of police intervention that relied on logistical media and coordinated patrol efforts. Colquhoun writes that, in order to "renovate" the morals of the working class, the police force should be

aided by pecuniary energy, and by powers calculated, more to counteract the Designs of evil-disposed persons by embarrassing them at all points, than to punish... [A]nd its effect will be the prevention of Depredations... in all situations where they were formerly committed. Upon this basis will of course be erected an improved System of Police Economy, in which will be combined every thing that can tend to give utility and effect to the Design.⁴¹

What was left to the police, then, was how to organize social space in such a way to "embarrass" the designs of potential criminals.

Hence Colquhoun, Bentham, and other liberal utilitarians designed a policing system that reimagined criminality and crime response vis-à-vis flows of people and information. Police resources and personnel were distributed based upon the mobility demands of the fleeing criminal and the communication imperatives of a responsive/preventive police apparatus. Certain people, places, and activities were tied to what David Garland calls "criminogenic situations,"⁴² which were generalized

based on factors such as a location's capacities for communication and flow (lodge houses and horse coachmen, e.g.), locale (urban or rural), and the class and perceived moral quality of a business's clientele (bars were targets, for example). L. J. Hume describes how this process unfolded, showing that at the center of this liberal policing policy lay

an attempt to prevent offences against property by harassing receivers of stolen goods and by establishing a co-ordinated network of police authorities throughout the country. The attack on receivers consisted essentially in various measures designed to facilitate knowledge of the fact of an offence.⁴³

Thus one of the earliest rationalities of the governmentalized police force was that, in order to decrease criminal activity without a heavy police presence, two measures would have to be taken: first, the behaviors of suspect and volatile populations would have to be surveilled and recorded, and second, certain lay individuals—such as innkeepers and carriage drivers—would have to carry out that surveillance by tracking and transmitting the behaviors of their fellow citizens.⁴⁴ Describing the advantages of implementing this vigilant lateral surveillance ethic among citizens, Colquhoun writes in his influential *Treatise on the Police of the Metropolis* that the police should position itself against criminals in the same way a general plots for war: “Opportunities are watched, and intelligence procured, with a degree of vigilance similar to that which marks the conduct of a skilful General, eager to obtain an advantage over an enemy.”⁴⁵

Media were central to the public distribution of this vigilance. For example, police intelligence was procured by requiring business owners to develop vast systems of bookkeeping: lodge houses were made to register their guests, and horse coachmen were required to keep track of their passengers' travels.⁴⁶ The owners and employees of suspect businesses were thus saddled with tremendous police-surveillance responsibilities. Whereas businesses routinely kept transaction records for financial reasons, Bentham emphasized that the information procured for policing authorities should be much broader than the “pecuniary economy usually regarded as the sole object of bookkeeping. . . . Every significant transaction should be recorded.”⁴⁷ Record books were thus re-envisioned as police media rather than means to document financial transactions, as fledgling police agencies appropriated traditional private media practices to trace the flows in and out of criminogenic spaces.

In addition to enhancing and redirecting the bookkeeping practices of volatile businesses, the earliest police bureaucracies used media to deputize local populations in the hunt for suspects. In a practice that has continued to the present day, police agencies would communicate rewards, crimes, stolen goods, and potential threats via newspapers, handbills, professional police gazettes, and strategically distributed “wanted” posters. For example, in the 1770s the *Weekly Hue and Cry*,⁴⁸ a police gazette devoted to the capture of criminals, deserters, and the mentally disabled, entered circulation; but it took several decades for this project to become successful throughout England.⁴⁹ In 1822, J. T. Barber Beaumont—one of England's chief law

enforcement officers in the early nineteenth century—testified before a government committee about how to best overhaul the media-driven hue and cry system:

It is true that there is a police newspaper called the “Hue and Cry,” but it is only published ONCE in *three weeks*, and now that the communication all over the kingdom is so rapid, no one would think of giving three weeks start to a criminal before a hue and cry were raised. That paper is of no use. . . . To produce a really effective “Hue and Cry,” it is therefore proposed for all informations of robberies, frauds, and other great offences in and about the metropolis, to be taken on oath at the police offices . . . [and] to be abstracted and transmitted every day at noon to a central office. . . . [and] to be immediately inserted in a *Police Gazette*, published every afternoon and set to every police office . . . *to be by them filed*.⁵⁰

Beaumont relates that the central problems facing the early police are the spatiotemporal constraints that limit officers’ abilities to intervene into and prevent criminal activity. The main problem with the *Hue and Cry Gazette* was its infrequency: with innovations in communication and transport, criminals were beating the police at the communication game. Old methods of police-media response were thus totally ineffective at meeting the challenges of the new century. A centralized communications office was needed, from which the news of all crimes could be transmitted to local jurisdictions each day. Further, these reports would need to be kept on file, so that offenses could be kept alive in the investigative imagination of local police bureaucracies.

This dream of perfect storage, access, and dissemination lends itself to demands for increasingly centralized police communications. When English politicians and bureaucrats were debating the need for a centralized police force in the early nineteenth century, committees were formed to assess the efficacy of centralizing England’s sparse network of independent police jurisdictions. The 1816 testimony of Nathaniel Conant, the magistrate of the Bow-Street Runners organization—a local policing apparatus that would soon provide the model for the rest of England—shows that centralized communications was a fantasy of the police even in its infancy. Responding to an examiner about the potential efficacy of a centralized office of police communications, Conant opines:

I have seen myself that such a communication would have been desirable at one part of the town, of an offence committed at another; because they would possibly have discovered an important offender who was afterwards found to have escaped into that neighborhood. . . . I have often thought that such communication, but for the expense attending it, would have a beneficial effect. I have thought of recommending, that one of the Clerks of every Office, at three in the afternoon, should put upon paper a minute of important offences, and sent it in the Penny-post to each Office; it would reach the Offices in two hours, and would answer many useful purposes.⁵¹

Conant’s testimony illustrates how in many ways the policing problem has historically been a *media* problem. The communication and storage of evidence and other data, as well as the deployment and coordination of patrols, have always shaped the aspirations and success of the modern police force. Because the constraints of mediated

communication frustrate the policing project, the ideal of faster, more durable, and more accurate communication has proven to be a recurrent preoccupation of police officials working to maintain their traditional governmentalized project.

Anthropometrics and Publicity in Nineteenth-Century Policing

As the police force continued to gain power and resources throughout the nineteenth century, its need for new knowledges and new instruments grew. To theorize the proper role of police in an economy of state practices, police councils turned to politicians and experts in the human and biological sciences, many of them practicing proto-eugenic specialties like anthropometry. As eugenics crept into most nooks of scientific inquiry, these experts and community leaders routinely reported that police could address growing crime rates—exacerbated by the industrial revolution and rapid urbanization—by linking citizens to vast surveillance databases that would contain photographs, family genealogies, and life histories. These databases were in part aimed at providing authorities with a vast resource with which they could isolate the genesis, habits, and physical characteristics of *Homo criminalis*, the (oftentimes constitutionally) criminal being.⁵² More generally, anthropometric data were used to gather and store knowledge about how police resources could be best allocated in order to preserve the size and focus of the governmentalized police force. While the importance of anthropometric databases to eugenic criminology has been well-documented,⁵³ we will turn our attention to how anthropometrics introduced new challenges and opportunities to the police media apparatus.

Media and modern forensic policing have long had a tight-knit relationship, and detective work and forensic science more generally benefit from the development of faster, more efficient, and more accurate methods for rendering residues of the past into analyzable data. In the 1880s Alphonse Bertillon, who was an influential police theorist in the late nineteenth century, introduced a new media-driven anthropometric science called “signalitics.” Hoping to turn the human body into a technology of criminal evidence, Bertillon devised a complex anthropometric scheme that sought to identify criminals with empirical precision, and then keep representations of them on file and ready at hand. The rationality behind this development, writes one of signalitics’ earliest American adopters, is to render the human body and its traces into data that could be harnessed by police agencies:

How much more precious still would such a means of identification be if it could be applied, not only to the living man, but to his dead body, even when crushed, mangled or dismembered beyond the recognition of his nearest friends and relatives!”⁵⁴

Although Bertillon’s dream of a biometric passport system—which would require all citizens at all times to carry their “papers,” complete with photograph, life history, bodily measurements, and fingerprints—never took strong hold in Western Europe or America, his innovations in investigation, intelligence-gathering, and surveillance have had a lasting impact on contemporary forensic and preventive policing techniques.⁵⁵

One of the central problems that Bertillon's signaletics set out to solve was how to record and transmit the identity of criminals reliably. Although photography was an important part of Bertillon's method, he recognized the shortcomings of a criminal identification system that relied primarily on photographs: first, Bertillon concluded that, given the state of photography at the time, photographs would have to be taken in the same place and by the same photographic equipment; second, he realized that photographs could not be easily reproduced and transmitted between jurisdictions; and third, he recognized that photographs captured superficial information that could be easily altered by clever suspects.⁵⁶ Signaletics, on the other hand, developed a thorough battery of bodily measurements that would quantify those parts of the adult body that remain relatively stable throughout life. Bertillon found that, if one were to take measurements of the head, feet, middle finger, forearm, height, ear, and other body parts, the statistical probability of false identification would be extremely low; and more importantly, these numerical anthropometric records would be much more comprehensive and transmissible than photographic images. So in addition to cameras and photographs, Bertillon turned to calipers, gauges, ink pens, and file cards in order to bring his "written portraits"⁵⁷ to life in a standardized form that could be widely and easily distributed.⁵⁸ Bertillon's signaletic science, then, was caught up in a broader media environment that constituted the possibilities of the policing project.

Signaletics soon gained popularity across America and in Europe and its colonies. In 1896, Boston's superintendent of police, Benjamin P. Eldridge, described his "mathematical" investigative strategy based upon Bertillon's signaletics:

To facilitate the comparison and identification [of criminals], every set of measurements that is taken is recorded on a card, and this card is filed in a cabinet divided into compartments, each of which is subdivided. these separate compartments are used for the classification of cards in a way approximately resembling the filing of book cards in a public library. In searching to identify any person who has been arrested, the examiner . . . can turn at once to a compartment in the cabinet containing all the cards of persons whose heads come within this range. This compartment is divided into smaller compartments, each of which contains its special range of measurements of other parts of the body, or marks distinctions in the color of the eyes and hair. So if there is any card of measurements corresponding exactly to the set taken by the examiner, he will soon put his hand upon it.⁵⁹

Eldridge illustrates how the late nineteenth-century police strove to govern through setting out the "rascal" population as a manageable set of data. Yet this process of representation was severely complicated by problems of compatibility and speed; not only was the measurement of criminals and suspects a time-consuming and difficult affair—signaletics required eleven measurements—but scouring through archives for identity matches imposed a huge workload on police workers. As Eldridge explains, this was addressed by organizing a special filing system, as the desire for a more "mathematical" (i.e., digital) process preoccupied turn-of-the-century police strategy (Figure 1).

At about this time, an alternative criminal identification strategy, the Rogue's Gallery, rose in popularity in American policing. The Rogue's Gallery, which

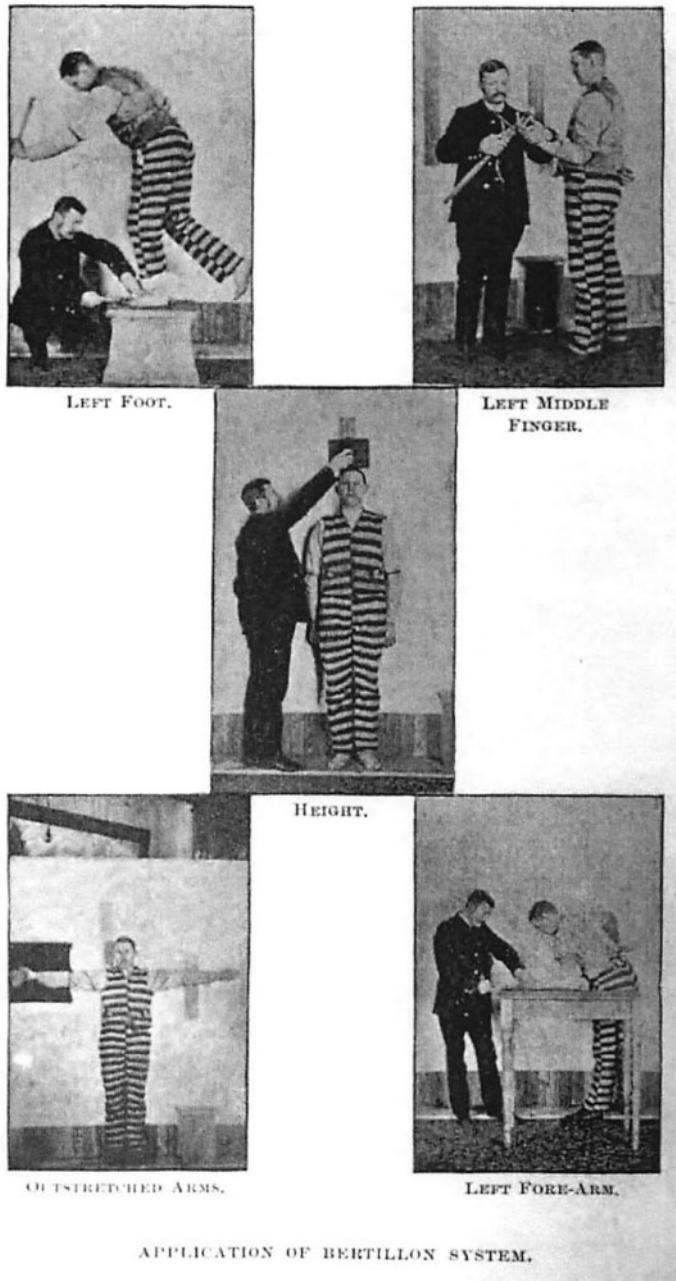


Figure 1. Demonstration of Bertillon's Signaletic Measurements.¹⁰²

eschewed the private police files and note cards demanded by signaletics, gained prominence in the 1880s when Thomas Byrne, head of the New York City Police Department, developed a criminal identification method that featured the Gallery.

Contra Francis Galton and other advocates of eugenics and the measurability of criminal “types,” Byrne cautions that theorizing a criminal class based upon physical features is a waste of time:

Look through the pictures in the Rogues’ Gallery and see how many rascals you find there who resemble the best people in the country. Why, you can find some of them, I dare say, sufficiently like personal acquaintances to admit of mistaking one for the other. . . . In fact, it is a bad thing to judge by appearances, and it is not always safe to judge against them. Experience of men is always needed to place them right.⁶⁰

This recognition gave Byrne a different set of concerns, as criminal identification was a matter with which non-specialists could assist. With signaletics and similar file-based identification strategies in mind, Byrnes writes:

While the photographs of burglars, forgers, sneak thieves, and robbers of lesser degree are kept in police albums, many offenders are still able to operate successfully. But with their likenesses within reach of all, their vocation would soon become risky and unprofitable.⁶¹

Byrne brings to the fore the question of whether police should govern through public rather than confidential police data. For Byrne, publicity had a number of advantages: first, it helped investigators and the public move beyond hyper-rational and hindering stereotypes of the criminal class, and second it effectively integrated representation and intervention into a single media process. Recognizing that rascals can appear as distinguished as any judge or businessman, Byrne refused to use photography and anthropometrics to theorize the criminal body (Figure 2); instead, the rogues’ galleries established the police’s focus on the physical characteristics of the individual suspect. These photographs, then, did not seek to capture the physical evidence of a criminal’s internal affliction, but were instead constitutive police media by which lay individuals were recruited into the policing apparatus. Like printed police gazettes and “wanted” posters, the rogues’ galleries worked to deter crime by spontaneous recruitment and hence the threat of publicly distributed, ubiquitous surveillance.

We see, then, two distinct yet parallel ways in which police media were used to govern crime in the nineteenth century. First, the police strove to represent the criminal and his or her acts into actionable data, typically through the use of specialized personnel and investigations.⁶² Today, of course, these media-driven practices still dominate the policing project, as technological developments such as fingerprinting, mug shots, and the polygraph shape police procedures at every level and allow the police to deploy resources more efficiently. Second, we see that police media were used to publicize suspects’ identities, diffusing police responsibilities to the public and deterring crime through the insecurity of categorical suspicion and ubiquitous surveillance.⁶³ This method, as we pointed out in our earlier discussion of police gazettes, has a long history, and the value of this kind of publicity was hotly debated among nineteenth-century police officials.⁶⁴ Synthesizing practices of representation and intervention, this diffusion of policing responsibilities allowed the surveillance reach of the police to multiply while the force itself remained



ROGUES' GALLERY.

Figure 2. Philadelphia's Rogues' Gallery in 1884.¹⁰³

relatively sparse and inconspicuous. Taken together, these two different media strategies helped satisfy the creeping disciplinary ambitions of the police while permitting the liberal police force to govern best while governing least.

Media and Police Automobility

Balancing the mobility and efficiency of communications has long been a concern of the police. The earliest forms of police patrol media were primarily mobile, and included guns, lights, whistles, night sticks, bells, and other instruments used to draw attention, call to arms, and warn civilians of immediate threats.⁶⁵ In the case of guns and night sticks, this was not their primary purpose. However, any number of technologies can and have been rearticulated to serve as a means for collecting, transmitting, storing, and processing police messages. Later, electronic systems connected the police to a broader network, but the media themselves were stable and tended to be placed in vicinities that were strategically and efficiently oriented according to logistical centrality and perceived necessity. In the 1850s, telegraphic call boxes were installed in some jurisdictions, allowing citizens one-way communications with the police.⁶⁶ More efficient call boxes would begin to appear in the late 1870s in America, and by the end of the century they were distributed throughout the British Isles. From its inception in 1880, this hybrid medium combined the telegraph and telephone into a multiple signal mechanism that via coded messages could designate a “fire, routine report, summon an ambulance, signal a riot, call a wagon or permit use of the telephone without a coded signal.”⁶⁷ Of equal importance, “All signals are recorded on paper tape at headquarters, giving a permanent record of exact time and location of the call.”⁶⁸ These new police media automated the collection of spatiotemporal data and provided a mechanism for surveilling officers themselves, an under-discussed yet essential element of the policing process.⁶⁹ Hence as with so many police media, call boxes were logistical coordination and response devices as well as information collecting technologies.⁷⁰

Yet as transportation and communication systems evolved, the police developed new means of enhancing their mobile capabilities. We should consider, therefore, the pivotal role that transportation technologies have played in reorienting the police’s relationship to the time/space axis.⁷¹ Well before the patrol car was introduced, horse drawn patrol wagons were widely established as a means of extending the range, speed, and load capacity of the police patrol. Although by the 1880s wagons were a mainstay of American police forces, their use restricted patrol to navigable roads, thus making the road a space of heightened policing.⁷² Concerns with all three of these variables—speed, range, and load—continue to this day and are in part determined by the utilization of modes of transport as media technologies. Many early police cars were in fact an extension of the horse drawn wagon as they were envisioned as both roving criminal collection devices whose enhanced *storage capacity* enabled the *collection* and *processing* of a greater number of criminals, not to mention a means for the rapid deployment of a police swarm.⁷³ The San Francisco Police Department’s official history focuses upon just such a transport/media “system”:

In 1889 the department established a patrol wagon/call box system through which officers could call their stations for the first time and obtain speedy backup assistance. Reserve officers standing by in stations would mount the wagons and respond quickly to calls for assistance and other emergencies.⁷⁴

These innovations in automobility gave the police a new set of opportunities, challenges, and preoccupations. Beyond instigating all manner of societal upheaval, the automobile radically reconfigured the nature of police work and soon became its primary security concern.⁷⁵ In 1968 political scientist Paul Weston betrayed this sentiment, coining the neologism *motorthanasia* to describe the conditions that were leading to the US's 50,000 annual traffic fatalities: "The great tragedy of this age of motorthanasia is that the only forces waging a day-to-day fight against death and injury on the highways are the police."⁷⁶ Widespread automobility altered the geometry of the "three great variables" by increasing the *speed* of transport for both criminals and police, extending the *territory* over which police patrols were distributed and creating new demands and capacities for police *communication*. By 1932, with the advent of the first two-way radio system, mobile communication technologies further reoriented the time/space axis and helped create a new police media sensibility in which too much communication or too little communication were both considered a threat to automotive safety.⁷⁷ As has been shown, the question of controlling dangerous mobilities had been a concern of police since its infancy, so these developments are more a change in scope than one of kind (Figures 3 and 4). Further, while automobile-based police patrol had become a mainstay of US policing by the 1910s, it was by no means the only form of patrol, nor was technologically enhanced mobility an entirely new element of policing. Foot, horse, bicycle, motorcycle, boat, and aircraft were all prominent modes of police transport by the 1960s,⁷⁸ thus making the police's territorial reach and intelligence capacities both extensive and intensive.



Figure 3. Police patrol wagon in Tampa Bay, 1890–1900.¹⁰⁴

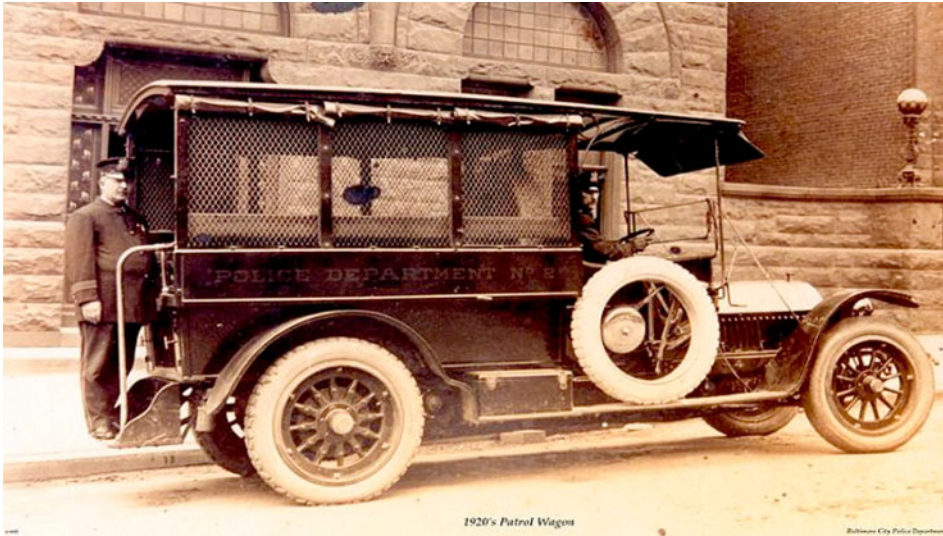


Figure 4. Police patrol wagon in Baltimore, 1920s.¹⁰⁵

This extension of mobility provided new means of gathering intelligence and enacting surveillance. For instance, radar guns were introduced in the 1950s to record the speed of vehicles, allowing for (1) individual citations to be given according to strict, mechanically collected data free from the subjective assessment of police judgment, and (2) the generation of a broader database of speeding at the level of the driving population. In this rudimentary sense radar detectors were both a technology of representation and intervention. In addition, airplanes eventually allowed for the ability to monitor a greater number of speeders while simultaneously providing a “bird’s eye view” of the motoring population, seen as a mass or aggregated traffic system. Thus police airplanes are both modes of transport and “ways of seeing,” as cockpit windows create a unique screen through which to monitor the world. Hence, at the level of police intelligence these newly integrated technologies extend the range of surveillance and offer new forms of data for collection, storage, and analysis.

To combat the most vilified form of illegal automobility, drunk driving, a number of media were brought into play in order to validate officers’ suspicions. In the 1920s, Indiana University’s Rollo N. Harger developed blood and urine tests that police could use to measure the alcohol content of suspects’ bodily fluids; but because these tests took several days to process, Harger and his team developed new ways to increase the speed of alcohol detection.⁷⁹ By the early 1930s, Harger developed a set of subjective criteria by which specially trained officers could detect drunkenness in suspects; yet while this met the demands of speed, it left much to be desired in accuracy. Then in 1938, Harger invented what he called “the Drunkometer,” which had its own problems: it was clunky and had to be recalibrated each time it was moved, so while it was a useful medium for measuring intoxication levels in laboratory studies, it was of little use to a mobilized police force. Yet in 1954, another Indiana University professor invented the Breathalyzer,⁸⁰ which has become the

police standard for collecting intoxication data, providing stable results even while being transported in an automobile. These police media function by turning phenomena into measurable illegalities. Risk was thereby made indexical, and contingencies are given the veneer of scientific determinacy via quantification: “drunkenness” suddenly becomes a quotient, 0.08 blood alcohol content. In other words, the demand for objective criteria in the assessment of risk also demands media for turning worldly phenomena into measurable and hence governable data.

In 1968, prominent criminologist Paul B. Weston wrote that

A successful tactical plan for action by police and other agencies concerned with traffic safety can only be based upon the facts confirmed in these [traffic] records. . . . [Yet] there has to be a cutback in the mass of accident records maintained by police . . . so that accident records can be maintained in some some *manageable* form.⁸¹

As with Bentham and Colquhoun’s approach to policing the Thames, traffic management would 150 years later follow the same sets of concerns, such as “identify dangerous locations or areas, . . . time of accidents, . . . cause of accidents, . . . [and] reveal the effectiveness of police traffic control activities.”⁸² Ledgers, carbon copy accident report forms, specialized training for accident assessment, weekly and monthly trend reports, location-based filing, spot maps for high-frequency accident locations, lists of most hazardous locations, collision diagrams, specially outfitted accident investigation cars, and “an efficient accident records unit”⁸³ have all been deemed necessary elements of a successful police media apparatus.

After the *Unsafe at Any Speed* movement,⁸⁴ governmental response to traffic safety invested an unprecedented amount of resources into studying traffic safety and implementing direct and cybernetic interventions. In particular, a variety of police media were subjected to assessment and quality control, including rumble strips, school zone flashers, freeway television surveillance, traffic control by radio communication, nuclear-energized self-luminous highway signs, in-car driver warning devices, computerized traffic actuated signals, communication of disabled vehicles, electronic traffic control and surveillance, and computerized traffic simulation modeling.⁸⁵ Treating these technologies as police media allows us to understand the nuanced ways that communication processes are elaborated and automated as a means of altering conduct in an efficient and non-intrusive fashion. Consider the rumble strip, for example, which is a cybernetic police agent that responds to a driver’s communicative action—viz., “I’m not paying attention”—with its own response, “Pay attention! Steer back on the road!”⁸⁶

While driver’s licenses and automobile license plates function as remote indicators of identity, these technologies provide little data in and of themselves; they are fully operative only when they become indices within a broader data set of the criminal record. Further, the remote retrieval and input of data while on patrol spreads the effectivity of police media as collectors and processors of information; the network is thus enlarged and sped up due to mobile media, and netpower is engorged. It is no surprise, then, that the police have been at the forefront of mobile media. While

militaries have generally outpaced police in their use of media at the tactical level of managing space and quickly amassing force,⁸⁷ the police have led the way in mobilizing remote databases. Police media have been making these data remotely available for hundreds of years through various print media, and with the advent of the telegraphic call box access became markedly smoother and more immediate by the 1860s. However, it was the advent of more remote forms of radio, telephonic, satellite, and ultimately digital media that have steadily increased the spatial and temporal frontiers of the modern police force.

Police and the Digital Ideal

Even though the broad-based amassing of data has some imagining Big Brother scenarios of all kinds, police administrators still use the language of efficiency and intelligent application of limited resources. The police record is not supposed to be all-encompassing, but rather intelligently shared by necessary policing agencies through translatable and accessible channels. Concerns over data-loss and incomensurable media systems plagued police telecommunications specialists for decades. How accurate was a 1924 fingerprint sent from New York to Chicago by Western Union's Telepix system? Analog records always had to be translated through transmission. This could mean a police communications officer accessing a criminal file in a cabinet and then reading important data to officers in the field listening on their one way police radio. Or it could mean sending a "missing persons" photo through a telephone assisted facsimile apparatus, a much more complicated multi-sequenced translation process that begins with an arbitrary flashbulb and an emulsifying chemical bath; decades later that result could travel through the phone lines as binarized data to be reconfigured as a pixelated image to connect a corpse with a criminal record continents away.

Incompatible systems and inaccessible databases were the two main problems confounding police omniscience, as data were in the wrong medium or were not properly mobile. To a large degree, such media incompatibilities were blamed for the failure of police to stop the 9/11 attacks.⁸⁸ More broadly the Department of Justice's (DOJ) IT plan presents a world of complexity laden with potential security threats:

Terrorist attacks, natural disasters, and large-scale criminal incidents too often serve as case studies that reveal weaknesses in our nation's information sharing capabilities. Current information collection and dissemination practices have not been planned as part of a unified national strategy. A tremendous quantity of information that should be shared is still not effectively shared and utilized among communities of interest (COIs).⁸⁹

Such DOJ documents are filled with infrastructural plans, diagrams, and flowcharts that clarify the necessity for a networked system that is still oriented around a central force, the US Government. As they state, "The Department supports both centralized and distributed models for information sharing."⁹⁰ While such a system has many nodes and is distributed, it is not a uniformly equal system, but corresponds to the asymmetrical power relations natural to most networks.⁹¹

As this general state of impending security crisis has become the “new normal,” many calls have been made for fully networked and entirely digitized police media at the regional and local level as well. The US Justice Department calls for just such media in their aptly titled policy brief “Effective Police Communications Systems Require New ‘Governance.’”⁹² The brief describes the history of police media incompatibility as originating with the use of police radio in 1933. Various interregional and extra-regional law enforcement and public safety agencies created separate and incompatible communications systems; hence these “stovepipes” were left both ineffective and inefficient. Instead the Justice Department calls for complete interoperability in which agencies share ownership, control, access, data, and costs. Similarly, by 2010 at least seventy two “fusion centers” had been created by the DHS in order to facilitate the collecting, sharing, and processing of data by local police forces, state police agencies, the FBI, and other intelligence services (Figure 5).⁹³ These centers point toward trends to more broadly network police media with all digital media. Digital information is gathered from all possible points at these centers, in part by private industry data specialists, in order to profile potential terrorists or political dissidents. Facebook posts, blog entries, and YouTube videos are treated as criminological data. Such *policing of media* could exponentially broaden the consideration of what may count as *police media*. It is at this point that we see the tendency toward what is variously called “function creep” or “surveillance creep”⁹⁴ that in this instance aligns with the more disciplinary or all-encompassing form of policing. Fusion centers are light, efficient and relatively unobtrusive, described as being “soft surveillance,”⁹⁵ thus looking an awful lot like the kind of “governing at a distance” most associated with modes of governmentality and security.

The vast scope and intensive data-processing of these practices raise considerable questions when one considers that all data are potentially criminological data. The ideal of digitality is to make all media one medium.⁹⁶ Further, with the advent of Internet-enabled mobile media perfect and seamlessly shared police knowledge can theoretically be collectively captured and processed everywhere, anytime, and by any police actants. The world can be turned into digitized data through numerous police media like radar guns, breathalyzers, CCTV cameras, digital fingerprinting, etc., as well as by “deputizing” all digital media in vast data-veillance efforts. Biometric, photographic, economic, demographic, genealogical, geospatial, and unspecified digital traces all exist as algorithmic and probabilistic potentiality. Temporal and spatial dynamics can be accessed, assessed, or even randomly generated to model optimal policing procedures.⁹⁷ The logic of security, unlike disciplinarity, is not binary—separating out the desirable from the undesirable—but it has increasingly come to depend on turning the world into binary data.

Conclusion

We want to conclude by offering two suggestions, one scholarly and the other political. First, there is much to be gained through broadening the analysis of media to include logistical media, especially as it concerns governmentality. The technical

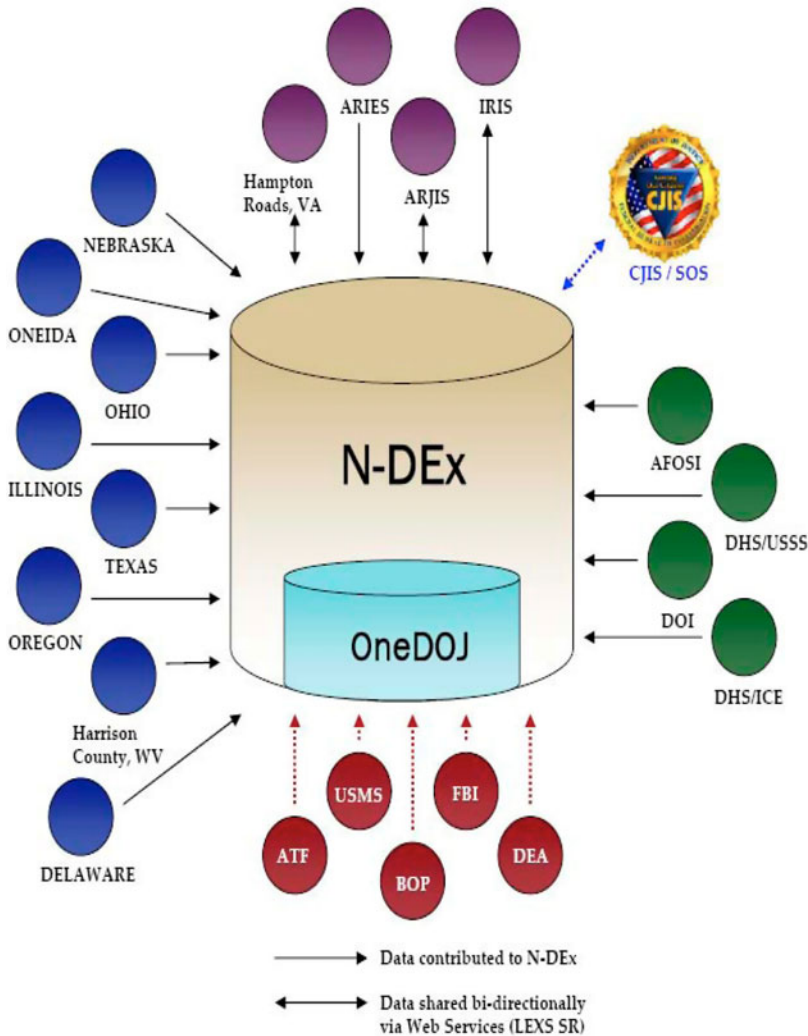


Figure 5. Department of Justice Fusion Center data collection flowchart.

and logistical aspects of governance are very often served, promoted, and enabled by such media. Our analysis of police media is merely a thin slice of one arena of how logistical media make modern governance possible. Importantly, the considerations of representing and intervening, as initially outlined by Ian Hacking nearly thirty years ago, retain their importance for both historical and present-minded critical research. The centrality of media in these processes cannot be overstated. Redirecting analysis toward how media function in the circulation of bodies and the *production* of knowledge, as opposed to the dissemination of knowledge or untruths, seems like a good starting point for broadening our understanding of how media function within different modalities of governmentality.

Second, it is becoming increasingly important to recognize that police resistance needs to attend to police media not only in terms of ideological maintenance, but also as strategic and logistical mechanisms for the collection, maintenance, and distribution of information and force. The police are increasingly looking to monopolize media by making illegal the tactical and logistical use of media by resistant forces. As Jack Bratich has explained, the ability to use media of all sorts, particularly in their logistical capacity, by protest movements has either been prevented outright through incarceration, as with the 2009 G20 protests in Pittsburgh, or co-opted and redirected as in the Egyptian uprising of 2011.⁹⁸ In such instances the police maintain superiority not simply through a monopoly on the use of violence, but by creating a monopoly on the use of logistical media as well.

Police media-violence should be a central consideration for protest movements. As Elmer and Opel clarify, such tactics transfer to the homeland the preemptive logics that spawned the Iraq War, as media are engaged domestically against dissidents to stop them before they even begin to protest.⁹⁹ Weaponry such as tasers are ideally suited for what are always-already mediated events such as protests, because they leave no visible trace of the violence they enact and on video footage look relatively harmless even as they are being deployed. Further, some police media are violent in and of themselves and also fail to leave a trace. The 2010 G20 Summit in Pittsburgh saw the inauguration of sound cannons, which “fire” a sonic blast of up to 150 decibels, producing what Patrick Gillham, Bob Edwards, and John Noakes call “strategic incapacitation.”¹⁰⁰ After their success against G-20 protestors, these cannons are becoming a routine part of the police-media arsenal: they were deployed extensively by police against the Occupy Movements of 2011 and were dispatched against protestors of the 2012 NATO Summit in Chicago.¹⁰¹ Understanding police media, then, is not simply of interest to media historians, but rather is necessary for understanding how and under what conditions *media are policed*—how they are made part of the policing process and how their use by protestors is suppressed, appropriated, or made illegal. As media become increasingly central to policing in general and policing dissent in particular, not only must the logistical mechanisms by which policing takes place be made transparent, but they need to be understood in order that countermeasures can be devised.

Notes

- [1] See, for instance, Timothy Lenz, *Changing Images of Law in Film and Television Crime Stories* (New York: Peter Lang, 2003), and the essays in the collected volume *Entertaining Crime*, eds. Gray Cavendar and Mark Fishman (Piscataway, NJ: Aldine Transactions, 1998).
- [2] Kathleen Battles, *Calling All Cars: Radio Dragnets and the Technology of Policing* (Minneapolis: University of Minnesota Press, 2010).
- [3] Mariana Valverde, *Law and Order: Images, Meanings, Myths* (New Brunswick, NJ: Rutgers University Press, 2006).
- [4] Nicole Hahn Rafter, *Shots in the Mirror: Crime Films And Society* (Oxford: Oxford University Press, 2006)

- [5] The co-constitutive rise in neo-liberal political ideology and law and order policing was first articulated by Stuart Hall et al., *Policing the Crisis: Mugging, the State, and Law and Order* (London: Macmillan 1978).
- [6] For a specific example of popular representations of law and order policing during the war on terror see Jack Bratich “Secret Agents and Popular Occulture,” in *Secret Agents: Popular Icons Beyond James Bond*, ed. Jeremy Packer (New York: Peter Lang 2009), 133–62. This period is more broadly described in James Hay and Mark Andrejevic, “Toward an Analytic of Governmental Experiments in These Times: Homeland Security as the New Social Security.” *Cultural Studies* 20. 4–5 (2006): 331–48.
- [7] Giorgio Agamben, *State of Exception*, trans. Kevin Attell (University of Chicago Press, 2004), and Michael Hardt and Antonio Negri, *Multitude* (New York: Penguin, 2004), 6–8.
- [8] Cf. Peter K. Manning, who writes that “The police face a communications problem: how to anticipate, respond to, mediate, and filter rising citizen demand with a controlled and calculated strategy. Police forces are based on complex communication systems and are dramatic, quasi-judicial organizations structured to allocate and deploy officers across time and space.” *Symbolic Communication: Signifying Calls and the Police Response* (Cambridge, MA: Massachusetts Institute of Technology Press, 1988), 3.
- [9] Friedrich Kittler, *Gramophone, Film, Typewriter* (Palo Alto, CA: Stanford University Press, 1999).
- [10] Sybille Kramer, “The Cultural Techniques of Time Axis Manipulation: On Friedrich Kittler’s Conception of Media.” *Theory, Culture & Society* 7–8 (2006): 93–109.
- [11] Michel Foucault, “Space, Knowledge, Power,” in *The Foucault Reader*, ed. Paul Rabinow (New York: Pantheon 1984), 244.
- [12] Stan Allen, “Infrastructural Urbanism,” in *Scroope* 9 (Cambridge: Cambridge University Architecture School 1998), 71–79.
- [13] Foucault, Michel. *Security, Territory, Population: Lectures at the College De France 1977–1978*, trans. Graham Burchell (London: Palgrave, 2007).
- [14] *Ibid.*, 44
- [15] *Ibid.*, 45.
- [16] *Ibid.*, 45.
- [17] *Ibid.*, 48.
- [18] *Ibid.*, 49.
- [19] As we address later in the essay, this trajectory has often been described as the shift from disciplinarity to governmentality. Regardless of the specific vocabulary, Foucault explained that there have not been simple replacements of one form of power by another (e.g., sovereignty replaced by disciplinarity replaced by governmentality), but rather that these three become fluid, with their interplay leading to one becoming more or less predominant at a given time. Cf. *Security, Territory, Population* 106–8.
- [20] Here we borrow from Peter Miller and Nikolas Rose, who synthesized Foucault and Latour to coin “government at a distance.” See “Governing Economic Life.” *Economy and Society* 19 (1990): 1–31.
- [21] Kelly Gates, “The Tampa ‘Smart CCTV’ Experiment.” *Culture Unbound: Journal of Current Cultural Research* 2 (2010): 85.
- [22] The whistle began to appear in English policing in about 1880, when it succeeded the police rattle (Critchley 1967, 151). Perhaps the earliest logistical medium in English policing history is the horn, which had been introduced into policing patrols at least by 1302. DeWindt and DeWindt argue that this is among the earliest uses of the horn for policing purposes. See Anne Rieber DeWindt and Edwin Brezette DeWindt, *Ramsey: The Lives of an English Fenland Town, 1200–1600* (Washington, DC: Catholic University of America Press, 2006), 331, fn. 66. Noting that police patrols at this time were civilian-run and organized around pacts of mutual responsibility, police official and legal historian Frederick Pollock implies that households were required to keep, along with knives and bows, horns to help in

- policing efforts. See Pollock, Frederick. *The History of English Law Before the Time of King Edward*, Vol. 2 (London: C. J. Clay and Sons, 1907), 577. In the fifteenth century, night watchmen—who performed police duties at night—were required to carry horns as they patrolled their villages. These watchmen—who were eventually outfitted with bells and trumpets—were moved to distributed police watchtowers, from which they would send customized alerts based upon the threat to the community. See Thomas Dudley Fosbroke, *Encyclopedia of Antiquities: and Elements of Archaeology, Ancient and Medieval*, Vol. 1. (London: John Nichols and Son, 1825), 472.
- [23] See R. W. Stewart, “The Police Signal Box: A 100-Year History.” *Engineering Science Education Journal* 3 (1994): 161–68.
- [24] Rachel Hall, *Wanted: The Outlaw in American Visual Culture* (Charlottesville: University of Virginia Press, 2009).
- [25] Battles, *Calling All Cars*.
- [26] See, for instance, John Durham Peters “Calendar, Clock, Tower,” in *Deus in Machina: Religion, Technology, and the Things in Between*, ed. Jeremy Stolow (New York: Fordham University Press 2012), in which he argues the logistical and organizational roles of media have been far too often overlooked.
- [27] Peter Miller and Nikolas Rose, “Governing Economic Life.” *Economy and Society* 19 (1990): 1–31. Miller and Rose borrow this framework from Ian Hacking’s influential *Representing and Intervening: Introductory Topics in the Philosophy of Natural Science* (Cambridge: Cambridge University Press, 1983).
- [28] “Governing Economic Life,” 7–8.
- [29] See, for example, Mark Andrejevic, *Reality TV: The Work of Being Watched* (Lanham, MD: Rowman and Littlefield, 2003); Ronald Walter Greene, “Lessons from the YMCA: The Material Rhetoric of Criticism, Rhetorical Interpretation, and Pastoral Power,” in *Communication Matters: Materialist Approaches to Media, Mobility and Networks*, eds. Jeremy Packer and Stephen B. Crofts Wiley (London: Routledge 2012), 219–30; Laurie Oullette and James Hay, *Better Living Through Reality TV: Television and Post-Welfare Citizenship* (Malden, MA: Blackwell, 2008); and Shayne Pepper, “Public Service Entertainment: Post-Network Television, HBO, and the AIDS Epidemic,” dissertation at North Carolina State University, 2011.
- [30] James Hay has provided a macro-scale approach to media as technologies of liberal government in his investigation of the historical role of cinema, radio, and television as mechanisms for “the spatial rationalization of bodies, movements, knowledge, and observation” in succeeding urban renewal initiatives in the US Such an approach is more in line with ours, though Hay’s media of choice are mass-media whereas we focus on media explicitly designed or applied to policing in its narrow sense. See James Hay, “The Birth of the ‘Neoliberal’ City and Its Media,” in *Communication Matters: Materialist Approaches to Media, Mobility and Networks*, eds. Jeremy Packer and Steven B. Crofts Wiley (London: Routledge 2012) 126; 121–40.
- [31] *Discipline and Punish*, 90–93; 104–7. Also see especially Foucault’s “Truth and Juridical Forms,” in *Power: Essential Works of Foucault, Vol. Three*, ed. James D. Faubion (New York: Norton, 2000), 1–88.
- [32] Cesare Beccaria, *On Crimes and Punishments and Other Writings*, trans. Aaron Thomas and Jeremy Parzen, ed. Aaron Thomas (Toronto: University of Toronto Press, 2008), 79.
- [33] *Ibid.*, 79–80.
- [34] *Ibid.*, 79.
- [35] H. L. A. Hart, *Essays on Bentham: Studies in Jurisprudence and Political Theory* (Oxford: Clarendon Press, 1982).
- [36] For a fuller description of this medieval watch-and-ward policing method, see Joshua Reeves, “If You See Something, Say Something: Lateral Surveillance and the Uses of Responsibility.” *Surveillance & Society* 10.3/4 (2012): 240–42.

- [37] T. A. Critchley, *A History of Police in England and Wales, 900–1966* (London: Constable Press, 1967), 42.
- [38] See Colquhoun's *Treatise on the Police of the Metropolis* (London: H. Fry for C. Dilly, 1796), where he bemoans the "absurd prejudice" that pitted a reluctant general public against the fledgling police force: "that the best laws that ever were made can avail nothing, if the public mind is impressed with an idea that it is a matter of infamy to become the casual or professional agent to carry them into execution" (213–4).
- [39] For more on how communication technologies are used to organize police patrols across time and space, see Richard V. Ericson and Kevin D. Haggerty, *Policing the Risk Society* (Oxford: Oxford University Press, 1997), 388–411, and Peter K. Manning, *The Technology of Policing: Crime Mapping, Information Technology, and the Rationality of Crime Control* (New York: New York University Press, 2011).
- [40] Patrick Colquhoun, *Treatise on the Commerce and Police of the River Thames, Containing a Historical View of the Trade of the Port of London* (London, 1800), 41.
- [41] *Ibid.*, 281.
- [42] David Garland, *Culture of Control: Crime and Social Order in Contemporary Society* (Chicago: University of Chicago Press, 2002), 31.
- [43] L. J. Hume, *Bentham and Bureaucracy* (Cambridge: Cambridge University Press, 1981), 114.
- [44] For a theoretical overview of lateral surveillance and a description of its contemporary trends, see Mark Andrejevic, "The Work of Watching One Another: Lateral Surveillance, Risk, and Governance." *Surveillance and Society* 2 (2005): 479–97.
- [45] Colquhoun, *Treatise on the Police of the Metropolis*, 101.
- [46] *Ibid.*, 100–104.
- [47] Jeremy Bentham, *The Works of Jeremy Bentham, Vol. VIII*, ed. John Bowring (London: Simpkin, Marshall, and Co., 1843), 392. Quoted in Hume, *Bentham and Bureaucracy*, 152.
- [48] The hue and cry policing method was the foundation of medieval crime response in England. Once a crime was committed, witnesses would raise a "hue and cry"—utilizing their voices, whistles, and whatever else they had on hand—and would trail the criminal until s/he was captured. Thus every male citizen could be deputized into an ad-hoc police force at any moment. For an overlook of the hue and cry and other pre-modern policing practices, see Critchley *A History of Police* 1–28, and Lucia Zedner, "Policing before and after the Police: The Historical Antecedents of Contemporary Crime Control," *British Journal of Criminology* 46 (2006): 78–96. Also see en. 21 above.
- [49] See Leon Radzinowicz, *A History of English Criminal Law and Its Administration from 1770* (New York: Macmillan, 1957), 47–50.
- [50] J. T. Barber Beaumont, "Regulations of Police for the Prevention of Disorders and Violence," in *The Pamphleteer: Dedicated to Both Houses of Parliament, Vol. XIX* (London: 1822), 131.
- [51] Nathaniel Conant, "Minutes of Evidence Taken Before the Committee on the State of the Police of the Metropolis," in *Report from the Committee on the State of the Police of the Metropolis* (London: 1816), 16.
- [52] See "Much of the lengthy intellectual history of criminology," writes Piers Beirne, "has been dominated by the belief that physical features are external signs of inner and spiritual darkness" in *Inventing Criminology: Essays on the Rise of Homo Criminalis* (Albany: State University of New York Press, 1993), 187. Beirne's work traces the historical development of *Homo criminalis* in the criminological imagination, showing how typologies of the criminal were especially dominant in the nineteenth century and accompanied sociological attempts—such as those by Adolphe Quetelet—to theorize the "common man" (1–6).
- [53] For work on the relationship between media—particularly photography—and eugenics, see Allan Sekula, "The Body and the Archive," in *The Contest of Meaning: Critical Histories of Photography*, ed. Richard Bolton (Cambridge, MA: Massachusetts Institute of Technology

- Press, 1989), 343–87; and Phillip Prodger, *Darwin's Camera: Art and Photography in the Theory of Evolution* (Oxford: Oxford University Press, 2009).
- [54] R. W. McClaughry, "Publisher's Preface," in Alphonse Bertillon, *Signaletic Instructions: Including the Theory and Practice of Anthropometrical Identification* (Chicago: Werner, 1896), vii.
- [55] See Kelly A. Gates, "Biometrics and Post-9/11 Technostalgia." *Social Text* 23.2 (2005): 41. Also see Valverde, *Law and Order*, 74–6.
- [56] See Armand Mattelart, *The Globalization of Surveillance*, trans. Susan Taponier and James A. Cohen (Malden, MA: Polity, 2010), 15–17.
- [57] Alphonse Bertillon, *Signaletic Instructions: Including the Theory and Practice of Anthropometrical Identification* (Chicago: Werner, 1896), 249–58.
- [58] See Anne Maxwell, *Picture Imperfect: Photography and Eugenics, 1870–1940* (Portland, OR: Sussex Academic, 2008), 65–7.
- [59] Benjamin P. Eldridge, *Our Rival the Rascal: A Faithful Portrayal of the Conflict between the Criminals of This Age and the Defenders of Society—the Police* (Boston: Pemberton Publishing, 1896), 321.
- [60] *Ibid.*, 55.
- [61] Thomas Byrnes, *Professional Criminals of America* (New York: Cassell and Company, 1886), Preface.
- [62] As Critchley points out, these innovations retained their prominence in twentieth-century policing: "From the early beginnings the forensic laboratory system has grown until today it is an integral part of the police service, employing pathologists, chemists, biologists, experts in hand-writing, and many others. Nowhere else, perhaps, is the quiet drama of police work so vividly presented to the layman as in these quiet laboratories, where the examination of blood-stained sheets, the comparison of hairs and bits of skin, the analysis of human organs pickled in jars, and the microscopic examination of stains, specimens, and minute tell-tale traces of all kinds from the scenes of innumerable crimes make up the daily work," in *A History of Police*, 213–14.
- [63] See Gary T. Marx, *Undercover: Police Surveillance in America* (Berkeley: University of California Press, 1988); also see Mark Andrejevic, *iSpy: Surveillance and Power in the Interactive Era* (Lawrence: University Press of Kansas, 2006), 124–5.
- [64] See, for instance, Charles Tempest Clarkson and J. Hall Richardson, *Police!* (London: The Leadenhall Press, 1889), 280–85.
- [65] See footnote 45 of this article for more information about media in hue and cry-based policing.
- [66] Critchley 109–10. Telegraph-based fire alarm systems came into use around this time as well. See R. W. Stewart, "The Police Signal Box: A 100-Year History." *Engineering Science and Education Journal* 3.4 (1994): 161–68.
- [67] G. Douglas Gourley and Allen P. Bristow, *Patrol Administration* (Springfield, IL: Charles C. Thomas, 1961), 179.
- [68] *Ibid.* 179.
- [69] Gourley and Bristow stress that police supervision is necessary to maintain discipline, but also to produce an extensive police record that can be used to determine future allocation of resources. Automating such surveillance through media is a common solution. See Haggerty and Ericson (FINISH, 1997).
- [70] For decades, call boxes were accessible only to police. In the 1950s, an increasing number of these boxes were made available to civilians as a direct means of communication to police headquarters. Call boxes remained necessary well after the advent of police radio as they allowed for secrecy where radio failed. Further, they were less prone to the noise of bloated airways pushed beyond their bandwidth capacity. By the 1960s, call boxes were deemed economically inefficient due to the high density of public telephones (Gourley and Bristow).

- [71] In different ways and for differing reasons, several scholars have suggested that automobiles might fruitfully be treated as media or communication technologies. See, for instance, Marshall McLuhan, *Understanding Media: The Extensions of Man* (New York: McGraw-Hill 1964); James Hay and Jeremy Packer, "Crossing the Media(-n): Auto-mobility, the Transported Self, and Technologies of Freedom," in *Media/Space: Scale and Culture in a Media Age*, Nick Couldry and Anna McCarthy (New York: Routledge 2004) 209–32; and Sarah Sharma, "Taxis as Media: A Tempero-materialist Reading of the Taxi-Cab," *Social Identities* 14.4 (2008): 457–64.
- [72] Roads, in fact, had been a special preoccupation of police since their inception. In 1839, ten years after Robert Peel founded the modern public police force, a commission convened to assess the effectiveness of the new police. One of their major concerns was the insecurity of travelers on rural highways. See *First Report of the Commissioners Appointed to Inquire as to the Best Means of Establishing an Efficient Constabulary Force in the Counties of England and Wales* (London: Charles Knight and Co., 1839), 87–92.
- [73] With the advent of the patrol car, we see the police striving to maintain a speed/territory edge on criminals. This became particularly germane during the Prohibition Era when bootleggers used increasingly faster cars for transporting alcohol (Packer 2008). The patrol car has been widely studied and invested in: for instance, based upon an internal study of the percentage of successful automobile pursuits by 6-cylinder versus 8-cylinder patrol cars, the city of Los Angeles in 1958 determined that they would use only 8-cylinder cars for patrol while 6-cylinder vehicles were delegated to investigation and transportation (Gourley and Bristow).
- [74] "The San Francisco Police Department: 150 Years of History." *S.F.Police.org*. <http://sf-police.org/index.aspx?page=1592> (accessed May 18, 2012).
- [75] For a pre-war analysis, see David Blanke, *Hell on Wheels: The Promise and Peril of America's Car Culture 1910–1940* (Lawrence: University Press of Kansas, 2007), and for a post-war analysis see Jeremy Packer, *Mobility Without Mayhem: Cars, Safety, and Citizenship* (Durham, NC: Duke University Press, 2008).
- [76] Paul Weston, *The Police Traffic Control Function* (Springfield, IL: Thomas, 1968), 3.
- [77] See Jeremy Packer "Rethinking Dependency: New Relations of Transportation and Communication," in *Thinkings with James Carey: Essays on Communications, Transportation, History*, eds. Jeremy Packer and Craig Robertson (New York: Peter Lang 2006), 79–100.
- [78] See Weston. Also see Ross D. Petty, "The Rise, Fall, and Rebirth of Bicycle Policing." *International Police Mountain Bike Association*, 2006, <http://www.ipmba.org/newsletters/ABriefHistoryofPoliceCycling.pdf> (accessed May 2012).
- [79] See R. N. Harger, "Some Practical Aspects of Chemical Tests for Intoxication." *Journal of Criminal Law and Criminology* 35 (1944): 202–18.
- [80] See R. F. Borkenstein and H. W. Smith, "The Breathalyzer and Its Applications." *Medicine, Science, and the Law* 2 (1961): 13–22.
- [81] Weston 216–21.
- [82] *Ibid.* 218.
- [83] *Ibid.* 230.
- [84] Responses to the perceived urgency of traffic safety were prolific following the publication of Ralph Nader's *Unsafe at Any Speed: The Designed-in Danger of the American Automobile* (New York: Grossman 1965), and led Congress to pass the Traffic and Motor Vehicle Safety Act.
- [85] Weston.
- [86] As Bruno Latour has argued, technologies like automatic door closers have agency and elicit specific forms of action from humans. See "Where Are the Missing Masses? The Sociology of a Few Mundane Artefacts," in *Shaping Technology/Building Society*, ed. W. L. Bijker (London: Massachusetts Institute of Technology Press, 1988), 225–58.

- [87] The German blitzkrieg depended upon cryptographically encoded radio communications. See Friedrich Kittler, "Media Wars: Trenches, Lighting, Stars," in *Literature, Media, Information Systems: Essays* (Amsterdam: Overseas Publishers, 1997), 117–29. Aerial photographs were used to map and plan attacks beginning as early as the Civil War, but gained prominence with film and airplanes during WWI. See Paul Virilio, *War and Cinema: The Logistics of Perception* (New York: Verso, 1989).
- [88] United States Government Accountability Office, "Testimony before the Committee on Government Reform, House of Representatives," in *9/11 Commission Report: Reorganization, Transformation, and Information Sharing*. 2004, <http://www.gao.gov/new.items/d041033t.pdf>, accessed May 20, 2012.
- [89] "Department of Justice Information Technology Strategic Plan, 2008–2013." *Justice.gov* (2008): 16, <http://www.justice.gov/jmd/ocio/2008itplan/08it-strategic-plan.pdf> (accessed May 20, 2012).
- [90] United States Department of Justice, "Department of Justice IT Strategic Plan Fiscal Years 2010–2015." *Justive.Gov.*, December 9, 2009, <http://www.justice.gov/jmd/ocio/it-strategic-plan.htm> (accessed May 19, 2012).
- [91] See Alexander Galloway and Eugene Thacker, *The Exploit: A Theory of Networks* (Minneapolis: University of Minnesota Press, 2007).
- [92] National Institute of Justice, "Effective Police Communications Systems Require New Governance." *NIJ.org*, <http://www.nij.gov/topics/technology/communication/governance.htm> (accessed May 18, 2012).
- [93] Torin Monahan, "The Future of Security? Surveillance Operations at Homeland Security Fusion Centers." *Social Justice* 37.2–3 (2010): 84–98.
- [94] *Ibid.*, and David Lyon, *Surveillance Studies: An Overview* (Malden, MA: Polity, 2007), 201.
- [95] Gary T. Marx, "Soft Surveillance: The Growth of Mandatory Volunteerism in Collecting Personal Information—'Hey Buddy Can You Spare a DNA?,'" in *Surveillance and Security: Technological Politics and Power in Everyday Life*, ed. Torin Monahan (New York: Routledge, 2006), 37–56.
- [96] Kittler 1999.
- [97] For an analysis of how such policing came into being, see Richard Erickson and Kevin Haggerty, *Policing the Risk Society* (University of Toronto Press 1997).
- [98] Jack Bratich, "User Generated Discontent: Convergence, Polemology, and Dissent," *Cultural Studies* 25.4–5 (2011): 621–40.
- [99] Greg Elmer and Andy Opel, *Preempting Dissent: The Politics of an Inevitable Future* (Winnipeg, Manitoba: Arbeiter Ring Publishing, 2008).
- [100] Patrick F. Gillham, Bob Edwards, and John A. Noakes, "Strategic Incapacitation and the Policing of Occupy Wall Street Protests in New York City, 2011." *Policing and Society* 23 (2013): 81–102. Also see Jack Bratich, "User-Generated Discontent: Convergence, Polemology, Dissent." *Cultural Studies* 25 (2011): 620–39.
- [101] "Chicago Police Sound Cannon: LRAD 'Sonic Weapon' Purchased Ahead Of NATO Protests," *Huffington Post.com*, May 15, 2012, http://www.huffingtonpost.com/2012/05/15/chicago-police-sound-cannon-lrad-nato-summit_n_1518322.html (accessed May 19, 2012).
- [102] Image taken from Eldridge, *Our Rival the Rascal*, 321.
- [103] From Howard O. Sprogle, *The Philadelphia Police, Past and Present* (Philadelphia: Howard O. Sprogle, 1887), 275.
- [104] Photograph accessed at http://www.tampagov.net/dept_police/information_resources/photo_gallery/historical_photos.asp. Retrieved 5/21/2012.
- [105] Photograph accessed at <http://mysite.verizon.net/vzesdp09/baltimorepolicehistorybywmhackle2/id26.html>. Retrieved 5/12/2012.