

# Introduction: The eyes have it—Should they?

## Police body-worn cameras

*Earlier version of an article in Bryce C. Newell (ed.), Police on Camera.  
Routledge 2021*

Gary T. Marx

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“You can observe a lot by just watching”  
– Yogi Berra (Gorman 2015)

But what can you and they see? The clearly written chapters in this compact volume about seeing—the first to focus exclusively on police body-worn cameras (BWCs)—are fine representatives of a rapidly expanding research field. In asking about looking, the chapters are necessary reading for researchers and those setting policy in this area. They advance understanding of some of the central conceptual, ethical, policy, and empirical factors seen with a surveillance technology that is galloping, rather than the more common pattern of creeping, in its diffusion. The cameras exist within a wide universe of contexts and ideas that this Introduction will consider. These can be slighted under the rush to innovate, political pressure, and the lure of federal funding. The book is most welcome because many of its chapters concern social, ethical, and epistemological issues beyond the multitudinous quantitative studies available on outcomes and attitudes toward the cameras (Chapman 2019; Lum et al. 2019 offer summaries).

The author of an introduction has it easy. He or she can write as a pontificating generalist, rather than as the expert specialist. Thus, there is no need to say anything new—unlike the authors in this volume. A further advantage is that, unlike the authors, the introducer can raise questions, but need not answer them. The writer of an introduction has merely to set the stage and locate the topic within a broader context and can, in good conscience, draw from his or her prior work. The perspective offered here is expanded on in Marx (2017) and Morente and Marx (2019).

The sociology of knowledge offers a powerful way to locate the topic. It is a reminder, in line with philosopher Alfred N. Whitehead, that every way of seeing is also a way of not seeing, and with social observer Georg Simmel that separating the seemingly connected and connecting the seemingly separated can advance understanding.

### Bentham on the need for research and new tools for social control

The development and adoption of BWCs and the voluminous evaluation research on the topic can be historically situated in the Enlightenment and in particular in the work of Jeremy Bentham (Quinn 2019). Bentham’s work as a politician, theorist, and reformer underlies

contemporary efforts in several ways. He sought a more rational ordering of the world through technology and empirical documentation and assessment. He wanted Parliament to use crime statistics, “in the formulation and evaluation of policy.” He argued for the use of observation and measurement for setting law and courses of action. His ethos is reflected in the chapters in this book and the many quantitative studies of the cameras under the support of the National Institute of Justice and the Department of Homeland Security that emphasize evidence-based policing. Any veterans of the largely qualitative criminal justice studies of the 1960s must be pleased with the turn toward systematic, quantitative empirical research of the last 50 years. Such research is essential, but so are other methods such as thought, imagination and ethnography (e.g., the observational study of Rowe, Pearson and Turner 2017)

Quantitative studies are often limited in their direct application to policy given ethical, political, and longer-term considerations. They are also often limited in its generalizability. Social science correlations are rarely as strong as those in natural science, are more difficult to replicate with equivalent results, and there is often less consensus regarding the choice of methods and conclusions. A flashing yellow light is needed, even when something appears to “work” according to the criteria measured. Those seeking a tighter connection between research findings and policy are often frustrated with their weak link, just as those urging caution can be troubled by the rush to implement.

Bentham’s emphasis on rationally approaching governance is also seen in his advocacy of using technology for prevention and deterrence, something clearly present with BWCs. He argued that crime might be lessened through creating a more equitable society, but more immediately through improved physical means. Bentham followed, and helped inspire, an ever evolving protective and preventive tradition from the inventors and builders of the first locks, safes, moats, walled castles, armor, and biological identification systems to the present environmental design (Newman 1972), situational crime prevention (Clarke 1997), and related efforts (Byrne and Marx 2011; McGuire and Holt 2017).

Bentham’s proposals fit well with a classification framework for technology-based engineering of social control efforts (Marx 2015) Such prevention efforts involve target or facility removal, target devaluation, target insulation, offender weakening, incapacitation or exclusion, victim warning and, when those fail, offense/offender target identification and documentation. The last form applies most clearly to BWCs. Expanded visibility (whether through undercover means, cameras, tracking devices, sensors, and more) can contribute to deterrence and, if prevention fails, it increases the likelihood that rule breakers and their behavior will be identified and recorded.

A rational approach could also be seen in the linking of accountability with visibility to limit the crimes of authority. Bentham wrote of “sinister interest” in which the vested interests of elites conspire against those of the public. This fits well with the demand for openness and documentation with respect to police actions.

Bentham’s vision for a new form of prison—the Panopticon, with its two-way street vision—was intended to control the prisoners, as well as the guards. Such control contains the seeds of our expectations regarding freedom of information and openness in government. Government had to be closely watched and calibrated to see that things worked according to plan and to guard against abuses of power.

Much of social (as against computer and business) writing on the new surveillance is explicitly or implicitly critical. Surveillance is asymmetrically done in the dark in contexts of inequality by those with greater power. Subjects neither consent, nor are informed, and if they are aware and challenges are possible, this often comes down to whose account is believed, with a decided tilt toward those in authority. But what if there were a technology that, if not able to reverse all of the above, could at least create a more level playing field by making the tool available to all and offering a documentary record of contested events? Such is the claimed promise of BWCs. Subjects see the cameras and their permission may even be requested. This contrasts markedly with the unseen (and often intentionally covert), nature of much other data collection. Informing and obtaining consent from subjects and offering them other protections (e.g., sharing the data, procedures for grievances) helps legitimate use of the tool and authorities can say, “we have nothing to hide.”

In creating a mobile, visible record, body cameras carry some remnants of the prescient Bentham’s never-built Panopticon, where unseen guards in towers peered into the actions of inmates. They are a technical means intended to bring self-control, but not because of subjects’ uncertainty of whether or not they are being watched. Instead, it is the certainty of being watched that is believed to create self-control. The ethos of accountability through visibility remains but is extended upward. Bentham’s proposed prison offered a means of controlling both prisoners and their guards. However, when supervisors, as the guards of the guards, were complicit in the latter’s wrongdoing, there could be no public accountability, let alone awareness (absent the rare whistle blower). In contrast, depending on how used, the mandatory body-worn camera (with good discretion policies regarding its uses) can be a strand in the democratization of surveillance along with bystanders with cell phone cameras. This broadens the audience for results to the public, not just to police and their managers. That in turn can greatly increase public pressure for change as seen in the Black Lives Matter movement. The characteristics and consequences of the BWCs illustrate what is new about contemporary surveillance technologies.

### BWCs as the paradigmatic new surveillance

The relative importance of the visual, from the earliest cave paintings through the invention of photography and its multiple forms, separates humans from most other sensate beings. The eyes contain the vast majority of the body’s sense receptors, in contrast to the much greater role of smell for canines or hearing for bats. Culturally, the visual is a master metaphor for understanding—“seeing is believing,” “worldview,” “I see,” “I get the picture,” “eagle eye.” To “turn a blind eye” is to refuse to acknowledge what the eye provides with the implication that it is accurate. We speak of “the mind’s eye,” not its ear or nose.

Marshall McLuhan (1962), in noting changes in communication technology, argued for the increasing importance of the visual in Western society and culture. The role of the visual received an enormous boost with the development of mass video communication through television, a boost supercharged by developments such as the cell phone and body-worn cameras. The powerful role of video in communicating “reality” gives it a presumptive validity. Absent some caution, this can mean a rush to judgment and can distort the search for truth. Facts, whether conveyed visually or in other ways, do not speak for themselves.

The body-worn camera with its technology and reliance on the eye is the poster child for the new surveillance. It fits well within a majority of dimensions useful in contrasting traditional and the new surveillance shown in Table 0.1.

Table 0.1 BWCs and new surveillance dimensions (adapted from Marx 2017)

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The new surveillance:

- is machine based and can be automated
  - is involuntary on the subject's part (and in principle mechanistically on the agent's part)
  - extends the senses, mind, physical borders, and time and can cross borders that previously protected information --is mediated in data collection
  - collects multiple forms of data (sight, sound, time, location, identity, co-presence, and potentially biological data)
  - involves mobile, continuous, and immediate data collection
  - permits the creation of a potentially permanent record
  - involves data gathered in real time, which can be easily communicated and widely shared
  - involves the collection of data that is folded into routine activity and is inherent in the action
  - is relatively inexpensive per unit of data collected
  - is often acontextual, gathering only what the technology is capable of when it is turned on (and works), not what is physically or temporally beyond its purview (e.g., what happened before or after it was activated, or was outside of its range).
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Varieties of variation

Turning the kaleidoscope in a different direction, variation in causes, processes, outcomes, forms, ethics, and policies can be seen. With a broad topic such as BWCs, identifying and exploring the correlates of these are vital to understanding and judgment. Variables to be analyzed include role played; means used before the tool appeared; uses in other surveillance and criminal justice contexts and in other institutional and interpersonal settings; types of camera; laws, policies, and guidelines.

Surveillance roles, alternatives

Three basic surveillance roles can be noted: agent (whether organizational sponsor or data collector), subject, and audience. We can further ask if a setting involves self-surveillance, co-surveillance, reciprocal/nonreciprocal, and symmetrical/asymmetrical surveillance. While conceptually these are distinct and, for analytic purposes, are often easily applied (e.g., court sanctioned wiretaps are nonreciprocal and asymmetrical), in the case of the BWC, the situation is

muddled. Like an Escher drawing, the components twist back onto themselves. This makes it more difficult to draw ethical, legal, and public policy conclusions and explains the surprisingly strong support for the cameras from both police and activists critical of surveillance.

The agents and subjects of BWCs are to varying degrees intertwined in their capture of a data production performance involving self-surveillance. In contrast to most government–citizen encounters, this is a reciprocal and, to a degree, symmetrical, example of co-surveillance. Who is the subject? Who is the agent? The police wearer of the camera is the agent, but he or she is also the subject. In another of the ironies drenching surveillance studies, the cameras become a tool for guarding the guards. Here, police as workers face monitoring in a new form. The camera may serve as a panoptic watchman intended to shape the officer’s behavior. The citizen being recorded by the police is also the subject and if that citizen is recording with a cell phone, then that person is also both agent and subject.

For police, we can ask the historical question, “How was the function (goal) intended to be served by the new tool met before the cameras were available?” With respect to the goal of seeking evidence for the question “what happened?” there were first-person accounts, documents, and forensic data before BWCs. When the goal is that of police performance and accountability, we can consider commonly used tools such as productivity measures, internal affairs units (with the potential for stings), drug, polygraph and reporting requirements, citizen complaints, and review boards.

#### Other settings, uses, and tools

Comparative insights can be found in viewing BWCs alongside other new surveillance technologies for criminal justice and security apart from patrol

Officers. Consider, for example, body and package scans, computer dossiers, X-rays, and facial identification at airports and borders, and traffic and toll road cameras. However, unlike some new surveillance means such as brain scans as presumed lie detectors or body scanners, BWCs look at not through, although looking at many cases using AI (artificial intelligence) may reveal unseen patterns (e.g., the use of big data to analyze athletic performance). In contrast to cameras mounted on a post, the agent as camera carrier is a direct party to the interaction, raising deeper issues about responsibility for the subject’s subsequent behavior.

Echoing the Panopticon, we have the presence of cameras in prisons. Consider also the video taping of police interrogations in which the interrogator and the suspect are both subjects, even as the former is the agent, although not the sponsoring agent.

BWCs share some unexamined, wish fulfillment beliefs with other oversold, rapidly diffusing prior techno-fixes such as the electronic monitoring of those under court supervision. The BWCs show similarities (speed of adoption, uncritical beliefs, and support of both authorities and their critics) to this correctional tool that appeared in the latter 1980s. A U.S. Department of Justice (1990) report referred to its rapid diffusion as “explosive.” Corbett and Marx (1991) used the word “frenzy” in describing the sometimes overly enthusiastic responses to electronic monitoring. They identified ten “tarnished silver bullet techno-fallacies” to characterize the often taken for granted assumptions seen in the uncritical adoption of new technologies. Among the most applicable to BWCs are the fallacies of the free lunch (a cost-free solution—no unwanted unintended consequences and the feds are paying for it); the fail-safe

system; the explicit agenda (goals are clearly and honestly stated); the vanguard (“desire to appear in step”); and of novelty (new means are better). Over the next three decades the list of techno-fallacies grew to 44 (Marx 2017).

Given the dynamic, prior environments with multiple actors and interests into which new tools are introduced (see Kathryn Henne and Jenna Harb, Chapter 3), it is hardly surprising that things do not always go as planned.<sup>1</sup> Faith in the presumed objectivity and sure fix quality of efforts to “get the humans out of the loop” may be undercut by research. For example, the NIST (2019) findings on racial disparities in facial identification. Holding apart the issue that the algorithm can only be as good (or bad) as the data it infers from, when even the best programmers can’t grasp the astoundingly complex logic of the algorithm, notice must be taken.

In considering the monkey wrenches that so often sprout from, or are thrown on, the best laid plans, Marx and Guzik (2017) identify the uncertainty principle. Five prominent factors here are *uncertainties of functioning* (e.g., do BWCs operate technically as designed?), *goals* (e.g., can BWCs be used for purposes other than those for which they were designed?), *consequences* (e.g., will BWCs produce unintended consequences?), *context* (e.g., how do social contexts shape how the police use BWCs?), and *environment* (e.g., will BWCs function in adverse weather or cultural conditions?).

The hopes of utopians and fears of dystopians are rarely on target. Contexts need to be considered, and discretion and interpretation remain dance partners as contingency provides the orchestration.

Contrasts with other institutional and interpersonal settings may also be helpful. Varying the context, properties, and policies accompanying the tool can surface distinctive structural and situational aspects of the BWCs. Beyond cameras in stores, at front doors and inside homes and on street posts, cars (including taxis), robots, and computers, consider videotaping of surgery, sex, births, forest fires, protests, sports, nursing homes, as well as nanny cams and video messages to heirs filmed by persons before they die. Important here are factors such as the role played, shared or oppositional goals, reciprocity, type of place, security, and validity of the data, being informed, consent, and the right to challenge and control results. With almost 40 manufacturers, both mechanically and with software, the cameras vary in significant ways.

### Ways of using

How the cameras are used is in part determined by how they are designed (note the different outcomes between places with similar contexts and policies but using different designs (Flight, chapter 1). Further variation can be seen in rules governing use, such as whether by technical possibility or by policy the camera must always be turned on and, if so, does it automatically stream and record, or does the officer have discretion about these? Is an electronic or verbal warning that audio and video recording is on offered? Where does the camera attach and how visible is it? Are there standards for the quality and range of the sound and image? Is the camera’s field of view limited or does it offer a 360-degree vista? What potential exists for editing, deleting, redacting, or enhancing the record, and what means are there for checking this, including redaction of faces? What is publicly released, when and to whom, and under what conditions? Are there protections for those wronged by the inappropriate releasing or

withholding of tapes, or for citizens whose phones are taken or destroyed when they try to film police?

Where are the data stored, how long are they kept and how secure is their protection and transmission? Given the potential to endlessly search and match other databases, the issues of how long data are kept and with whom they are shared have great importance. With no limits on retention there can be full enforcement in scouring for minor (or lower priority) violations, which can lead to overflowing the system, misuses of discretion, and inflated performance data. How effective do we want police to be?

Intellectual and social problems associated with the surveillance capitalism of giant data companies (Zuboff 2019) need consideration here. Who owns and controls the publicly generated data from police encounters? What are the implications for the public good and accountability as a result of the proprietary interests and non-disclosure statements companies such as Axon require of local police agencies? How can the accuracy of algorithms be judged when they are in private hands and the companies' claims regarding their visual analytics and predictive powers cannot be independently analyzed?

The adoption of cameras generally happens with little public discussion. Financially pressed departments welcome the incentives (free cameras and data storage, training and support for a year) the companies offer, not to mention the revenue from fines and the saving of court costs. However, police priorities may be subtly shifted by the increased revenue from infractions documented by license plate and facial recognition software. How much do companies (in some cases receiving 25% of revenue from fines generated) and facing little or no liability as "mere" transmission conduits, value due process?

What do departments gain in return for granting control over "their/our" data to private clouds? Elizabeth Joh (2017) argues that such companies exercise a largely unseen, undue influence with implications for civil liberties, technology design, and transparency. The law says a lot about searches (e.g., conditions for the collection of police data) but little to what happens to collected data.

When cities do give serious legislative consideration to the issues, what is their experience (e.g., in San Francisco, a city that banned use of the cameras for facial identification?) How can, and should, the gains in privacy and anonymity be measured against the failure of deterrence or the inability to identify suspects or missing persons? How do departments vary, and with what consequences, for where they draw the lines?

One commonly studied type of variation involves attitudes. Beyond seeing the overlap in supportive views of citizens and many police, a common finding is that rank and file police are in general less supportive than police supervisors, but with considerable support none the less. A part of that involves believing that the camera can offer justification for the use of force and exonerate the officer from complaints, even if it were to ironically mean greater use of legally justified force in the absence of the camera.

Variation in attitudes can also be seen in looking across countries.

## Comparative

Chapters in this book by Barak Ariel et al. (Chapter 6), Gregory Brown (Chapter 7), and William Webster and Charles Leleux (Chapter 12) with data from Uruguay, Canada, and Scotland, and

the other chapters with data from the United States and England, alert us to variation involving comparative international questions. For example, while Canada has had police scandals and shares much with its southern neighbor, Brown's work (Chapter 7) shows that the rapid acceptance of BWCs is not among them (at least not yet). Variation in patterns of diffusion (and, if rarely, contraction) are vital topics for inquiry, including not only countries but across types of organization (e.g., other public and private service workers such as parking attendants, hospital workers, school guards).

Many contemporary security technologies rapidly go global. The diffusion of hi-tech means of social control—such as cameras, facial recognition, DNA, and home monitoring—is apparent. Is this because of shared problems, entrepreneurs, fads, or the manifest superiority of the new means? But even if the technology is the same, is it used in the same ways, does it have the same meaning, and is it experienced by subjects and agents in the same ways across institutional settings, jurisdictions, and countries? Is there a move toward a uniform world surveillance society driven by a common ethos, problems, and technology developed in Western societies? Or is the commonality based on convergence and amalgamation drawing on the cultural and historical distinctiveness of different societies? Or, instead, will we see a world of uncommonality, where local differences in narratives and uses remain strong, even as common technologies are adopted (Fijnaut and Marx 1995; Doyle, Lippert, and Lyon 2011; Guzik 2016; Siqueira Cassiano 2019)? Finally, we can note variation in goals—their meaning and prioritizing.

Goals: Depolicing or deescalating, transparency or privacy?

The literature generally suggests that depolicing is an outcome to be avoided. Several studies suggest that as measured by readily accessible variables such as traffic enforcement (number of tickets written) the camera's presence was not associated with increased police passivity, at least as conventionally measured (Ariel et al chapter 6; Yokum, Ravishankar, and Coppock 2017). Absent other goals and considerations, these findings support (or at least do not argue against) use of the tactic based on passivity concerns. But even if that was not the case, there are a multiplicity of goals beyond productivity as this is commonly measured and valued. These include respect for due process and avoiding enforcement actions which can enflame situations. Consider New York City's experience with "high" productivity as measured by "stop, question and frisk". This was as declared unconstitutional in 2013 and its effectiveness questioned (see, e.g., Weisburd, Telep, and Lawton 2014; Special Issue 2014).

Goals, beyond often being in conflict, are not of equal weight and may vary by the role played and change with time. What are the goals of BWCs? 4 Is there agreement on what a goal means and how it is to be measured? How are, and should, goals be weighed and prioritized (e.g., police accountability as against surveillance of citizens)? Are results from the citizen filming perspective consistent with those from police filming? A fuller picture is possible if both begin filming at the same time. However, if citizens in contrast to police, begin filming only after an encounter becomes aggressive disagreement seems more likely. Also of interest are claims about truth and judicial outcomes where there is a non-police video with those where there is no police video and only police written reports after the fact (Rodney King and other recent cases), as well as the opposite, or when both sides have videos. Some natural field experiments can be seen in contrasting these.



Furthermore, conflicting claims and challenged evidence apart, some goals are hard to measure. There is a tilt toward giving undue prominence to what is easy to ascertain. When the technology drives the search for the problem, rather than the reverse, we see the techno-fallacy of where there is a will, there is a way. “Have tool, will travel,” if you can’t be near (or find) the measurement you’d like to love, love the measurement you have. The inert tool of course is fueled by the “supply side” drivers who sponsor the development and diffusion of the tool.

Bentham, in spite of his valuing measurement, acknowledged “the imperfections of moral calculation” and the difficulty of measuring “imponderable” but relevant factors. Yet, even if there were no risk of being captured by what can be most easily measured, to a much greater extent than for other public serving institutions such as medicine or education, police productivity is expected to be more restrained. Too much or too little is a cause for concern.

Richard Jones (Chapter 2) observes, “In countries and places where policing is facing questions regarding its neutrality such imagery will inevitably fuel public criticism and debate, and be treated as a currency within struggles for control of public spaces.” In public documentation of abuse, the imagery offers further evidence of technologies’ (and governments’) lack of neutrality. Yet, it may do the opposite as well, illustrating good faith on the part of government in seeking the truth, whether or not this implicates government agents. This is neutrality as fairness and due process. It nicely illustrates the claim that “surveillance is neither good nor bad, but context and compartment make it so” (Marx 2017, 10). This helps explain the support for BWCs from both police and activists as each side believes the “truth” revealed will back their claims.

Consideration of the BWC technology’s neutrality well illustrates the often inherent potential for some common interests and cooperation among adversaries noted by classic game theorists (e.g., Rapoport 1960; Schelling 1960). Even within deep and rancorous conflicts, a space can exist for some mutual interests. Regarding BWCs, activists and police may agree on the importance of an accurate empirical record. Mutual confidence in what has been documented is a step toward cooperation among opponents. As Goffman (1969) noted, assumptions about truth telling are central to social interaction and order, even if they need not be the full story. Jaworski (2019) offers a nice elucidation of Goffman’s early encounter with game theorists and the intricacies of communication, truthful and otherwise.

While equal access to information is a strand supportive of neutrality, merely knowing does not automatically equate with being able to act, although it is a necessary first step. Whether or not the truth sets you free depends on supportive resources and institutions, including the law and popular culture. A visual and auditory record, when available to those policed, may be “neutral” and democratic in the sense that all can see it, regardless of whether they sleep in their car or under a bridge. To paraphrase Anatole France, “the law in its majestic equality permits the rich as well as the poor to view images the police get to make, edit and choose to release.” The camera is not necessarily neutral with respect to access to, and control over, the levers that generate the data, let alone the ability to hire lobbyists, consultants, and media space to advance their claims.<sup>5</sup> Even aspects of supposedly neutral law grant greater legitimacy to images from the police perspective over those from others (Brucato 2015).

Nor do we see neutrality with respect to other aspects, such as what technologies are developed and for whom, ease of use, and who can use them. Most new surveillance technology was developed for military and corporate purposes, not to serve the needs of the least favored

and peripheral sectors of society.<sup>6</sup> As Krystle Shore (chapter 9) clearly documents this has led to the increased militarization of domestic policing in ways hardly envisioned by the original British notion of policing by one's peers.

Mary Fan's comprehensive research (Chapter 11) on body camera policies calls attention to value conflicts such as between the transparency of FOIA (Freedom of Information Act) requirements and privacy protection. Fan notes that privacy erosions are increasingly a price paid for important social goods. In addition, as Regan (1995) has so clearly shown, privacy itself is also a social good. Policies are needed that acknowledge competing goals, while being responsive to the distinctiveness of local settings and specific contexts and roles (e.g., offenders, victims, witnesses, varieties of camera).

However, given the intricacies of the context, setting policies is difficult. When the subject is also the agent, as is the case with the officer, routine policies for opting in or out become challenging. The response preferred by privacy advocates is a default of no data collection and then giving the subject the choice of opting into having their data collected, rather than the default of data being collected and requiring the subject wanting privacy to opt out. With both citizens and police as subjects who gets to choose? What policy should govern disagreements about recording among citizens who are present? When the citizen does have a choice, a conflict may be experienced between protecting privacy and believing that a recording must be made as a means of holding the officer accountable. Requesting permission may not be possible (or workable) in an emergency or with multiple parties present.

Discretion is central to policing, but the non-legal guidelines governing it offer an escape hatch to police bent on neutralizing the accountability that cameras are intended to provide. Mandatory recording requirements (or even having the camera always be on—whether because of engineering or policy— as with most fixed security cameras) protects against that, but of course brings other costs. Should officers, as monitored employees, be allowed to opt out if they feel a need to protect themselves from unfair supervisors? Should they be able to override the preference of a citizen to not be recorded?

#### Levels of analysis and tempering optimism

The more conceptual chapters in this book direct our attention to the meaning within concepts. Thus Anthony Braga (chapter 14) urges caution regarding the different meanings of legitimacy. Keith Guzik (chapter 4) emphasizes what researchers call "levels of analysis" in considering the meaning of accountability, with attention to the organizational level. In contrast, most of the systematic empirical work on BWCs focuses at the level of the individual. It is assumed that increased visibility will lessen police abuse because the individual is held accountable. However, reforms at the levels of organizational structure and police culture may bring positive change as well and may be needed before widespread change at the individual level occurs. Guzik argues that the widely shared optimism regarding BWCs requires analysis linked to "the hierarchical organizational and occupational structure of policing." The health of both the individual apple and the barrel needs consideration. The failure to see the distinction can result in unrealistic expectations and can undermine impacts.

A taken for granted idea about the cameras involves the assumption that increasing visible police accountability will, in a linear fashion, increase police legitimacy, particularly in minority

communities as this involves the use of force. Does the level of force shown by the camera (whether supportive or in violation of the policy) lead to more violence or does it deter? Are there conditions under which initial police restraint in the use of force unintentionally results in increased violence on the part of the subject?

Similar questions can be asked about citizen complaints. The meaning of increases or decreases in the use of force, or in complaints filed, needs to go beyond simply counting. *Fewer police complains* may mean there is less to legitimately complain about, or it could mean the dashing of raised expectations in the absence of appropriate police response to documented abuses, --resulting in the feeling that complaining is useless. Or an *increase in complaints* may reflect raised expectations that they will be taken seriously.

Better public policies are likely when the meanings within taken for granted terms such as legitimacy and accountability are unpacked and the connections between levels of analysis are considered. Measure of organizational as well as individual performance are needed (Marx 1976).

Emmeline Taylor and Murray Lee (Chapter 5) urge caution in how we view the “truth” cameras offer, given the tilt toward seeing as believing in our video culture and in human societies more generally (Doyle 2003; Jay 1993). The video and audio records are “constructed” and selective approximations of reality. But that does not mean they are equivalent in their usefulness, nor logic. Bridges are constructed as well but vary greatly in their quality. We must approach the images with eyes wide open (sic), aware of the various factors that condition the record (e.g., discretion when the camera is on or off, what it doesn’t capture even when it is on, clarity of the recording, editing, or enhancing what is publicly released). Who has the motivation to distort or at least shape results? Whose perspective does it represent? Is their time in the passions of the moment to be so strategic? The resources available to police and citizens to limit, distort, or shape the probative value of the recording needs consideration.

There is a growing literature on neutralization tactics (Marx 2017). There is an ironic counter-surveillance turnabout inherent in many technologies (e.g., demonstrators filming police, as studied by Wilson and Serisier 2010 and Ullrich and Knopp 2018, or publicizing the location of cameras studied by Wood and Thompson 2018).<sup>7</sup> When permitted (or when they can get away with it), citizens may wear hoods, glasses, hats, or use voice altering tools to block identification. Police may selectively turn cameras on or off, misdirect, unplug, or otherwise block or disassemble them, or claim they fell off.

A related issue involves the neutralization efforts of police as subjects of citizen recordings—whether from organized Copwatch groups or the episodic cell phone observers. Sandhu (2016) identifies means such as avoidance, legal restrictions, confiscation, and destruction. But far more common are “camera friendly” police efforts to softly manage impressions through polite and respectful behavior, showing and explaining the reasons for the actions taken. This is not quite a cooptation of adversaries, but it does give one pause in assuming that the increased visibility from recording police behavior (or other kinds of visibility, as noted by Brighenti 2010) will necessarily meet the goal of accountability. Even if a citizen video clearly reveals abuse, the complexities of the Internet and social media may limit its impact (Schaefer and Steinmetz 2014).

Holding apart power imbalances and the intricacies of communication forms for raining on democratic potentials, our vision is constricted in other ways when we only focus on the costs and benefits of the tool and the validity, comprehensiveness, and meaning present in the immediate situation. The construction of the image limits what we see, as does our rootedness in the present. But we can draw glimpses of what the future might hold by looking at trends, learning from the history of technology-driven changes, and using a bit of imagination.

### Broad changes in social control

The presumed ability of BWCs to visually document abuse and spurious complaints in contexts of high emotion helps account for the cameras' rapid and widespread implementation under federal subsidization. But their presence is also related to broader changes in social ordering and surveillance. They must be viewed alongside the profusion of other new surveillance and security tools. Ellul (1964) warned decades ago that we were at risk of sleep walking into a very different kind of society. With Huxley and Orwell, it is a less democratic society driven by fear, efficiency, manipulation, and seduction, propelled by blind faith in technology and more recently by commercial privatization, risk aversion, securitization, and global powers beyond the nation-state.

The advocates of BWCs, regardless of where they sit, note the many things the technology will do for us (whether as citizens, subjects/suspects, or police). As a result of the increased police legitimacy the cameras are hoped to deliver, it is claimed that they will improve police–community relations; stop, deter, or lessen crime and abuse, whether on the part of citizens or police; help in identifying violators and violations; inform police of impending problems<sup>8</sup>; and result in better cooperation from victims, witnesses, and citizens, and a fairer, more efficient system with respect for due process based on better evidence of what happened (whether for legal proceedings or departmental review).<sup>9</sup> Consider also the identification that might come for those otherwise unable to identify themselves, such as very young children, homicide victims, or Alzheimer's patients.

Less often do we hear about what we will give to the technology or what it may uninvitedly do to us. This is considered by the chapters in Section 3 (Privacy and Surveillance) by Goold (Chapter 10) and Webster and Leleux (Chapter 12), as well as Jones (Chapter 2). They discuss the implications of BWCs for broad trends in social control. Benjamin Goold (Chapter 10) asks us to take a step back from the specifics of BWCs, and the commonly noted tension between police accountability and individual privacy, and to consider what the cameras tell us about changes in the traditional borders between the public and the private and the citizen's relationship to government. We are seeing, if not the de-privatization of both the home and public places, at least the border blurring between what was traditionally considered private as against public. The tensions and back and forths between anonymity/invisibility and identifiability are enduring features of Western society.

While we must be wary of technological determinism and aware of the multiplicity of causal factors and dynamic interactions involved, and not impute independent will to material objects like the BWC, it is clear that many of the assumptions and foundations of social order have changed significantly, even if the functions social control serves have not. Shifts that were apparent in the latter eighteenth century have been greatly accelerated by technical and social

developments of recent decades. These raise profound questions for the nature of social order, what it means to be human, and what kind of a society we are—or are becoming.

Consider the seemingly ever-expanding, octopus-like surveillance society breaking borders of time, space, covertures, and human incapacity that previously protected information. Such a society has interconnected tentacles everywhere under sway of bottom lines, privatization, and globalization along with the softening of surveillance and greater emphasis on prevention. Information is gathered with laser-like specificity and sponge-like absorbency. If we consider the information-gathering net as analogous to a fishing net, then, as Stanley Cohen (1985) suggested, the mesh of the net has become finer and the net wider. The relentless march of the omnipresent and totalizing mediation of information technologies onto, and into, our daily lives, is like air, everywhere. Without air we die, yet with too much we also die.

Unlike the fixity of mounted cameras in public areas,<sup>10</sup> which you come to, BWCs, like drones and pizza delivery, come to you. They deliver! In so doing, the space opened up to the state vastly expands. What had previously been private, whether because of both technical incapacity or formal and informal expectations, is now public, at least in the sense of being visible. It may also become public in a wider sense through FOIA policies or hacking and YouTube.

The irony of having privacy in public as a result of the default anonymity previously offered by numbers (the crowd), or of being unidentified in the “safe” places of the many public settings of civil society is important for freedom of expression and association. Public places such as parks have not traditionally been synonymous with government places. They are a part of civil society. They historically have offered a buffer between the enduring society writ large and a government that changes.

There are also implications for democracy in the procedures through which technology is introduced. Fan (Chapter 11) documents the variety of ways that the technology is regulated and argues for the importance in a democratic society of legislation and public discussion, rather than executive directives quietly setting policy under the seduction of federal funding. The technical properties of such tools make them easy to set up and use. As with related tools such as cameras at intersections, BWCs may appear by executive bureaucratic fiat without much public discussion, let alone formal legislation.

To judge from social processes seen with other new surveillance means, “technical progress” will see continual declines in cost, increased efficiency, and ease of application and improvements in the breadth, depth, temporality, and quality of data collected and the addition of other functions. For example, in the case of electronic home monitoring, we saw a move from first-generation equipment that simply monitored physical presence through emissions transmitted over telephone lines to equipment allowing for visual inspection, telemetric alcohol tests, and then to two-way video communication. Equivalent expansions are very likely with the cameras. We have already seen cameras move from poles, police cars, and helmets to drones and bodies; as well as the addition of sound, two-way communication with supervisors, better quality images. Soon, real-time facial identification and linkages to far-flung databases seem likely, as well as the deep AI mining of millions of records. Threat assessment and suspicion might even be offered, based on body language or emotion detection.

With respect to facial identification matches, a study by the National Institute of Standards and Technology (NIST 2019) noted a marked decline in errors (the error rate fell from under 8 percent to 0.3 percent between 2010 and 2018). That however was under ideal conditions. Over time there will likely be continued improvements involving brighter lighting, better resolution, frontal and side images, restrictions on hats, glasses, and mask-wearing, and stronger algorithms, further reducing errors.

Yet in one of those “who could ever have imagined?” cases, the pandemic with the mandatory wearing of masks has slowed down the runaway train of facial recognition. Another NIST study reports that with 70% of the face covered by a mask algorithms that work well without a mask had failure rates between 20% and 50% with masked faces (Telford 2020). None-the-less, as new software is developed and if federal legislation appears, this slowing down is likely to be temporary.

Technical developments are perpetual dissatisfaction machines. Their promise of “ever more and better” continually raises expectations and can bring new anxieties and insecurities. There is always another, even higher, mountain to climb: more security, efficacy, and ease, along with new threats. With modern culture, humans seem sentenced to a never sated quest in which “progress” bootlegs in irony, dissatisfaction, and new vulnerabilities.

#### Threat assessments, warnings and suspicions

The cameras with their human-machine cyborg potentials hint at other possible developments. The new biometrics (the ultimate windows into the soul) can include implants, brain scans, and genetic analysis and the merging of brain, body, and machine in ways previously only seen in science fiction. Identity will be determined with greater certainty as a result of automatically collecting and combining what is unique to each person (face, DNA, smell, voice, and gait). We can envision body or brain sensors connected to the officer and other information (location, time of day, license plate, facial identification, speech patterns) to be transmitted in real time. Such data fed by sensors embedded everywhere and in everything (the Internet of Things)<sup>11</sup> will be integrated with that from far flung data bases filtered and correlated via deep AI mining of millions of records.

These will trigger real time threat assessments and warnings. The algorithms’ predictions will likely be statistically supportable relative to large populations, but not necessarily in any given individual case. There, due process and individualized justice may conflict with statistical rationality and maximal efficiency. Based on unchallengeable predictions of risk and opportunity, these developments have major implications for life chances and fairness. How integrated into expanding surveillant assemblages (Haggerty and Ericson 2000) will the data from cameras with ever improving face recognition become? As arcane AI algorithms are used to make “sense” out of data from the body and linked to automatic decisions, we may wonder who is in control and what remedies are in place when errors and injustice occur.

#### Bentham again

Given the ubiquity of change, the rich variety in human situations, and the complexity and challenges of causation, measurement, and communication, new technologies should be approached cautiously, with an eye to logic, evidence, and learning from the past, comparisons

with alternative means (including doing nothing), latent agendas, and short- and long-range costs and consequences (both intended and unintended). Wisdom, ever a commodity in short supply, is more likely when the tacit assumptions and structures (including form, context, logic, empirical support, stage, or “strip”<sup>12</sup> of the surveillance process and ethics) associated with a new technology are critically examined.

The wise Bentham, who was both a seeker and a believer, offers a conclusion. Much of what he believed makes enormous sense for the twenty-first century. I refer to his cool rationality, disciplined eclecticism, and tempered optimism in the face of both the exaggerated hype of entrepreneurs of various stripes (whether economic, ideological, or organizational) and the unreflective conservatism of traditionalists. Bentham calls for humility and reflexivity. He does the best he can with what he has. He argued for innovation, but also for realism in complex public policy settings. He favored the best alternative as revealed by “direct object measurement” along with the consideration of values that don’t lend themselves to that. “Best” is used here in relative terms. It might well be the least bad alternative. Sometimes the choices are between the good and the good (or the better), or at least between the bad and the worst (or, in Machiavelli’s words, viewing “the least bad as good”).

In writing about Bentham, Michael Quinn (2019) observes: “Utilitarian calculation might be less exact than one would wish, but it remained the only defensible approach for those seeking a rational criterion for the evaluation of rules or institutions.” The thoughtful chapters in this book are most welcome because they offer such an approach.

## Notes

- 1 Anderson (2012) builds on the concepts of surveillance creep and slack (Marx 2017), in documenting the unpredictable career of a new tool. He reports on “slackening” and “tensing” of a tool’s application (the fit between its potential and actual use) over time. The former involves a loosening and the latter a reeling in with respect to that fit. This is seen in observing the non-linear career of cameras in San Francisco taxicabs. New tools emerge from, and are dropped into, preexisting local cultures, conflicts, and interests—regardless of the power of the technology—and these may change over time along with the extent and nature of the use. The varied and jagged trajectory of use also demonstrates the risks of basing what is to be explained (e.g., rapid diffusion for the proposed goal) on a short time period.
- 2 According to Ariel et al. (Chapter 6), Nagin (2013) sees restrictive police policies as having the potential to lessen police motivation, “to be the kind of pro-active engaged hunters we expect them to be and to actively tackle offenders preemptively.” The suggestion that “we” expect police to be “pro-active engaged hunters” requires elaboration; in particular, who are the “we”? The contrast between what is generally expected re maximum productivity from educators or doctors, as against police, is noteworthy here. Unleashing powerful technologies has a different meaning in the more consensual settings of schools and hospitals than in

police and other control settings.

- 3 Non-enforcement, along with escalation and covert facilitation, describe settings of interdependence between rule enforcers and breakers (Marx 1981). In the current case, non-enforcement (not as slacking off, but as strategic) can be a way of avoiding the escalation of conflict, as well as a way of gaining needed cooperation that cannot be otherwise obtained. As with other neutral terms such as neutrality and discrimination, a context and unpacking of several meanings are required for moral evaluation.
- 4 Empirical inquiry into when, and for what purposes, results are used is needed. Most footage is never used. But when it is used, how is this distributed between use for evidence and investigation on a citizen subject, officer accountability, training, and/or public relations?
- 5 A majority of states permit citizens to openly film and record police in public. However, in some states wiretap laws mean that this cannot be done in secret. The filming must not obstruct police in lawfully carrying out their duties. At the federal level, recording sound (although not video, because it appeared more recently, and the law hasn't caught up) may violate federal wiretap statutes. Without a warrant police cannot seize a person's phone and what it captured. Relevant variables are whether single party consent is sufficient to record and whether the place is deemed "public" or "private." Laws and policies regarding FOI (freedom of information) access to the subsequent results of police recordings are less clear. Alex Vitale (2017) notes that the conflict of interest police have in now controlling access to the tapes would be mediated by having an independent civilian agency responsible for access for both citizens and police. A related aspect of access involves the conditions (if any beyond a mere request) for sharing the data with other law enforcement agencies and data bases, including those maintained by private cloud service providers such as the dominant supplier Taser (now Axon). If sound policies for the release of filming are in place, we need to ask if they are honored. Research by Rothman (2017) on the honoring of access requests by citizens finds that the asymmetry of BWC surveillance may carry over to making it difficult for citizens to obtain records.
- 6 Brucato (2015) reports that a spokesperson for the manufacturer Axon says that their mission is to "solve problems for professionals in the law enforcement and military space" and the company's CEO reports: "At Taser we're passionate about protection, whether it's protecting officers from physical harm with a Taser ECD, or protecting that officer and the agency from false claims about what really happened."
- 7 Steve Mann, who deserved the A he got in a course on surveillance and society at MIT, early noted this is in suggesting the concept of sousveillance (Mann, Nolan, and Wellman 2003). He was not welcomed when he wore a camera and filmed inside stores, even though their



surveillance cameras were filming him.

- 8 Some of this discovery may be inadvertent as the camera collects images and sound beyond what it was focused on (the fallacy of the sure shot). This can mean privacy invasions of persons not connected to the initial incident, but within the tool's purview. It can also mean documenting evidence of violations or incidents in the vicinity, but not the initial focus, of the recording. Such spillage processes need greater consideration in the face of the excitement generated when new technologies are introduced.
- 9 It is also possible that, for some observers, the cameras will serve to decrease police legitimacy. Before cameras, abuse could be denied as the word of the police vs. an accuser. That becomes more difficult to do with ocular proof. Seeing egregious behavior undercuts the idea of police neutrality. While not applying here, there are mythological claims as well from functionalist social theory about what happens when myths are destroyed.
- 10 However, in combining images from many fixed cameras (on both "private" property and "public" streets) a channel of observation is created as a car or person moves along. Numerous fixed cameras become the equivalent of moving cameras. With instant face recognition from omnipresent cameras, you won't even have time to run, let alone hide. The issue becomes even more complicated when we consider who owns the camera (and its footage with images of non-consenting subjects), whether it is situated "on" public or private property, whether the image gathered is from a public or private place, and whether what is captured is visible "public" or hidden. Among the large literature on this, see: Nissenbaum (1997); Marx (2001); and Timan, Newell, and Koops (2017).
- 11 Beyond humans as transmitters we may see drones that look like flies and hover like hummingbirds, "snakebots" that can slither under doors, and smart dust, micro motes, and cyborg beetles (live insects) that can portage cameras and other sensors (Hudson 2016).
- 12 These strips (tool and subject selection, and data collection, processing, analysis, interpretation, uses and fate) seen in the career of a tool frame the "surveillance occasion."

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