

Article

Body-worn cameras, police violence and the politics of evidence: A case of ontological gerrymandering

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Abstract

Public demands for greater police accountability, particularly in relation to violence targeting Black and Brown communities, have placed pressure on law enforcement organisations to be more transparent about officers' actions. The implementation of police body-worn cameras (BWCs) has become a popular response. This article examines the embrace of BWCs amidst the wider shift toward evidence-based policing by scrutinising the body of research that evaluates the effects of these technologies. Through an intertextual analysis informed by insights from Critical Race Theory and Science and Technology Studies, we illustrate how the privileging of certain forms of empiricism, particularly randomised controlled trials, evinces what Woolgar and Pawluch describe as *ontological gerrymandering*. In doing so, the emergent evidence base supporting BWCs as a policing tool constitutively redefines police violence into a

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narrow conceptualisation rooted in encounters between citizens and police. This analysis examines how these framings, by design, minimise racialised power relations and inequalities. We conclude by reflecting on the implications of these evidence-based claims, arguing that they can direct attention away from - and thus can buttress - the structural conditions and institutions that perpetuate police violence.

Key words

evidence-based policy, knowledge production, police body-worn cameras, police violence, racism

Introduction

Demands for radical changes in policing gained significant momentum in 2020. A wave of protests ensued across the United States and globally after a white police officer killed George Floyd, an unarmed Black man arrested by Minneapolis police for allegedly using a counterfeit 20-dollar bill. It also reignited outrage about police killings of other unarmed people of colour. In response, a range of proposals emerged, including calls to defund the police and to abolish militarised law enforcement practices, as well as recommendations to implement stronger police accountability measures.

Against this backdrop, police organisations across the United States have implemented police body-worn cameras (BWCs) to improve police behaviour and accountability. Other countries have followed suit, investing significantly in the technology. In June 2020, Canadian Prime Minister Justin Trudeau addressed the issue of racialised police violence by promising to work quickly with provinces to introduce BWCs among Canadian police organisations (Blanchfield, 2020). Officers in jurisdictions as diverse as Australia, China, Turkey, the United Kingdom, and Uruguay wear BWCs while on patrol. Despite the widespread use of BWCs, debates continue regarding their merits as a solution to police violence and whether funds might be better spent on social programs. While advocates have framed them as a promising ‘evidence-based’ response to demands for police reform (e.g., Ariel et al., 2017a; Cubitt et al., 2017), critics have argued BWCs threaten individual privacy (Lippert and Newell, 2016), broaden state control (Adams and Mastracci, 2017), and disproportionately target racialised communities (Bud, 2016; Mateescu et al., 2016).

The proliferation of police BWCs has been matched with a steady rise in studies assessing the effectiveness of the technology in reducing officer misconduct and improving police accountability. It reflects a trend, often referred to as ‘evidence-based policing’, that promotes empirical evaluations of ‘what works’ to enhance policing practice and ensure cost-effectiveness (Sherman,

2013). Although some policymakers propose rigorous and objective research as a mode of counteracting the shortcomings of experts and practitioners (Pearce and Raman, 2014), evidence-based policies are not as politically neutral as inferred. As 'evidence is constructed and used to make decisions' through 'socially organised practices' (Nichols, 2017: 605), it would be a mistake to assume it is resistant to influence. Governments often use evidence 'to transform ideology into discourse, which then provides the legitimate authority to force through the intended reform agenda' (Naughton, 2005: 47). The joining of evidence and policy can therefore reinforce state interests. In the case of criminal justice policy, there is not only a 'lack of diversity among the voices represented as experts on crime' (Uggen and Inderbitzin, 2010: 734), but also a 'troubling lack of attention to power and power relations' that perpetuate inequalities, forms of oppression, and processes of criminalisation (Nelund, 2014: 68).

Accordingly, scholars have questioned the scientific standards upon which many evidence-based policies are based, indicating they are poorly equipped to examine inequality – or, worse, are implicated in imperialistic practices. As Kitossa (2014: 63) explains, the 'pretensions of scientific rationalism' can reinforce and perpetuate 'epistemic violence', especially as positivistic evidence is often used to disqualify claims made by colonised and minoritised peoples. Considering these observations, we take up Science and Technology Studies (STS) scholars' calls to critically examine practices of evidence-based policy through the lens of epistemic governance – which 'suggests that the production of knowledge for governance itself needs be governed', not simply embraced without question (Pearce and Raman, 2014: 388). In examining assessments of BWCs' effectiveness, we bring concerns of epistemic governance in dialogue with longstanding critiques that mainstream criminology's value-neutral claims reflect the field's complicity in enabling government and corporate entities to advance unjust forms of domination and violence (Young, 2012).

We explore how the emergent BWC evidence base constitutively informs policy-related understandings of police violence, which Critical Race Theory (CRT) scholars have traced as a 'structural phenomenon and not simply as a product of rogue police officers who harbour racial animus' (Carbado, 2016: 1482). As documented in this article, many evidence-based interventions adopt a different approach; they frame the social problem of police violence as *police misconduct*, which captures law enforcement officer 'behaviour that is deviant, dishonest, improper, unethical, and criminal' (Roebuck and Barker, 1974, cited in Maule, 2017: 9). In doing so, their work exemplifies a form of *ontological gerrymandering*, a process that Woolgar and Pawluch (1985: 216) describe as 'portraying statements about conditions and behaviours as objective while relativising the definitions and claims made about them'. According to Woolgar and Pawluch (1985), even constructivist efforts to explain

social problems often conceptualise societal issues as if they are stable. By missing opportunities to query how these definitions are socially contingent, they can reinforce problematic power dynamics. Here, we argue that evaluations of BWCs offer a contemporary case of ontological gerrymandering, which is informed by the rise of evidence-based policing. Their methodological approaches recast police violence as localised phenomena, obscuring how interlocking oppressions contribute to this wider social problem. In failing to shed light on structural conditions contributing to police violence, this body of knowledge lends to policy interventions that retain an individualistic and behavioural focus, such as anti-bias training or BWCs, rather than more substantive changes.

Our argument proceeds as follows: First, we situate the uptake of BWCs within a broader call for evidence-based policies and policing reform. We then reflect on our approach and methods of analysis, explaining how we draw on both CRT and STS to scrutinise how evidence-based claims are fashioned and justified. The third section of the article details how evaluations of BWCs' effectiveness come to constitutively redefine police violence into an issue of police misconduct. We conclude with a critical discussion of how this instance of ontological gerrymandering reflects hegemonic standards of evidence and how they threaten to contribute to the ongoing problem of police violence.

Situating BWC debates and the rise of evidence-based policing

The implementation of BWCs as devices intended to support police reform fits within a longer trajectory of police surveillance (see Bradford et al., 2020). While various technologies and techniques, including the use of informants, biometric verification, and predictive policing tactics, are geared toward monitoring citizens, other surveillance technologies have been deployed for the stated purpose of tracking officers. For example, US legislation implementing dashboard cameras responded to civil unrest following documented instances of police racial bias during the 1980s. In-car cameras emerged as a solution by recording whether police received consent to search stopped vehicles and are still used to monitor police-citizen interactions during routine traffic stops (Morton, 2018). Many contemporary police cruisers are equipped with Global Positioning Systems (GPS) that use real-time locations to track officers and vehicles (Mabrey, 2003), as well as microphones, affixed to officers or vehicles, to 'create an audible record of events as they happen' (IACP, 2004: 48). More recently, BWCs have been promoted to monitor police behaviour. In 2015, the US Department of Justice committed \$23 million to BWC pilot programs in 32 states (Yokum et al., 2019). The uptake of this technology

by police departments has increased rapidly, with over 90 per cent of police organisations in major US cities implementing BWCs (Leadership Conference on Civil and Human Rights and Upturn, 2017).

BWC technology consists of a small battery-powered wearable camera affixed to an officer's uniform, typically on the upper chest or shoulder area (though sometimes worn on their hat or sunglasses). When turned on, the camera records audio and video footage from the vantage point of the officer wearing it, which is then stored either locally on a server managed by the police organisation or remotely on a cloud database managed by a third-party vendor (Hung et al., 2016). Despite minor differences in video quality and data storage options, the technology itself is relatively standard in form (Brustein, 2018). BWC policy and procedure, however, varies considerably among police organisations. For instance, some organisations require officers equipped with BWCs to keep the camera always activated, while others allow officers to activate the camera at their discretion (Hung et al., 2016). Newer camera models are automatically activated when officers draw a weapon or turn on emergency lights in their cruisers, at which point the body cam footage is livestreamed to police supervisors (Axon Enterprise, Inc., n.d.). At the time of writing, no overarching legislation in North America regulates how and when BWC footage is publicly released by police.

While the embrace of BWCs is presented as a response to public demands for increased police accountability and transparency, it also coincides with the rise of evidence-based policing. Evidence-based policing advocates for policies and practices that have been investigated and assessed as effective – typically through experimental methods. Some police researchers have argued evidence-based reforms are the most appropriate response to critical issues like fatal police-citizen encounters (Engel et al., 2020). Other scholars beyond criminology have criticised evidence-based solutions on the grounds that their design ‘imposes very stringent requirements on quality of data, randomisation, and replication’, often to the exclusion of socially meaningful categories of difference and contextual nuance (Willis and White, 2003, as cited by valentine 2009: 449).

To date, most evidence-based studies of BWCs employ randomised controlled trials (RCTs) designed to isolate the causal effect of the technology on a specific outcome, such as police use of force. Many of them draw conclusions about BWCs' positive impacts (e.g., Ariel et al., 2017a; Demir, 2019; Sutherland et al., 2017; White et al., 2018). Some assessments cast doubt on these assertions (Yokum et al., 2019), characterising the effects of BWCs as unclear (Yokum et al., 2019). Others contend that important questions remain unanswered, such as whether BWCs mitigate officers' unfair treatment of citizens across social categories of difference, such as class, ethnicity, gender, race, and religion (Lum et al., 2015; 2019).

By focusing on the quality of evidence, criminologists involved in these debates often fail to ask whether or how the pursuit of more or better BWC

evidence will result in reducing police violence. They also negate the shortcomings of past evidence-based policing approaches. For instance, hot spots policing is a widely implemented set of policing tactics, which is backed by experimental evidence suggesting it has crime deterrence effects (Sherman and Weisburd, 1995: 645). Critics note that these findings about hot spots policing ‘fail to consider implications beyond the immediate crime effects’ (Kochel, 2011: 367), including the violence that police disproportionately inflict on predominately Black and Brown communities (Gaston et al., 2020). Acknowledging these patterns, critical criminologist Schneider (2018) explains that the promotion of police BWCs is not about accountability. Accountability would entail ‘an obligation to give an account of activities within one’s ambit of responsibility’; rather, he argues, the introduction of BWCs is about building ‘the capacity to provide a record of activities that explains them in a creditable manner so that they appear to satisfy the rights and obligations of accountability’ (Ericson, 1995: 137, cited in Schneider, 2018: 459). Thus, we ask: what assumptions and values are embedded in assessments of BWCs and their impacts on policing?

Using CRT and STS to illuminate ontological gerrymandering

To examine the assumptions underpinning empirical assessments of BWCs’ effectiveness, we draw on CRT and STS, two fields of critical inquiry that offer valuable insights for interrogating questions of exclusion, expertise, and knowledge. CRT has a rich tradition of laying bare the normalisation of racism (Delgado and Stefancic, 2017), with a strong emphasis on how legal and social forces contribute to ‘an ongoing, dialectic process that ultimately reproduces and transforms racial inequality’ (Gómez, 2010: 448). We also draw on STS, particularly feminist science studies, because it provides complementary modes of examining power exercised through ‘epistemological and ontological assumptions’ (Foster, 2016: 129). Comprised of scholars who are diverse in their perspective and substantive interests, feminist science studies scholarship interrogates how ‘the cloak of “pure science” and objectivity continues to surround the sciences’ (Subramaniam, 2009: 952). CRT thus provides the ‘methodological guideposts that challenge mainstream assumptions about objective research and interpretation’ (Christian et al., 2019: 5), while STS offers analytic tools for unpacking the epistemic politics of evidence-based claims in practice (Pearce and Raman, 2014).

Methodologically, we carried out an in-depth analysis of a sample collected through an earlier study that systematically reviewed the English literature on police-issued surveillance technologies and police misconduct (Henne et al., 2020). Here, we examined how evaluative research assesses the

effectiveness of BWCs and then queried two dimensions of their claims: (1) what comes to count as evidence and (2) how they, in turn, conceive of the social problem addressed by BWCs. Having had read nearly 1,400 BWC research studies for our earlier systematic review ($N=1,397$), we focused this analysis on articles that assessed BWCs specifically in relation to police misconduct. Notable themes emerged through the process: Most studies examined US contexts, employed RCTs in their design and used either official complaints against police or police perceptions of behaviour as measures of police misconduct. Despite making a range of evidentiary claims, a limited number of studies met positivistic evidenced-based criteria ($N=21$). Our examination revealed methodological inconsistencies and highlighted how positivistic methodologies exclude important social considerations.

In keeping with other STS analyses, such as Woolgar and Lezaun (2013: 330–331), we examined how the ‘organisation of texts’ provided insight into ‘the relations of governance with respect to ordinary objects’, such as the scientific variables that are central within positivistic reasoning. Employing an intertextual analysis enabled close examination of scientific claims and the power dynamics informing them (Henne and Shah, 2015; Nichols, 2017). This approach facilitated a close reading of the language, rationales and ideologies employed when explaining findings across publications. We identified patterns in the construction and explanation of evidence. The process, in turn, illuminated how textual relationships instil and reflect acts ‘of control’ from which ‘the issue of social power arises’ (Briggs and Bauman, 1990: 76). This level of scrutiny enabled tracing the logics underpinning authors’ descriptions of whether and how results in the sample met standards of evidence.

The intertextual analysis also aided in identifying patterns that reflected conventions in the field of criminology, which have been characterised as disregarding or minimising the role of race and racism in shaping understandings of criminality (see Henne and Shah, 2015; Van Cleve and Mayes, 2015). Like other empirical CRT approaches, we sought to understand how ‘research design is rarely race-neutral’; the ‘selection of an analytical object’, measurement techniques, ‘the choice of method’ and ‘empirical foci are inevitably shaped by political concerns’ (Christian et al., 2019: 2). Van Cleve and Mayes (2015: 420–421), for instance, argue, ‘Criminal justice research and statistics play a crucial role in the cultural reification of Black criminality’ because these ‘[s]eemingly race-neutral statistics’ are understood as ‘scientific proof. . . and justification for support of practices and policies that reinforce racial segregation and inequality’. Building on their observations, we examined how similar dynamics emerged in the framing of BWC evidence.

Accounting for textual alignments and divergences across the studies enabled us to analyse the constitutive relationships that substantiate authors’ claims, including their research design decisions, choice of variables, modes of assessment and linguistic characterisations. In the next sections, we detail how

claims about BWCs come to reflect a narrow gaze that is limited to particular and often isolated factors related to police-citizen encounters. Their constructions of BWCs and police violence as objects of analysis share a common tendency: they overlook the socially contingent dimensions of these interactions and erase structural factors that could – and arguably should – inform policy.

Techniques of constructing BWC evidence

Evaluating BWCs does more than measure the impact of these technologies on policing; it entails a process of constructing objects for analysis. Positivist logics and criteria conceive of BWCs as independent entities, with most studies reflecting two key tendencies. First, they focus on the localised encounter between law enforcement officers and citizens as the source for understanding police violence, and second, they reflect a presumption that actively monitoring police officers can change behaviour. This epistemological vantage point implicates how both police violence and BWCs are constructed in the production of evidence-based claims.

To understand these constitutive dynamics first requires considering the mainstays of evaluation research and hierarchies of evidence. RCTs are considered effective in assessing whether a specific intervention produces an intended effect and are common in medicine; however, the ‘lay public, and sometimes researchers, put too much trust in RCTs over other methods of investigation’ (Deaton and Cartwright, 2018: 2). RCTs neglect ‘issues of interpretation and meaning in the desire to tame complexity with numbers’ and fail ‘to consider ethical questions around random assignment of potentially beneficial interventions’ (Pearce and Raman, 2014: 389) – both of which are important for many areas of policymaking. They may advance science, but they are weak grounds for understanding ‘what works’ because they cannot capture dynamic social interactions (Deaton and Cartwright, 2018; see also Cartwright, 2007).

BWC evaluation research’s privileging of RCTs reflects these limitations. Most studies analysed in our sample present their aims as assessing BWCs’ impact on actions, such as reducing use-of-force and complaints. As such, they reinforce a presumption that BWCs’ successes or failures (e.g., to reduce force or not reduce force) can be understood as consistent interventions, even if the context, situation, and actors involved vary greatly. In other words, BWCs become understood as entities used by human actors to *do* policing in methodical and predictable ways, rendering BWC technology as a thing abstracted from context. This depiction emerges in sharp contrast to STS approaches, which would acknowledge an object, including BWCs, as part of entangled relationships (Henne and Harb, 2020; Woolgar and Lezaun, 2013).

The problematic dimensions of these framings become evident when scrutinising what considerations are removed when making empirical assess-

ments that align with objective criteria. To illustrate, let us look more closely at an exemplar of these analyses: Ariel and colleagues (2017a: 303) claim that BWCs reduce complaints against police and can therefore aid in improving police legitimacy. They reason that the presence of BWCs conveys to everyone involved in a police-citizen interaction that they are being recorded; this knowledge – and the subsequent potential that one's behaviour can later be scrutinised – improves the behaviour of all parties. The authors suggest this dynamic reduces complaints made against police in two ways: first, BWCs reduce legitimate complaints against police by serving as a catalyst for improved police behaviour, and, second, BWCs dissuade illegitimate complaints from citizens who want to 'make trouble' (Ariel et al., 2017a: 302).

While this example captures what is described as the 'civilising effect' of BWCs (see Headley et al., 2017), it departs from observations made through different modes of inquiry. Others have documented how BWC footage, especially when combined with officer accounts of events, often undermines the credibility of citizen narratives about police violence (Brucato, 2015; Russell-Brown, 2016). By buttressing police explanations, BWCs can operate as repressive tools against citizens seeking to make claims against law enforcement officers (Brucato, 2015). Further, RCTs negate how time can shift behaviour changes that BWCs may initially spark. As police become more accustomed to BWCs and being recorded, they may adapt their actions, which is a potential longitudinal development that exceeds the scope of the RCTs in our sample. Instead, RCTs, by design, divorce their analytic assessments from lived realities of citizen-police encounters, including the social conditions and inequalities that inform them (Roussell et al., 2017). Their narrow focus on the specific 'act' and 'effect' results in research that does not capture structural or relational considerations. The civilising effect can thus be asserted as an evidence-based finding precisely because the methodology used disregards the on-the-ground relationships of which these technologies become a part.

Although RCT research is often upheld as the gold standard of evidence (Cartwright, 2007), many results interpreted as supporting BWCs as a police reform fail to meet accepted standards of evaluation; that is, they do not adhere to their own guiding methodological principles. Adherence to strict positivistic criteria is the very mechanism that allows positivistic researchers to assert claims as evidence. When studies deviate from their own set criteria, they – by their own definition – jeopardise the credibility of their results. While the nature of these limitations varied across the studies, inconsistencies in the definition of officer misconduct was a clear pattern. For example, many studies include the outcome measure of 'police use of force' or 'official citizen complaints against the police'. Relying on official citizen complaints is often problematic, though, as citizens are less likely to come forward with complaints against law enforcement officers when there are tenuous police-

community relationships (Gascón and Roussel, 2019; Kappeler et al., 1992). Studies in our sample also used police perceptions of their own behaviour as a variable for assessing police misconduct (e.g., Goetschel and Peha, 2017), which has long been understood as misleading because officers tend to underestimate the prevalence of their own misconduct (Hader and Snortum, 1975). This measure not only reinscribes police misconduct as the primary issue of concern, but it also lends to conservative, and likely skewed, estimates of individual behaviour.

Another foundational challenge for RCTs that emerges across the studies analysed is maintaining the necessary conditions of their experiment, which require controlled separation of the experimental groups under study (e.g., officers with BWCs and officers without BWCs) and accounting for all possible variables that may influence study results (e.g., officer age, rank). Studying interactions in real-life settings, however, is unpredictable. For example, it is difficult to verify whether officers in experiments appropriately activate their BWCs because of two key issues: (1) not knowing for sure whether officers had their BWCs turned on and (2) keeping officers assigned to wear BWCs separate from those assigned not to wear BWCs during their encounters with citizens. From an evaluative stance, the potential co-mingling of officers wearing BWCs and officers not wearing BWCs during an experiment prompts questions about whether changes in officer-citizen encounters are due to the technology or to some other factor – a concern most authors did acknowledge.¹

Many studies inconsistently adhered to accepted statistical logics. At times, authors recognised this problem, citing issues with statistical power due to low incident rates (e.g., White et al., 2018). Others make no note of the statistical issues afflicting their experiments,² even though rigour is a stated justification for RCTs. For instance, a US-based study found no significant difference in the number of complaints received by officers wearing BWCs compared to officers not wearing BWCs during their one-year experiment (Ariel et al., 2015). The authors nonetheless claim that BWCs reduce officer complaints because of a significant drop across *all* complaints (that is, for both officers wearing and not wearing BWCs) during the experimental period compared to the overall number of complaints received the year prior to BWCs being implemented. Their explanation: BWCs improve law enforcement behaviour even for officers who observe others wearing the cameras. They assert a civilising effect despite not conforming to expectations of RCTs³. Further, the methods used are not attuned to broader societal developments that may have influenced their results. For example, the study took place from January to December 2012, during which the death of Trayvon Martin, an unarmed Black adolescent killed by a white Florida resident, renewed public outrage around issues of racial justice, including police violence toward Black persons. The study disregards how this climate of police

scrutiny could affect law enforcement officers' actions because such considerations exceed the scope of its empirical gaze.

The impact of these inadequacies is compounded when multiple articles from the same authors or a subset of authors feature duplicate data and findings, which emerged in our final sample.⁴ Consider, for instance, early BWC research conducted in Rialto, California (Ariel and Farrar, 2012). The Rialto study, which employs RCT methodology to assess the impact of BWCs on use-of-force incidents and citizen complaints, is widely cited. The authors have published many follow-up articles supporting the use of BWCs, which are based on findings from the original dataset (e.g., Ariel et al. 2015; Ariel et al., 2017b; Sutherland et al., 2017). While often done for comparative purposes, the repetition of data and findings reinforces claims already made, amplifying earlier conclusions as if they are seemingly more valid.

In response to the observed limitations of experimental research, some proponents of evidence-based policing have begun to argue that RCTs are too constrictive and that incorporating diverse methodologies would provide more robust evaluations (Brown et al., 2018). Some recent scholarship demonstrates the importance of highlighting the conditions that inform police misconduct, including the social position of persons involved and the duration of police-citizen encounters (e.g., Willits and Makin, 2018). But is methodological tinkering enough when faced with the challenge of ontological gerrymandering?

Embracing empirical approaches that do not disrupt these constructions of police misconduct and BWCs threatens to replicate processes of knowledge production that feminist science studies scholars have characterised as reductionist (Haraway, 1988; Harding, 2015). As Haraway (1988: 580) explains, 'versions of objectivity' that work in 'the service of hierarchical and positivist orderings of what can count as knowledge' posit dangerous simplifications. In the next section, we discuss how the reductionism of the BWC evidence base can be understood as a form of epistemic violence. It aids in sustaining what CRT scholars describe as the 'normal science' of racism, which is 'difficult to address or cure because it is not acknowledged' (Delgado and Stefancic, 2017: 8).

Imagining police violence through evidence

The presumption that RCTs are objective prompts questions that extend beyond research methodology to concerns of ethics. For experimental designs to reduce police violence to an interpersonal encounter they require a form of abstraction that creates distance from embodied experience (Pascale, 2010). By design, they erase contextual elements to isolate causal relationships between constructed variables. In doing so, these methodological techniques *re-imagine* the dynamic relations of police violence through a constrained set

of ontological possibilities in which the police, citizens, and technologies are understood as distinct and autonomous actors.

Feminist science studies scholars offer important insights into how power operates in and through this kind of selective gaze. For Haraway (1988: 585), vision 'is *always* a question of the power to see – and perhaps of the violence implicit in our visualising practices'. Some researchers have queried the role of vision in shaping perceptions of BWCs and their value. Brucato (2015: 470), for example, attends to how BWC footage is often understood as objective data, even though it is 'conditioned by the point-of-view from which the documentation is captured'. Seen through an STS lens, BWCs and the data they generate emerge as constitutive of technosocial relations, which exceed epistemological perspectives that render 'events and phenomena' as 'singular, isolated moments' (Pascale, 2010: 161). Seeing policing dynamics through the gaze of RCTs minimises their complexity; it negates the socio-historical conditions in which these relationships manifest in lived encounters.

The gaze through which specific events are interpreted cannot be divorced from the inequalities that inform crime, crime control practices, and police violence (Henne and Shah, 2016). Scrutinising what becomes recognised and valued as objectivity provides a window to understanding the power dynamics that shape knowledge, its mobilisation and its impact (Harding, 2015). The privileging of RCTs reifies a form of vision that it is 'honed. . . to distance the knowing subject from everybody and everything in the interests of unfettered power' and is 'tied to militarism, capitalism, colonialism and male supremacy' (Haraway, 1988: 581). One such manifestation of this is how the cloak of neutrality provided by experimental methodology can deflect the potential for public harm⁵. In our sample, studies funded by industry partners with vested interests in the outcomes of assessments present BWCs as effective tools for certain police-related tasks, such as improving the accuracy of report-writing among officers (Dawes et al., 2015).⁶ Although these partnerships are disclosed, transparency does not address the ethical concerns at hand, which are how these corporate funding relationships may impact the research, not whether they are accredited after the fact (see Goldberg, 2019).

Situating BWC evidence in longer histories of research-informed crime policy aids in unveiling racialised contours. Muhammad (2010) has traced how racism has been central to the emergence of US crime statistics and analysis, which took shape after the Civil War as more Black persons migrated to Northern cities. Informed by the racial ideologies of the time, their focus on 'urban' (Black) crime drew upon research using crime statistics to explain crime as rooted in Black racial inferiority. Scholars have since drawn similar links to how contemporary criminological practice has contributed to the subjugation of racialised groups – for example, the use of statistic-based studies to support predictive crime control strategies, which are known to disproportionately target urban communities of colour (Van Cleve and

Mayes, 2015). Even studies concerned with race and racism still tend to cast 'whiteness as the norm' but in a way that bias is often 'masked through so-called objective (white) methods' (Henne and Shah, 2015: 116–117). Racism does not operate simply through claims made about racialised groups in criminological studies; it also manifests when its role in shaping criminological concerns is obscured.

The emergent BWC evidence base does not escape this critique. The design of these studies posits evaluations that negate racialised power dynamics informing calls for greater police accountability. One such example is research by White and colleagues (2018) on the impact of BWCs on violence during police-citizen encounters. While they acknowledge 'a persistent undercurrent of racial tension' in contemporary policing, their methodology does not account for it (White et al., 2018: 66). Further, they conclude that BWCs have a positive effect on police-citizen encounters since use-of-force incidents and citizen complaints seem to drop after the implementation of BWC technology, even though this finding is not statistically significant. While this work reflects an understandable desire to isolate the impact of BWCs, their claims demonstrate how positivistic techniques reflect an active choice in terms of deciding what contours of police violence become both visible and known as well as invisible and unknown. As Glasbeek and colleagues (2020: 339) argue, what BWCs 'make visible may be, in the end, less important to the ongoing struggle against racialised policing than what they do not see'. These technologies, as well as the evidence-based methods used to evaluate them, are not equipped to attend to the 'deeply racialised nature of the relationship between the surveillance state and its subject populations' (Glasbeek et al., 2020: 339). The influence of vision related to BWCs is therefore twofold: on the one hand, the devices capture events through a narrow lens that reflects a law enforcement officer's perspective of encounters; on the other, the evidence base obfuscates how racism operates in and through police violence by not capturing it.

While evaluative studies of BWCs may appear race-neutral because they seem objective, they are far from it (see also Shore, 2020). They reflect colour-blind practices that either minimise or erase racial inequality from police-citizen interactions. As Omi and Winant (2015: 14) warn, the promotion of such individualism often lends to the 'erasure of race', which is itself a form of 'racial ideology' that operates hegemonically. The assessments in the BWC research analysed here fail to capture how police violence is entangled with interlocking systems of domination – even as they assert themselves as truth through evidence-based claims. The workings of racism, as manifest in our sample, inform their epistemic contours. By negating the racialised contours of violence, most BWC studies do not question or query the oppressive dimensions of policing in practice, limiting their applicability in terms of addressing the harms perpetuated by these institutions. In other words, the

evidence actively whitewashes policing, a form of epistemic violence that can carry over into policing recommendations. We conclude by considering how these reductionist constructions can have grave consequences for policy and practice, particularly for racialised communities.

Conclusion

In illustrating how the BWC evidence base imagines and constructs police violence as a localised encounter, our analysis shows that evaluations of BWCs constitute a distinct form of ontological gerrymandering (Woolgar and Pawluch, 1985). Specifically, attempts to scientifically evaluate BWCs dismiss how police violence is etched and shaped by interlocking oppressions – thus, redefining the policy problem as police misconduct. As such, the insights gleaned through this analysis mark a clear departure from criminological reviews of police BWCs, which suggest the technology is innovative and promising (Cubitt et al., 2017) or state there is not yet enough evidence to make an assessment (Lum et al., 2019).

Our findings point to an important and overlooked concern in BWC debates: the hegemonic influence of accepted gold standards of evaluation, namely RCTs. It manifests here in two interrelated ways: (1) in driving the forms of knowledge valued as appropriate for evidence-based policy and (2) in shaping the contours of the social problem addressed by BWCs. Taken together, they demonstrate not only how RCTs valorise specific incidents between law enforcement, citizens, and BWCs as the grounds of evidence, but also how these imaginings of police violence come to reinforce racialised power relations by not attending to them.

As criminal justice policy has life and death consequences, the glaring absence of critical discussion about epistemic governance in relation to evidence-based policing is a significant concern. Against the backdrop of global protests about police violence, we would be remiss not to address how criminological evidence embodies foundational concerns of how epistemic power and authority can sustain, rather than counter, violence. According to Black criminologist Russell-Brown (2016: 213), the proposition of BWCs as a solution to police violence is indicative of how policy partnerships discredit 'Black claims of state violence'. The evidence base, valued for its scientific basis, becomes a stand-in for community voices that often articulate other proposals, such as redirecting resources to community-led initiatives and abolitionist responses to wider inequalities (see McDowell and Fernandez, 2018). The BWC evidence base also leaves the structural problems that surveillance technologies are intended to respond to out of their frame and out of the purview of policy reforms. In doing so, as the gaze of research carries over into policy and practice, it forecloses the possibility of more radical and institutional reforms

to systemic issues. In short, the BWC evidence can undermine attempts to hold the state to account for its complicity in structures of violence.

The reliance on narrowly constructed evidence does more than fail to challenge power relations underpinning racialised violence. It can buttress institutions responsible for such harms, as criminal justice policy premised on scientific objectivity can contribute to powerful, albeit misguided, rhetoric that police violence is being addressed effectively through technological solutions. Such patterns have already emerged in practice: Canadian and US police departments have framed BWCs as supporting checks and balances, civility, and transparency (Bud, 2016) even as they augment these technologies in ways that suggest alternative aims – such as, for example, the recent push to pair BWCs with facial recognition technology, which civil society organisations have framed as ‘transform[ing] a tool intended to improve police accountability into a mass biometric surveillance network’ (Tsukayama, 2019: para. 7).

The BWC evidence base is complicit in the expansion of police power, even if it is not intended by individual researchers; it bolsters calls to enhance law enforcement’s surveillance capacity, which disproportionately targets Black and Brown communities (Maynard, 2017). This brings the real-world consequences of ontological gerrymandering into stark relief: the whitewashing of police violence through experimental modes of assessment can enable racist practices to persist and adapt under the mantle of reform. They evince CRT scholars and critical criminologists’ longstanding concerns that value-neutral social science can work in the service of fortifying racist systems of oppression by not challenging them.

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Notes

1. This is understandable, especially in large-scale studies, given the dynamic nature of policing; however, it points to the limitations of using these methodologies.
2. For example, Gaub and colleagues (2016) report statistically significant group differences at $p < .10$, though the conventionally accepted level of significance in social science research is an alpha level of .05 or lower.
3. By this, we refer to the practice of combining effects for treatment and control groups and still making a causal claim based on the intervention (Field, 2009).
4. Six studies included duplicate sets of data and findings (with five presenting new research).

5. As was the case when deep partnerships between the pharmaceutical industry and health care providers contributed to the opioid crisis (Goldberg, 2019).
6. TASER International Inc., now Axon (and its subsidiary Vievu), funded the study. As of 2018, the company held 43 of the 54 active BWC contracts in the United States (Brustein, 2018). Four of the five study authors were employees of Axon, and two authors were investors at the time of publication.

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