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Technological Innovation and Police Officers' Understanding and Use of Force

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Today, the TASER is a ubiquitous less-than-lethal force technology lauded for its ability to curb police officers' use of excessive and lethal force. Although less injurious than other weapons, concerns exist that the TASER can still be misused by police officers. This article uses ethnographic observations and unstructured interviews across three urban police departments to describe how the TASER affects officers' understanding and use of force in beneficial and unintended ways. I find that officers understand and use the TASER as a device that can enhance safety for themselves and suspects, including in cases where the TASER is used in lieu of lethal force that officers believe would have been justified. Despite these benefits, understanding of the TASER as a safety-enhancing technology also influences the use of excessive force via TASER by young, inexperienced officers, ultimately contributing to the very problem TASERs were intended to ameliorate.

From data-driven enforcement strategies like hotspots policing (Manning 2011) to new "big data" surveillance practices (Brayne 2017), U.S. policing experienced unprecedented technological advancement over the past three decades. The use of force—a defining feature of the police occupation (Bittner 1970)—is no exception to the inexorable current of technological change; modern police officers have access to a greater range of coercive tools than ever, especially with regard to less-than-lethal weapons (Alpert et al. 2011). Chief among these advancements is the conducted energy device (CED) or "TASER," a weapon that incapacitates subjects with 50,000 V that cause involuntary muscle contractions (NIJ 2008). Today, TASERs are used by more than 17,000 U.S. law enforcement agencies (Axon 2015) and are

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lauded as safe, effective alternatives to the lethal force that is at the heart of longstanding judicial and public concerns over excessive force (Obasogie and Newman 2018; PERF 2011).

As with any technological innovation, however, TASERs also come with the risk of unintended and even counterproductive consequences. Despite their less-than-lethal benefits, concerns exist that TASERs are used in ways that nonetheless constitute excessive force that injures members of the public and damages the legitimacy of police (Amnesty International 2004; Kleinig 2007). Unfortunately, evidence of the role of TASER technology in the use of excessive force is sparse and the research literature on excessive force has not kept pace with the advent of the TASER that is commonly discussed as a safer alternative to more injurious force options, such as batons or firearms (Adams and Jennison 2007). Furthermore, neither the existing literature on excessive force nor TASER use considers how patrol officers' understandings of force with regard to the TASER contribute to the systemic issue of excessive force (Kappeler et al. 1998).

In light of the current emphasis on police violence and its detrimental effect on police legitimacy, public safety, and community health (Carr et al. 2007; Gau and Brunson 2010; President's Task Force on 21st Century Policing 2015), there is pressing need for empirical accounts of how officers make sense of this new technology and incorporate it into their understanding and use of force that—even if less injurious than other force options—can still constitute excessive force.¹ Drawing on observational and unstructured interview data from three urban police departments in the United States, I describe how officers' understanding of the TASER as a lessthan-lethal force option has both beneficial and unintended consequences for their use of coercive force. First, TASERs are understood and used by officers as a force option that can enhance safety for them and the public, including during "hidden" TASER use whereby officers threaten electrocution to ensure suspect compliance without leaving any physical evidence of the TASER's use. Second, officers understand and use the TASER as a force option that allows them to refrain from using their firearm in situations they believe would have

¹ In lieu of the term "perceptions" common to policing scholarship, legal doctrine, and psychological research emphasizing biologically rooted cognition, I use "understanding" to capture the end product of a broader process of "meaning-making"—the lived interpretation of situations and patterned action in ways that make them intelligible or "account-able" to individuals and others (Garfinkel 1967: 1; Spillman 2001). In short, "understanding" is intended to capture how officers see, experience, and make sense of TASERs and their use in their role as legal agents empowered to deploy coercive force.

justified lethal force, particularly when confronting suspects suffering from mental illness. Despite these apparent benefits of the TASER, officers also link understanding of the TASER as a safety-enhancing force option to the use of less-than-lethal but still excessive force by young, inexperienced officers already prone to unnecessarily escalate interactions with the public. I conclude with a discussion of the implications of these findings for the technological control of excessive force, as well as for broader sociolegal considerations of the unintended consequences of technological innovation in policing.

The Use of Excessive Force

The authority to use force is a central feature of the police role that allows police to enforce the edicts of the state, ensure the safety of the public, and to defend themselves and other officers from harm (Bittner 1970; Harmon 2008). However, just as state-sanctioned force can be used appropriately and within the bounds of the law, so too can it be abused (Kappeler et al. 1998; Westley 1970). The misuse of force, in addition to physically harming the public, violates public expectations of fair impartial legal agents and reduces the legitimacy of police (Carr et al. 2007; Gau and Brunson 2010; Kochel 2012). The loss of police legitimacy—the belief that police have the right to demand citizen compliance and that the public should defer to police authority (Tyler 2004) hinders the cooperation and willing deference of the public that police depend on to address crime and disorder (Tyler and Fagan 2008). When cooperation is not forthcoming, police interactions with the public are more likely to escalate into competitions for status and respect, in turn increasing the likelihood that interactions devolve into violence that can injure police and the public alike (Sunshine and Tyler 2003: 520). When the force used by police is perceived as excessive, the public's perceptions of illegitimate police are confirmed, contributing to a climate of mutual resentment, distrust, and fear (Brunson 2007; Werthman and Piliavin 1967).

Given the dire consequences of excessive force, understanding and mitigating excessive force is of paramount concern to those interested in protecting the public's well-being and fostering cooperation between police and the community (Adams 1999; Harris 2009). Although the significance of excessive force is clear, the definition and empirical study of what constitutes "excessive" force is less so. Indeed, decades of scholarship use a litany of

terms to describe this phenomenon, including: "excessive use of force, use of excessive force, brutality, unauthorized force, wrongful force, unjustified force, misuse of force, and unnecessary force" (Terrill and Mastrofski 2002: 222; see also Adams 1999). In spite of this terminological tangle, researchers have used various conceptual and methodological approaches to investigate the determinants and distribution of excessive force.

One branch of past work relies on a priori conceptualization of excessive force as force greater than what, according to the researcher, is "necessary" given a suspect's level of resistance (Adams 1999; Worden 1995). Based on this definition, researchers observe and code uses of force as well as information on officer, suspect, and situational variables to explore the determinants of excessive force. Overall, this research finds that excessive force is rare—occurring in between 1.3 and 2.4 percent of police-suspect interactions (Friedrich 1980; Reiss 1975; Worden 1995)—and commonly used on lower class males that police perceive as disrespectful (see also Chevigny 1969; Harris 2009; Reiss 1975; Toch 1992). These studies provide mixed evidence on the effect of suspect race on excessive force but consistently find that situational-level factors such as resistance or disrespect are stronger predictors of excessive force than officer-level characteristics.

Other researchers rely on citizen perceptions of excessive force that are captured by administrative data on citizen complaints. Descriptively, Hickman's (2006) analysis of complaint data across hundreds of state and local police agencies shows that large municipal (i.e., local) departments have higher rates of excessive force complaints than sheriff's offices, county, or state police. Similar to research on the contextual determinants of excessive force, research also attends to factors that influence the probability of an excessive force complaint. The large-scale survey analysis by Pate and Fridell (1993) shows that blacks are overrepresented as complainants and that the officer race is unrelated to excessive force complaints. Smaller single-city studies support these findings and

² Klockars (1995: 18) defines excessive force as "the use of any more force than a highly skilled police officer would find necessary to use in that particular situation," while Skolnick and Fyfe (1994) eschew the term excessive force and instead distinguish brutality from unnecessary force based on officers' intent. Despite abundant definitions and terms, one review of use-of-force research finds vanishingly few studies that directly measure excessive force (Hickman et al. 2008), and those that attempt to do so rely on "subjective and nonsystematic criteria" (Smith 2008: 623). Matters are no clearer in the courts: the "objective reasonableness" standard defines excessive force by what it is *not*—excessive force is that which is not reasonable. The calculation of reasonableness in turn assumes the "subjective objectivity" of officers such that "reasonableness' becomes not a standard for police behavior as much as a conclusion" (Alpert and Smith 1994: 489). Unfortunately, the remark that "An objective definition of excessive force continues to remain unreachable" (Alpert and Smith 1994: 501) is as true today as it was a quarter century ago.

also link officer age, gender, experience, and arrest activity to excessive force complaints, showing a concentration of younger, male officers with higher levels of arrest activity among "repeat offenders" that receive multiple complaints (Brandl et al. 2001; Lersch and Mieczkowski 1996).

Although this past research provides useful insight into the contextual factors that influence the use of excessive force, knowledge of the individual or situational determinants of excessive force does little to explain *how* or *why* police officers misuse force at the street level. That is, while such work isolates the effect of race or resistance on the likelihood of excessive force or a citizen complaint, the role of police officers as social actors is relegated to a series of individual-level variables. The methodological focus on characteristics of officers, suspects, and their interactions, although useful for delineating the determinants of excessive force, allows little insight into how street-level understanding structures the force decisions of police officers. Without consideration of the active and agential role of officers, research that aims to "explain[] the use of force may not suffice for *understanding* the use of force," excessive or otherwise (Worden 1995: 46).

A rare exception to this critique is Hunt's (1985) ethnographic study of the Metro City Police Department, which focuses on officer's interpretations and rationalizations of force to elucidate "the active role of consciousness" (316) in how they understand, use, and normalize excessive force on the street. Hunt finds that officers do not define force in strictly legal terms, but judge it according to their interpretation of what is demanded by their unique working environment (see also Bittner 1970; Rubinstein 1993; Westley 1970). Officers normalize excessive force with excuses that deny personal responsibility or which justify it situationally (i.e., force is necessary in this event) or abstractly (i.e., force is morally appropriate). These rationalizations aside, some instances of excessive force are viewed as illegitimate or immoral, such as when an officer uses force randomly or with no control, or when the level of force employed exceeds what a suspect "deserves" (333-34).

As Hunt (1985) shows, the "close range," ethnological observation of officers enables unique insights into the "heterogeneity, causal complexity, dynamism, contingency, and informality" of officers' lived experience (Schatz 2013: 11). This analytic nuance is necessary for delineating not only under what conditions excessive force occurs but how and why individual officers use it as they do. Despite the strengths of Hunt's analysis, it and the broader body of research on excessive force is limited by its inability to address the rapid pace of advancement in force technology.

Although past work on excessive force attends to force that runs the gamut from verbal to lethal (Friedrich 1980; Hunt 1985; Reiss 1968; Skolnick and Fyfe 1994; Westley 1953; Worden 1995), it does not explore how officers make sense of and incorporate TASERs into their use and abuse of force.

TASER Use and Its Effects

Following the civil unrest of the 1960s, the Presidential Commission tasked with finding solutions to the problem of crime in a free society recommended that police have non-lethal weapons capable of overcoming citizen resistance without causing serious injury (The President's Commission on Law Enforcement and Administration of Justice 1967: 256). In 1974, a NASA scientist named Jack Cover patented a new device that could fire less-thanlethal electrified projectiles, naming it the TASER. After a device modeled after Cover's design failed to subdue Rodney King in the now infamous incident of police brutality perpetrated by the Los Angeles Police Department, Cover collaborated with the eventual co-founder of TASER International, Patrick Smith, to redesign the TASER (Mann 2016). Throughout the late-1990s and 2000s, the TASER was aggressively marketed to U.S. law enforcement agencies and grew to become what is now a ubiquitous less-than-lethal force option for police: between 2000 and 2013, the number of U.S. law enforcement agencies providing TASERs to their officers grew from 500 to over 17,000 (Stone 2014). Today, police agencies maintain that the TASER can enhance the safety of both officers and suspects while effectively ending suspect resistance (Alpert et al. 2011; Paoline et al. 2012: 116), including during volatile situations in which a suspect is suffering from mental illness or is under the influence of drugs or alcohol (PERF 2011: 3).

These benefits notwithstanding, the widespread adoption of TASERs raises concerns about the technology's safety and its potential for abuse by officers tasked with street-level social control (Amnesty International 2004; Kleinig 2007). In light of these concerns, research examines the effects of TASERs on the safety of suspects and officers. Generally, the TASER is a force option that can effectively subdue a suspect with a low probability of serious injury or death, although their use comes with small but meaningful risks (Bozeman et al. 2009; Lin and Jones 2010; Mesloh et al. 2008ab; Strote et al. 2010; Swerdlow et al. 2009; White and Ready 2007).³

³ One recent analysis that includes minor injuries (e.g., puncture wounds from TASER darts) as well as measures of injury severity finds that TASER use is related to a higher probability of suspect injury, as well as more serious suspect injuries (Terrill and Paoline III 2012).

For example, multiple TASER shocks on suspects who are mentally ill or under the influence of drugs or alcohol are related to subsequent suspect death (White et al. 2013; White and Ready 2009), and even non-fatal TASER exposure causes pain, fear, and emotional distress (Sussman 2011).⁴

Several studies also find that TASERs can enhance officer safety and show that departmental TASER adoption is related to a decrease in officer injuries (Lin and Jones 2010; MacDonald et al. 2009; Taylor et al. 2009; Taylor and Woods 2010). Multivariate analyses provide more mixed results: some find TASERs are related to fewer officer injuries (Taylor et al. 2009), others find no effect (MacDonald et al. 2009), and still others suggest TASERs reduce injuries in only some departments (Smith et al. 2007). Most recently, Paoline et al. (2012) compare TASERs to other force options and find that while the use of TASERs alone is related to a lower probability of officer injury, using a TASER in conjunction with other force options is related to an increased probability of officer injury.

Given the attractiveness of the TASER as a safe, effective option for subduing a resistant suspect, research also considers how the TASER is substituted for other types of force. Using a randomized field-training experiment, Sousa et al. (2010) find equipping officers with a TASER changes their likelihood of using other force options: officers are less likely to respond to a deadly threat with their firearm if they have a TASER and are more likely to use a TASER instead of their baton or OC spray in the event of aggressive physical resistance.⁵ In contrast to this small-scale experiment, an analysis of more than 36,000 force incidents in Chicago finds no evidence that the availability of TASERs reduces officers' use of a firearm. The same analysis does find, however, that officers substitute lower and equivalent force options with TASERs and that the introduction of TASERs is related to an overall increase in use of force incidents (Ba and Grogger 2018).⁶

Such research provides some support for a hypothesized "lazy cop syndrome," whereby "police officers may turn to a [TASER] too early in an encounter and may rely on a [TASER] rather than his or her skills in conflict resolution or even

⁴ Additionally, there is a small but real risk of suspects falling and sustaining traumatic brain injury as a result of TASER-induced loss of muscular control (Kroll et al. 2016).

 $^{^5}$ OC spray is short for "oleoresin capsicum spray," more commonly known as "pepper spray."

⁶ Delineation of "higher," "lower," or "equal" use of force is complicated by substantial variation in use-of-force-policies across departments, especially with regard to the design of the "force continuum" that orders force options and dictates under what conditions they should be used (Terrill and Paoline 2013).

necessary hands-on applications" (Alpert and Dunham 2010: 253; see also Mesloh et al. 2008ab). Of course, though administrative use-of-force data can elucidate the frequency of TASER use relative to other, more injurious force options, such data cannot speak to *why* officers choose to use a TASER or how they incorporate TASERs into their understanding of force relative to other force tools. Further, what limited investigation of officers' understanding of TASERs and their use exists does not address what TASER use constitutes excessive force from an officer's perspective (Rojek et al. 2012; see also Alpert and Dunham 2010). As such, current research can say little about how or why officers use TASERs in instances of excessive force.

The Present Study

Taking into account the limitations of past work on excessive force and TASERs, this article connects and builds upon these literatures by investigating how officers, in their role as legal agents empowered to use coercive force, understand and (mis)use their TASERs. This article does not aim to resolve the conceptual mire surrounding the term "excessive force" or to enumerate the frequency of TASER deployment, excessive or otherwise. Instead, this article draws on ethnographic observations and unstructured interviews with officers to illuminate "how and why agents on the scene act, think and feel the way they do" (Wacquant 2003: 5), with particular focus on providing grounded description of how officers themselves make sense of TASERs and incorporate this new technology into their understanding and practice of force.

Following a description of my field sites and methodology, my analysis proceeds with description of how officer's understand and use TASERs as a less-than-lethal option that enhances the safety of officers and suspects, including in instances where TASERs are used to threaten further force to preempt suspect resistance. Next, I describe officers' understanding of TASERs as alternatives to firearms in situations that they believe would justify lethal force, particularly during encounters with suspects suffering from mental illness. The analysis concludes with description of how TASER technology and officers' perception of the TASER as a safety-enhancing force option contribute to TASER uses by rookie officers that are interpreted by other officers as excessive force.

Methodology and Data

To investigate how officers make sense of and use TASERs in the field, participant observations and unstructured interviews

Table 1. Field Site Characteristics			
Department	Region	De	

Department	Region	Department Size ^a
Elmont	Northeast	500
West River	West	700
Sunshine	Southwest	900

^aThese figures represent the number of sworn officers in each department.

were gathered with officers in the Elmont (EPD), West River (WPD), and Sunshine (SPD) police departments between August 2014 and July 2018.⁷ These three departments are located in distinct regions of the United States, and are all large urban departments within the top 1 percent of U.S. police departments by the number of full-time sworn officers they employ (see Table 1) (FBI 2017).

The multisite design of this study has decided benefits. In combination with the depth provided by ethnographic and interview methods, data provided by multiple officers in multiple departments allows for cross-site validation of observations and officers accounts, helping to ensure that this study's conclusions are not simply artifacts born of the idiosyncrasies of a single department. As such, this study's multisite design provides added external validity relative to single-site ethnographies frequently critiqued for emphasizing depth to the exclusion of breadth. Even with the benefits provided by in-depth up-close observation across multiple sites, however, this study's selection of large urban departments-though reasonable given the concentration of excessive force complains in such departments (Hickman and Piquero 2009)—inevitably frustrates generalization to smaller and more rural departments that make up a significant proportion of the approximately 18,000 law enforcement agencies in United States (Banks et al. 2016; FBI 2017). Further, because the ethnographic and interview methods employed in this research do not rely on the probabilistic sampling common to other methodologies, this research is ill-suited to make claims about the representativeness of its findings to the broader policing occupation (Small 2009).

Moving to the data collected in Elmont, West River, and Sunshine, Table 2 displays the observation hours and unstructured interviews gathered in each site. Data collection began in August of 2014 and continued through February of 2018. Interviews and observations of officers in the EPD occurred throughout this time, while data collection with the WPD and the SPD took place

⁷ Per the protocol approved by the Yale University IRB, the field sites in which data collection took place are given pseudonyms, as are all officers. To aid in maintaining the confidentiality of the department and individual officers employed by those departments, more precise demographic information is omitted from the description of these sites.

Department	Observation Hours	Interviews	
Elmont	315	29	
West River	380	36	
Sunshine	325	43	
Total	1020	108	

Table 2. Data Collected per Police Department

during intensive 2-month data collection periods in the summer of 2015 and 2016, as well as periodic phone calls with officers across sites and a follow-up visit to the WPD in the summer of 2017. In total, 108 unstructured interviews were gathered across the three field sites, and approximately 1020 hours were spent in the field with officers. Observations were primarily collected during ride-alongs with patrol officers as they responded to calls for service across all hours of the day and every area of the city. These ride-alongs were supplemented with observations gathered in training sessions (e.g., driving instruction and firearms), community meetings, departmental roll-calls, fundraisers, a memorial service, and an award ceremony.

Importantly, the data gathered during ride-alongs focused primarily on the work and experiences of patrol officers—the most contacted and visible manifestations of the criminal justice system—not those of officers in less visible departmental roles such as detectives or police administrators. As a result, these data are less able to speak to other roles within the complex structure of modern police departments (e.g., LAPD 2018). Nonetheless, the lion's share of contact with the public falls to uniformed patrol officers responding to the public's calls for service (Black 1980). Since these are the officers tasked with addressing calls that range from the mundane to the violent, focus on patrol officers offers important insight into the perceptions and practices of the street-level legal agents involved in over 40 million interactions with the public and hundreds of thousands of use-of-force incidents each year (Eith and Durose 2011; Hyland et al. 2015).

Entry to my field sites was aided by previous collaboration with law enforcement agencies on violence reduction projects. These collaborations provided signals of my professional alignment with officers in their goals of enhancing public safety, and my prior exposure to officers and familiarity with departmental organization and operations facilitated the building of rapport with officers. Certainly, access to police departments was valuable in and of itself for entry into multiple field sites—for example, I was asked to provide a police reference from a previous field site before I was approved to collect observations in the SPD. As I gathered observations and became familiar with police work in

multiple cities, my own experiences and stories from patrol became valuable resources upon which to draw and engage in the "cop talk" common among officers (Trujillo and Dionisopoulos 1987; Waddington 1999).

Against the backdrop of the critical media coverage of police during my time in the field, my presence within the police department was met with both suspicion and curiosity. When asked about my intentions, I described my research as observing what modern police work is like; this was appreciated by officers who felt unfairly judged by the media and public alike, and some expressed gratitude for me "forming [my] own opinion" or "seeing for [my]self." Additionally, my prior collaborations with multiple police departments and assurances that my research protocol required pseudonyms for all departments and officers helped assuage suspicions. Curious officers told me that I—a large Latino male with visible tattoos—did not match their preconceptions of what a doctoral student looked like; instead, several officers commented that my age, build, and tattoos made me look like a plainclothes officer and joked that I should join the police department. In general, my phenotype and male gender identity allowed relatively easy movement through the male-dominated police environment (Rabe-Hemp 2009), and my Spanish-speaking ability was appreciated by officers who would ask me to translate in the field. To be sure, it is entirely likely that my presence affected officer behavior—some officers joked that I was an undercover internal affairs officer, a muckraking journalist, or a "fed." Nonetheless, even stylized performances are useful windows into how officers make sense of themselves and their work (Armenta 2016; Monahan and Fisher 2010) and provide opportunities to examine officers' accounts of their own and other officers' behavior in relation to observable, contextually situated action on the street (see Jerolmack and Khan 2014).

Field notes and jottings were gathered during my time with officers via a notepad or a note-taking app on a smartphone. Upon completing a ride-along, these field notes were expanded into more complete field narratives of events, interactions, and conversations observed in the field. Unstructured interviews with officers followed the informal style of the "ethnographic interview" described by Spradley (1979) and employed in recent sociolegal scholarship (Hureau and Braga, 2018; Armenta 2016; Stuart 2016). These interviews were recorded via smartphone with the verbal consent of officers and were subsequently transcribed. In keeping with an abductive approach to qualitative analysis (Timmermans and Tavory 2012), hundreds of pages of field notes and interview transcripts were reviewed as fieldwork progressed, allowing for data gathered across officers and sites to

guide subsequent observations and questions in the field. As a result, what I focused on during ride-alongs and interactions with officers, in contrast to a static instrument or interview protocol, were informed and amended according to new data (see Small 2009: 27). My analysis combines data derived from field observations, recorded interviews with officers, as well as reconstructions of events and conversations. Similar to Contreras's (2012) presentation of multiple types of qualitative data, I use plain text to denote recorded interviews and place any reconstructed conversations in *italics*. I have edited reconstructions and transcripts for clarity (e.g., removing repeated words, "Um"s, and sentence fragments).

TASERs as Mutually Safety-Enhancing Technology

Lieutenant Miles (WPD), a well-liked supervisor respected among officers for his extensive street experience, began his career in the early 1990s, over a decade before the West River Police Department acquired TASERs. In his younger days, his preferred force option was the "long wood," a 26-inch club that allows for blocking as well as two-handed strikes. He recalled, "When I was a rookie I used my baton a lot, when I first hit the street. I was very competent with the baton." Now more than 25 years later, Miles oversees dozens of officers, all of whom carry a TASER on their duty belt. He discussed the safety-enhancing benefits of this new force technology for officers and suspects from a dually practical and administratively minded perspective:

From a risk management perspective, you have an officer that goes to make an arrest, the bad guy starts resisting, the officer does a hand strike and breaks his hand. Risk management perspective says we lost an officer for six months; why use physical force when you can use a TASER?... [TASERs] prevent injuries to officers and bad guys. Most people who get tasered don't get hurt...You use the TASER, they fall, that's it.

At the street-level, patrol officers also understand the TASER as a mutually safety-enhancing technology. Officer Jasper (WPD), a young officer who joined the WPD after serving in the military, explained this benefit of the TASER to me as he drove around looking for a stolen Toyota Corolla that had been spotted in the area:

We're not trained to get into a boxing match with suspects, we're trained to end it as fast as possible. That's why we have weapons, you know. We can just end it. ... So say if he wants to

box: I draw my TASER. And I can be like, "Hey, dude. If you want to fight you're going to get tased"...You know, one thing they teach you in the military, dude, is "only suckers fight fair." My job is to win, and I'm going to win at all costs. If I got to peel your skin off with my teeth or if I have to pick up a rock. But if you're whooping my ass my job is to end the fight.

The TASER is, at its core, one of several weapons that officers can use to ensure the survival emphasized by their training and the broader policing culture (Sierra-Arévalo 2016; Skolnick 1966). Jasper sees no reason to get into a fistfight when he can use a TASER to quickly "win" a confrontation with an aggressive suspect and secure his own safety. As he went on to explain, however, the TASER is an especially useful force tool because it ensures officer survival while also reducing the likelihood of injury to a suspect:

So, I fight with a dude with my hands, right? I'm boxing, because I have an ego and I just want to box. And, so I box with the dude. I break my hand, I break the dude's nose, I break his jaw, he breaks my jaw, he knocks me unconscious, he gets my gun, shoots me. Right? A *million* things can happen...So, it's safe. It's safer for me. It's safer for the subject.

In Elmont, Officer Carmelo recalled an incident involving a suspect who was under the influence of PCP (also known as "angel dust"), a narcotic that can cause hallucinations, aggression, and which some officers say gives users superhuman strength. As he explained, the TASER enabled officers to quickly subdue the man that posed a risk to himself, officers, and nearby children:

...when we used the TASER on the guy he was out in the middle of a park where there are kids all around and everything like that. He's going crazy. He's rolling around pretending he's a sniper saying he's going to kill everyone... Then he just made a beeline for me and—ready to go—clenched his fist ready to fight for whatever reason. And luckily [another officer] had a TASER and tased him right in the back. No problems, no injuries, no nothing...this guy was humongous. He dwarfed me... and just ripped. I was like, "Oh great here we go. I'm going to have to get into a fight now and I'm going to get hurt. It's just going to turn out to be a brawl and someone's going to get hurt." And luckily the TASER—that was an instance where the TASER didn't hurt anyone. No one was injured. No one. The most you had to do was pull the prongs out.

In a broad sense, TASER could be thought of as an efficiency-enhancing technology that allows police to more effectively dispense force and fulfill the demands of their work with limited time and personnel (Lipsky 1980). TASERs are simply quicker and easier than a knock-down, drag-out fight. From the viewpoint of a flesh-and-blood officer like Carmelo, however, the TASER is understood and used as a parsimonious solution to a precarious situation that poses serious risk to him, his fellow officers, the suspect, and bystanders. As opposed to a hand-to-hand fight or the use of more injurious force options such as a baton or firearm, officers can use a TASER to quickly subdue a larger, stronger suspect while also reducing the probability of bodily harm to themselves and the target of their coercive force.

In addition to instances in which the TASER is used to electrocute and immobilize suspects in order to gain compliance, officers also engage in a type of "hidden" TASER use to preempt resistance and avoid injuries without subjecting suspects to 50,000 V. Namely, officers use the TASER's built-in laser sight to, as described in the TASER's official user manual (TASER International 2011: 8), "paint" or mark suspects with a bright red dot and signal that non-compliance will result in painful electrocution. In contrast to full TASER deployments that leave marks on a suspect's body and expel metal probes and wires, laser painting neither injures the suspect nor leaves physical evidence of the TASER's use. I asked Officer Diggler (SPD) if he had ever used a TASER in this way or seen someone else do so. He assured me, "Yeah, [I've done it] tons of times. And I've seen it tons of times and it works." This technique is effective, he explained, because:

...people see the TASER, they know what's up. They see the red dot, they know what it is. They're like, "Oh shit."...They see that red dot. You're telling them I'm about to tase you...They're like, "Hell no, I don't want to get tased!" They've seen the videos, they've been tased before. People don't want to get tased.

I observed Officer Hainey (EPD) use his TASER in this manner while providing backup to Officer Harper during a vehicle stop of a Chevrolet linked to a man that a local community member saw with a firearm. When Hainey arrived at the scene of the car stop, Harper was patting down the driver while the passenger in the stopped vehicle looked on. After stopping just shy of the Chevrolet, Hainey jumped out of the driver's seat and immediately drew his TASER, the red laser dancing on the chest of the short, round-faced man in the passenger seat of the stopped vehicle. Hainey called out loudly, "Don't move! Don't move! Let me see your hands!" Hainey quickly moved to the passenger side door, got the

man out of the vehicle at TASER-point, handcuffed him, and then set the passenger down on the curb while his information could be checked for warrants through Hainey's in-car computer system. Neither passenger nor driver had warrants and no firearm was found in the vehicle.

After the driver and passenger left the scene, Hainey told Harper, "I came out with my TASER because I saw [the passenger] fidgeting. He kept moving his hands. I put the cuffs on him just in case." I asked Hainey why he chose to use his TASER as he had, and he echoed the rationale given by Diggler in Sushine: "I like the TASER because it has the laser. People can see the laser on them and that gets their attention real quick. They stop moving because they think they're going to get tased." I asked him why he opted to use his TASER instead of his firearm, and he responded, "I didn't think I needed [my firearm] right then. I didn't see a weapon, but I wanted him to stop moving, so I pulled my TASER and gave commands."

Hainey's use of his TASER's laser to gain the passenger's compliance, unlike an officer tasing an actively aggressive suspect, was intended to preempt resistance altogether. Additionally, the TASER provided a quick, visible, and less-than-lethal option for making the suspect show their hands in a situation that Hainey did not believe merited the threat of lethal force. It is important to remember that pointing a TASER, though it is a less-than-lethal weapon, nonetheless constitutes a use of force. As a result, this incident could be interpreted as a case in which an officer mitigated their use of force, threatening less-than-lethal force with a TASER instead of lethal force with a firearm; if we consider that there was no weapon found and there was no actual suspect resistance, however, it could also be seen as a case of unnecessary threat of force via TASER. In any case, Hainey understands the TASER as a parsimonious means of coercing immediate compliance from a suspect, using it to enhance officer and suspect safety by averting resistance and subsequent uses of force entirely.

TASERs as Alternatives to Lethal Force

The TASER's safety-enhancing benefits are also apparent in cases where officers use a TASER instead of lethal force, even if they perceive that lethal force would have been justified. This understanding and use of the TASER is particularly salient in officers' encounters with suspects suffering from serious mental illness, many of whom also suffer from substance abuse disorders that increase the probability of suicidality and violence (Alpert 2015; Buckley 2006). In combination, these overlapping issues contribute to the phenomenon termed "suicide by cop," whereby

an individual "engages in behavior which poses an apparent risk of serious injury or death" to precipitate their own death at the hands of police (Mohandie and Meloy 2000: 384). Officer Estacio recounted an attempted suicide by cop that, thanks to another officer's TASER, was resolved without deadly force that he believed would have been justified:

I had the green light to kill somebody and I didn't. ...We stopped this guy on a bike, big black dude, and he ended up being a schizophrenic... He's a big guy, so I'm having trouble getting him off the bike, but he redirects back towards our car and gets off the bike. He blades his body...And he goes like this with his left hand and pulls up his shirt like this. I saw a fucking bulge—and it couldn't be his dick unless he's a fucking elephant—so he goes in with his right hand. I go, "Mark, he's got a fucking gun!" My finger is on the trigger, I am fucking shaking. "Mark, we need a fucking TASER!" So I'm 7 feet away and he's pulling something and I see something brown or black, and my partner comes around the side of the car and drops him like a sack of potatoes with the TASER. Then me and some others jump on top, grab his arms, he's saying, "It's a gun!" I grab it. Shit, it's a fucking wallet!

Upon inspecting the wallet, Estacio discovered several "schizo-phrenic cards" that showed the details of a mental health facility at which the man presumably received treatment. After the incident, he learned that the man had attempted suicide by cop in the past. Although Estacio believes that he would have been justified in using lethal force, and though it is impossible to know the exact outcome if a fellow officer had not been equipped with a TASER, the availability and use of the TASER likely prevented the shooting of an unarmed man suffering from mental illness.

In another attempted suicide by cop scenario, Officer Frels (SPD) was confronted by a knife-wielding man who yelled "Fucking kill me, pigs!" while walking toward Frels's patrol car. Frels explained his reaction to the young man as well as how the TASER of an officer in a car behind him allowed for the situation to be resolved without resorting to deadly force:

So I fucking draw [my pistol] and I said, "Don't come any fucking closer or you're dead!" ...at the same time, a mom in her minivan with her 13-year old daughter in the passenger seat came to a screeching halt right behind him. So that was my backdrop, was a 13-year-old female passenger... And as soon as I saw [the daughter] I took my finger off the trigger and put it back on the frame. I yelled "transition" to the other guy next to me... I told him to go non-lethal, because we were both lethal... and in like a second I saw the [TASER's] red dot pop up on the guy's chest. I said, "Fucking tase him!" [The kid] actually said,

"Don't fucking tase me, fucking kill me!" As soon as he got those words out [the backup officer] hit him with the TASER. [The kid] fucking locked up, fell back, dropped the knife, and then we addressed it from there.

Like Estacio (EPD), Frels drew his firearm in response to what he saw as a potentially lethal threat. Unlike Estacio, however, Frels was presented with an unexpected complication—an innocent bystander in the line of fire—that necessitated rapid reassessment of the force options being employed. Frels needed to keep his pistol aimed at the young man in front of him but also recognized that his firearm posed additional risks to the girl in the vehicle behind the suspect. To enhance safety for himself, the suspect, and the public, Frels called for the other officer to transition to a less-than-lethal TASER that could subdue the knife-wielding suspect while also avoiding lethal force that could seriously injure or kill the suspect or an innocent bystander.

In both of these attempted suicide by cop incidents, the availability of the TASER let officers subdue what they understood to be a lethal threat without resorting to the use of lethal force themselves. Of course, officers do not necessarily need to have access to a TASER to refrain from using lethal force. Officer Murray (EPD) recounted an incident that took place before the EPD distributed TASERs to all its officers, during which a domestic dispute escalated into a standoff with a young man who grabbed a knife and demanded that Murray kill him:

... there's been times where I've needed a TASER...I literally thought I was going to have to shoot the person...It was an 18-year-old kid and we were going to arrest him because he tore up the house. We think he hit his sister, so we went to go arrest him. And as soon as I started to walk towards him he runs to the kitchen, picks up this knife...I was probably not even four or five feet away from him. And he was holding the knife up, "I'm going to fucking kill you!" He's like, "Don't fucking come near me!" And then he starts yelling at me to fucking shoot him. He's like, "I don't even want to fucking live anymore! Fucking kill me!" And it was like the most intense thing ever. And I'm sitting there like, "Give me a fucking TASER."... So I have my gun down and pointed at his chest. I'm like, "Don't fucking take a step." Fuck. And then I don't know what. His sister started talking to him, trying to calm him down—his older sister. She had just showed up. And he finally just slowly backed away and put the knife down. We ended up walking him out to the front and handcuffing him. It was like the most fucking intense thing. I was like, "Jesus Christ, that could have ended badly."

I asked Murray whether he believed that lethal force would have been justified in this incident and he responded with a mixture of relief and gravity, "I'm glad it didn't go down that way. But I think I would've been justified to do it."

Grateful to have avoided what he believed would have been justified lethal force, Murray also looks back and wishes to have had a TASER available. Unlike Frels and Estacio, Murray had no less-than-lethal option to decisively regain control of the situation and subdue an aggressive suspect trying to commit suicide by cop. Instead, Murray found himself in a wholly reactive position, poised to use lethal force if the young man took a single step toward him, and left to hope for the young man's surrender. Taken together, these incidents point to an understanding of the TASER as a tool that enables officers to coerce compliance with minimal injury and, crucially, end a confrontation before they are left with no choice but to use lethal force. For officers, the TASER is thus understood and used not only as a less-than-lethal alternative that can safely subdue suspects but also as a tool that can mitigate the chaos and uncertainty of volatile situations before they escalate to the point of no return.

Rookies, TASERs, and Excessive Force

The benefits of TASERs described by officers notwithstanding, this less-than-lethal technology is no panacea for the longstanding issue of excessive force. Although this technology provides tangible benefits to officer and suspect safety, understanding of the TASER as a safety-enhancing technology can combine with the inexperience of young officers to result in excessive force. Take the perspective of Officer Willis (WPD), a department veteran and a former federal law enforcement agent, who expressed to me that young officers are prone to use force first and ask questions later.

In the early hours of a day shift, Willis and another officer responded to a disturbance at a local Denny's restaurant. After arriving and speaking with the manager, the officers learned that a woman came in and attempted to buy coffee with no money. After being denied coffee she went over to one of the booths and angrily shook salt and pepper on the table and floor, then left the establishment in the direction of a nearby bus stop. With no damaged property, no suspect, and a manager that did not want to press charges, Willis and her backup thanked the manager and left the scene. As uneventful as this call was, Willis explained that many rookie officers needlessly escalate even mundane situations to the point of using force:

See what I mean? We get here and there was no actual destruction of property, no one got hurt, no upset customers, nothing. A lot of officers, the young ones, will just run in and start going hands on with people [i.e. grabbing or restraining]. You have to assess, get some information before you start doing your thing.

Ten hours later, Willis raced to a scene where she perceived the inexperience of a rookie officer and TASER technology contributed to excessive force. Upon arriving, Willis spoke with a sergeant who instructed her to canvas for witnesses on the side of the street where Gomez, a rookie officer, had chased after a suspect, deployed his TASER twice, and then tackled the suspect to the asphalt. Upon arriving, I saw the alleged suspect—a young black male—strapped to a gurney and sitting in the back of an idling ambulance. I followed Willis up the street and into the driveway of a one-story house where two police vehicles were parked. We were met by a woman in her late 40s or early 50s who exclaimed, "You got Damarcus, not Daniel! You have my patient!" The woman explained that the address to which officers initially arrived was a mental health care home where she was a caretaker; the man in police custody was Damarcus, a patient of hers diagnosed with schizophrenia and autism, not Daniel, an employee of the care home that she confirmed was the man wanted in relation to the earlier battery call.

I turned to Officer Bancroft—Gomez's backup officer—and asked him what happened. He described seeing Gomez approach, pursue, and tase an apparently fleeing suspect, and suggested that the pursuit and TASER deployments were legally defensible: "I saw Gomez go so I backed him up. For me it's reasonable officer standard. Fleeing felon, you know?" After Willis informed him that the young man was not involved with the earlier battery, he joked, "The radio traffic must've sounded awful! <laughs> At least he wasn't handcuffed then tased!"

Bancroft initially cites the "reasonable officer standard" to make sense of and justify Gomez's uses of force, drawing on the "objective reasonableness" standard established in *Graham v. Connor* that privileges officers' subjective, in-the-moment perception of a situation over post hoc assessments (Obasogie and Newman 2018: 1477). When Willis provided new information that laid bare the inaccuracy of Gomez's and Bancroft's perception, he supplemented his legalistic interpretation with reframing of the incident's severity using callous, cynical humor common to police (Rowe and Regehr 2010). More than simple insensitivity, Bancroft's joke is an attempt to rationalize and downplay the taseing of an innocent citizen with an appeal to how much more "awful" it would have been had Gomez tased a handcuffed

suspect, a use of the TASER explicitly discouraged by WPD policy and which case law has found to be excessive (PERF 2011: 36).⁸ Although he does not directly critique Gomez's force as excessive, his juxtaposition of the incident to a more obviously excessive (and, thus, less defensible) use of force betrays Bancroft's understanding of Gomez's use of force as problematic.

Leaving Bancroft and Willis, I walked back down the street to where Officer Gomez was having a tear in his pants photographed by crime scene technicians. I asked him what happened, and he recounted:

We had that 242 [battery] at the station, and the chick's eye was all busted up. So we came later to check out the address where she said the guy was—this place <points up the street>. Get there and there's a guy in the front yard matching the description. I roll down the window and I go, "Daniel!" The kid looks up and goes, "What's up?" So, he responds to the name and I get out. As soon as I get out and start going towards him he starts backing up. Now I'm thinking, "This is about to go all kinds of bad." I go to grab his wrist and he takes off on me and I go after him.

I asked Gomez if he knew the person he tried to tase twice and then tackled was an innocent man suffering from mental illness. He responded bluntly, "How could anyone know that? He responded to the suspect's name and then he ran." The sergeant on-scene also viewed Gomez's TASER use as quite straightforward: "They roll up on him, he goes running. He probably did something, who knows what, but he goes running. Gomez jumps out and chases him, tells him to stop, then deploys [his TASER]." Although Gomez and the sergeant pointed to the mentally ill man's flight as an indicator of guilt, WPD policy makes it clear that "Fleeing in and of itself does not justify [TASER] deployment."

In contrast to the rationalizations for using force given by Bancroft, Gomez, and the WPD sergeant, Willis strongly denounced Gomez's multiple uses of force:

You're a sick kid and you get tased and tackled because the police think you're someone you're not? That's what I was saying earlier: you have to take time to assess. You have to get the information before you just start

⁸ WPD policy discourages use of the TASER on a handcuffed suspect unless they are "actively resisting and their actions present and immediate threat to officers, third parties or themselves." Similarly, while case law generally considers the use of TASERs on restrained or handcuffed suspects to be excessive when suspects are compliant, TASER use on restrained suspects who are physically resisting is frequently found to be reasonable under the Fourth Amendment.

laying hands on people, taseing fools. That's [Gomez's] second and he's still on probation!

Had this been an isolated incident it might have been labeled by Willis as no more than a "rookie mistake" (Hunt 1985: 336); as a part of a pattern of behavior, however, Gomez's actions suggest either incompetence or an unwillingness to appropriately constrain his use of force. Although Gomez, Bancroft, and their sergeant excuse this TASER use on the basis of the innocent man's flight—a longstanding justification for the use of both reasonable and excessive force (Kappeler et al. 1998; Phillips 2015)—Willis's assessment centers the innocence of the citizen and the lack of control with which Gomez approached the situation. In her eyes, excessive force on an innocent—that is, undeserving—man could have been avoided entirely if Gomez took the time to gather more information and properly assess the situation.

A few days later, while talking with WPD veterans Sergeant Hidalgo and Officer Summers, I recounted Gomez's TASER use. Like Willis, Hidalgo perceived that young officers are prone to the overuse of their TASERs, telling me, "These kids coming out of the academy love taseing people. We used to use our hands." Summers agreed, pointing to generational differences in training as one reasons for why modern day rookies are more comfortable with (and more prone to) TASER use than veteran officers:

I didn't train with the TASER in the academy. Didn't train how to draw them, nothing like that...We have the training, but it wasn't part of the academy. So they give us a TASER after we do the 6 hour course and I just put it somewhere on my belt. We didn't train force options like the kids now...I don't practice with [the TASER].

Whereas excessive force was once restricted to the use of fists, batons, and firearms that comprised the entirety of an officer's force repertoire, TASERs are now a key part of recruits' training and their eventual practice of force when they leave the academy. Like any other force option, TASERs can be used improperly; in conjunction with rookie officers' propensity to escalate situation to the point of using force, the TASER is a new technology misused by rookie officers in age-old ways.

Beyond the simple fact of the TASERs availability to contemporary rookies, the TASER's less-than-lethal properties also contribute to understandings of the TASER that contribute to the use of excessive force by inexperienced officers. This was the case in Elmont, where I watched body worn camera footage of three rookie officers responding to a report of an emotionally disturbed person in the street. The officers found the 35-year old man

walking into a convenience store, followed him inside, and asked him for identification several times. After the man failed to comply, one officer ordered the man to put his hands behind his back but the man refused and moved toward the exit. Over the next three minutes, that same officer deployed his TASER three times to no effect—the barbs stuck in the man's coat, preventing proper penetration—while the man whimpered, cried, and tried to hide behind cardboard store displays. A second officer also deployed their TASER to no effect. When the suspect climbed onto the store counter the third officer deployed OC spray, after which the suspect fled toward the back of the store where he was physically restrained and arrested for interfering with police and disorderly conduct.

After viewing the video, I spoke with Assistant Chief Rodarte who, though unwilling to label the multiple TASER deployments anything more than indicative of a "training issue," saw the officers' inexperience and related impulsivity as a contributor to their TASER use:

I didn't tell [the officers] that it was necessarily wrong, but we identified it as a training issue. We sat them down and told them that we can't say what they perceived in that moment—because what is a threat to me might not be a threat to you, it's all about that officer and what they perceive, so we weren't saying it was necessarily really bad—but all three officers did receive additional training on the TASER and use of force policy...all three are pretty inexperienced, and they escalated the situation when they didn't need to, where a more experienced officer would have probably not...younger [officers] can be impulsive.

I also spoke with Sergeant Rigby, a former internal affairs investigator and the officer in charge of redesigning the EPD's TASER policy. Although she agreed with Rodarte that inexperience played a role in the rookie officers' TASER deployments, she viewed them as clear examples of excessive force. Most crucially, she tied these instances of excessive force to the common understanding of the TASER as a force option that can enhance officer safety:

You have a bunch of younger, inexperienced officers that, my perception, are afraid to put their hands on somebody. They quickly resort to the TASER and they don't use a lot of what we call verbal judo or their communication skills...they do a million things that ultimately resulted in them getting extensive retraining on the use of their TASER weapons...I've noticed with the newer officers [] that they're less apt to put their hands on people. We've had that exact conversation, like, I said to the officer, "Why didn't you just grab that person?" And he said, "Well, that

would've put me more at risk." So, they're not thinking in terms of what risk that weapon poses to that person, they're thinking about self-preservation. I think it's wrong because it's our duty to protect and we have to use the least force necessary to overcome any type of resistance we have, either to affect an arrest or do what we need to do to protect others or ourselves. So, to resort to the TASER, I think that's faulty reasoning...This is my personal opinion, I'm not speaking for the department, I believe it's excessive force.

For police, the propriety of force is less tied to questions of "should or whether" than to calculation of "when and how much" (Rubinstein 1993: 321). Rigby's assessment of these rookies' TASER use is no different and is not predicated on an assumption of force as inherently undesirable. Although she believes that the rookies should have first tried to de-escalate the situation and avoid using force entirely, she also would have preferred the officers simply grab and restrain the man instead of using TASERs, OC spray, and then physical force. More fundamentally, Rigby's assessment rests on an understanding of the police role as one that demands careful consideration of the costs of force. Though Rigby does not refute younger officers' perception that TASERs can enhance officer safety, she does problematize the unquestioned priority of officer safety over the well-being of the citizens that police are sworn to protect and serve. In her view, the understanding of TASERs as a safety-enhancing force option combines with the inexperience of escalation-prone rookies in a way that frustrates the correct balancing of officer safety with that of the public, ultimately resulting in the use of excessive force via TASER.

Discussion and Conclusion

Recalling how the patrol car, radio, the 911 system, and the rise of information technology revolutionized policing's structure, measurement, and implementation (Manning 2011), the TASER represents an important addition to the range of tools available to officers for the distribution of force. Like other force options, the TASER has legitimate and lawful uses within the scope of police activities; by the same token, the TASER can also be misused. Drawing on ethnographic observations and unstructured interviews with officers in Elmont, West River, and Sunshine, this article attends to how this new technology affects the coercive function of the most visible and contacted legal agents of the criminal justice system, and connects literature on excessive force and how the TASER is incorporated into officers' understanding and

use of force. In line with past work that discusses the safetyenhancing benefits of TASER technology (e.g., Paoline et al. 2012; White and Ready 2007), officers understand and use the TASER as a force option that, unlike their fists or batons, can quickly neutralize a potential threat while reducing the likelihood of injury to suspect and officer alike. Of particular note is "hidden" TASER use whereby officers use the TASER's laser sight to visibly mark suspects and threaten electrocution to coerce compliance, preempting resistance and potential injury. TASERs also allow officers to avoid using lethal force in situations where they believe such force would have been justified, thus preventing serious injury or death when confronting mentally ill suspects attempting to commit suicide by cop. These benefits aside, officers' understanding of the TASER as a safety-enhancing force option also combines with the propensity of young, inexperienced officers to unnecessarily escalate situations, ultimately resulting in the use of excessive force via TASER.

This article's description of how the TASER is integrated into officer's understanding and implementation of force, in addition to shedding light on the role of new technology in contemporary police practice, calls attention to the limitations of relying on technological innovation to remedy systemic issues in policing. Although this article does support past research findings that TASERs help officers prevent injury and death in perilous situations (Alpert et al. 2011; White and Ready 2007), it also shows that the intended goal and very design of the TASER perpetuate the problem it was intended to solve, albeit through electrocution instead of bullets or blunt force. It is precisely the TASER's lessthan-lethal capabilities and officers' understanding of this technology as a safety-enhancing tool that contribute to its use in cases of excessive force that, even if non-lethal, are detrimental to public safety and police legitimacy (Carr et al. 2007; Gau and Brunson 2010; President's Task Force on 21st Century Policing 2015).

With regard to the limitations of technological salves for problems in policing, this article underscores the weakness of an approach to constraining police force that focuses on the specific technology of force without considering the cultural and structural forces that shape the inequitable distribution of police force more broadly. Even if one assumes that the availability of TASERs translates to fewer uses of lethal force, this benefit of new lessthan-lethal technology centers exclusively on altering the particular means by which coercive force is distributed. Unaddressed by technological solutions to excessive force are persistent features of police training and culture that socialize officers into an "us versus them" orientation that frames the public as potential threats instead of fellow citizens and allies (Brown 2007; Crank 2004). Combined with the aggressive tactics encouraged by a "warrior" style of policing that emphasizes officer safety at all times and at all costs (Marenin 2016; Sierra-Arévalo 2016; Stoughton 2014), TASERs and other less-than-lethal technologies—including pepperballs, bean bag munitions, and sound cannons (Hager 2015; Moynihan 2017)—are more likely to expand the range of tools that officers can misuse rather than remedy the underlying culture of the police occupation that over a half century of research links to the use of excessive force (Kappeler et al. 1998; Skolnick and Fyfe 1994; Westley 1953).

Neither does innovation in force technology address structural forces that shape who police come into contact with and, by extension, who is subjected to police force. Case in point, although this article shows that TASERs are understood and used by officers as a means to avoid using lethal force during suicide by cop incidents, this less-than-lethal innovation cannot hope to reverse the de-institutionalization of mental health care or remedy chronically inadequate social services that perpetuate the use of police as "street-corner psychiatrist[s]" (Lamb et al. 2002: 1266). To make matters worse, although there is growing recognition of the need for new police tactics and training tailored to interactions with those affected by mental illness (Wood and Watson 2017), formal training on how to best serve and protect this vulnerable population remains sparse and inconsistent (Hails and Borum 2003). Without a concerted effort to address these underlying issues, the use of police as a stop-gap remedy for inadequate mental health resources will only perpetuate frequent police contact with those affected by mental illness. In conjunction with this article's discussion of officers' TASER use when confronting individuals in a mental health crisis, research showing that mental illness is related to an increased probability of lethal complications resulting from TASER use underscores the shortfalls of relying on strictly technological fixes for ensuring the safety of vulnerable groups (White et al. 2013; White and Ready 2009).

Finally, this study of TASERs and police use of force speaks to a growing body of sociolegal research that highlights the unintended and even counterproductive consequences of technological innovation in the criminal justice system. In comparison to this article's focus on new force technology, other recent scholarship attends to the promises and pitfalls of new "big data" technology and its effect on another key police function: surveillance. Although the currently unprecedented capacity for gathering and storing data stands to enhance police efficiency and reduce human bias, social scientists and legal scholars caution that these potential benefits must be considered alongside the risks of expanding and deepening systems of surveillance that perpetuate

enduring inequalities in who is monitored, marked, and punished (Ferguson 2017). As encapsulated by Brayne (2017) in her study of the Los Angeles Police Department, such technology plays a dually "continuous and transformative" role in policing, amplifying some police practices while fundamentally altering others in ways that reify existing inequalities in surveillance and social control (996).

That technological innovation—no matter its sophistication or intended benefits—can have unintended even counterproductive outcomes is a promising theoretical lens that can be applied to the study of other technologies employed by officers at the streetlevel, such as body-worn cameras (BWCs) lauded for their ability to curb officers' use of force, reduce citizen complaints, and enhance police legitimacy (Ariel et al. 2015; Stanley 2015). These benefits aside, however, new research also shows that BWCs decrease force and complaints while increasing arrests and citations (Braga et al. 2018), suggesting that cautions made by legal scholars about the possibility for body cameras to increase punitive enforcement were prescient (Wasserman 2014). As of yet, however, the discretionary mechanism that drives increased enforcement vis-à-vis body cameras is unclear; future research should leverage ethnographic and interview methods to uncover why body cameras affect officers' discretionary enforcement as they do, and how body cameras are integrated into punitive police practices that, if inequitably distributed, further damage the police legitimacy body cameras were intended to fortify. More broadly, researchers would do well to consider how technological advancement of all kinds within and outside policing connects once distinct institutions into a ubiquitous web of surveillance and control (Brodeur 2010), as well as how the private corporations that produce, use, and sell these technologies blur the boundaries between public and private control (Bayley and Shearing 1996; Joh 2017; Lageson 2017). As these distinctions become more nebulous and the reach of the criminal justice system grows both more pervasive and less visible (Joh 2016), it is imperative that researchers attend to how new technologies shape the micro-level practices that (re)produce who is contacted and controlled by legal agents (Brayne 2017; Kohler-Hausmann 2018; Stuart 2016).

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