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Revisiting Adoption of Conducted Energy Weapons (CEWs) by Canadian Police

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This article focuses on the consequences of increasing patron–client relationships between manufacturers of Conducted Energy Weapons (CEWs) and Canadian police. It explicates the potential for institutional isomorphism in Canadian police. Four markers of isomorphic change in the policing field generated by the growing dependency of police on CEW manufacturers are highlighted. The article argues that the role CEW makers assume is intrinsically complex and contradictory and constitutes a gatekeeping, legitimizing, and ideationally (re)structuring process.

Keywords: use of force options, Conducted Energy Weapons, institutional isomorphism, policing, Tasers, TASER International

Introduction

The use of force is a fundamental but controversial aspect of policing.¹ Over-reliance on coercive force in particular generates paradoxical outcomes as it makes policing more dangerous.² Police organizations, therefore, have been concerned since at least the 1920s to find less-lethal weaponry.³ These efforts are intended by police organizations to de-escalate potentially dangerous

situations and to reduce injuries and casualties in police–citizen encounters. The challenging process of controlling violent or unruly suspects, and ensuring officers' safety while maintaining social order,⁴ especially during riots, mob activities, and instances where individuals become combative,⁵ has led to growth in the number of available less-than-lethal force options.⁶

This search for alternatives to lethal force has led to a proliferation of policing paraphernalia. These include teargas, pen-guns, and chemical mace and pepper spray, as well as capture nets, immobilizers, pepper

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fog, slippery material, water cannons, wooden plug guns, rubber plug guns, ricochet cartridges, riot batons, and tranquilizing darts.⁷

While each of these weapons has attracted criticisms, the deployment of Conducted Energy Weapons (CEWs) has made their predecessors pale in comparison in the scale of adoption, consequences, and public reaction. In 1998, the Victoria Police Service became the first Canadian law enforcement organization to adopt TASER CEWs.⁸ CEWs have since then become ubiquitous. About 129 Canadian law enforcement agencies out of an estimated 202 were known to have adopted a CEW at the end of 2010.⁹ An estimated 9174 CEWs are in use in Canada.¹⁰ This is a significant increase from 2800 TASER CEWs in 2008.¹¹ Thirty-three persons have died during or after deployment of such devices,¹² although “CEW exposure cannot be confirmed or excluded as the primary cause” of death.¹³

At least 11,500 law enforcement agencies use about 260,000 CEWs like TASER CEWs in the US.¹⁴ This is by far the largest use of CEWs in the world. There have been at least 500 casualties in CEW-related incidents in the US.¹⁵ However, advocates for CEW use, such as Steve Palmer, executive director of the Canadian Police Research Centre, argue that the lives saved by use of CEWs are often unreported. A report by Toronto Police Service, for instance, demonstrates that TASER

CEW was effective—successfully incapacitated a suspect—94% of the time it was deployed without any serious incident.¹⁶

This article explores the growing adoption of CEWs by police in Canada. It is intended to serve as a cautionary note against the back-drop of increasing reliance of Canadian police on CEW manufacturers, particularly TASER International. While sections of the public and the media are concerned with the immediate consequences of CEW use, this article contemplates the medium- to long-term consequences of dependence of police organizations on CEW manufacturers. The aim is to warn that the nascent patron–client relationship between CEW manufacturers and law enforcement organizations may put the latter in a relatively weak position.¹⁷ Police organizations may become too dependent on CEW manufacturers as the influence of CEW manufacturers increases over time.

The first part of this article draws on the work of Paul DiMaggio and Walter Powell to interrogate growing institutional isomorphism in the Canadian policing field in the context of adoption of CEWs. It emphasizes the nascent CEW-related credentialism in Canadian policing. The second part explores the gate-keeping function of CEW manufacturers. The article concludes by offering policy and research suggestions.

Institutional Isomorphism and Adoption of CEWs

How are organizations internally structured and how do they adapt to their environment to accomplish

their goals? One of the dominant perspectives in organizational research that seeks to answer this question is

“contingency theory.” Contingency theory holds that “organizational structures are rationally chosen in order to maintain and/or enhance organizational effectiveness.”¹⁸ This approach argues that the structures of an organization are shaped by (1) the internal characteristics and (2) the external environment of an organization. Examples of an organization’s internal features include its size and technical capability, while factors such as political environment and crime rate are external factors. These two sets of factors constitute an organization’s contingencies.¹⁹ The capacity of an organization to accomplish its goals and enhance performance is dependent on how it is able to adapt to them.²⁰

The contingency approach has gained widespread acceptance in policing research. It has been described as the “implicit foundation of nearly every study of police organizations.”²¹ This approach presupposes that police organizations are rational entities whose structures are shaped by efforts to achieve organizational goals through adaptation to contingencies. In other words, structures of police organizations are intertwined with performance objectives.

Institutional theory, by contrast, suggests a rather weak link between an organization’s structures and its performance. Institutional theory holds that organizations adopt structures that have widespread support from major environmental actors, such as funding agencies, accreditation establishments, professional associations, and the government.²² This approach suggests that organizational “structures are not necessarily adopted because they lead to improved effectiveness in a technical sense; organizations incorporating

these structures are viewed as legitimate by environmental actors.”²³ Adopting such “prescribed structures” help to demonstrate “organizational worth.”²⁴ Such organizations may receive support from powerful elements of their environment whether or not they have demonstrated capacity to achieve their goals.²⁵ This is possible because a causal link between performance and implementation of certain structures and strategies is difficult to demonstrate in some organizations.²⁶ Law enforcement agencies provide an archetypal example of such organizations, described as “permanently failing organizations.”²⁷ Such organizations typically survive despite rarely meeting set goals and objectives. Therefore, institutional theory emphasizes the significance of *legitimacy* rather than performance in their survival.

From the perspective of institutional theory, isomorphism is one fundamental consequence of the decoupling of organizational structures and strategies from performance or effectiveness. The concept of isomorphism captures the gradual development of homogenization or similarity among organizations in an institutionalized field. Isomorphism is “a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions.”²⁸ Structures and strategies being used by organizations within a given field such as policing become diffused and overtime become prescriptions for the conduct of organizations.²⁹

This section draws on the work of DiMaggio and Powell to explain how adoption of CEWs and the relationship between law enforcement organizations and CEW manufacturers

may lead to (institutional) isomorphism. While the analysis focuses on Canadian police, it is relevant to other police agencies, particularly in the geopolitical West, where the state and the police seek to legitimize their actions and to be seen to uphold democratic ideals.³⁰

DiMaggio and Powell draw on the work of John Meyer and Mary Fennell to delineate two types of isomorphism, competitive isomorphism, and institutional isomorphism. Competitive isomorphism is predicated on the theoretical notion of a free market and is relevant in fields where competition is open and transparent.³¹ In theory, competition among organizations in a *laissez faire* environment should lead to isomorphic change. The policing field in Canada, however, is not a free market. The Royal Canadian Mounted Police (RCMP), for instance, has no structural equivalent despite the existence of several city and provincial police organizations as well as private security companies. Therefore, the idea of competitive isomorphism has limited utility in Canada, although competition for prestige and perceived effectiveness is not unusual.

The institutional view of isomorphism DiMaggio and Powell espouse underscores the salience of other organizations in the decision-making process of a particular organization in a field; that is, that "the major factors that organizations must take into account are other organizations."³² DiMaggio and Powell provide three mechanisms of institutional isomorphic change. These are coercive isomorphism, mimetic isomorphism, and normative isomorphism.

First, coercive isomorphism is produced by "formal and informal

pressures exerted on organizations by other organizations upon which they are dependent and by cultural expectations in the society within which organizations function." These pressures may be perceived as "force," "persuasion or as invitations to join in collusion."³³ They may also arise as a result of a government mandate or the existence of a common legal environment.³⁴ For instance, a survey of 115 chiefs of police in Kentucky found that the "police chiefs must cope with varying levels of political pressures and interference, some legitimate and some illegitimate, which remove a large degree of management discretion from police administrators."³⁵ Mayors, city council members, and business leaders exerted pressure on the police chiefs in a variety of areas, such as hiring, personnel deployment, arrests, enforcement of specific laws, and provision of unusual or special services, among others. The authors conclude that "the local politicians have a direct effect on operational decisions in almost one-third of the police agencies."³⁶ Similarly, a study on the tenure of police chiefs found that besides health and family issues, "politics," "interference and micro-management" from city administrators and mayors played a major role in the turnover of police chiefs.³⁷

Second, mimetic isomorphism occurs as a result of uncertainty because uncertainty "encourages imitation."³⁸ Organizations that operate where the "environment creates symbolic uncertainty" in fields in which technologies have not been properly mastered and have rather nebulous or unclear goals are likely to emulate qualities of other organizations.³⁹ This mimesis includes adoption of innovative techniques and tools and

may help increase legitimacy and demonstrate that an organization is making efforts towards efficiency.⁴⁰

Third, normative isomorphism occurs as a result of professionalization. Professionalization is the “collective struggle of members of an occupation to define the conditions and methods of their work.”⁴¹ It is an attempt to control “the production of producers.”⁴² Overall, professionalization sets up an intellectual foundation and helps to gain legitimacy and autonomy for an occupation.⁴³ DiMaggio and Powell note that professionalization produces isomorphism through university education and professional networks.

The concept of institutional isomorphism provides a theoretically useful way to understand ongoing changes in policing in Canada. CEW manufacturers are playing a major catalytic role in effecting isomorphic change in Canadian policing. Such companies serve as one of the key gatekeepers of a highly institutionalized field. The following analysis focuses on how TASER International performs this role, as its devices are the most widely used by Canadian law enforcement.

First, CEW manufacturers, particularly TASER International, have intensified a need in law enforcement—the quest for development of less-than-lethal technology, which, as stated earlier, goes back to at least the 1920s. TASER International has aggressively marketed its products, particularly TASER X26.⁴⁴ The TASER X26 brochure titled “Safety Every Officer Deserves” contains information about the effectiveness of the TASER CEW. Some police officers provide testimonials about the effectiveness of the TASER CEW in the brochure:

The most effective less-lethal tool I have seen in 30 years of policing.

(Sgt. Doug Walker, Toronto Police Service).

We've found it's been much more effective than the other non-lethal options available to us.
(Sgt. Mike Ryan, Ottawa Police Services).⁴⁵

The brochure also presents statistics from US police departments to support the claim that the TASER CEW has enhanced the safety of police work. TASER International's marketing discourse emphasizes the risk of injuries, deaths, and the need to guarantee the “safety every officer deserves”, and suggests that police departments that do not buy into the “Taser effect”⁴⁶ are unresponsive or irresponsible.⁴⁷ TASER CEWs are presented as tools that are fundamental to policing in today's risk-prone world. Police chiefs may feel compelled or obligated to procure such devices whether or not they are convinced of their functionality and relevance.⁴⁸ This pressure has elements of both coercive and mimetic isomorphism. However, this effect is neither unprecedented nor peculiar to police organizations, as the structure and routine functioning of organizations are shaped by the institutional environment.⁴⁹

The spread of the innovative idea of community policing is one example. A US study conducted by Melissa Morabito found that a number of factors were predictive of adoption of community policing. Particularly, adoption of community policing was influenced by higher rates of crime.⁵⁰ This is not surprising, given that the police would be more likely to adopt new measures in crime-ridden areas. Morabito also found that police organizations with a high degree of “formalization” were more likely to adopt community policing.⁵¹

This means that the higher the level of bureaucratization in a police agency, the more likely it is that community policing will be adopted. This demonstrates that the “police are alert to and care about their place in the public bureaucracy.”⁵² In addition, the influence of the political environment on police innovations is reflected in the availability of funds. Community policing was adopted as there was federal money for police organizations who made that adoption. Morabito argues that the “Department of Justice grants became intertwined and for some, even synonymous with community policing.”⁵³ However, this does not mean that the priorities of police organizations are set by the political environment; rather, it means that there are several factors, including the influence of municipal politicians that shape the agenda of police organizations and the type of innovations they adopt. Morabito concludes that “the factors that are predictive of organic police innovations may not explain the adoption of community policing.”⁵⁴

The adoption of innovation such as community policing ought to be preceded by or lead to certain structural changes, such as crime control models, order maintenance, and service provision in police agencies, as Zhao, Lovrich, and Robinson point out.⁵⁵ However, research indicates that adoption of community policing does not necessarily lead to change in the internal structure or priorities of a police organization. For instance, Zhao et al. analyzed panel data from over 200 police organizations in the US vis-à-vis adoption of community policing. Over 70% of participants stated that their implementation of community policing had proceeded as planned.

However, the technical core of the police organizations, including crime control model and service delivery, remained fundamentally unchanged from the professional model despite the introduction of community policing. Zhao et al. conclude that contrary to contingency theory, which suggests that police organizations adopt various measures based on the practical issues they encounter, “the findings reported here suggest the utility of the institutional perspective in the investigation of organizational change in municipal police agencies.”⁵⁶

Therefore, both Morabito and Zhao et al. find that external pressures play a major role in the adoption of community policing by police agencies. Nonetheless, adoption of community policing did not lead to fundamental changes in the structure or priorities of the police organizations. Rather, the adoption of innovation (in and of itself) kept the organizations in line with institutional expectations.⁵⁷

In addition, a study found that a US police department established a gang unit although the city had no gang problem.⁵⁸ The police department formed a gang unit as a result of pressure from the media and minority community leaders, among other institutional sovereigns—powerful entities that must be taken into consideration by police organizations in crafting and implementing policies as they shape perceptions of the police and the level of material and non-material support that law enforcement receives.⁵⁹ There are arguably elements of indirect coercion in this process, as police organizations have to respond to the demands of their institutional environment. This response ensures that such

organizations do not lose their legitimacy in the eyes of powerful segments of society⁶⁰ but brings into conflict the ceremonial (or apparitorial) and technical aspects of policing.⁶¹

A similar scenario is evident in the growth of SWAT (Special Weapons and Tactics) teams in police organizations serving relatively small populations.⁶² Peter Kraska and Louis Cubellis studied the rise in the number of SWAT teams among police organizations serving populations of 25,000 to 50,000 citizens.⁶³ They found an increase of 157% in the number of SWAT teams between 1985 and 1995. This finding supports mimetic isomorphism because (1) the presence or absence of SWAT teams was not shaped by the crime rate and (2) SWAT teams are typically deployed to combat situations that rarely occur in smaller jurisdictions: hostage crises, terrorism, and potentially violent protests.⁶⁴ As John Crank and Robert Langworthy argue, "police practices and organizational structures cannot be understood either simply in terms of production economies or solely from the perspective of technical efficiency and effectiveness."⁶⁵

Second, CEW makers are shaping law enforcement desire for a relatively new product through vigorous public relations campaigns, product demonstrations, and endorsements. The result is that a tool that was unknown until recently has become sine qua non to policing. The RCMP adopted TASER CEWs in 2001 and by 2008 had 2800 of the devices in its arsenal. The RCMP's TASER CEW adoption followed that of the Victoria Police Department. As stated earlier, the latter adopted TASER CEWs in 1998—a fashionable trend copied from its US counterparts. TASER

CEWs have been adopted by 63.86% of Canada's estimated 202 police departments within a period of 12 years.

Adoption of CEWs by police departments has been described as indicative of being "progressive"⁶⁶ despite concerns over their effectiveness.⁶⁷ This is a reflection of the heavy reliance on technology to help reduce uncertainties and control risks.⁶⁸ It is emblematic of "technological restlessness" and the "general culture of scientism."⁶⁹ This approach roughly translates to acquiring technologies as part of a fashionable trend—to acquire bragging rights—rather than due to the technical capability and actual contributions of such appurtenances to policing.

CEWs appear to serve two major purposes in this regard. Growing numbers of law enforcement officers *believe* that the tools help mitigate the risks encountered in dealing with potentially unruly citizens. This is a subjective function, as the tool boosts confidence and provides a source of peace of mind for officers. Thus, it appears that having a TASER CEW in one's holster as a police officer is, in and of itself, a source of safety and comfort.⁷⁰ Also, CEWs constitute a kind of symbolic technology that increases a police organization's claim to being "modern" and responsive to a hostile environment. However, technological solutions typically exacerbate rather than attenuate risks and uncertainties.⁷¹ A major study of Canadian police, conducted by Richard Ericson and Kevin Haggerty, found that the police were "among the leaders in technological adaptation and development."⁷² The study found that the police use technology, particularly computers and communications

technology, for several reasons. These include (1) reduction of the burden of paperwork; (2) more efficient production of the knowledge of risk; (3) surveillance of knowledge-production activities of police officers; (4) organizational security; and (5) swift transmission of knowledge within the organization across geographic space.⁷³ Nonetheless, Ericson and Haggerty also argue that such technologies are “a source of organizational legitimacy. They symbolize the competence of organizations ... How else can one appear progressive?”⁷⁴

There is evidence suggesting that the effectiveness of CEWs in policing remains controversial and hinges on how variables such as “injury” are operationalized.⁷⁵ Overall, the foregoing suggests the possibility of coercive and mimetic isomorphism as CEWs become ubiquitous in policing. These processes have potential to lead to normative changes, including changes in the rules and regulations guiding police organizations. For instance, the police use of force guidelines may be revised following the introduction of new devices. Operational policies and measures may have to be enacted to regulate the use of the newly adopted technologies, particularly when unintended consequences begin to emerge. Regular reports on such devices may become the norm, as the police seek to be seen as responsive and transparent. The RCMP, for example, revised its CEW policy following the Braidwood Inquiry and public complaints.⁷⁶ The organization has been producing quarterly reports on CEWs since 2007.⁷⁷ The ensuing issues from newly introduced appurtenances of policing lend

credence to the idea that “like other consumers, police may not always understand fully what they are getting into when they shop.”⁷⁸

Third, TASER International has almost single-handedly legitimated the need for and use of its devices in spite of controversies. Manufacturing a product and legitimizing its use are different issues in a field as specialized as law enforcement. CEW manufacturers, particularly TASER International, appear to have conducted both. This is a groundbreaking accomplishment, as most commercial products require legitimization by external entities. However, law enforcement agencies largely cite safety assurances by TASER International to convince skeptics, while also making use of TASER International’s database, as well as in-house data to demonstrate the efficacy of TASER CEWs.⁷⁹ Conversely, TASER International cites law enforcement on the safety of its products. The safety of TASER CEWs as espoused by TASER International and law enforcement agencies is difficult to refute. For that reason, a *National Post* editorial from September 2008 voiced concern that “Too many of the 170 Canadian police services that use Tasers rely almost entirely on TASER International’s claims about their safety.”⁸⁰ O’Brien and Thom argue that “(r)esearch evidence about the safety of Tasers is dominated by studies whose authors have financial interests in the commercial production, sale, and promotion of Tasers by police.”⁸¹ Other scholars have also warned that a disproportionately large number of studies claiming that TASER CEWs are safe are authored by persons

funded by or affiliated to TASER International.⁸²

This influence of TASER International results in part because CEWs have become diffused and increasingly institutionalized as a policing innovation. Diffusion of policing innovation generally occurs as a result of police-focused publications, the professionalization of law enforcement, presence of other law enforcement organizations, leadership, local political environment, and social anxieties and uncertainties, among other factors.⁸³ In addition, organizations within an organizational field engage in multilayered forms of interactions and develop widely accepted ideas, beliefs, and rationalities (the logic and explanations for basic practices) about their field.⁸⁴ These beliefs and rationalities are institutionalized over time and rarely critically questioned.⁸⁵ They become manuals for the conduct of (police) activities. For instance, since the 1990s it has become difficult for police chiefs to adopt a mechanism of policing that deviates from community policing.⁸⁶

It is instructive to note that some of the institutionalized innovations became firmly entrenched in the policing field over a relatively short period of time. These include establishment of specialized gang units, community policing, and SWAT teams.⁸⁷ Other widely accepted innovations, such as rapid response to 911 calls and preventive patrols, have a debatable record of efficiency but constitute a major part of the activities of police departments as they have become widely accepted as fundamental aspects of policing.⁸⁸

George Burruss and Matthew Giblin find that police organizations'

likelihood of adopting an innovative tool or technique is contingent on familiarity with the innovation; hence, they will be influenced by the innovations that are popular in their institutional environment. They conclude that

[i]nstitutional factors—professionalization, publications, and mimesis—mattered, independent of other commonly cited factors, such as perceived crime and organizational characteristics. These factors shape or perhaps constrain the options available to local law enforcement officials who are seeking to make changes in the organization. They make known the possible solutions to the challenges faced by law enforcement officials.⁸⁹

The institutionalization of a relatively small number of innovations implies, on one hand, that the choices available to police organizations are reduced.⁹⁰ The resultant mimesis, on the other hand, increases technicism in policing and enhances the degree of occupational drama, as it makes police work seem more esoteric. Adopting technological innovations makes the police appear "professionally and bureaucratically efficient" and situates police in the rhetoric of science as the solution to human problems.⁹¹ This is a major characteristic of occupations without well-defined, measurable goals—"there is little consensus on precisely what it is that police departments *should* be doing," Crank and Langworthy point out.⁹² Some of these technologies not only require police to obtain the services of more "experts," they also rarely simplify police work and sometimes detract from the real task of policing, however defined. This detraction includes the paperwork that accompanies the use of such devices.⁹³

CEW-related Credentialism

TASER International has become a major part of the growing professionalization and concomitant credentialism of policing. For instance, as of 2008, 9100 RCMP officers had undergone training on how to use TASER CEWs.⁹⁴ The number represents 47.9% of regular RCMP officers—18,988 persons—from constable to commissioner. A report by the RCMP indicates that between 30 June 2009 and 30 June 2010, 3012 officers completed the Conducted Energy Weapon User Course, the Conducted Energy Weapon Recertification Course, or the Conducted Energy Weapon Instructor course.⁹⁵ The figures from the previous quarter indicate that 3083 officers had completed similar training.⁹⁶ Nonetheless, deployment of CEWs by frontline officers has dropped by 87% in British Columbia.⁹⁷ It appears that reduction in deployment of CEWs by frontline officers and increased TASER CEW-related training have been occurring concurrently in the post-Braidwood Inquiry era.⁹⁸

The increase in CEW training may contribute to greater care in deployment following changes made to CEW policy vis-à-vis the Braidwood Inquiry's recommendations to restrict CEW use to circumstances in which a suspect is "causing bodily harm," or the officer is "satisfied on reasonable grounds" that bodily harm would "imminently" occur.⁹⁹ However, CEW-related training is also a fundamental part of normative isomorphism. The TASER Training Academy offers four specially designed courses that confer certifications on police officers upon successful

completion. These include the TASER Technical Solutions and Investigations Course, which provides hands-on knowledge about how to operate and maintain TASER X26, X26P, and X2 models, and the TASER Conducted Electrical Weapon (CEWs) Instructor Course, which, upon completion, certifies officers as TASER instructors in the listed models. The instructor course requires recertification every 2 years. The recertification process involves participating in an eight-hour online course to keep instructors up to date on the newest developments in TASER technology, safe handling, and information dissemination.

The TASER International Training Academy also offers a free program on Use of Force, Risk Management and Legal Strategies. This seminar is "limited to current law enforcement executives and their designees, government legal counsels, risk managers and medical advisors."¹⁰⁰ The course is designed to disseminate

*substantial factual information as to how TASER electronic control devices incapacitate individuals, how these devices fit into law enforcement use-of-force deployment strategies, training considerations, various police recommendations (including IACP, PERF and others), what medical studies are being performed and the current findings, the effects of TASER devices on liability exposures and on reducing officers' and suspects' injuries.*¹⁰¹

In addition, the TASER Training Academy offers a certification course on digital evidence management. This course teaches participating individuals the rudiments of Internet security as it relates to law

enforcement. An optional aspect of the course focuses on how to properly use Evidence.com, a website established by TASER International as a police evidence-storage infrastructure. The site is designed as a law enforcement equivalent of Dropbox. The website serves as an affordable alternative to independent and presumably costlier IT (information technology) infrastructure of police departments. The website is also used to download video recorded by another of the company's products—AXON FLEX On-Officer Camera—a sophisticated pair of sunglasses, which when worn by officers records videos of police-citizen encounters. The course also includes legal standards for keeping records and emerging case law on digital evidence. Consequently, TASER International assumes an intrinsically complex, multifaceted role that arguably involves a conflict of interests. This issue merits further elucidation.

TASER International manufactures specific law enforcement products; it designs and administers courses that articulate the need for those products and the place of its brand of CEWs and other accoutrements on the use-of-force continuum. TASER International also certifies police officers as technically competent in a domain of knowledge created by TASER International as

part of its legitimate business model. It also provides an online platform for helping law enforcement agencies store evidence through rubrics that the company provides.

Further, TASER International's seminar for senior law enforcement executives is designed to offer recommendations to senior police officers on the formulation of less-than-lethal force policies. This seminar also provides advice on probable civil rights issues, police liability for CEW use, and dissemination of information on research findings as regards CEWs. This comprehensive model is capable of producing coercive, mimetic, and normative changes in law enforcement.

The broad range and wide applicability of this role go beyond commercial interests. It has significance beyond TASER International's established stature as a key player in producing law enforcement technologies. The role assumed by TASER International through this business model represents a gatekeeping, legitimizing, and (re)structuring ideational process. As isomorphic changes inadvertently develop, they constitute symbolic institutional currency whose value generates several consequences. Some of the consequences of this growing institutional currency are explicated below.

The Gatekeeping Function of CEW Manufacturers

One consequence is to create a domain of knowledge that law enforcement agents are increasingly and routinely expected to acquire. This knowledge becomes reified—widely accepted and construed as beyond question—and over time becomes

constitutive of the “situated work practices that produce and sustain the core discourses and symbolic categorizations of the imagined police community.”¹⁰² Reification of this knowledge is critical, as officers who have gone through TASER

International's training may be inadvertently assessed as technically more proficient and knowledgeable than those who have not. For instance, police organizations have begun to routinely publish data illustrating the number of officers who are "qualified CEW operators and instructors."¹⁰³

The CEW in question is more often than not from a single manufacturer—TASER International. In Ontario, for instance, TASER M26 and X26 models are the only CEW devices officially approved for use.¹⁰⁴ This official endorsement indirectly strengthens the position of TASER International relative to competitors like Stinger that may not be able to compete. Therefore, TASER International generates a lineage of clients, as choices available to law enforcement agencies begin to diminish. The influence of TASER International may increasingly become coercive rather than persuasive. As a corollary, law enforcement agencies may become increasingly dependent on TASER International. This dependence is unwittingly exacerbated if they adopt the cost-saving measure of subscribing to www.evidence.com, TASER International's evidence-storage architecture.

A trifecta of effects is the result, creating a feedback loop: first, law enforcement agencies are incrementally cast in the image of TASER International—in their paraphernalia of policing, such as sunglasses, and distinctive symbols of police work. As DiMaggio and Powell hypothesize: "The greater the dependence of an organization on another organization, the more similar it will become to that organization in structure, climate and behavioral focus."¹⁰⁵

Second, at a theoretical level, police organizations may inadvertently look to TASER International for what counts as useful innovation. Specifying devices from a single manufacturer arguably constitutes an early stage of this process. The consequence is normative isomorphism. This includes bureaucratic processes, such as evidence collection and storage, and use of force policies and procedures. Law enforcement reliance on TASER International, which has an almost monopolistic hold on the CEW market, may become coercive due to the company's technical services on which the police increasingly depend. As DiMaggio and Powell warn, "[d]irect imposition of standard operating procedures and legitimated rules and structures also occurs outside the government arena."¹⁰⁶ Pressures may be brought to bear on organizations that use the service infrastructure of monopolistic firms, as coercive isomorphism may also be subtle and indirect.¹⁰⁷

Third, law enforcement agencies begin to share TASER International's discursive understanding, orientation, and reaction to issues generated by deployment of CEWs, such as liabilities for citizen injuries and civil rights violations. The mode of reasoning of TASER International begins to proliferate in police departments: it becomes knowledge rather than a form of knowledge. For example, a report prepared by independent experts on behalf of William Elliott, RCMP Commissioner criticizes

[the] over-reliance on research carried out by [stun gun] manufacturers ... or sponsored by the manufacturers. While manufacturers understandably need to provide (and are entitled to do so) information to potential

*customers or clients as part of their marketing and promotion efforts, the policing community needs to be assiduous in assessing the manufacturer's information.*¹⁰⁸

TASER International may begin to have an influential role with respect to how CEW-related issues are regarded, as more police officers participate in training sessions and courses designed by the company. As DiMaggio and Powell argue, "when organizations in a field are similar and occupational socialization is carried out in trade association workshops, in-service educational programs, consultant arrangements, employer-professional school networks, and in the pages of trade magazines, socialization acts as an isomorphic force."¹⁰⁹

The consequence is that such professionals "will tend to view problems in a similar fashion, see the same policies, procedures and structures as normatively sanctioned and legitimated, and approach decisions in much the same way."¹¹⁰ This is no guarantee of police efficiency. TASER International's sponsorship of the 2008 conference of Canadian Chiefs of Police arguably suggests that this process may already be in motion.¹¹¹ Police organizations who have fully embraced TASER International's products and (more importantly) services begin to think like TASER International and over time may adopt policies and procedures that are indistinguishable from TASER International's. The end product is a police

officer and a police organization that have been disciplined by TASER International through voluntary multistage training, shared mode of reasoning, and brand loyalty.

In addition, diffusion of personnel may begin to occur. In particular, retiring officers from the top cadre of police organizations may be appointed to the boards of CEW manufacturers. This may serve to strengthen the grip of such companies on the policing field in the long run. For example, Salt Lake City and Fort Worth, Texas, have begun reviewing their ethics policies following a report by the Associated Press on the relationship between TASER International and their former and current chiefs of police over purchase of the company's products.¹¹² This ethical problem is not unprecedented. The military and defense industry have historically had such a relationship. Figures from 2009 to 2011, for instance, indicate that an estimated 70% of retired three- and four-star generals in the US are employed by the top defense companies or consultants.¹¹³ It represents a decrease of 10% from 2004 to 2008.¹¹⁴ The same military-private sector "revolving door" generated over 3500 jobs in arms companies for retired senior military officers within 16 years in the UK.¹¹⁵ Such relationships are not necessarily illegal but pose ethical questions, as they have the potential to influence decisions over adoption of innovations and other defense contracts.

Conclusion

This article analyzes the consequences of the growing reliance of Canadian police on manufacturers of CEWs. It

argues that institutional isomorphic change is probable as more police organizations adopt CEWs from a

single producer. The analysis suggests that the domination of the Canadian market by TASER International's products has unintended consequences such as the credentialization of police officers by a client of the police and, over time, the sharing by the police of the perspectives and mode of reasoning of Canada's major CEW supplier. Such a relationship, the article argues, produces coercive, mimetic, and normative isomorphism. It may ultimately lead to a relationship that privileges TASER International in its dealings with the police.

One policy consideration is that not all developments in the US policing field—normative, technological, bureaucratic—are appropriate for Canadian society. The texture of the “crime problem” in the US differs from Canada's. The Province of Manitoba, for instance, has recorded the highest number of homicides among Canadian provinces in the last decade. The City of Winnipeg, Manitoba's administrative headquarters, has long been considered Canada's gang and homicide capital. Yet with a population of over 600,000 there was only one police shooting in 2003 and there were none in 2004 in Winnipeg.¹¹⁶ Winnipeg police fired guns on suspects twice in 2006 but, following CEW adoption in September 2006, TASER CEWs were deployed 37 times within 4 months.¹¹⁷ This development suggests the possibility of usage creep.¹¹⁸ Recent national data suggest that while the homicide rate in the US is 4.7 per 100,000, Canada's homicide rate is 1.44 per 100,000. Despite witnessing a population increase of over 100,000 and being labeled Canada's murder capital among major cities, Winnipeg recorded only 26 homicides in

2014.¹¹⁹ These figures should inform policy that recognizes the underlying sociological variables in the US—such as widespread availability of firearms and a larger population, among others—that are not yet the norm in Canada. In addition, US police have a reputation for being overly reliant on force.¹²⁰ Ongoing controversies over police shootings of unarmed civilians in Missouri and New York have done little to attenuate this image. Therefore, Canadian police ought to seek a different model, if mimesis is inevitable.

Police organizations confront an unenviable task as regards adoption and deployment of CEWs. The public often demands to know why a CEW was not deployed when citizens are killed by firearms in police-related encounters. The public also questions why the police adopted CEWs when citizens die in CEW-related incidents.¹²¹ Nonetheless, police organizations in Canada appear inexorably drawn to CEWs despite debate over their utility. TASER CEW use has been expanded in Ontario, for example.¹²² The widely publicized recommendation of the Council of Canadian Academies and the Canadian Academy of Health Sciences (2013) on the need to establish a national use-of-force registry has the potential to settle the debate over CEW “safeness.” Such a policy, and other (legislative) measures have to be accompanied by social and cultural changes in order to be effective, as Australia's experiences with firearms demonstrate.¹²³

Several other liberal democratic societies are grappling with the social consequences of the adoption of CEWs. A study analyzed the New Zealand police Tactical Operations

Database (TOD) within a 1-year period (2006–07) and found that Taser CEWs were deployed on a total of 141 persons. Twenty-one percent of the number (or 30 persons) on whom Taser CEWs were deployed had “mental health emergencies.”¹²⁴ Overall, deployment of Taser CEWs at mental health emergencies was found to be more than twice as likely than at criminal arrests.

In Australia, the deaths of a Brazilian student and a Queensland man have fueled controversies surrounding the Taser CEW.¹²⁵ There is evidence suggesting that the adoption of Taser CEWs in Australia has not helped to reduce the use of firearms by police. New South Wales Greens MP David Shoebridge argues that “we’ve just seen a whole new class of corporal punishment, physical punishment, being delivered by police through the use of 50,000 volts at the end of a taser.”¹²⁶ An Australian criminologist has cautioned that

*[t]he problem with less than lethal weapons such as Tasers is that police come to rely on them as a technical quick-fix and move away from those negotiation skills that are often far more effective, particularly with people who are high on drugs or going through a psychotic episode relating to a mental illness.*¹²⁷

In addition, the increase in Taser CEW use in England and Wales (7877 in 2011 from 3128 in 2009)¹²⁸ has been cited as an example of possible usage creep. The death in 2013 of Andrew Pimlott, who had poured gasoline (petrol) on himself and caught fire when a Taser CEW was deployed on him,¹²⁹ has been used to buttress arguments that de-escalation techniques rather than force are required when mentally disturbed persons come in contact with the police. Similarly, a Canadian study found that Taser

CEW deployment is gendered, with only males involved in all 26 fatalities examined.¹³⁰ Other suspect characteristics are also generally consistent with findings from Australia, the US, the UK, and New Zealand. These include low socio-economic status, higher representation of persons of ethnic minority status, people with drug problems, and “certified mentally ill” persons.¹³¹

CEW debates and controversies in the UK, Australia, and New Zealand—Canada’s peer countries—where police are also generally viewed as less coercive than US police demonstrate that CEW use must be treated with caution. As Kleinig points out, the ethical terrain and officer safety must be discussed in connection with the development of CEW policy.¹³² It is possible to reduce the overall use of force—lethal and less-than-lethal—by the police through emphasis on the salience of individual, organizational, and cultural factors, as well as internal and external accountability.¹³³

Further research is required. Although the emergence of CEWs is becoming a standard feature of scholarly work in policing scholarship, CEWs have rather surprisingly been largely treated as having emerged in a social vacuum. The wider cultural, socio-economic, and political context of CEW deployment is absent from most academic analyses. Scholarship on CEW deployment has yet to be embedded within analysis of changes in governance strategies, penal reforms, administration of the criminal justice system, and global flows associated with globalization. In addition, there has been no genealogical investigation of the predecessors of CEWs and social conditions within which successive changes

were made in policing appurtenances in Canada. Research on policing tools in Canada seems to have stalled in 1982 when Philips and Klancher published *Arms & Accoutrements of the Mounted Police, 1873–1973*. There is an urgent need to analyze developments in police weaponry post-1973.

Finally, the fatal shooting of teenager Sammy Yatim on 27 July 2013 by a Toronto Police officer, the death on 22 December 2014 of an unnamed burglary suspect in Newcastle-under-Lyme following intervention by Staffordshire Police in England, and the death of Eric Garner at the hands of New York City police on 17 July 2014 are examples of problems confronting police in liberal democratic states. Although a different force measure was adopted by police in each of the three cases—lethal force through a service gun, less-

than-lethal force via a TASER CEW, and chokehold, respectively—all three measures led to the same consequence.

“Policing’s new visibility” marked by use of cell phone cameras, CCTV, Youtube, Facebook, and other social networking sites means that such incidents will garner significant public attention while ignoring the vast majority of less-spectacular encounters when police officers did their job without any problems.¹³⁴ Such incidents erode public confidence in the police and damage state reputation. Another commonality among these incidents is that they raise questions about what force options are available, appropriate use of force, and police occupational culture. There are no quick fixes to these problems, but technological solutions should be treated with caution.

Notes

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1 See Bittner, *Functions of the Police*; Klockars, *Idea of Police*; Peak, “Quest for Alternatives”; and Adams, “What We Know.”

2 See Skolnick and Fyfe, *Above the Law*.

3 See White and Ready, “Taser”; Trostle, “Force Continuum.”

4 See Kornblum and Reddy, “Effects of the Taser.”

5 See National Institute of Justice, “Non-lethal Weapons and Equipment.”

6 A June 1986 conference convened by US Attorney General Edwin Meese, to address the slow pace of technological development in law enforcement, proposed the term “less-than-lethal” weapons to replace the widely used term “non-lethal” weapons. The new term in essence

acknowledges that any weapon is “*potentially lethal if used inappropriately*”; see Sweetman, “Report,” cited in Trostle, “Force Continuum” (emphasis in original). The term “less-lethal” is also commonly used; for details, see Trostle, “Force Continuum”; Sweetman, “Report,” 2.

7 See Kornblum and Reddy, “Effects of the Taser.”

8 See Canadian Police Research Centre, “TASER Technology Research Paper.”

9 See Canadian Broadcasting Corporation, “RCMP Softened Taser-use Restrictions.”

10 See Canadian Broadcasting Corporation, “Taser, Other Stun Gun Deaths.”

11 See Canadian Broadcasting Corporation, “RCMP Softened Taser-use Restrictions.”

12 See Canadian Broadcasting Corporation, "Taser, Other Stun Gun Deaths."

13 Council of Canadian Academies and the Canadian Academy of Health Sciences, "Health Effects," ix.

14 See National Institute of Justice, "Study of Deaths."

15 See Amnesty International, "Amnesty International Urges Stricter Limits."

16 See Toronto Police Service, "Toronto Annual Taser ECD."

17 This article does not address the issue of appropriateness of CEW use. For more on this debate, see Terill and Paoline, "Conducted Energy Devices"; Kaminsky et al., "Quantum of Force."

18 Giblin, "Structural Elaboration," 644.

19 Ibid.

20 See Donaldson, *American Anti-management Theories*.

21 Maguire and Uchida, "Measurement and Explanation," 535.

22 Giblin, "Structural Elaboration."

23 Ibid., 645.

24 Hinings and Greenwood, "Normative Prescription," 53.

25 Giblin, "Structural Elaboration."

26 Ibid., 645.

27 Meyer and Zucker, *Permanently Failing Organizations*; see the review by Bruton, "Permanently Failing Organizations," 247.

28 DiMaggio and Powell, "Iron Cage Revisited," 149.

29 See Manning, *Police Work*, 4. Manning presents a macro-dramaturgical perspective of policing. He notes the inherently ceremonial, dramatic, and ritualistic nature of police work and finds that what constitutes police work is often a function of who you ask in the chain of command. The police "job" is often understood in various ways by different levels of actors. Manning argues that the "driving force of policing is not the regulations and policies, law, politics or public sentiment, although all play a role" (4); the engine of police work, he argues, is the

occupational culture in interaction with external factors or institutional environment.

30 See Nivette, "Legitimacy and Crime"; McLaughlin, *New Policing*.

31 See DiMaggio and Powell, "Iron Cage Revisited," 150.

32 Aldrich, *Organizations and Environments*, 265, cited in DiMaggio and Powell, "Iron Cage Revisited," 150.

33 DiMaggio and Powell, "Iron Cage Revisited," 150.

34 Ibid., 150.

35 See Tunnel and Gaines, "Political Pressures," 14.

36 Ibid., 11.

37 Rainguet and Dodge, "Problem of Police Chiefs," 278–9.

38 DiMaggio and Powell, "Iron Cage Revisited," 151.

39 Ibid.

40 Ibid.

41 Ibid., 152.

42 Larson, *Rise of Professionalism*, 49–52, cited in DiMaggio and Powell, "Iron Cage Revisited," 152.

43 See DiMaggio and Powell, "Iron Cage Revisited."

44 Oriola, Neverson, and Adeyanju, " 'Don't Tase Me, Bro.' "

45 TASER International, "Safety Every Officer Deserves," 4.

46 Ibid., 2.

47 Oriola, Neverson, and Adeyanju, " 'Don't Tase Me, Bro.' "

48 Ibid.

49 Meyer and Rowan, "Institutionalized Organizations."

50 See Morabito, "Adoption of Policing Innovation," 478.

51 Ibid., 479.

52 Ibid., 480.

53 Ibid., 481.

- 54 Ibid., 481.
- 55 See Zhao, Lovrich, and Robinson, "Community Policing," 365, 373.
- 56 Ibid., 373.
- 57 See also Klockars, *Idea of Police*.
- 58 See Katz, "Establishment of a Police Gang Unit."
- 59 See *ibid.*
- 60 See Crank, "Watchman and Community"; Klockars, *Idea of Police*.
- 61 See Meyer and Rowan, "Institutionalized Organizations."
- 62 See Kraska and Cubellis, "Militarizing Mayberry and Beyond."
- 63 Ibid.
- 64 See *ibid.*; Katz, "Establishment of a Police Gang Unit."
- 65 Crank and Langworthy, "Institutional Perspective of Policing," 341.
- 66 Canadian Police Research Centre, "TASER Technology Research Paper," 5.
- 67 See Terrill and Paoline, "Conducted Energy Devices."
- 68 See Gandy, *Panoptic Sort*.
- 69 Geertz, *Local Knowledge*, 171–2.
- 70 See Oriola, Neverson, and Adeyanju, "Don't Tase Me, Bro.' "
- 71 See Ericson and Haggerty, *Policing the Risk Society*.
- 72 Ibid., 389.
- 73 Ibid., 389–90.
- 74 Ibid., 390.
- 75 See Kaminsky et al., "Quantum of Force"; Terrill and Paoline, "Conducted Energy Devices."
- 76 Royal Canadian Mounted Police, "Archived: RCMP Modifies."
- 77 Royal Canadian Mounted Police, "Quarterly Report October to December 2007."
- 78 Ayling and Grabosky, "When Police Go Shopping," 666.
- 79 Oriola, Neverson, and Adeyanju, "Don't Tase Me, Bro.' "
- 80 "When to Zap." This fact emerged from a RCMP report following a *Toronto Star* Access to Information Request.
- 81 O'Brien and Thom, "Police Use of Tasers," 4.
- 82 See Azadani et al., "Funding Source."
- 83 See Burruss and Giblin, "Modeling Isomorphism"; Matusiak, "Dimensionality"; Morabito, "Adoption of Policing Innovation"; and Thompson, *Organizations in Action*.
- 84 See Meyer and Rowan, "Institutionalized Organizations"; Burruss and Giblin, "Modeling Isomorphism."
- 85 See Palmer, Biggart, and Dick, "Is New Institutionalism a Theory?"
- 86 See Oliver, "Third Generation."
- 87 See Katz, "Establishment of a Police Gang Unit"; Zhao, Lovrich, and Robinson, "Community Policing"; Morabito, "Adoption of Policing Innovation"; Lyons, *Politics of Community Policing*; Balko, *Rise of the Warrior Cop*; and Kraska and Cubellis, "Militarizing Mayberry and Beyond."
- 88 See Crank and Langworthy, "Institutional Perspective of Policing."
- 89 Burruss and Giblin, "Modeling Isomorphism," 349.
- 90 Ibid.
- 91 See Manning, *Police Work*, 122.
- 92 Crank and Langworthy, "Institutional Perspective of Policing," 360 (emphasis in original).
- 93 See Ottawa Police, "Use of Force"; Occupational and Health Safety Canada, "Report on Taser Use."
- 94 See Canadian Broadcasting Corporation, "Facts About Stun Guns."
- 95 See Royal Canadian Mounted Police, "Quarterly Report July to September 2010."
- 96 See Royal Canadian Mounted Police, "Quarterly Report April to June 2010."
- 97 See Occupational Health and Safety Canada, "Report on Taser Use."

98 The Braidwood Inquiry was established in British Columbia, Canada, following the death of Polish immigrant Robert Dziekanski on the floor of Vancouver International Airport. Dziekanski died after the deployment of Taser CEWs by four RCMP officers. The incident arguably remains the watershed in the use of CEWs in Canada. See Braidwood, *Restoring Public Confidence*. For a critical review of the Braidwood Inquiry's recommendations, see Williams, "Braidwood Commission Reports."

99 Braidwood, *Restoring Public Confidence*, 308.

100 See TASER International, "Course Descriptions."

101 PoliceOne.com, "TASER Announces Use of Force" (emphasis added).

102 McLaughlin, *New Policing*, 143.

103 See Ottawa Police, "Use of Force."

104 See Ontario Association of Chiefs of Police, "OACP Submission."

105 DiMaggio and Powell, "Iron Cage Revisited," 154.

106 Ibid., 151.

107 Ibid.

108 Cited in "When to Zap."

109 DiMaggio and Powell, "Iron Cage Revisited," 153.

110 Ibid.

111 Cotter, "Taser Firm."

112 See Foley, "Ethics Reviews."

113 See Johnson, "Report."

114 Ibid.

115 See Hopkins, Evans, and Norton-Taylor, "MoD Staff."

116 See Canadian Broadcasting Corporation, "Tasers Don't Reduce Shootings."

117 Ibid.

118 See Geis and Binder, "Non-lethal Weapons."

119 See "Manitoba has Highest Homicide Rate."

120 See Balko, *Rise of the Warrior Cop*; Peak, "Quest for Alternatives."

121 See Oriola, Neverson, and Adeyanju, "'They Should Have Just Taken a Gun'."

122 See Canadian Broadcasting Corporation, "Ontario Expands Police Taser Use."

123 See Klieve, Barnes, and De Leo, "Controlling Firearms Use"; Peters and Watson, "Breakthrough."

124 O'Brien et al., "Use of Tasers on People," 1.

125 See Lindgren, "Fresh Taser Debate."

126 See *ibid.*

127 Ibid.

128 Ibid.

129 See Carter, "Man Died."

130 See Oriola, Neverson, and Adeyanju, "'They Should Have Just Taken a Gun'." See also O'Brien and Thom, "Police Use of Tasers."

131 Oriola, Neverson, and Adeyanju, "'They Should Have Just Taken a Gun'," 74.

132 See Kleinig, "Ethical Constraints."

133 See Prenzler, Porter, and Alpert, "Reducing Police Use of Force."

134 See Goldsmith, "Policing's New Visibility," 914.

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