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LAW ENFORCEMENT AND TECHNOLOGY

Understanding the Use of
Technology for Policing

**Edited by
Andy Bain**



Law Enforcement and Technology

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palgrave
macmillan

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ISBN 978-1-137-57914-0
DOI 10.1057/978-1-137-57915-7

ISBN 978-1-137-57915-7 (eBook)

Library of Congress Control Number: 2016960038

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Printed on acid-free paper

This Palgrave Pivot imprint is published by Springer Nature
The registered company is Macmillan Publishers Ltd.
The registered company address is: The Campus, 4 Crinan Street, London, N1 9XW,
United Kingdom

ACKNOWLEDGMENT

With thanks to our friends and colleagues in law enforcement and criminal justice services around the world; we live in times both strange and challenging, but always rewarding.

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An Introduction

Andy Bain

Abstract This first chapter is an introduction to the book. It contextualizes the discussion to follow and sets out the argument for the continued need to develop our individual and service understanding of such an important and fast changing area. The chapter provides a short outline of the historical nature of policing, and their position as local and national agencies of state control, to support the community. In the final section the chapter provides the reader with an outline of the chapters to follow and how this will help to inform their own knowledge and understanding of this important topic.

Keywords Policing futures · Technology · Community policing

THE POLICE (DEVELOPING THE SERVICE)

It is a little short of 200 years since the first formal police force was introduced to the city of London, and in that (very) short period we have seen law enforcement grow from a single city force into an internationally recognized brand, providing for the same structure, uniformity,

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and service to their local and national communities. It is a development which has been premised upon a service to the community which speaks to the best parts of our social being, the wish to provide a safeguard, to support those in need. Indeed, a quick search of almost any police force, local, national, or international, finds a mission statement which (broadly) espouses that same message. The London Metropolitan police mission states that they seek to make *London safe for all the people we serve*. Similarly the Queensland Police Service in Australia states, *With Honor We Serve*, and the prevailing standard that has become instantly recognizable is that of the LAPD motto *To Protect and to Serve*, which has remained in service for 50 years (and more). It is a symbol of our work, and it communicates an intention.

Policing, more generally its role and the services it provides, make for an extremely interesting discussion, and although the concept of policing can be dated as far back as the ancient Egyptians, it is in its more modern form – as a service to enforce the laws of the state, to maintain order, to provide safety, security, and support, to the local community – that it is more easily recognizable today.

That is not to say that historically we lived in a society devoid of structure, organization, or any recognizable form of policing. Indeed, this is a subject of great interest to many authors (see for example Barrett and Harrison 1999; Emsley 1999; Fuhrmann 2012), but prior to Sir Robert Peel's introduction of the Police (reform) Act of July 1829, policing was rather an *ad hoc* system of governance. A system, which, really did depend upon your ability to work for, or pay for the securities that we tend to take for granted today. Even still, it was not as smooth an introduction as it appears in the textbooks. It has required great interest and innovation on the part of certain individuals, in order to keep pace with, and even develop new forms of policing, which has taken place over a (comparatively) very short, but immensely, proud history. Yet it was/is a field replete with opportunity, and through the development of technologies much of the work of the early officers was thrust into the public eye – an area of great interest for the following chapter.

Technology plays an even greater part in our lives today, than perhaps anybody could truly have imagined just 20–30 years ago, yet its involvement and intertwined relationship with policing has remained constant. Indeed, Deflem (2002: 453) has noted that “technological advances are particularly relevant for policing because they are seen to influence the organization and practices of [the] police.” Schultz (2008) agrees, and

states that technological changes in policing are happening so quickly, that the same technologies in common use today were not even common knowledge just a few years ago. Indeed, the one constant has been the evolution of technology for use in policing. Examples of this can be found in the development and use of photography, the two-way radio, body armor, and DNA analysis, although there are so many more. This text provides just a little clarity, adding some depth to the knowledge and understanding of such a fast moving field.

Although this text is not truly a comparative analysis of policing and use of technologies, being based predominantly in the experiences of the United States, the broader issues raised here are certainly applicable to a much more widely based social discourse. That said, we acknowledge that there are some service, policy, and even demographic differences which exist. For example, there are a number of countries in which officers do not routinely carry firearms: Iceland, Ireland, New Zealand, Norway, and the United Kingdom (with the exception of Northern Ireland), all spring to mind. However, each of these countries also has access to specialized units (the United Kingdom is one such country which makes use of specially trained officers to perform the duty rather than arming all officers), or the limited use of firearms (in Norway, for example, officers may be issued a firearm, which is kept locked inside the vehicle and is not carried on a routine foot patrol). Further to this, it is also important to recognize that we are discussing *the use of technology for policing*. Thus, although the argument can be made that experience differs, it is still the case that each service will make use of similar equipment, tactics, and training, when using patrol vehicles, body armor, cameras, photography, forensics, computer sciences, and so much more.

With these points in mind, although much of our terminology and discursive analysis is based in the policing and law enforcement of the United States, we are quick to acknowledge that just as much innovation and technological advance has taken place in a host of other global settings. Policing is no longer a local affair, and what takes place in England, France, Germany, Italy, Australia (to name but a few countries) today will have a bearing upon North America tomorrow, and this is just as easily reversed. Indeed, the vision and mission statements of the International Association of Chiefs of Police (IACP) states that “IACP serves the leaders of today and develops the leaders of tomorrow,” concluding that “IACP is dedicated to advancing the law enforcement profession through advocacy, outreach, education and programs” (IACP 2015: para 1). This then is far removed

from the insular and self-serving interests of the first law enforcement departments, and speaks more to the community of policing and society as a whole.

In fact, the period from the 1830s through to 1920 is often seen to be the first period in “modern” policing, the so-called political era – synonymous with the influence of powerful individuals, and the drive and motivations they may have had for the protections of their own social position rather than (perhaps) the altruistic behavior that we associate with policing today. Repetto (2010) has noted that in England the rise of modern policing may have had more to do with the feared rise of the “criminal masses,” than it had to do with the protection of the social whole. This is similarly reflected in the close ties which existed between the local councilmen (politicians) and the elected police officials and officers in the United States (as noted in [Chapter 2](#) of this text). Nevertheless, the fact remains that whatever the purpose of its historical beginnings, modern policing quickly developed into a service for the investigation, and the examination, of criminal behavior, supporting the rights of the individual within the social group. It is a service which we have become familiar with and come to expect today.

THE STRUCTURE OF THE BOOK

There are three themes evident in the book: (1) Technology past and present, (2) Supporting Community Policing, (3) The Application and Reality of Policing and Technology, and we have divided the text accordingly. In the first two chapters we offer a short history of the development of technology as used by law enforcement departments – rather than technology *per se*. In [Chapter 2](#) Andy Bain examines the history and development of technologies, from the early history of modern policing through to the end of the twentieth century, and makes use of a number of examples to provide an indication of just how quickly things have changed, and developed, in just 200 years of policing. The technology of the twenty-first century is brought into focus in [Chapter 3](#) by Bill Mackey and Brandon Courtney. In this chapter Mackey and Courtney make use of the list of technologies and law enforcement provided by the National Institute of Justice, United States, as their basis for the ensuing discourse, in order to frame the work of police departments in the United States today.

Regardless of the technologies available, unless they are put to good use, there is no advantage. [Chapters 4](#) and [5](#) are to a greater extent concerned

with how law enforcement can put its best foot forward in using modern technologies. In an alternative discussion Andy Bain ([Chapter 4](#)) and Bryan Robinson ([Chapter 5](#)) discuss the power of communication in serving the community. Communication is something that policing agencies have been accused of being particularly poor at (regardless of where in the world policing has been examined). In many instances, policing is accused of bullying tactics and lacking an understanding of, or providing for any real dialogue with, the local communities. Examples are not limited to, but include, the death of Mark Duggan and the subsequent London riots (2011); the disappearance of April Jones (2013); the death of Michael Brown which sparked the Ferguson (Mi) riots (2014); the use of bullying and intimidation tactics by police officers in Victoria, New South Wales (AU); and the New York police officer – Randolph Holder – who was shot and killed in October 2015. Most recently this has been added to by the devastating shootings of two civilians: Alton Sterling (Baton Rouge, LO) and Alva Brazier (Houston, TX), and the fatal shooting of five officers (Lorne Ahrens, Michael Krol, Michael Smith, Brent Thompson, and Patrick Zamarripa) in Dallas (TX), during the summer of 2016. Thus, in [Chapter 4](#), Bain provides for a discussion of fairness, fair use, and community policing and ways in which communication has been used to serve the police and aid community service. In [Chapter 5](#) Robinson examines the use of electronic, and more specifically, social media to support community relations and aid law enforcement departments in understanding better their community image.

In [Chapters 6](#) and [7](#) we turn our attention to the realities of technology, its use at the crime scene, and the reality of managing the use of technology. In [Chapter 6](#) Jim Conser and Lou Carsone explore the advancement and development of technologies in use at crime scenes and which can aid the investigation and processing of the scene today, providing further discussion of the technologies related to communications, patrol, crime scene analysis, evidence processing, and crime laboratory equipment. For example, we know that electroshock weapons are a less-lethal alternative to using deadly force, but the specialized functions such as video, details of deployment, and voice recording can document the incident from angles other than the traditional vehicle video and even modern body cameras. In contrast, Chief Andrew Turowski of the Louisville Police Department (OH) provides a discussion of the realities of the use of technology in policing today (see [Chapter 7](#)). This provides an opportunity to look at the topic from the perspective of a true professional, and helps us to consider how technology