Special Issue: Crime and Control in the Digital Era

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Abstract
In the digital age, “eyes” are complemented by technologies such as smartphones, “apps,” or body worn cameras, giving expression to new ways of depicting what happens in public space. This special issue (SI) brings together five articles that characterize the nature of control, surveillance, and guardianship in the context of today’s technological advancements. The articles help inform criminology by reporting on examples and impacts of technologies as well as by providing a better understanding of how the massive use of these technologies and new practices might be just redefining public space.

Keywords
law enforcement/security, crime prevention, police processes

Aim and Objectives
This special issue (SI) aims at advancing interdisciplinary knowledge and understanding of the nature of control in the digital age and the potential effects of new technologies on both crime and crime prevention. This aim is achieved by:

- advancing our understanding of the nature of control, surveillance, and guardianship. Compared to the time-honored “eyes on the street,” today’s technological exercise of social control utilizes a number of other senses as well as sight, such as touch and sound, captured by photo, live streaming, and text—fast disseminated via social media—through the use of personal smartphones, apps, and body worn cameras (BWCs).
- demonstrating how the body of criminological theories applies to today’s exercises of control and guardianship that are redefined by rapid technological developments. Issues of individual integrity and accountability, lack of context, and commodification of security are relevant here.
- exemplifying how these technologies have become an integral part of social control, guardianship, and policing. Also, by investigating how these technologies impact the ways police work and by providing a nuanced understanding of the use of public space in relation to citizens’ rights.

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The Scope and Relevance

In this SI, the word “control” is designedly defined in a broad way; capturing the processes of individual monitoring (control from above), natural surveillance (mutual control), sousveillance (control from below), as acts of intervention for the purposes of crime prevention and control (Figure 1). The term sousveillance, coined by Mann (2004, p. 620), refers “both to hierarchical sousveillance, for example, citizens photographing police, shoppers photographing shopkeepers, as well as personal sousveillance, bringing devices down to eye level, for human-centered recording of personal experience.” This SI is therefore of relevance for current criminological research for the following reasons.

First, because control is key to understanding crime occurrence. As rapid technological developments affect the types of and opportunities for control, current criminological theories are put to the test. For example, the traditional exercises of social control are being reevaluated since the accepted roles of offenders, victims, managers, guardians, and crime controllers are being reconceptualized. What is also new is that technological development (and Internet in particular) means that more and more individuals can participate in real time in this process (in front of or behind the sensor), imposing new frameworks for information gathering and diffusion. Second, the age of digital surveillance imposes a number of new empirical, methodological, and ethical challenges, which are well illustrated by articles in this SI. Third, while contributions to this SI are characterized by high-quality research by international renowned experts in this area, the SI adds a multidisciplinary perspective to the topic that is crucial for a better understanding of phenomena that are at the border of criminology, policing, engineering, and urban planning. Furthermore, it includes both theoretical and empirical articles from a range of countries and is therefore highly relevant to both academics and practitioners around the world.

The Contribution

The notion of control has long been present in environmental criminology. We argue here that environmental criminology theories are still linked to the notion of surveillance and not on sousveillance and on information diffusion in real time. The challenge ahead is to assess how these fit in with the current theories. We indicate briefly below some of the important theories in environmental criminology that are affected by old and new types of exercises of control.
Social disorganization theory, for instance, suggests that crime breeds in areas characterized by poor social control. Similarly, in collective efficacy theory (Sampson, Raudenbush, & Earls, 1997), control is expressed by individuals’ readiness to act upon a common good. According to this theory, social control is what allows community residents to create a safe and orderly environment. Some would relate the individual’s capacity to exercise social control with the quality of the urban environment, in particular how it is designed and maintained. For example, environments that promote natural surveillance (Figure 1) make it easier to prevent crime (Newman, 1972). Natural surveillance is one of the principles of crime prevention through environment design, a place-based set of strategies for reducing crime and improving perceived safety (e.g., Cozens, 2002; Iqbal & Ceccato, 2016; Jeffery, 1977).

The notion of control can also be found in both routine activity approach (Cohen & Felson, 1979)—in which guardianship is a key concept—and in situational crime prevention theory (Clarke, 1983)—which is about identifying ways to make criminal opportunities more difficult and less attractive to potential offenders. Yet, the absence of guardians and making targets less attractive to potential offenders are not sufficient conditions to explain why individuals choose to commit crime. Situation action theory (Wikström, 2006) offers a process-based explanation of offending, in which the notion of control is present. However, the theory does not illustrate how this process takes shape when sousveillance is the trigger mechanism that leads the individual to choose not to commit the crime.

The age of digital surveillance imposes a number of new empirical, methodological, and ethical challenges as illustrated in this SI. The first set of challenges relates to the ways we capture and interpret “reality.” An incident that happens on the street is still local (attached to a physical place) but can now be seen by far-away eyes as soon it is shared over the Internet, perhaps in real time. When information about an event is available online, information sharing and provision of mutual support may even help resolving the problem. However, a random scene posted on YouTube can be misinterpreted, as “a crime” for instance, generating a cascade of behaviors, including harassment and threats against those involved (see, e.g., Mallén, 2016.).

The second set of challenges refers to the nature of data and data sharing. Methods to store and analyze these complex volumes of data are being developed. Nowadays, technology offers countless opportunities to understand human activities and monitor them over time, explore human interaction with the local environment and improve safety. For the first time, it is possible to capture snapshots of events in tiny slices of time through for example, social media. In this SI, we offer examples of state-of-the-art research in this area, using these new types of data and advanced methodologies to improve policing as well as to capture the way citizens take to the streets and interact with law enforcement agents. Issues of individual integrity and accountability as well as commodification of security and information diffusion are also important issues that must be considered as current and future research frontiers.

This special issue is therefore a contribution to the rapidly expanding research field on crime and control in the digital age. For example, recent books by Schneider and Altheide (2016) and Taylor and Rooney (2016) as well as articles by Ariel et al. (2016), Cerezo (2013), Reynald (2010), Reynald & Elffers (2009) are advancing the state of the art. Surveillance & Society also presented a double issue on “Surveillance and the Global Turn to Authoritarianism” (Wood, 2017) with 31 shorter pieces covering 25 countries.

This interdisciplinary SI includes both qualitative and quantitative empirical research from around the world, as well as innovative theoretical papers. It brings together international scholars from different disciplines and countries to discuss the nature of social control in the digital age and the potential effects of these new technologies have on crime and crime prevention. The contributions are characterized by high-quality research produced by five renowned experts from case studies from Australia, Sweden, the UK, and the United States. The articles also look forward and
discuss future research agendas and policy recommendations that arise from this international and multidisciplinary take on crime and control in the digital age. Thus, we believe that a special issue like this one appeals to a wider scientific community beyond criminology and sociology, such as media and communications, law, anthropology, geography and urban planning. Furthermore, although the SI is directed to an academic audience, it can also inform government agency representatives, policy makers, and those involved in policing.

The Articles

The first article of this SI is by Reynald who looks back at her long experience in the field to predict and reflect upon the potential to extend guardianship using new digital crime prevention applications (apps) that have been developed as a result of technological advancements in information communication technology and social engagement. This theoretical piece also highlights concerns and risks that need to be considered amid the proliferation of these new technologies for crime control. This article is followed by two pieces of a more empirical nature that focus on the use of apps to call for emergency services and to report crime. They both critically discuss the implications of these civic technologies for social engagement and exercise of social control. The first of the two articles, by Ceccato, draws from a case study in Sweden to reflect upon the nature of the data from an app and assess the pros and cons of these new ways of exercising social control, while the second, by Solymosi, explores spatial patterns in active guardianship of public space through mapping people’s participation in a platform for reporting neighborhood concerns—a form of digitally enabled guardianship.

By bringing devices down to eye-level, the studies by Wood and Groff and Ariel explore the use of BWCs as a crime control measure. Wood and Groff found in their pilot study in Philadelphia that BWCs could provide a tool for police officers to emphasize their role as guardians. The SI ends with the study by Ariel and colleagues who also found encouraging evidence of the effect of use of BWCs on violence against staff members in transit environments (train operating companies) in the UK.

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This special issue was born at the 2017 autumn seminar, “Eyes & apps on the streets: From natural surveillance to crime sousveillance”; a gathering that brought together scholars and practitioners to discuss the issues of crime and crime prevention in the digital era. Nearly all the authors of this special issue were present at that seminar, which took place at the School of Architecture and the Built Environment, KTH Royal Institute of Technology in Stockholm, Sweden, and which was organized by the Safeplaces network (https://www.sakraplatser.a-be.kth.se/en/), sponsored by The Swedish National Council for Crime Prevention (Brottsförebyggande rådet—BRÅ). There is no doubt that the seminar was fundamental, both to stress the need for more research in this field, and to make the current research findings and reflections available to a wider audience.
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References


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Vania Ceccato is a professor at the Department of Urban Planning and Environment, School of Architecture and the Built Environment, KTH Royal Institute of Technology, Stockholm, Sweden. Ceccato’s research is on the situational conditions of crime and crime prevention in urban and rural environments. She is interested in the relationship between the built environment and crime and perceived safety, in particular, the space-time dynamics of crime and people’s routine activity. Gendered safety and the intersectionality of victimization are essential components in her research. Main research areas are transit safety, crime geography, housing and community safety, rural crime, retail crime. She has published several books and articles in journals of Criminology, Geography and Urban Planning.