

# Surveillance & Space

Francisco  
R. Klauser



Los Angeles | London | New Delhi  
Singapore | Washington DC | Melbourne



Los Angeles | London | New Delhi  
Singapore | Washington DC | Melbourne

SAGE Publications Ltd  
1 Oliver's Yard  
55 City Road  
London EC1Y 1SP

SAGE Publications Inc.  
2455 Teller Road  
Thousand Oaks, California 91320

SAGE Publications India Pvt Ltd  
B 1/I 1 Mohan Cooperative Industrial Area  
Mathura Road  
New Delhi 110 044

SAGE Publications Asia-Pacific Pte Ltd  
3 Church Street  
#10-04 Samsung Hub  
Singapore 049483

---

Editor: Robert Rojek  
Editorial assistant: Matthew Oldfield  
Production editor: Katherine Haw  
Copyeditor: Neville Hankins  
Indexer: Elizabeth Ball  
Marketing manager: Sally Ransom  
Cover design: Wendy Scott  
Typeset by: C&M Digitals (P) Ltd, Chennai, India  
Printed in the UK

© Francisco Klauser 2017

First published 2017

Apart from any fair dealing for the purposes of research or private study, or criticism or review, as permitted under the Copyright, Designs and Patents Act, 1988, this publication may be reproduced, stored or transmitted in any form, or by any means, only with the prior permission in writing of the publishers, or in the case of reprographic reproduction, in accordance with the terms of licences issued by the Copyright Licensing Agency. Enquiries concerning reproduction outside those terms should be sent to the publishers.

**Library of Congress Control Number: 2016940074**

**British Library Cataloguing in Publication data**

A catalogue record for this book is available from the British Library

ISBN 978-1-4739-0776-8

ISBN 978-1-4739-0777-5 (pbk)

At SAGE we take sustainability seriously. Most of our products are printed in the UK using FSC papers and boards. When we print overseas we ensure sustainable papers are used as measured by the PREPS grading system. We undertake an annual audit to monitor our sustainability.

# Introduction: Governing the Everyday in the Digital Age

Digital media work through the accumulation, transfer and analysis of data. The digital age also is a surveillance age, if we understand surveillance as ‘focused, systematic and routine practices and techniques of attention, for purposes of influence, management, protection or direction’ (Lyon, 2007: 14; also see Murakami Wood et al., 2006). Thus by definition and by fact, surveillance reaches far beyond state-driven security schemes. Today, computerized systems that act as conduits for multiple, cross-cutting ways of gathering, transferring and analysing data control, protect and manage everyday life on many levels, serving security, administrative, commercial or political purposes. Think of the rapidly expanding use of RFID chips in tickets and goods, the increasing number of surveillance cameras in public places, the computerized loyalty systems of the retail sector, geo-localized smart-phone applications, or smart traffic and navigation systems.

Yet surveillance is nothing fundamentally new. The history of humanity could be written as the history of its practices and techniques of systematic attention, focused on individual or collective objects to be monitored, secured or simply administered. Alas, today, the prevalence of information generation and processing implies ever-increasing possibilities of tracking and profiling our daily activities, combined with increasingly automated, software-driven data analytics. The key point about contemporary surveillance is not merely information generation and transfer, but information processing through software, understood as predefined lines of code that process and analyse information with a view to generating automatic responses (Thrift and French, 2002; Kitchin and Dodge, 2011). Software constitutes a form of ‘programmed awareness’ (Kitchin and Dodge, 2011: 99) that ‘mediates, saturates and sustains contemporary capitalist societies’ (Graham, 2005: 562). It works on all spatial scales, is intrinsically woven into the texture of everyday life, is embedded in both inner- and intra-urban infrastructures and permeates global communication networks.

Thus questions are being asked. Who monitors whom, and how? What motivates contemporary developments in surveillance matters, and what are the implications thereof? In more geographical terms, how do surveillance techniques affect socio-spatial practices and relationships? How do they shape the fabrics of our cities, our mobilities, the spaces of the everyday? And what are the implications in terms of border control, the exercise of political power and the administration of territory?

In responding to such questions, this book explores, conceptualizes and problematizes contemporary IT-based techniques of regulation, management and control – here approached through the concept of ‘surveillance’ – in their relationship to space. My key question is this: How does IT-mediated surveillance, in its logics, functioning and implications, interact with space? In responding to this question, the book makes a number of analytical, epistemological–conceptual, empirical and socio-political contributions. It is worth outlining these succinctly and in some detail before moving on to discuss the structure and content of the chapters that follow.

## **EXPLORING THE SURVEILLANCE–SPACE NEXUS**

The book pursues two main analytical strands. On the one hand, its aim is to highlight the complex and manifold ways in which space makes a difference to the exercise and experience of surveillance. On the other hand, the book elucidates how surveillance affects and organizes space and socio-spatial relations.

Yet to avoid any misunderstanding, the surveillance–space focus advocated here does not imply that other analytical levels of enquiry into the problematic of surveillance should be neglected. On the contrary, the book reiterates again and again the need to place centrally the political, economic and social processes and relationships through which surveillance is conditioned and co-produced, in order to understand its spatial logics and implications. The ambition to add a distinct ‘spatial curiosity’ (Allen, 2003: 104) to the existing surveillance literature and debates merely expresses a sense that surveillance has essential spatial dimensions, which have not been explored carefully enough in scholarly research. As the book shows, such a perspective is of critical importance because space contributes in many ways and on many levels to the functioning and impacts of surveillance. Space must be approached as one of the constitutive dimensions of surveillance, rather than as a static background structure (Craviolini, Van Wezemaal and Wirth, 2011). Furthermore, the focus on space and on socio-spatial relations is of critical importance for an understanding of the wider implications of surveillance: in manifold ways, surveillance techniques relate to, focus on and project themselves into space, become inscribed there, and in the process contribute to the very production of the spaces concerned.

I am not alone in making this argument. Theoretical and empirical research has long suggested that surveillance tends not only to relate to specific persons or social

groups (Marx, 1988; Lyon, 2003a), but also to select, differentiate and manage specific categories of space (Graham, 1998; 2005; Koskela, 2000; Coleman and Sim, 2000; Franzén, 2001; Adey, 2004; Belina, 2006; Benton-Short, 2007; Duarte and Firmino, 2009; Zurawski, 2014). However, while the importance of space as the locus, object and tool of surveillance has been acknowledged, there has to date been very little attempt to bring existing studies together in order to approach the spatial dimensions of surveillance more fully and rigorously.

More importantly still, despite the wealth of insight provided by recent research on the imbrications of space and surveillance, there is to date no systematic reflection on the associations and tensions between differing spatialities of surveillance, combining various geographical scales and spatial logics (see Chapter 11 for a fuller discussion of this claim). Little is known about the dissonances and resonances between surveillance practices and techniques relating for example to separation, access control, circulation and internal organization. Yet, as I show in this work, the centrality of space to surveillance, and, in turn, the impacts of surveillance on space, can only be fully grasped when the different spatialities of surveillance are considered together.

It is in this sense that the book develops an agenda-setting reflection dealing with the co-constitution of space and surveillance. The thereby pursued ambition is to study and to conceptualize surveillance as an ensemble of heterogeneous techniques and practices of control and power that are intrinsically bound up with space, through multiple processes and relationships, on different scales and for numerous reasons.

## **BRIDGING POLITICAL GEOGRAPHY AND SURVEILLANCE STUDIES**

The book explores the surveillance–space nexus on various conceptually informed grounds. In content and perspective, the approach pursued is thus fundamentally interdisciplinary and as such very wide ranging. It is nevertheless possible to identify two main academic fields of investigation that provide the book’s theoretical backbone and main target disciplines: political geography and surveillance studies. By bridging the two fields, the book’s epistemological contribution is to encourage reflection on the possibility of a ‘political geography of surveillance’.

### **SURVEILLANCE IN POLITICAL GEOGRAPHY**

Political geography informs the book in at least two fundamental ways. Firstly, the field offers a thematically relevant body of work for my purposes, given its traditional research foci on issues of border control, geostrategic conflict, territoriality and the control, defence and administration of territory. More specifically, the book draws upon political geographical research that focuses on bordering and mobility control (Salter, 2005; Amoore, 2006; Côté-Boucher, 2008; Cowen, 2010), migration management (Andreas and Snyder, 2000; Bigo

and Tsoukala, 2008), geosurveillance, GIS and spatial ordering (Monmonier, 2002; Pickles, 2004; Crampton, 2007), military surveillance (Gregory and Pred, 2007; Graham, 2010) and policing (Fyfe, 1991; Yarwood, 2007). Important insights into the problematics of surveillance and space can also be gained from the discipline's neighbouring fields of governmentality studies (Hannah, 2000; 2010) and critical geopolitics (O Tuathail, 1996: 4).

The idea of a corresponding relationship between political control and space was present already in Friedrich Ratzel's *Politische Geographie*, in its attention to geostrategic advantages resulting from geographical location and spatial organization: 'corner locations take their importance from the encounter, or at least convergence, of two lines of movement. A location's value resides in its gains from, and also in its control of, these routes' (Ratzel, 1897: 281; unless otherwise stated, all German or French quotations have been translated by the author).

This particular kind of engagement with surveillance and space has been further developed in the politico-geographical literature throughout the twentieth century, generating insight into the role of transportation and communication networks, military bases, commercial settlements and administrative grids for the control and administration of the two main stakes of political power: population and territory. Jean Gottmann's *La politique des Etats et leur géographie* provides an interesting example thereof:

The control of maritime relations has become ever more attractive to powers that lay claim to the sea. To establish and exercise control, however, large numbers of ships are hardly sufficient, given their limited range of action, which does not allow the covering of vast sea waters. There must be a network of wisely disposed [military] bases, to make it easy for a fleet to control major maritime routes. ... Hence emerges a whole strategy of strait controls. (Gottmann, 2007: 81)

Interestingly, Gottmann also refers explicitly to the 'surveillant disposition' of geographical knowledge production itself, stressing the discipline's observing and classificatory gaze on the world (2007: 28). This reflection has been further pursued in critical geopolitics in more recent years (O Tuathail, 1996: 4).

In political geography in the 1980s and 1990s, one of the most explicitly surveillance-framed contributions can be found in Robert David Sack's work on human territoriality, understood as 'a spatial strategy to affect, influence, or control resources and people by controlling area' (Sack, 1986: 1). What matters for Sack is to explore the geographical expression of social power (1986: 5), which he does from a viewpoint centred on 'spatial control' and on 'control through spatial organization'. In this particular respect, Sack's territoriality-as-spatial-strategy approach concurs with Claude Raffestin's alternative, relational take on human territoriality, developed in francophone geography from the late 1970s (Raffestin, 1980; 2012; Klauser, 2012a; also see Chapter 4).

In his programmatic conceptual work, Raffestin also places strong emphasis on the controlling dimension of power (1980: 49), approached in its means as a

‘variable combination of energy and information’ (1980: 47). Thus for Raffestin, territoriality, as the ‘lived side of the acting side of power’ (1980: 146), is genuinely related to the accumulation and ordering of information: ‘territoriality sums up the ways in which societies satisfy their needs in terms of energy and information, at a given moment for a given population and for a given ensemble of instruments’ (1980: 145).

Importantly, Sack and Raffestin also concur in moving beyond Ratzel’s and Gottmann’s attention to state power in its spatial articulations, logics and implications, to question and conceptualize different scopes, modes and means of power in their relation to space. As such, both approaches mirror the opening up and reframing of political geography from the late 1970s around ‘power and space’ rather than around ‘politics and state territory’ (Raffestin, 1980; Philo, 1992; Lévy, 1994; Allen, 2003; Painter, 2008). It should be noted that I speak of ‘political geography’ here and not of ‘human geography’, precisely because my interest lies on the former’s defining focus on power and space. However, a relational conception of human geography implies by definition an attention to the notion of power if we accept that relations are sites of power in a Foucauldian sense (Raffestin, 1980). Political and human geography differ in emphasis, not in kind.

These comments point at the second major insight derived from political geography, whose conceptual approach to space as both the product and producer of power provides the backbone of my investigation of the surveillance–space nexus. Grounded in an understanding of political geography as the academic field that investigates power and space in their co-constitutive and mediated relationship (Raffestin, 1980; Philo, 1992; Allen, 2003; Cox, Low and Robinson, 2008: 7; Painter, 2008), the development of a specifically politico-geographical approach to surveillance involves first and foremost the task of conceptualizing surveillance as a mode of power that interacts with space. Chapters 2–4 are devoted to this task.

## **SURVEILLANCE STUDIES**

Surveillance studies have been academically institutionalized more recently than political geography. The field has great momentum, and surveillance-related courses now figure in many academic programmes in geography, sociology, criminology, political sciences, security studies and risk research. While I take from political geography its thematic and conceptual insights into the role of space for the exercise of power, I see in surveillance studies a heterogeneous and interdisciplinary community of researchers who share a critical reflection on the logics behind and implications of contemporary surveillance developments.

In recent years, a variety of factors have contributed to the establishment and expansion of this research community, including the journal *Surveillance and Society*, the *Surveillance Studies Network* and the European COST Action *Living in Surveillance Society*, in addition to a range of international conferences and

collaborative research projects. From these catalysts, a burgeoning ‘cross-disciplinary field of research’ (Lyon, 2007) has emerged that provides a fertile ground for examining the social implications of the proliferating range of new aims, agendas, objects, agents, technologies, practices and perceptions of surveillance (Ball, Haggerty and Lyon, 2012).

In arguing for a political geography of surveillance, my ambition is to add a specifically politico-geographical viewpoint to surveillance studies (Klauser, 2013b). As mentioned above, spatial thought is not completely absent from the existing surveillance literature, but more systematic and deeper attention is needed. What can a politico-geographical focus on space offer to the study of surveillance, in its functioning, logics and implications?

Throughout but especially at the end of the book, this reflection is also turned on its head, thus using the problematics of surveillance to rethink the field and scope of political geography in the present-day world. What kind of political geography is needed to understand the power–space interactions underpinning, and developing from, the governing of everyday life in the digital age? This discussion also makes a specific conceptual contribution, in advocating a long-range theoretical and analytical ambition to rethink the problematic of power and space from a perspective focused on the IT-mediated forms and techniques of control and regulation in the digital age. What does the problematic of surveillance tell us about the interactions between power and space in the present-day world?

## **CASE-STUDY APPROACH TO SURVEILLANCE**

The surveillance–space nexus can only be fully understood through detailed field research. The analytical chapters of this book therefore draw heavily upon first-hand empirical materials, including case studies relating to the fields of video surveillance, sport mega-event security, airport surveillance, and smart energy management. Reflecting 15 years of research into the problematic of surveillance and space, this approach is based on the retrospective reworking of a range of previously published research, combined with discussions of original and unpublished work. Against this background, the book also makes an empirical contribution to the field of surveillance studies.

However, my ambition cannot be to study surveillance in all its functional expressions and local variations. Important gaps remain, in terms of both the geographical zones covered and the fields of surveillance explored. Still, the empirical investigations brought together here have the advantage not only of relating to very different forms and finalities of surveillance, but also of exploring surveillance in its functioning, logics and effects in German, francophone and anglophone linguistic and socio-cultural contexts. On these grounds, my objective is not only to study how surveillance permeates specific settings for

specific reasons, but also to advance a range of more general claims regarding the cross-cutting spatial logics, power dynamics, driving forces and implications of differing forms and formats of surveillance.

For example, the field of video surveillance can also be taken as an entry point to discuss other spatially articulated forms of visual surveillance ‘from above’ by drones or satellites. Equally, the case studies relating to airport surveillance and sport mega-events allow for a broader discussion of ‘surveillance and the management of mobilities’, while the study of smart energy management opens the door for considering more generally the logics and implications of contemporary smart-city initiatives. Below, the four main fields of surveillance explored empirically in the book are described in some more detail, with a view to highlighting the special appeal of, and complementarities between, the studied forms and sites of surveillance.

## **VIDEO SURVEILLANCE**

Video surveillance cameras and systems – often referred to as closed-circuit television (CCTV) – represent probably the most iconic form of spatially bound control at a distance today. Before targeting particular groups or individuals, surveillance cameras are first related to specific portions of space, either extracting information from monitored sites (cameras as a means of visual control) or projecting information into monitored sites (cameras as symbols of control). Social behaviour is of interest only within the cameras’ spatially articulated field of vision or sphere of symbolic agency. Analytically speaking, the subject of video surveillance thus offers ideal conditions in which to ask how surveillance affects space as it is lived, perceived and conceived; to explore the resonances and dissonances between differing spatial logics of surveillance; to enquire into the popular experiences and perceptions of the distancing of control that characterizes contemporary IT-mediated surveillance; and to question the ways in which surveillance systems respond to differing spatially bound-up interests and needs.

The book draws upon the empirical study of street prostitution surveillance by means of CCTV in the Swiss city of Olten (Chapter 10). The case study is of particular interest in its combination of two complementary methodological approaches for studying how video surveillance was experienced and perceived by the population at large and by users of the monitored area.

## **AIRPORT SURVEILLANCE**

The field of airport surveillance is important to my politico-geographical engagement with surveillance for several reasons. Firstly, given the privileged position of airports as passage points for flows of people and cargo, surveillance

in this context responds to a number of major security issues, such as organized crime, people trafficking and threats of terrorism. This alone justifies research attention. Secondly, the dramatic increase of airport surveillance following the 9/11 terrorist attacks highlights the need not only to enquire what role airports play today in the complex realities of security governance and border control, but also to reflect critically upon the wider implications of the extended and redesigned screening and filtering of international mobilities in and through airports. Thirdly, the study of security and surveillance in the aviation sector presents very favourable conditions for empirical insight into the complexity of the factors that contribute to contemporary security governance. I consider in particular the interactions of scale and the public–private partnerships that shape surveillance policies today. Fourthly, as burgeoning socio-technical universes in constant transformation, airports are particularly exposed to the challenges and opportunities implied by new technologies, economic trends and socio-cultural dynamics. Thus for my purposes, I also approach airports as key locations in the global production and circulation of surveillance-related practices and expertise. In sum, airport surveillance offers a worthwhile lens through which to view some of the most salient issues and developments in contemporary surveillance matters.

This discussion draws upon empirical insights provided by a two-year research project funded by the Swiss National Science Foundation (Ruegg et al., 2006). Based on several case studies, the project examined the multiple factors contributing to the ways in which contemporary security governance functions and permeates specific places and settings. In the present work, I refer to one of these case studies, relating to the policing of Geneva International Airport. I draw upon this research in empirical detail in the case study that rounds off Chapter 5.

## **SPORT MEGA-EVENT SECURITY**

There are also a number of reasons that account for the appeal of the field of sport mega-event security. Firstly, like airports, sport mega-events are of interest because of the scope and importance of security and surveillance operations in this context, offering ideal conditions for investigating how different surveillance strategies complement and conflict with each other and how they interact with the spaces affected by their deployment and performance. Secondly, sport mega-event security serves as a particularly useful frame not only for identifying particular surveillance logics, practices and trends in the field, but also for investigating how exemplified surveillance solutions are transferred from one place to another. Thirdly, sport mega-event security condenses and accentuates one of the central issues that shapes contemporary security governance, namely the need to reconcile and combine in consensus and conflict the demands for mobility and security. The sport mega-event field is therefore ideal for investigating how,

today, people and objects on the move are monitored, filtered and protected in highly differential and flexible ways.

The book investigates these issues empirically in Chapters 6, 7, 8 and 9 through two international case studies, relating to security governance at the European Football Championships in 2008 in Switzerland and Austria (Euro 2008) and at the Vancouver Winter Olympic Games in 2010. Both studies investigate the internal logics and functioning of event security, thus offering scope for comparison and supplementation.

## **SMART ENERGY MANAGEMENT**

The field of smart energy management illustrates in exemplary fashion the increasingly automated techniques of control and regulation that shape present-day life. As such, the field is of interest for several reasons. Firstly, it allows the study of surveillance beyond the usual risk focus, thus inviting a more sustained reflection on surveillance in relation to sustainability, efficiency and self-management. Secondly, it offers an opportunity to explore how surveillance incorporates parameters relating to both human and non-human phenomena, from micro-climate modelling to the monitoring of electricity grids and private energy consumption. Thirdly, the field reiterates the need to investigate in more depth how, today, the disparate aims and modalities of surveillance coalesce into apparent ‘whole’ architectures and systems. Finally, the example of smart energy management brings to the fore one of the most fundamental conceptual problems in need of more attention in future debates across surveillance studies, relating to the importance of exploring and theorizing the inherent flexibility that characterizes contemporary techniques of software-based surveillance. In sum, in moving beyond traditional research foci on the surveillance of humans, on single control technologies, on the risk problematic and on surveillance in its rigid, disciplinary logics, the field of smart energy management offers an interesting terrain for investigating the agents, practices and spaces of surveillance in the present-day world of ‘governing through code’.

Empirically speaking, the book approaches the field of smart energy management in Chapter 11 through the investigation of two coordinated pilot projects in Switzerland. These have been studied as part of a two-year research project, funded by the Swiss State Secretariat for Education, Research and Innovation (Klauser, Paasche and Söderström, 2014; Söderström, Paasche and Klauser, 2014).

## **QUESTIONING THE POWER OF SURVEILLANCE**

In interrogating the spatial logics, functioning and implications of surveillance, the book also contributes to wider socio-political debates about the desirability and necessity for surveillance, its implications and problems. In its ambition of

‘outing’ surveillance and its effects, my endeavour connects neatly with the rapidly developing body of critical scholarly research that has in recent years sought to highlight and question the extent and normality of the increasingly automated forms of IT-mediated control that invade many aspects of everyday life. Relevant work has emphasized a number of critical issues arising from such developments, including the effects on privacy and social trust, the lack of accountability and transparency, the risks associated with information sharing, the potential of social discrimination arising from surveillance, the role of private interests, the financial costs and the limited effectiveness of many surveillance systems (COST Action IS0807, 2008).

Regarding more generally the power issues associated with surveillance, an increasingly sophisticated body of theoretical and empirical research has shown that surveillance is never neutral, whether the collection, classification and analysis of data aim at greater efficiency, convenience or security. Information management, and management of everyday life through information, enable and depend on manifold forms and possibilities of differentiation and prioritization which are used to orchestrate everyday life and which affect the life chances of individuals or social groups in ways that are often unknown by the public. Critical debates about surveillance have thus gone far beyond issues of privacy, data protection and accountability, to challenge the functioning of surveillance as a potent means of power that shapes, and becomes increasingly dissociable from, our daily activities (Graham, 1998; 2005; Lyon, 2003a; Coleman, 2004).

In sharing a concern about these key issues, the present work is driven by a critical reflex and sensitivity with regard to its studied object. Adding to broader contemporary debates on civil liberties, security issues, threats of terrorism, state censorship, policing and the computerization of society, the book assesses, from a politico-geographical viewpoint, the opportunities and challenges associated with surveillance developments in the present-day world. It aspires more fully to inform citizens, public agencies and the private sector of the various dimensions and effects of the current proliferation and intensification of surveillance, to raise awareness of the advantages and problems of surveillance, to inform public policies and, ultimately, to favour critical democratic debate. In sum, the book aims at a critical politico-geographical engagement with contemporary debates on regulation and control in the digital age, engendered by and within theoretical thinking.

## CONTENT

The book is structured into four main parts. Part I comprises four theoretically oriented chapters, which together lay the conceptual foundation for the book’s engagement with surveillance in its spatial dimensions and effects. They do this by linking surveillance to the concepts of the everyday (Chapter 1), to mediation (Chapter 2), to power (Chapter 3) and to space (Chapter 4). Parts II–IV of the

book are analytical in scope and ambition. Distinguishing between three main levels on which to approach the surveillance–space nexus, they in turn address the spatial logics of surveillance (Chapters 5–7), the functioning of surveillance in its relation to space (Chapters 8–9) and the socio-spatial implications of surveillance (Chapters 10–11). Together, the three parts add both empirical depth and theoretical nuance to our understanding of how surveillance, in its logics, functioning and implications, interacts with space. Below, I highlight in more detail the contribution of each chapter, for the sake of clarity and to provide a quick summary to the reader.

## PART I

Chapter 1 develops an understanding of surveillance as a mode of governing the everyday that relies on techniques of systematic information gathering, transfer and analysis. In so doing, the chapter suggests an approach to surveillance that moves beyond the usual risk and policing problematic, while also conceiving surveillance in a broad sense as relating to both human and non-human objects. In setting the everyday as the scale of analysis for the study of the surveillance–space nexus, the chapter also moves beyond the predominant urban focus in contemporary work on surveillance, which chronically underplays the ways in which surveillance techniques shape other (for example, rural) contexts. In sum, Chapter 1 sets out the analytical scope of the book in drawing attention to the possibility of a politico-geographical engagement with the role and functioning of IT-mediated surveillance in its everyday operation, expression and experience.

Chapter 2 proposes a conceptualization of surveillance channelled through the concepts of ‘mediation’ and ‘mediators’. Drawing upon actor network theory, these two concepts are mobilized as analytical tools for studying the making and functioning of surveillance. Through what means and associations is surveillance produced? How do novel means of surveillance modify existing surveillant assemblages? The two concepts thus offer a conceptual and empirical perspective from which to approach the inherent relationality and processuality of the ‘surveillant assemblages’ studied (Haggerty and Ericson, 2000).

Chapter 3 links surveillance to the concept of power. Not only is this task of central importance to the book’s programmatic claim regarding the possibility of a political geography of surveillance, but also it connects with the ambition to challenge the wider socio-spatial implications of contemporary IT-mediated forms of regulation and control. More specifically, the chapter develops a broad conceptual framework within which surveillance can be approached as techniques of power through systematic attention that act on everyday life. It does so by drawing upon Michel Foucault’s approach to power, conceived as a capacity to ‘structure the possible field of action of others’ (Foucault, 1982: 790).

Chapter 4 further pursues this discussion, developing a relational conceptualization of space (Raffestin, 1980; Lefebvre, 1991) on which to build my study of

the surveillance–space nexus. Again, the chapter thereby places centrally the concept of mediation as an analytical lens through which to conceive space in its co-constitutive, mediated and mediating relationship to power and, more specifically, to surveillance. The chapter thus not only lays the conceptual basis for investigating how surveillance impacts upon and produces space as it is lived, perceived and conceived, but also invites the study of how space, as a socially produced, ordered reality, in turn mediates the exercise of surveillance in its many forms, functionalities and finalities. This highlights the need to move beyond a mere description of the spatial distribution and articulation of surveillance, and study instead how surveillance impacts (and depends) upon the actual qualities of specific places, shapes (and reflects) spatial perceptions and practices, and produces (and results of) specific socio-spatial relations.

## PART II

In consecutive chapters, Part II of the book draws upon three complementary terminological registers, which together allow the discerning of a range of differing spatial logics of surveillance. This focus on the spatialities of surveillance is important because it enables us to gain an understanding of where and indeed how surveillance shapes everyday life. In line with my programmatic ambition to consider the possibility of developing a political geography of surveillance, it also opens up a discussion about the very vocabulary to be mobilised hereby.

Chapter 5 focuses on the terminological register of points, lines and planes, together with derived notions such as nodes, networks and rings, as a set of two-dimensional metaphors through which to study the spatial logics and inscriptions of surveillance. This discussion draws upon Kandinski's and Klee's theories of abstract painting. Differing techniques of surveillance are thus portrayed and explored in their punctual (access control, protection of specific objects at risk, etc.), linear (transport lines, border lines, infrastructural networks) and planar (inner-city areas, secured perimeters) spatial forces and articulations.

Chapter 6 further pursues this discussion from a Foucauldian viewpoint. Drawing upon Foucault's distinction between apparatuses of 'discipline' and 'security' (Foucault, 2007a), the chapter carves out a set of contrapuntal pairs of spatial logics of power, relating to fixity, enclosure and internal organization in the case of discipline, as opposed to flexibility, openness and circulations in the case of security, which offer a second composite terminology for exploring the surveillance–space nexus.

Chapter 7 concludes this part with a discussion of the Sloterdijkian terminology of 'bubbles', 'globes' and 'foams' (Sloterdijk, 1998; 1999; 2004), as a third set of three-dimensional metaphors for exploring the spatial logics of surveillance. By conveying an explicit 'voluminous' dimension, the three terms complement the two other terminological registers in drawing attention to the spherical attributes, forces and implications of the studied 'spaces of surveillance'.

### **PART III**

Part III relates to the second broad level of analysis that runs through my politico-geographical investigation of surveillance, consisting of a critical exploration of the internal functioning of surveillance in its relation to space. In this part, I focus in particular on the actor networks and interests that mediate the making and acting of particular surveillance systems. There are various questions addressed in this investigation, but two key issues stand out, as follows.

Chapter 8, on the one hand, explores the role of various (public and private, locally anchored, but also transnationally circulating) forms of expertise in the planning, installation, development and use of surveillance. This analysis highlights that the planning, setting up and development of particular surveillance systems cannot be explained by referring exclusively to the formal competences of the stakeholders involved (Ruegg, November and Klausner, 2004). Rather, these processes must be portrayed as the product of complex relationships, which are mediated by the interests, sources of authority and domains of expertise conveyed by many different actors, ranging from the user and owner to the technical manager and supplier of the considered system. My aim thereby is not only to provide isolated insights into the micro-politics of surveillance in particular settings, but also to reinstitute this question as part of a broader problematic: the mediating role of expertise and the growing functional fragmentation of authority in contemporary 'techno politics' (Mitchell, 2002: 43).

Chapter 9, in turn, investigates and questions the development and reproduction of increasingly standardized surveillance solutions by internationally operating experts, who 'parachute in' to specific localities with predefined plans and designs, thus contributing to the creation of increasingly standardized spaces of surveillance. There are two main lines of enquiry to highlight here. On the one hand, the chapter focuses on the transnational circulation, sharing and appropriation of public-private surveillance knowledge and practices, with a view to understanding the ways in which these fuse in particular sites and settings. On the other hand, I ask how the reproduced best-practice solutions are twisted and rearticulated in particular locales, and how indeed such locales contribute themselves to the establishment and circulation of novel exemplified solutions in the field.

### **PART IV**

Part IV covers the third analytical level of the book, relating to the socio-spatial implications of surveillance. There are three sub-themes to foreground here, relating to 'distancing and separation', the 'orchestration of space' and the 'automatic production of space'. Together, these sub-themes show how surveillance affects monitored spaces as they are lived and perceived by the 'surveyed' and conceived by the 'surveyors'.

Chapter 10 explores the first sub-theme, relating to the spatial and social distancing of control induced by contemporary forms of IT-based surveillance. On the one hand, this discussion revolves around the question of how operators in control rooms relate to the places that are monitored and managed from a distance. On the other hand, I explore the popular perceptions of remote surveillance, discussed here through the example of video surveillance.

Chapter 11 studies how surveillance orchestrates space by sorting access, filtering flows and organizing presences in evermore automated ways. Thus the chapter combines the two sub-themes of the ‘orchestration of space’ and the ‘automatic production of space’. One particular type of surveillance at stake in this broad problematic is access control, as a complex, spatially articulated and increasingly IT-mediated exercise of categorization, prioritization and filtering. Yet the chapter also focuses on the management of circulations through digital technologies and on spatially more extended, planar forms of surveillance that regulate and affect the spatial practices and socio-spatial relations within monitored areas.

The book’s concluding section, finally, connects the main conceptual arguments advanced and analytical insights provided in the preceding chapters. On these grounds, the section also reconsiders the possibility of a political geography of surveillance, as a project that not only explores how surveillance interacts with space, but also invites a broader reflection on the co-constitution of power and space in the digital age and thus of the very field and scope of contemporary political geography.

## FURTHER READING

**Andrzejewski, A.V. (2008) *Building Power: Architecture and Surveillance in Victorian America*. Knoxville: University of Tennessee Press.**

*Building Power* demonstrates how surveillance informed the design and spatial arrangement of various kinds of buildings in the United States during the Victorian period: prisons, post offices, factories, private houses and religious camp grounds. Anchored in architectural history, this analysis offers a very detailed account of both the surveillance-relevant role of space and the space-producing role of surveillance.

**Ball, K., Haggerty, K. and Lyon, D. (eds) (2012) *Routledge Handbook of Surveillance Studies*. London: Routledge.**

This collection provides a solid overview of the key topics, issues and theoretical approaches explored in contemporary surveillance studies. Chapters are written by a number of internationally recognized scholars. This is the first handbook in surveillance studies and thus marks an important step in the establishment of this cross-disciplinary field of research.

**Graham, S. (2010) *Cities Under Siege: New Military Urbanism*. London:Verso.**

*Cities Under Siege* offers a compelling analysis of the role of military technologies, expertise and interests in urban security governance. This is a very important work that provides deep and critical insight into the functioning and implications of military power and control in the present-day world.

**Lyon, D. (2007) *Surveillance Studies: An Overview*. Cambridge: Polity Press.**

Written by one of the most influential surveillance scholars, this book provides a very good introduction to surveillance studies. It discusses the scope, ambitions and main research directions of this field of study, and offers an overview of the main issues and challenges associated with contemporary surveillance evolutions.