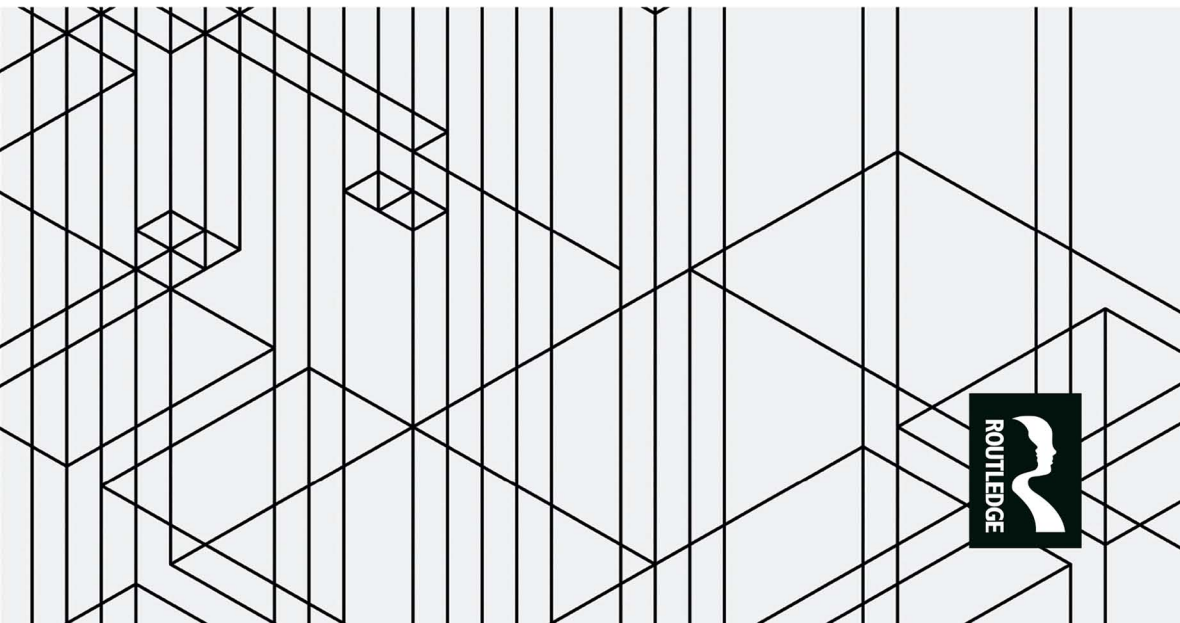


Routledge Studies in Surveillance

SURVEILLANCE, PRIVACY AND PUBLIC SPACE

Edited by
Bryce Clayton Newell, Tjerk Timan and
Bert-Jaap Koops



Surveillance, Privacy and Public Space

Today, public space has become a fruitful venue for surveillance of many kinds. Emerging surveillance technologies used by governments, corporations, and even individual members of the public are reshaping the very nature of physical public space. Especially in urban environments, the ability of individuals to remain private or anonymous is being challenged.

Surveillance, Privacy, and Public Space problematizes our traditional understanding of “public space”. The chapter authors explore intertwined concepts to develop current privacy theory and frame future scholarly debate on the regulation of surveillance in public spaces. This book also explores alternative understandings of the impacts that modern living and technological progress have on the experience of being in public, as well as the very nature of what public space really is.

Representing a range of disciplines and methods, this book provides a broad overview of the changing nature of public space and the complex interactions between emerging forms of surveillance and personal privacy in these public spaces. It will appeal to scholars and students in a variety of academic disciplines, including sociology, surveillance studies, urban studies, philosophy, law, communication and media studies, political science, and criminology.

Bryce Clayton Newell is an Assistant Professor in the School of Information Science at the University of Kentucky. In his research, he focuses on understanding the impact that surveillance and information and communication technologies (ICTs) have on individuals, society, and the law.

Tjerk Timan is a policy advisor and researcher at TNO, the Netherlands. He has been publishing on topics of policing technologies, surveillance theory and practices, and privacy. Recently, he has co-edited a book on privacy in public space.

Bert-Jaap Koops is Professor of Regulation & Technology at the Tilburg Institute for Law, Technology, and Society (TILT), Tilburg University. In 2016/17, he was Distinguished Lorentz Fellow at the Netherlands Institute for Advanced Study (NIAS). He publishes widely on cybercrime, cyber-investigation, privacy, and data protection, including recently “A Typology of Privacy Spaces” and “Bentham, Deleuze and Beyond.”

Routledge Studies in Surveillance

Kirstie Ball, William Webster, Charles Raab

<https://www.routledge.com/Routledge-Studies-in-Surveillance/book-series/RSSURV>

1 Big Data, Surveillance and Crisis Management

Edited by Chiara Fonio and Kees Boersma

2 Surveillance, Privacy and Public Space

Edited by Bryce Clayton Newell, Tjerk Timan, and Bert-Jaap Koops

3 Surveillance and Democracy in Europe

Kirstie Ball and William Webster

Surveillance, Privacy and Public Space

Edited by
Bryce Clayton Newell, Tjerk Timan
and Bert-Jaap Koops

First published 2019
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

and by Routledge
711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 2019 selection and editorial matter, Bryce Clayton Newell, Tjerk Timan, and Bert-Jaap Koops; individual chapters, the contributors

The right of Bryce Clayton Newell, Tjerk Timan, and Bert-Jaap Koops to be identified as the authors of the editorial material, and of the authors for their individual chapters, has been asserted in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

British Library Cataloguing in Publication Data

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

Library of Congress Cataloging in Publication Data

A catalog record has been requested for this book

ISBN: 978-1-138-70996-6 (hbk)

ISBN: 9781315200811 (ebk)

Typeset in Bembo
by Taylor & Francis Books

Contents

<i>List of illustrations</i>	vii
<i>List of contributors</i>	viii
<i>Acknowledgements</i>	xi
1 Privacy and surveillance in the streets: An introduction BRYCE CLAYTON NEWELL	1
2 In the privacy of our streets CARISSA VÉLIZ	16
3 Building ivory surveillance towers: Transformations of public space in higher education SARAH SHOEMAKER AND PATRICK SCHMIDT	33
4 The changing nature of public space in São Paulo: A taxonomic approach ANTHONY BOANADA-FUCHS	51
5 A window into the soul: Biosensing in public ELAINE SEDENBERG, RICHMOND WONG AND JOHN CHUANG	75
6 Adverse detection: The promise and peril of body-worn cameras MICHAEL A. KATELL	99
7 “The end of privacy as we know it”: Reconsidering public space in the age of Google Glass OLYA KUDINA AND MELIS BAŞ	119
8 Revisiting privacy in public spaces in the context of digital vigilantism DANIEL TROTTIER	141

9	Emergency calls with a photo attached: The effects of urging citizens to use their smartphones for surveillance GERARD JAN RITSEMA VAN ECK	157
10	“I’m a creep, I’m a weirdo”: Street photography in the service of the male gaze STUART HARGREAVES	179
11	Legal standards of location privacy in light of the mosaic theory ALEŠ ZAVRŠNIK AND PRIMOŽ KRIŽNAR	199
12	Surveillance and privacy in North American public spaces BRYCE CLAYTON NEWELL, SILVIA DE CONCA AND KRISTEN THOMASEN	221
	<i>Index</i>	251

Illustrations

Figures

3.1 The Double Inversion of University Surveillance	43
4.1 Comparison of two different public spaces	69
9.1 Photograph taken with an Apple iPhone 6 smartphone in London on 17 September 2015 by Benjamin Welle	162

Tables

4.1 Framework developed by Németh and Schmidt (2011) (adapted)	58
4.2 Proposed public space taxonomy (in the variable column, terms with a star are shared with Németh and Schmidt (2007, 2011)).	61
4.3 The taxonomy of public spaces and its hybrid forms	65
5.1 A taxonomy of sensors and potential capabilities	80

Contributors

Melis Baş is a PhD candidate at the Philosophy Department of the University of Twente. She works on a project entitled, “Mediated Public Spaces: Parks and Politics.” In this project, Melis interprets Hannah Arendt as a philosopher of technology, and situates public parks as political agents in our everyday practices of politics.

Anthony Boanada-Fuchs acts as project and academic relations manager at the University of St. Gallen Institute of Management in Latin America (GIMLA). He is also post-doctoral researcher at CASE (Centre for Research on Architecture, Society & the Built Environment) at ETH Zurich and has held other post-doc and visiting positions at the University of Lausanne, University Basel and the University of São Paulo. He completed his PhD at the Graduate Institute of International and Development Studies in Geneva (IHEID), Switzerland.

John Chuang is a Professor at the UC Berkeley School of Information, and Director of the BioSENSE Lab, with research interests in bio-sensory computing applications, security, and privacy.

Silvia de Conca is a PhD Researcher at the Tilburg Institute for Law, Technology, and Society (TILT) at Tilburg University, where she works at the intersection of robotics, artificial intelligence, and privacy. She holds an LL.M. in IT, Media & Communication Law from the London School of Economics and Political Science (London), and an LL.M. with Honors in International and Comparative Law from the University of Roma Tre (Rome). Before starting at TILT, Silvia lived in Mexico, where she was Assistant Professor of Information Technology Law and Intellectual Property Law at the Law Department of the Tec de Monterrey University ITESM (Chihuahua).

Stuart Hargreaves is an Assistant Professor at the Faculty of Law of the Chinese University of Hong Kong, where he is also Director of the LLB Programme and Assistant Dean for Undergraduate Studies. He is a barrister and solicitor (Law Society of Upper Canada). He holds a BA from McGill

University, a JD from Osgoode Hall Law School, a BCL from the University of Oxford, and an SJD from the University of Toronto.

Michael A. Katell is a PhD Candidate in data and technology ethics at the University of Washington Information School. His research interests include privacy, digital reputation, digital equity, and the ethical design of information systems.

Bert-Jaap Koops is Professor of Regulation & Technology at the Tilburg Institute for Law, Technology, and Society (TILT), the Netherlands. In 2016/17, he was Distinguished Lorentz Fellow at the Netherlands Institute for Advanced Study (NIAS). His main research fields are cybercrime, cyber-investigation, privacy, and data protection.

Primož Križnar earned a Bachelor of Laws in 2013 and Master of Laws in 2015. He is currently working as a senior judicial advisor at the District state prosecutor's office in Ljubljana and as a legal researcher at the Institute of Criminology at the Faculty of Law in Ljubljana.

Olya Kudina is a PhD candidate at the Philosophy Department of the University of Twente. She works on a project entitled, "Mediated Morality: Google Glass, Sex Selection, and the Complex Interactions between Ethics And Technology." Her research contributes to conceptualizing the way technologies co-shape human norms and values.

Bryce Clayton Newell is an Assistant Professor in the School of Information Science at the University of Kentucky. He is also a licensed attorney (California), a documentary filmmaker, and a former Google Policy Fellow. He specializes in the study of surveillance, information practices, and the use of ICTs in the contexts of policing and irregular migration, with additional research and teaching interests in criminal law, information policy, and technology regulation.

Gerard Jan Ritsema van Eck MA is a PhD researcher at the Security, Technology, and e-Privacy (STeP) research group at the University of Groningen. His research focuses on the use of smartphones for participatory surveillance and its impact on the free enjoyment of human rights in public spaces.

Patrick Schmidt is Professor and Chair of Political Science at Macalester College. His teaching and research interests span American constitutional law, regulation, and public policy, including higher education and information policy.

Elaine Sedenberg is a PhD Candidate at the UC Berkeley School of Information and Co-Director of the Center for Technology, Society & Policy (CTSP). She studies information sharing practices and the legal, ethical, and economic aspects of data access for research purposes.

Sarah Shoemaker graduated from Macalester College with a Bachelor of Arts in Political Science in 2015. She subsequently received a Fulbright award to Malaysia.

Kristen Thomasen is an Assistant Professor of Law, Robotics and Society at the University of Windsor Faculty of Law. She is also a PhD Candidate in Law at the University of Ottawa. Her research explores the legal and social impacts of automated technology, particularly on privacy in public space. Kristen is a member of the Law Society of Alberta. Prior to starting her PhD, Kristen clerked for the Honourable Madam Rosalie Abella at the Supreme Court of Canada, and for the Alberta Court of Queen's Bench.

Tjerk Timan is a policy advisor and researcher at TNO in the field of privacy, surveillance, and data science. Previously, he held a position as postdoctoral researcher at the Tilburg Institute for Law, Technology, and Society (TILT), where he was engaged in questions around new privacy issues in the 21st century. He has also been a lecturer at the Erasmus University Rotterdam, providing courses on digital humanities, big data, and data visualization. He completed his PhD thesis at the University of Twente in which he investigated emerging and existing technologies of surveillance in urban nightlife districts.

Daniel Trottier (PhD, Queen's Canada) is an Associate Professor in the Department of Media and Communication at Erasmus University Rotterdam. His primary research interests include user-led forms of monitoring and policing through digital media.

Carissa Véliz is a Research Fellow at the Uehiro Centre for Practical Ethics at the University of Oxford. She completed her doctoral degree (DPhil) in Philosophy at the University of Oxford, writing her dissertation on the ethics and politics of privacy.

Richmond Wong is a PhD Candidate at the UC Berkeley School of Information. His research investigates how speculative and critical design methods can be used to interrogate privacy and other policy-related concerns during the process of technology design.

Aleš Završnik, Doctor of Law (LL.D.), is a Senior Research Fellow at the Institute of Criminology at the Faculty of Law in Ljubljana and Associate Professor at the Faculty of Law University of Ljubljana. Currently, he is EURIAS Research Fellow 2017-2018 at the Collegium Helveticum in Zürich, co-funded by Marie-Sklodowska-Curie Actions (COFUND Programme - FP7).

Acknowledgements

The preparation and editing of this book was made possible by a grant from the Netherlands Organisation for Scientific Research (NWO), project number 453-14-004.

This page intentionally left blank

Privacy and surveillance in the streets

An introduction

Bryce Clayton Newell

Introduction

Privacy in public space is a recurring topic within a variety of academic fields. Even prior to Warren and Brandeis's (1890) famous call to protect privacy in the face of advancing methods of photography in 1890, new technologies and individual privacy have been in tension with each other. Today, emerging surveillance technologies used by governments, corporations, and even individual members of the public are reshaping the very nature of physical public space and are challenging the ability of individuals to remain private or anonymous in these spaces, especially in urban environments. Within these spaces, we see complex interactions arise between anonymity and identification; between trade/commercial activity, social interaction, and suspicion. Surveillance and privacy intersect in these spaces, and these intersections are significant, especially as information traditionally kept in private physical spaces or personal activities not subject to long-term and aggregate monitoring are recorded and captured by a variety of visual and other sensors embedded in public space.

Personal information and documents that once stayed (physically) protected behind closed doors or inside peoples' homes are now stored in the cloud (a so-called "digital home" (Irion 2015), albeit with much more porous walls), and this information is also transmitted through physical public space, subject to capture and analysis (consider, for example, the use of cell-tower simulators, or "stingrays", that mimic cellular towers and capture calls and data in transit over cellular networks). These developments have resulted in a metaphorical "evaporation" of the home (Koops 2014, 247, 256–257), traditionally seen as the bastion of privacy, as a barrier between surveillance and the details of private life. This "evaporation of houses" (Koops 2014, 257) and the increasing accessibility of private information in and from public space is connected to "ubiquitous trackability" because, as this private data spills over into public space, it adds to the digital profiles already being collected by surveillance in these spaces and, in turn, this aggregation makes further analysis possible that can reveal additional "aspects of private life that used to be confined to private places" (Koops

2014, 259). As such, public space has become a ripe and fruitful venue for surveillance of many kinds.

Privacy and surveillance may both implicate the control of information (Marx 2015a), although each may not be limited only to informational concerns (Koops et al. 2017). Surveillance has been influentially defined as “the focused, systematic and routine attention to personal details for purposes of influence, management, protection or direction” (Lyon 2007, 14). Haggerty and Ericson (2006, 3) also argue that surveillance “involves the collection and analysis of information about populations in order to govern their activities.” The definition of privacy, on the other hand, has been highly contested for decades. Privacy has been defined in many ways, both normatively and descriptively (Koops et al. 2017, 492; Marx 2015a, 35; Moore 2010; Newell 2015, 28; Solove et al. 2006, 40–51). For purposes of this introduction, it is sufficient to say that privacy and surveillance may oppose one another in many contexts but, as Marx (2015a, 33) has argued, they should not necessarily be seen as opposites. In the end, it seems apparent that we need to find new boundary-marking concepts to more appropriately determine the scope of privacy rights for individuals or groups in public space and regulate the scope and techniques of surveillance directed at them. Complicating matters, of course, is the fact that privacy and expectations of privacy may differ by culture (see, for example, Friedman et al. 2008). Despite that concern, however, it is likely that some aspects of privacy are shared across cultures (Moore 2010, 49–52) and that certain boundary-marking concepts might be used, or be at least usable, in many different cultures (for example, “personal space”). If this is true, then the cross-cultural (and even time-dependent) variability lies in where the boundary itself is placed – for example, how and where exactly do we draw the line between “personal space” and “not personal space”?

In the chapters that follow, various authors identify ways in which privacy and surveillance interact and intersect in public space. These analyses provide insights, empirical findings, and arguments that can help illuminate possible boundary-marking concepts and frame future scholarly debate about how we should regulate (or not regulate) surveillance in public space. They also argue for alternative understandings of how we should understand the impacts that modern ways of living and technological progress have on the experience of being in public and – at the extreme – the very nature of what public space really is. The contributions are also highly multidisciplinary, and range in methods from philosophical to empirical to legal, and provide a broad overview of the changing nature of public space and the complex interactions between emerging forms of surveillance and personal privacy in these public spaces.

In the next section, I summarize how the authors of the subsequent chapters conceptualize and problematize the notion and definition of “public space”, as this provides a useful lens through which to view the ensuing analyses of the role of privacy and surveillance in these spaces. Following this summary of what the “public space” is (or can be), I then outline a series of concepts

References

Conclusion

Arendt, Hannah. 2013. *The Human Condition*. 2nd ed. Chicago, IL: University of Chicago Press.

Balkin, Jack M. 2012. "Room for Maneuver: Julie Cohen's Theory of Freedom in the Information State." *Jerusalem Review of Legal Studies* 6(1): 79-95.

Cohen, Julie E. 2012. *Configuring the Networked Self: Law, Code, and the Play of Everyday Practice*. New Haven, CT: Yale University Press.

Cohen, Julie E. 2013. "What Privacy Is For." *Harvard Law Review* 126: 1904-1933.

Friedman, Batya, Kristina Hook, Brian Gill, Lina Eidmar, Catherine Sallmander Prien, and Rachel Severson. 2008. "Personlig Integritet: A Comparative Study of Perceptions of Privacy in Public Places in Sweden and the United States." *Proceedings of Nordi CHI 2008*, 142-151. Lund: ACM.

Goffman, Erving. 1972. *Relations in Public*. London: Penguin.

Gooas, Kerstin, Michael Friedewald, William Webster, and Charles Leleux. 2015. "The Co-Evolution of Surveillance Technology and Surveillance Practices." In *Surveillance in Europe*, edited by David Wright and Reinhard Kreissl, 51-100. London: Routledge.

Gray, David, and Danielle K. Citron. 2013. "A Shattered Looking Glass: The Pitfalls and Potential of the Mosaic Theory of Fourth Amendment Privacy." *North Carolina Journal of Law & Technology* 14: 381-429.

Habermas, Jürgen. 1989. *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*. Cambridge, MA: The MIT Press.

Haggerty, Kevin D., and Richard V. Ericson. 2000. "The Surveillant Assemblage." *British Journal of Sociology* 51(4): 605-622.

Haggerty, Kevin D., and Richard V. Ericson. 2006. "The New Politics of Surveillance and Visibility." In *The New Politics of Surveillance and Visibility*, edited by Kevin D. Haggerty and Richard V. Ericson, 3-25. Toronto: University of Toronto Press.

- Hartzog, Woodrow, and Frederic Stutzman. 2013a. "Obscurity by Design." *Washington Law Review* 88: 385-418.
- Hartzog, Woodrow, and Frederic Stutzman. 2013b. "The Case for Online Obscurity." *California Law Review* 101(1): 1 -49.
- Harvard Law Review. 2015. "Considering Police Body Cameras." *Harvard Law Review* 128: 1706-1817.
- Hinna, Kenneth Einar. 2015. "Why Security Trumps Privacy." In *Privacy, Security and Accountability: Ethics, Law and Policy*, edited by Adam D. Moore. Lanham, MD: Rowman & Littlefield International.
- Irion, Kristina. 2015. "Your Digital Home is no Longer Your Castle: How Cloud Computing Transforms the (Legal) Relationship between Individuals and Their Personal Records." *International Journal of Law and Information Technology* 23: 348-371.
- Kerr, Orin S. 2012. "The Mosaic Theory of the Fourth Amendment." *Michigan Law Review* 111: 311-354.
- Koops, Bert-Jaap. 2014. "On Legal Boundaries, Technologies, and Collapsing Dimensions of Privacy." *Politica e Società* 3: 247-264.
- Koops, Bert-Jaap, Bryce Clayton Newell, Tjerk Timan, Ivan Škorvánek, Tomislav Chokrevski, and Maša Galic. 2017. "A Typology of Privacy." *University of Pennsylvania Journal of International Law* 38: 483-575.
- Kugler, Matthew B., and Lior Jacob Strahilevitz. 2015. "Actual Expectations of Privacy, Fourth Amendment Doctrine, and the Mosaic Theory." *The Supreme Court Review* 2015: 205-263.
- Lyon, David (ed.) 2003. *Surveillance as Social Sorting: Privacy, Risk, and Digital Discrimination*. London, New York: Routledge.
- Lyon, David. 2007. *Surveillance Studies: An Overview*. Cambridge: Polity Press.
- Marx, Gary T. 2003. "A Tack in the Shoe: Neutralizing and Resisting the New Surveillance." *The Journal of Social Issues* 59(2): 369-390.
- Marx, Gary T. 2015a. "Coming to Terms: The Kaleidoscope of

Privacy and Surveillance.” In *Social Dimensions of Privacy: Interdisciplinary Perspectives*, edited by Beatte Roessler and Dorota Mokrosinska, 32-49. Cambridge: Cambridge University Press.

Marx, Gary T. 2015b. “Surveillance Studies.” In *International Encyclopedia of the Social & Behavioral Sciences* (2nd ed.), edited by James Wright, 23: 733-741. Oxford: Elsevier.

Miller, Kevin. 2014. “Total Surveillance, Big Data, and Predictive Crime Technology: Privacy’s Perfect Storm.” *Journal of Technology Law & Policy* 19: 105-146.

Moore, Adam D. 2010. *Privacy Rights: Moral and Legal Foundations*. University Park: Pennsylvania State University Press.

Newell, Bryce Clayton. 2015. “Transparent Lives and the Surveillance State: Policing, New Visibility, and Information Policy” (doctoral thesis, University of Washington).

Ready, Justin T., and Jacob T.N. Young. 2014. “Three Myths about Police Body Cams.” *Slate*, September 2. www.slate.com/articles/technology/future_tense/2014/

Roberts, Andrew. 2015. “A Republican Account of the Value of Privacy.” *European Journal of Political Theory* 14(3): 320-344.

Selinger, Evan, and Woodrow Hartzog. 2014. “Obscurity and Privacy.” In *Routledge Companion to Philosophy of Technology*, edited by Joseph Pitt and Ashley Shew. Pre-press version available at <http://ssrn.com/abstract=2439866>.

Sennett, Richard. 1992. *The Fall of Public Man*. New York: W.W. Norton & Company, Inc.

Slobogin, Christopher. 2012. “Making the Most of United States v. Jones in a Surveillance Society: A Statutory Implementation of Mosaic Theory.” *Duke Journal of Constitutional Law & Public Policy* 8: 1-37.

Solove, Daniel, Marc Rotenberg, and Paul M. Schwartz. 2006. *Information Privacy Law*. New York: Aspen Publishers.

Timan, Tjerk, and Anders Albrechtslund. 2015. “Surveillance, Self and Smartphones: Tracking Practices in

the Nightlife.” *Science and Engineering Ethics* (online first, advance publication). DOI:
doi:10.1007/s11948-11015-9691-9698.

Tonkiss, Fran. 2003. “The Ethics of Indifference: Community and Solitude in the City.” *International Journal of Cultural Studies* 6(3): 297-311.

Warren, Samuel D., and Louis D. Brandeis. 1890. “The Right to Privacy.” *Harvard Law Review* 4: 193-220.

2 2. In the privacy of our streets

Altman, Irwin. 1975. *The Environment and Social Behavior. Privacy, Personal Space, Territory, Crowding*. Monterey: Brooks/Cole Publishing Company.

Badger, Emily. 2017. "Google's Founders Wanted to Shape a City. Toronto Is Their Chance." *The New York Times*, October 18. www.nytimes.com/2017/10/18/upshot/ta

Barr, Caelainn, and Shiv Malik. 2016. "Revealed: The 30-year Economic Betrayal Dragging Down Generation Y's Income." *The Guardian*, March 7. www.theguardian.com/

Benn, Stanley. 1971. "Privacy, Freedom, and Respect for Persons." In *Nomos XIII: Privacy*, edited by J. Roland Pennock and John W. Chapman. New York: Atherton Press.

Bryant, Ben. 2016. "VICE News Investigation Finds Signs of Secret Phone Surveillance Across London." *VICE*, January 14. <https://news.vice.com/article/vice-news-investigation-finds-signs-of-secret-phone-surveillance-across-london>.

Cameron, Aundreia, Elke Kolodinski, Heather May, and Nicholas Williams. 2008. *Measuring the Effects of Video Surveillance on Crime*. Report to the California Research Bureau. Available at www.popcenter.org/library/scp/pdf/210-Cameron.pdf.

Clifford, Stephanie, and Quentin Hardy. 2013. "Attention, Shoppers: Store Is Tracking Your Cell." *The New York Times*, July 14. www.nytimes.com/2013/07/15/business/a

Dunne, Carey. 2017. "Ten Easy Encryption Tips for Warding Off Hackers, the US Government - and Russia." *Quartz*, January 4. <https://qz.com/873922/easy-encryption-m>

Dyer, Clare. 2003. "Suicide Bid on CCTV May Herald New Privacy Law." *The Guardian*, January 29. www.theguardian.com/media/2003/jan/29/pressandpublishing.broadcasting.

Federal Trade Commission. 2016. "FTC Releases Annual Summary of Consumer Complaints."

Fuller, Brandon, and Paul Romer. "Urbanization as Opportunity." *The World Bank Sustainable Development Network, Urban and Disaster Risk Management Department, Policy Research Working Paper 6874*, Washington DC, May 2014.

- Gavison, Ruth. 1980. "Privacy and the Limits of Law." *The Yale Law Journal* 89(3): 421- 471.
- Goffman, Erving. 1959. *The Presentation of the Self in Everyday Life*. New York: Anchor Book.
- Goffman, Erving. 1963. *Behavior in Public Places*. New York: The Free Press.
- Hall, Edward T. 1966. *The Hidden Dimension*. Garden City: Doubleday.
- Hicken, Melanie. 2013. "Data Brokers Selling Lists of Rape Victims, AIDS Patients." CNN, 19 December 2013. <http://money.cnn.com/2013/12/18/pf/data-broker-lists/>.
- Hoofnagle, Chris Jay. 2016. "Businesses Are Invading Your Privacy." *The Hill*, 27 January 2016.
- Laurent, Olivier. 2013. "Protecting the Right to Photograph, or Not to Be Photographed." *The New York Times*, 23 April. <http://lens.blogs.nytimes.com/2013/04/23/paris-city-of-rights/>.
- Marmor, Andrei. 2015. "What Is the Right to Privacy?" *Philosophy and Public Affairs* 43 (1): 3-26.
- Mazur, Kevin, dir. *\$.ellebrity*. 2012. El Segundo, CA: Gravititas Ventures, 2013. DVD.
- Moore, Barrington. 1984. *Privacy. Studies in Social and Cultural History*. Armonk, New York: M. E. Sharpe.
- Nagel, Thomas. 1998. "Concealment and Exposure." *Philosophy and Public Affairs* 27(1): 3-30.
- Nissenbaum, Helen. 2010. *Privacy in Context. Technology, Policy, and the Integrity of Social Life*. Stanford, CA: Stanford University Press.
- Rachels, James. 1975. "Why Privacy is Important." *Philosophy and Public Affairs* 4(4): 323-333.
- Spacks, Patricia Meyer. 2003. *Privacy: Concealing the Eighteenth-Century Self*. Chicago, IL: The University of Chicago Press.
- Véliz, Carissa. 2017. *On Privacy*. Doctoral dissertation, University of Oxford.

Welsh, Brandon C., and David Farrington. 2004.
"Surveillance for Crime Prevention in Public Space: Results
and Policy Changes." *Criminology and Public Policy* 3(3):
497-526.

3 3. Building ivory surveillance towers: Transformations of public space in higher education

Anderson, R. D. 2004. *European Universities from the Enlightenment to 1914*. Oxford: Oxford University Press.

Arendt, Hannah. 2013. *The Human Condition*. 2nd ed. University of Chicago Press.

Axis Communications. 2015. "Safe Education at Karaganda State Medical University."

Bennett, Colin J. 2011. "In Further Defence of Privacy ..."
Surveillance & Society 8(4): 513-516.

Brown, Lance Jay. 2012. "Public Space Then and in the Future." In *Beyond Zuccotti Park: Freedom of Assembly and the Occupation of Public Space*, edited by Ron Shiffman, Rick Bell, Lance Jay Brown, and Lynne Elizabeth, 236-253. Oakland, CA: New Village Press.

Campbell, Kenneth, and Charles Bryceland. 1998. *Policing the Campus: Providing a Safe and Secure Environment*. London: Police Research Group.

Catto, J. I. 1984. "Citizens, Scholars and Masters." In *The History of the University of Oxford*, edited by J. I. Catto, 151-192. Oxford: Oxford University Press.

Clavell, Gemma, Gladon, Lohitzune Zuloaga Lojo, and Armando Romero. 2012. "CCTV in Spain: An Empirical Account of the Deployment of Video-Surveillance in a Southern-European Country." *Information Polity: The International Journal of Government & Democracy in the Information Age* 17(1): 57-68.

Day, Charles R. 2000. "Higher Education." In *Encyclopedia of European Social History*, edited by Peter N. Stearns. New York: Scribners & Sons.

Ditton, Jason. 2000. "Crime and the City: Public Attitudes towards Open-Street CCTV in Glasgow." *The British Journal of Criminology* 40(4): 692-709.

Fonio, Chiara. 2011. "The Silent Growth of Video Surveillance in Italy." *Information Polity: The International Journal of Government & Democracy in the Information Age* 16(4): 379-388.

Foucault, Michel. 1977. *Discipline and Punish: The Birth of*

the Prison. 1st American ed. New York: Pantheon Books.

Fyfe, Nicholas R., and Jon Bannister. 1996. "City Watching: Closed Circuit Television Surveillance in Public Spaces." *Area* 28(1): 37-46.

Gardner, Lee. 2015. "25 Years Later, Has Clery Made Campuses Safer?" *The Chronicle of Higher Education*, March 9. <http://chronicle.com/article/25-Years-Later-Has-Clery/228305>.

Golden, Daniel. 2017. *Spy Schools: How the CIA, FBI, and Foreign Intelligence Secretly Exploit America's Universities*. New York: Henry Holt and Co.

Griffin, Owen R. 2006. "Confronting the Evolving Safety and Security Challenge at Colleges and Universities." *University of New Hampshire Law Review* 5(3).

Habermas, Jürgen. 1989. *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*. Cambridge, MA: MIT Press.

Harvard Law School. 2016. "Video Security Policies." Harvard Law School. <http://hls.harvard.edu/dept/facilities/video-security-policy/>.

Hauser, Christine, and Anahad O'Connor. 2007. "Virginia Tech Shooting Leaves 33 Dead." *The New York Times*, April 16. www.nytimes.com/2007/04/16/us/16cnd-shooting.html.

Heilmann, Eric. 2011. "Video Surveillance and Security Policy in France: From Regulation to Widespread Acceptance." *Information Polity: The International Journal of Government & Democracy in the Information Age* 16(4): 369-377.

Heldt, Diane. 2012. "Colleges Expanding Use of All-In-One Student ID Cards." *Community College Week* 24(25): 10-10.

Horowitz, Helen Lefkowitz. 1987. *Campus Life: Undergraduate Cultures from the End of the Eighteenth Century to the Present*. Chicago, IL: University of Chicago Press.

Jones, Meg Leta. 2016. *Ctrl + Z: The Right to Be Forgotten*. New York, NY: NYU Press.

Kaltefleiter, Caroline K. 2013. "We Are All Hokies." In *Policing the Campus: Academic Repression, Surveillance, and the Occupy Movement*, edited by Anthony J. Nocella I and

David Gabbard, 105-122. New York: Peter Lang Publishing Inc.

Kayden, Jerold S. 2000. *Privately Owned Public Space: The New York City Experience*. New York, NY: Department of City Planning and Municipal Art Society of New York.

Keller, Lisa. 2008. *Triumph of Order: Democracy & Public Space in New York and London*. New York, NY: Columbia University Press.

Kelly, Rhea. 2015. "Lynn University to Track Student Attendance by iPad Location." *Campus Technology*, March 9. <https://campustechnology.com/articles/2015/03/09/>

Kennedy, Mike. 2009. "Keyless Access." *American School & University* 81(9): 32-34.

Lawrence, C. H. 1984. "The University in State and Church." In *The History of the University of Oxford: The Early Oxford Schools*, edited by J. I. Catto, 1:97-150. Oxford: Oxford University Press.

Lee, Philip. 2011. "The Curious Life of In Loco Parentis at American Universities." *Higher Education in Review* 8: 65-90.

Lorenz, Chris. 2012. "If You're So Smart, Why Are You under Surveillance? Universities, Neoliberalism, and New Public Management." *Critical Inquiry* 38(3): 599-629. doi:10.1086/664553.

Lyon, David. 2009. *Identifying Citizens: ID Cards as Surveillance*. Cambridge: Polity.

Marginson, Simon, Chris Nyland, Erlenawati Sawir, and Helen Forbes-Mewett. 2010. *International Student Security*. Cambridge: Cambridge University Press.

Matthes, Jörg, Kimberly Rios Morrison, and Christian Schemer. 2010. "A Spiral of Silence for Some: Attitude Certainty and the Expression of Political Minority Opinions." *Communication Research* 37(6): 774-800. doi:10.1177/0093650210362685.

Mayer-Schönberger, Viktor. 2011. *Delete: The Virtue of Forgetting in the Digital Age*. Princeton University Press.

Moore, Kathryn McDaniel. 1976. "Freedom and Constraint in Eighteenth Century Harvard." *The Journal of Higher*

Education 47(6): 649-659.

National Public Radio. 2007. "Timeline: How the Virginia Tech Shootings Unfolded." NPR.org, April 17.
www.npr.org/templates/story/story.php?storyId=9636137.

Parkinson, John R. 2012. "Conclusions and Implications." In *Democracy and Public Space: The Physical Sites of Democratic Performance*, 191-222. Oxford: Oxford University Press.

Pasias, George, and Yannis Roussakis. 2012. "'Who Marks the Bench?' A Critical Review of the Neo-European 'Paradigm Shift' through Higher Education Policies and Discourses." *The Journal for Critical Education Policy Studies* 10(1): 127-141.

Plantan, Frank. 2004. "The University as a Site of Citizenship." In *The University as Res Publica*, edited by Sjur Bergan, 83-128. Strasbourg: Council of Europe Publishing.

Rompay, Thomas J. L. van, Dorette J. Vonk, and Marieke L. Fransen. 2009. "The Eye of the Camera: Effects of Security Cameras on pro-Social Behavior." *Environment and Behavior* 41(1): 60-74.

Shore, Cris. 2008. "Audit Culture and Illiberal Governance: Universities and the Politics of Accountability." *Anthropological Theory* 8(3): 278-298.

Times Higher Education (THE). 2000. "Should an Ivory Tower Turn Fortress?" March 3, 2000.

Singhal, Jesse. 2016. "Emory University: We Will Use Security Cameras to Track Down and Possibly Punish Students Who Chalked Their Support for Trump." *Daily Intelligencer*. March 22.

Smolla, Rodney A. 2011. *The Constitution Goes to College: Five Constitutional Ideas that Have Shaped the American University*. New York: NYU Press.

Stanford University. 2014. "Stanford University Video Surveillance System Guidelines." Stanford University, May 1. <https://police.stanford.edu/pdf/vssguidelines.pdf>.

Stoycheff, Elizabeth. 2016. "Under Surveillance: Examining Facebook's Spiral of Silence Effects in the Wake of NSA Internet Monitoring." *Journalism & Mass Communication*

Quarterly 93(2): 296-311.

Suspitsyna, Tatiana. 2010. "Accountability in American Education as a Rhetoric and a Technology of Governmentality." *Journal of Education Policy* 25(5): 567-586. [https:// doi.org/10.1080/02680930903548411](https://doi.org/10.1080/02680930903548411).

Times Higher Education. 2000. "Should an Ivory Tower Turn Fortress?" *Times Higher Education*, March 3. www.timeshighereducation.com/news/should-an-ivory-tower-turn-fortress/150449.article.

Trow, Martin. 1999. "From Mass Higher Education to Universal Access: The American Advantage." *Minerva* 37(4): 303-328.

Turam, Berna. 2015. *Gaining Freedoms: Claiming Space in Istanbul and Berlin*. Stanford, CA: Stanford University Press.

Turner, Paul Venable. 1984. *Campus: An American Planning Tradition*. Cambridge, MA: MIT Press.

Van Heertum, Richard. 2013. "Cameras and ID Card Swipes: Disappearing Privacy and the Cultivation of the Virtual Self." In *Policing the Campus: Academic Repression, Surveillance, and the Occupy Movement*, edited by Anthony J. Nocella II and David Gabbard, 67-77. New York: Peter Lang Publishing Inc.

Vine, Phyllis. 1976. "The Social Function of Eighteenth-Century Higher Education." *History of Education Quarterly* 16(4): 409-424.

Webster, William C. W. R. 1996. "Closed Circuit Television and Governance: The Eve of a Surveillance Age." *Information Infrastructure & Policy* 5(4): 253-263.

Witt, Hans de. 2002. *Internationalization of Higher Education in the United States of America and Europe: A Historical, Comparative, and Conceptual Analysis*. Charlotte, NC: Information Age Publishing.

4 4. The changing nature of public space in São Paulo: A taxonomic approach

Banerjee, Tridib. 2001. "The Future of Public Space: Beyond Invented Streets and Reinvented Places." *Journal of the American Planning Association* 67(1): 9-24.
doi:10.1080/01944360108976352.

Blakely, Edward J., and Mary Gail Snyder. 1997. *Fortress America: Gated Communities in the United States*. Washington, DC: Brookings Institution Press.

Bonduki, Nabil, and Raquel Rolnik. 1982. "Periferia Da Grande São Paulo: Reprodução Do Espaço Como Expediente de Reprodução Da Força de Trabalho." In *A Produção Capitalista Da Casa (E Da Cidade) Do Brasil Industrial*, edited by Ermínia Maricato. São Paulo: Alfa Omega Ltda.

Caldeira, Teresa, and James Holston. 2005. "State and Urban Space in Brazil: From Modernist Planning to Democratic Interventions." In *Global Assemblages: Technology, Politics, and Ethics as Anthropological Problems*, edited by Aihwa Ong and Stephen J. Collier, 393-416. Malden, MA: Blackwell Publishing.

Carmona, Matthew. 2010. "Contemporary Public Space, Part One: Classification." *Journal of Urban Design* 15(2): 265-281.

Carmona, Matthew. 2015. "Re-Theorising Contemporary Public Space: A New Narrative and a New Normative." *Journal of Urbanism: International Research on Placemaking and Urban Sustainability* 8(4): 373-405.
doi:10.1080/17549175.2014.909518.

Cohen, Lizabeth. 1996. "From Town Center to Shopping Center: The Reconfiguration of Community Marketplaces in Postwar America." *American Historical Review* 101 (4): 1050-1081. doi:10.2307/2169634.

Coy, Martin, and Tobias Töpfer. 2014. "Inner-City Development in Megacities between Degradation and Renewal: The Case of São Paulo." In *Megacities: Our Global Urban Future*, edited by Frauke Kraas, Surinder Aggarwal, Martin Coy, and Günter Mertins, 101-120. Dordrecht: Springer.

De Moraes, Regis. 1985. "O Que É Violência Urbana." *Coleção Primeiros Passos*. Brasiliense 42.

De Souza, Marcelo Lopes. 2014. "Phobopolis: Violence, Fear

and Sociopolitical Fragmentation of the Space in Rio de Janeiro, Brazil.” In *Megacities: Our Global Urban Future*, edited by Frauke Kraas, Surinder Aggarwal, Martin Coy, and Günter Mertins, 151-164. Dordrecht: Springer.
doi:10.1007/978-90-481-3417-5_11.

De Souza, Marcelo Lopes. 2009. “Social Movements in the Face of Criminal Power.” *City* 13(1): 26-52.
doi:10.1080/13604810902770788.

Frantz, Klaus. 2006. “Private Gated Neighbourhoods: A Progressive Trend in US Urban Development.” In *Private Cities: Global and Local Perspectives*, edited by Georg Glasze, Chris Webster, and Klaus Frantz, 61-72. New York: Routledge.

Fuchs, Anthony, Igor Guatelli, Jaap Klaarenbeek, and Jasper Moelker. 2009. “The Open City - A Matter of Access?” Paper presented at the N-Aerus Conference, Rotterdam, Netherlands, October 1-3.
http://n-aerus.net/web/sat/workshops/2009/Rotterdam/pdf/Fuchs_etal.pdf.

Garreau, Joel. 1991. *Edge City: Life on the New Frontier*. New York: Doubleday.

Glasze, Georg, Chris Webster, and Klaus Frantz. 2006. *Private Cities: Global and Local Perspectives*. London, New York: Routledge. doi:10.1007/s13398-014-0173-7.2.

Harteveld, Maurice G.A.D., and Anthony Fuchs. 2007. “A Forgotten Chapter in European Urbanism: The Invention of the Mall, Its Mutation and Inherent Potentials.” Paper presented at the 4th International Seminar on Urbanism and Urbanization, TU Delft, September 24-26.

Harteveld, Maurice G.A.D. 2006. “Viva Las Vegas: A Search for the Urban Design Task of Interior Public Space.” In *Urban Transformations and Sustainability: Progress of Research Issues in Urbanism 2005*, edited by Frank van der Hoven and H.J. Rosemann, 32-41. Delft: Delft University Press.

Iveson, Kurt. 2003. “Justifying Exclusion: The Politics of Public Space and the Dispute over Access to McIvers Ladies’ Baths, Sydney.” *Gender, Place & Culture* 10(3): 215-228.

Jacobs, Jane. 1961. *The Death and Life of Great American Cities*. New York: Random House.

Janoschka, Michael, and Axel Borsdorf. 2006. "Condomínios Fechados and Barrios Privados: The Rise of Private Residential Neighbourhoods in Latin America." In *Private Cities: Global and Local Perspectives*, edited by Georg Glasze, Chris Webster, and Klaus Frantz, 89-104. Abingdon: Routledge.

Kohn, Margaret. 2004. *Brave New Neighborhoods: The Privatization of Public Space*. New York: Routledge.

Lopes, Miguel Nogueir, Sara Cruz, and Paulo Pinho. 2012. "The Changing Publicness of Urban Spaces." Paper presented at the European Symposium on Research in Architecture and Urban Design (EURAU 12), Porto, Portugal, September 12-15.

Low, Setha, and Neil Smith. 2006. "Introduction." In *The Politics of Public Space*, edited by Setha Low and Neil Smith. New York: Routledge.

Low, Setha. 2004. *Behind the Gates: Life, Security, and the Pursuit of Happiness in Fortress America*. New York: Routledge.

Lynch, Kevin. 1960. *The Image of the City*. Boston, MA: MIT Press.

Madanipour, Ali. 2003. *Public and Private Spaces of the City*. Abingdon, Oxon: Routledge.

Madden, David J. 2010. "Revisiting the End of Public Space: Assembling the Public in an Urban Park." *City & Community* 9(2): 187-207. doi:10.1111/j.15406040.2010.01321.x.

Marcuse, Peter. 2005. "The 'Threat of Terrorism' and the Right to the City." *Fordham Urban Law Journal* 23: 767-785.

Marques, Eduardo. 2014. "Estrutura Social E Segregação Em São Paulo: Transformações Na Década de 2000." *Dados - Revista de Ciências Sociais* 57(3): 675-710. doi:10.1590/00115258201421.

Mitchell, Don. 1995. "The End of Public Space? People's Park, Definitions of the Public, and Democracy." *Annals of the Association of American Geographers* 85(1): 108-133. doi:10.1111/j.1467-8306.1995.tb01797.x.

Morris, Anthony Edwin James. 1972. *History of Urban Form: Prehistory to the Renaissance*. London: George Godwin.

Németh, Jeremy. 2009. "Defining a Public: The Management of

Privately Owned Public Space.” *Urban Studies* 46(11): 2463-2490. doi:10.1177/0042098009342903.

Németh, Jeremy, and Stephan Schmidt 2007. “Toward a Methodology for Measuring the Security of Publicly Accessible Spaces.” *Journal of the American Planning Association* 73(3): 283-297.

Németh, Jeremy, and Stephan Schmidt. 2011. “The Privatization of Public Space: Modeling and Measuring Publicness.” *Environment and Planning B: Planning and Design* 38(1): 5-23.

Newman, Oscar. 1972. *Defensible Space*. New York: Macmillan.

Newman, Oscar. 1996. *Creating Defensible Space*. US Department of Housing and Urban Development, Office of Policy Development and Research. Institute for Community Design Analysis, Center for Urban Policy Research, Rutgers University, Washington, DC.

PPS (Project for Public Spaces). 2000. *How to Turn a Place Around: A Handbook for Creating Successful Public Spaces*. New York: Project for Public Spaces.

Reis, Nestor Coullart. 2004. *São Paulo: vila cidade metrópole*. BankBoston.

Sennett, Richard. 1992. *The Fall of Public Man*. New York: W. W. Norton & Company, Inc.

Sorkin, Michael. 1992. *Variations on a Theme Park: The New American City and the End of Public Space*. New York: Macmillan.

Tuan, Yi-fu. 1979. *Landscapes of Fear*. Minneapolis: University Minnesota Press.

Varna, George, and Steve Tiesdell. 2010. “Assessing the Publicness of Public Space: The Star Model of Publicness.” *Journal of Urban Design* 15(4): 575-598. doi:10.1080/13574809.2010.502350.

Villaca, Flavio. 1998. *Espaco Intra-Urbano No Brasil*. São Paulo: Studio Nobel.

Webster, Chris. 2002. “Property Rights and the Public Realm: Gates, Green Belts, and Gemeinschaft.” *Environment and Planning B: Planning and Design* 29(3): 397-412.

Weintraub, Jeff. 1997. "The Theory and Politics of the Public/Private Distinction." In *Public and Private in Thought and Practice: Perspectives on a Grand Dichotomy*, edited by Jeff Weintraub and Krishan Kumar, 1-42. Chicago, IL: University of Chicago Press.

Young, Iris Marion. 1990. *Justice and the Politics of Difference*. Princeton, NJ: Princeton University Press.

5.5. A window into the soul: Biosensing in public

Access All Brands. 2017. "ISHU: Anti-Flash Scarf." Accessed January 5, 2017. [https:// theishu.com/](https://theishu.com/).

Adib, Fadel, Hongzi Mao, Zachary Kabelac, Dina Katabi, and Robert C. Miller. 2015. "Smart Homes that Monitor Breathing and Heart Rate." Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems - CHI' 15, 837-846.

Adler, Jerry. 2015. "Smile, Frown, Grimace and Grin - Your Facial Expression Is the Next Frontier in Big Data." Smithsonian.com, December. Accessed January 5, 2017.

Berisha, Visar, Shuai Wang, Amy LaCross, and Julie Liss. 2015. "Tracking Discourse Complexity Preceding Alzheimer's Disease Diagnosis: A Case Study Comparing the Press Conferences of Presidents Ronald Reagan and George Herbert Walker Bush." Journal of Alzheimer's Disease 45(3): 959-963.

Bicchieri, Cristina. 2000. "Words and Deeds: A Focus Theory of Norms." In Rationality, Rules, and Structure, edited by Julian Nida-Rümelin and Wolfgang Spohn, 153-184. Dordrecht: Kluwer Academic Publishers.

Biotime Technology. 2014. "Finger on the Fly: Contactless 4 Fingerprint Capture in Less than 1 Second Now Available." YouTube.com, December 14. Accessed January 5, 2017. www.youtube.com/watch?v=lhAe36m4jQs.

Boulton, Clint. 2013. "Snackmaker Modernizes the Impulse Buy with Sensors, Analytics." CIO Journal (blog), Wall Street Journal, October 11. Accessed January 5, 2017.

Bradfield, Ron, George Wright, George Burt, George Cairns, and Kees Van Der Heijden. 2005. "The Origins and Evolution of Scenario Techniques in Long Range Business Planning." Futures 37(8): 795-812.

Burns, Will. 2013. "Nine Business Applications for Google Glass." Forbes, February 27. Accessed January 5, 2017.

Cavoukian, Ann. 2011. "Privacy by Design: The 7 Foundational Principles." Accessed November 1, 2017. www.ipc.on.ca/wp-content/uploads/Resources/7foundationalprinciples.pdf.

- Clifford, Stephanie, and Quentin Hardy. 2013. "Attention, Shoppers: Store Is Tracking Your Cell." *New York Times*, July 14. Accessed January 5, 2017. www.nytimes.com/
- Clusmann, H., C. Schaller, and J. Schramm. 2001. "Fixed and Dilated Pupils after Trauma, Stroke, and Previous Intracranial Surgery: Management and Outcome." *Journal of Neurology, Neurosurgery & Psychiatry* 71(2): 175-181.
- Computing Community Consortium. 2015. "Visioning Activity: Privacy by Design." Accessed January 6, 2017. <http://cra.org/cra/visioning/visioning-activities/2015-activities/privacy-by-design/>.
- Cooper, Charlie. 2014. "Facial Recognition Technology Used to Spot Genetic Disorders." *Independent*, June 23. Accessed January 5, 2017. <http://www.indep>
- Corkery, Michael. 2016. "Goodbye, Password. Banks Opt to Scan Fingers and Faces Instead." *New York Times*, June 21. Accessed January 5, 2017. www.nytimes.com/
- Crawford, Kate, Jessa Lingel, and Tero Karppi. 2015. "Our Metrics, Ourselves: A Hundred Years of Self-Tracking from the Weight Scale to the Wrist Wearable Device." *European Journal of Cultural Studies* 18(4-5): 479-496.
- Denning, Tamara, Zakariya Dehlawi, and Tadayoshi Kohno. 2014. "In Situ with Bystanders of Augmented Reality Glasses: Perspectives on Recording and Privacymediating Technologies." *Proceedings of the 32nd Annual ACM Conference on Human Factors in Computing Systems*, 2377-2386.
- DiSalvo, David. 2013. "The Banning of Google Glass Begins (And They Aren't Even Available Yet)." *Forbes*, March 10. <http://onforb.es/10rxJBl>.
- FTC (Federal Trade Commission). 1980. "FTC Policy Statement on Unfairness." Federal Trade Commission, December 17. Accessed January 5, 2017. www.ftc.
- FTC (Federal Trade Commission). 1983. "FTC Policy Statement on Deception." Federal Trade Commission, October 14. Accessed January 5, 2017. www.ftc.gov/
- FTC (Federal Trade Commission). 2015. "Internet of things: Privacy & security in a connected world." Federal Trade Commission, January. Accessed January 5, 2017.

Floridi, Luciano. 2006. "Four Challenges for a Theory of Informational Privacy." *Ethics and Information Technology* 8(3): 109-119.

Food and Drug Administration. 2016. "General Wellness: Policy for Low Risk Devices - Guidance for Industry and Food and Drug Administration Staff." July 29. Accessed January 5, 2017.
<https://www.fda.gov/downloads/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/UCM429674.pdf>.

Friedman, Batya, Peter H. Kahn, Jr., Jennifer Hagman, Rachel L. Severson, and Brian Gill. 2006. "The Watcher and the Watched: Social Judgments about Privacy in a Public Place." *Human-Computer Interaction* 21(2): 235-272.

Guston, David H. 2014. "Understanding 'Anticipatory Governance.'" *Social Studies of Science* 44(2): 218-242.

Hewitt, John. 2013. "MIT Researchers Measure Your Pulse, Detect Heart Abnormalities with Smartphone Camera." *ExtremeTech*, June 21. Accessed January 5, 2017.

Hill, Kashmir. 2012. "Sergey Brin's Favorite Google Glass Feature." *Forbes*, September 11. Accessed January 5, 2017.
<http://onforb.es/RIXia6>.

Humphreys, Lee. 2005. "Cellphones in Public: Social Interactions in a Wireless Era." *New Media & Society* 7(6): 810-833.

Humphreys, Lee. 2010. "Mobile Social Networks and Urban Public Space." *New Media & Society* 12(5): 763-778.

ISO (International Organization for Standardization). 2017. "ISO/IEC 27001 Family - Information Security Management Systems." Accessed January 6, 2017. <http://www.iso.org/iso/iso27001>.

Introna, Lucas, and Helen Nissenbaum. 2009. "Facial Recognition Technology: A Survey of Policy and Implementation Issues." *The Center for Catastrophe Preparedness and Response*, New York University, July 22. Accessed January 5, 2017. <https://ssrn.com/abstract=1437730>.

Klosowski, Thorin. 2013. "How Stores Manipulate Your Senses So You Spend More Money." *Lifehacker*, April 18. Accessed January 6, 2017.

- Latvala, Antti, Ralf Kuja-Halkola, Catarina Almqvist, Henrik Larsson, and Paul Lichtenstein. 2015. "A Longitudinal Study of Resting Heart Rate and Violent Criminality in more than 700000 Men." *JAMA Psychiatry* 72(10): 971-978.
- Li, Xiaobai, Jie Chen, Guoying Zhao, and Matti Pietikäinen. 2014. "Remote Heart Rate Measurement from Face Videos under Realistic Situations." *Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition*, 4264-4271.
- Li, Xiaobai, Xiaopeng Hong, Antti Moilanen, Xiaohua Huang, Tomas Pfister, Guoying Zhao, and Matti Pietikäinen. 2015. "Towards Reading Hidden Emotions: A Comparative Study of Spontaneous Micro-Expression Spotting and Recognition Methods." *IEEE Transactions on Affective Computing* PP (99): 1-13.
- Licht, Amir N. 2008. "Social Norms and the Law: Why Peoples Obey the Law." *Review of Law and Economics* 4(3): 715-750.
- Lindsay, David. 2000. "The Kodak Camera Starts a Craze." PBS. Accessed January 5, 2017.
- MacGillivray, Tom, Manuel Trucco, James Cameron, Baljean Dhillon, Graeme Houston, and Edwin van Beek. 2014. "Retinal Imaging as a Source of Biomarkers for Diagnosis, Characterisation and Prognosis of Chronic Illness or Long-Term Conditions." *The British Journal of Radiology* 87: 1-16.
- Madden, Mary, and Lee Rainie. 2015. "Americans' Attitudes about Privacy, Security and Surveillance." Pew Research Center, May 20. Accessed January 5, 2017. www.pewinter
- Massimi, Michael, Khai N. Truong, David Dearman, and Gillian R. Hayes. 2010. "Understanding Recording Technologies in Everyday Life." *IEEE Pervasive Computing* 9(3): 64-71.
- Mullan, Patrick, Christoph M. Kanzler, Benedikt Lorch, Lea Schroeder, Ludwig Winkler, Larissa Laich, Frederik Riedel, et al. 2015. "Unobtrusive Heart Rate Estimation during Physical Exercise Using Photoplethysmographic and Acceleration Data." *Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBS 2015-November*, 6114-6117.
- Mulligan, Deirdre K., and Jennifer King. 2011. "Bridging

the Gap between Privacy and Design.” University of Pennsylvania Journal of Constitutional Law, 989-1034.

NIST (National Institute of Standards and Technology). 2014. Framework for Improving Critical Infrastructure Cybersecurity. NIST. Accessed January 5, 2017. www.nist.gov/

Nguyen, David H., Alfred Kobsa, and Gillian R. Hayes. 2008. “An Empirical Investigation of Concerns of Everyday Tracking and Recording Technologies.” Proceedings of the 10th international conference on Ubiquitous computing (UbiComp '08), 182-191.

Nissenbaum, Helen. 2010. Privacy in Context. Stanford: Stanford University Press.

Palca, Joe. 2014. “Chemist Turns Software Developer after Son’s Cancer Diagnosis.” NPR, May 6. Accessed January 5, 2017. <http://www.npr.org/sections/health-shots/>

Randall, Kevin. 2015. “Neuropolitics, Where Campaigns Try to Read Your Mind.” New York Times, November 3. Accessed January 5, 2017. www.nytimes.com/2015/

Rätty, Tomi D. 2010. “Survey on Contemporary Remote Surveillance Systems for Public Safety.” IEEE Transactions on Systems, Man, and Cybernetics, Part C (Applications and Reviews) 40(5): 493-515.

Rubinstein, Ira S. 2011. “Regulating Privacy by Design.” Berkeley Technology Law Journal 26: 1409-1456.

Sarvas, Risto, and David M. Frohlich, eds. 2011. “The Kodak Path (ca. 1888-1990s).” In From Snapshots to Social Media - The Changing Picture of Domestic Photography, 47-82. London: Springer London.

Scigiene Corporation. n.d. “Infrared Thermometers.” Accessed January 5, 2017. www.scigiene.com/pdfs/Infrared%20Thermometers.pdf.

Solove, Daniel. 2006. “A Taxonomy of Privacy.” University of Pennsylvania Law Review 154(3): 447-560.

Solove, Daniel, and Paul M. Schwartz. 2015. Information Privacy Law. New York: Wolters Kluwer.

Surden, Harry. 2007. “Structural Rights in Privacy.” Southern Methodist University Law Review 60: 1605-1629.

Tavani, Herman T. 2008. "Informational Privacy: Concepts, Theories, and Controversies." In *The Handbook of Information and Computer Ethics*, edited by Kenneth E. Himma and Herman T. Tavani, 131-164. Hoboken, NJ: John Wiley & Sons, Inc.

Tene, Omer, and Jules Polonetsky. 2013. "A Theory of Creepy: Technology, Privacy and Shifting Social Norms." *Yale Journal of Law and Technology* 16(1): 59-102.

Thier, Dave. 2013. "The Potentially World-Changing New Feature in Google's Project Glass." *Forbes*, February 20. Accessed January 5, 2017. <http://onforb.es/11VjbyK>.

Trottier, Daniel. 2014. "Crowdsourcing CCTV Surveillance on the Internet." *Information, Communication & Society* 17(5): 609-626.

Truth Labs. 2014. "Mondelez Smart Shelf." *Vimeo.com*. Accessed January 5, 2017. <http://vimeo.com/96148396>.

Wang, Siying, Antje Pohl, Timo Jaeschke, Michael Czaplik, Marcus Kony, Steffen Leonhardt, and Nils Pohl. 2015. "A Novel Ultra-Wideband 80 GHz FMCW Radar System for Contactless Monitoring of Vital Signs." *Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, 4978-4981.

Warren, Samuel D., and Louis D. Brandeis. 1890. "The Right to Privacy." *Harvard Law Review* 4(5): 193-220.

West, Nancy Martha. 2000. *Kodak and the Lens of Nostalgia*. Charlottesville: University of Virginia Press.

Wong, Richmond Y., and Deirdre K. Mulligan. 2016. "When a Product Is Still Fictional: Anticipating and Speculating Futures through Concept Videos." *Proceedings of the 2016 ACM Conference on Designing Interactive Systems*, 121-133.

6 6. Adverse detection: The promise and peril of body-worn cameras

Allen, Anita L. 2012. "Privacy Law: Positive Theory and Normative Practice." *Harvard Law Review Forum* 126: 241.

Angwin, Julia, Jeff Larson, Surya Mattu, and Lauren Kirchner. 2016. "Machine Bias: There's Software Used across the Country to Predict Future Criminals. And it's Biased against Blacks." *ProPublica*, May 23. www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing.

Ariel, Barak, William A. Farrar, and Alex Sutherland. 2014. "The Effect of Police Body-Worn Cameras on Use of Force and Citizens' Complaints against the Police: A Randomized Controlled Trial." *Journal of Quantitative Criminology* 31(3): 509-535. doi:10.1007/s10940-014-9236-3.

Ariel, Barak, Alex Sutherland, Darren Henstock, Josh Young, Paul Drover, Jayne Sykes, Simon Megicks, and Ryan Henderson. 2016. "Wearing Body Cameras Increases Assaults against Officers and Does Not Reduce Police Use of Force: Results from a Global Multi-Site Experiment." *European Journal of Criminology*, May 14. doi:10.1177/1477370816643734.

Bachman, Katy. 2013. "Senate Commerce Report Says Data Brokers 'Operate Behind a Veil of Secrecy' [Updated]." *AdWeek*, December 18. www.adweek.com/news/technology

Barbaro, Michael, and Tom Zeller. 2006. "A Face Is Exposed for AOL Searcher No. 4417749." *The New York Times*, August 9. <http://query.nytimes.com/gst/abstract.html?res=9E0CE3DD1F3FF93AA3575BC0A9609C8B63>.

BBC News. 2015. "Freddie Gray Death: Protesters Highlight Other Police Deaths." April 28, sec. US & Canada. www.bbc.com/news/world-us-canada-30341927.

Blanchette, Jean-François, and Deborah G. Johnson. 2002. "Data Retention and the Panoptic Society: The Social Benefits of Forgetfulness." *The Information Society* 18(1): 33-45. doi:10.1080/01972240252818216.

Boutin, Paul. 2016. "The Secretive World of Selling Data About You." *Newsweek*, May 30.

Cahill, Michael T. 2007. "Retributive Justice in the Real World." *Washington University Law Review* 85: 815.

- Chen, Jinyan. 2014. "Gait Correlation Analysis Based Human Identification." *The Scientific World Journal* 2014. doi:10.1155/2014/168275.
- "Considering Police Body Cameras." 2015. *Harvard Law Review* 128(6): 1794+.
- Council on Crime and Justice. 2007. "Justice, Where Art Thou? A Framework for the Future." Minnesota, MN: Council on Crime and Justice.
- Dewey, Caitlin. 2016. "Creepy Startup Will Help Landlords, Employers and Online Daters Strip-Mine Intimate Data from Your Facebook Page." *The Washington Post*, June 9.
- Dixon, Pam, and Robert Gellman. 2014. "The Scoring of America: Secret Consumer Scores Threaten Your Privacy and Your Future." *World Privacy Forum*.
- Doyle, Tony, and Judy Veranas. 2014. "Public Anonymity and the Connected World." *Ethics and Information Technology* 16(3): 207-218. doi:10.1007/s10676-014-9346-5.
- Fellner, Jamie. 2009. *Decades of Disparity: Drug Arrests and Race in the United States*. New York: Human Rights Watch.
- Ferguson, Bob. 2014. "Video And Audio Recording of Communications between Citizens and Law Enforcement Officers Using Body Cameras Attached to Police Uniforms." Washington State. Office of the Attorney General. November 24.
- Fertik, Michael, and David C. Thompson. 2015. *The Reputation Economy: How to Optimize Your Digital Footprint in a World Where Your Reputation Is Your Most Valuable Asset*. First edition. New York: Crown Business.
- Fleming, Julia. 2004. "The Right to Reputation and the Preferential Option for the Poor." *Journal of the Society of Christian Ethics* 24(1): 73-87.
- Florida Star v. B. J. F.* 1989. 491 US 524. US Supreme Court.
- Foucault, Michel. 1977. *Discipline and Punish: The Birth of the Prison*. New York: Pantheon Books.
- Froomkin, A. Michael. 2000. "The Death of Privacy?" *Stanford Law Review* 52(5): 1461-1543. doi:10.2307/1229519.

Gagné, Marc. 2016. "Does Privacy Still Exist? Data and Privacy Insights with Marc Gagne." Irish Tech News. December 19. <https://irishtechnews.ie/does-privacy-still-exist-data-and-privacy-insights-with-marc-gagne/>.

Garvie, Clare, Alvaro Bedoya, and Jonathan Frankle. 2016. "The Perpetual Line-Up." Center on Privacy & Technology, Georgetown Law. www.perpetuallineup.org/.

Goos, Kerstin, Michael Friedewald, William Webster, and Charles Leleux. 2015. "The Co-Evolution of Surveillance Technology and Surveillance Practices." In *Surveillance in Europe*, edited by David Wright and Reinhard Kreissl. London, New York: Routledge.

Haggerty, Kevin D., and Richard V. Ericson. 2000. "The Surveillant Assemblage." *The British Journal of Sociology* 51(4): 605-622. doi:10.1080/00071310020015280.

Henderson, Wade, and Karen McGill Lawson. 2011. "The Reality of Racial Profiling."

Hinna, Kenneth Einar. 2015. "Why Security Trumps Privacy." In *Privacy, Security, and Accountability: Ethics, Law And, Policy*, edited by Adam D. Moore. Lanham, MD: Rowman & Littlefield International.

Hinds, Kate. 2013. "Some Police Departments Embrace Body Cameras." New York, NY: WNYC.

Hundtofte v. Encarnacion. 2014. 181 Wn.2d 1. Washington State Supreme Court.

Jennings, Wesley G., Lorie A. Fridell, and Mathew D. Lynch. 2014. "Cops and Cameras: Officer Perceptions of the Use of Body-Worn Cameras in Law Enforcement." *Journal of Criminal Justice* 42(6): 549-556. doi:10.1016/j.jcrimjus.2014.09.008.

Jennings, Wesley G., Mathew D. Lynch, and Lorie A. Fridell. 2015. "Evaluating the Impact of Police Officer Body-Worn Cameras (BWCs) on Response-to-Resistance and Serious External Complaints: Evidence from the Orlando Police Department (OPD) Experience Utilizing a Randomized Controlled Experiment." *Journal of Criminal Justice* 43(6): 480-486. doi:10.1016/j.jcrimjus.2015.10.003.

Joh, Elizabeth E. 2016. "Beyond Surveillance: Data Control and Body Cameras." *Surveillance & Society* 14(1): 133-137.

Lyon, David. 2003. *Surveillance as Social Sorting: Privacy,*

- Risk, and Digital Discrimination. London, New York: Routledge.
- Lyon, David. 2007. *Surveillance Studies: An Overview*. London: Polity.
- Maass, Dave, and Aaron Mackey. 2016. "5 Ways Law Enforcement Will Use Tattoo Recognition Technology." Electronic Frontier Foundation. June 2. www.eff.org/deep
- Miller, Lindsay, Jessica Toliver, and Police Executive Research Forum. 2014. "Implementing a Body-Worn Camera Program: Recommendations and Lessons Learned." Washington, DC: Office of Community Oriented Policing Services.
- Newell, Bryce Clayton. 2017. "Collateral Visibility: A Socio-Legal Study of Police Body-Camera Adoption, Privacy, and Public Disclosure in Washington State." *Indiana Law Journal* 92(4): 1329-1399.
- Nissenbaum, Helen. 1998. "Protecting Privacy in an Information Age: The Problem of Privacy in Public." *Law and Philosophy* 17(5/6): 559-596. doi:10.2307/3505189.
- Norris, Clive, and Gary Armstrong. 1999. "CCTV and the Social Structuring of Surveillance." *Crime Prevention Studies* 10(157-178): 1.
- NY Daily News. 2016. "Philando Castile, Alton Sterling and Other Police Deaths." July 7.
- Pasquale, Frank. 2015. *The Black Box Society: The Secret Algorithms that Control Money and Information*. Cambridge, MA: Harvard University Press.
- Pierson, Emma, Camelia Simoiu, Jan Overgoor, Sam Corbett-Davies, Vignesh Ramachandran, Cheryl Phillips, and Sharad Goel. 2017. "A Large-Scale Analysis of Racial Disparities in Police Stops across the United States." ArXiv:1706.05678 [Stat], June. <http://arxiv.org/abs/1706.05678>.
- Poon, Martha. 2007. "Scorecards as Devices for Consumer Credit: The Case of Fair, Isaac & Company Incorporated: Scorecards as Devices for Consumer Credit." *The Sociological Review* 55 (September): 284-306. doi:10.1111/j.1467-954X.2007.00740.x.
- powell, john a. 2008. "The Color of Opportunity; Race, Place, and Opportunity." *The American Prospect*, October 1,

sec. Special Report.

"Predict Crime | Predictive Policing Software." 2016.
PredPol. www.predpol.com/.

Rice, Lisa, and Deidre Swesnik. 2013. "Discriminatory Effects of Credit Scoring on Communities of Color Symposium: Credit Scoring and Credit Reporting." *Suffolk University Law Review* 46: 935-966.

Rockefeller, Jay. 2013. "A Review of the Data Broker Industry: Collection, Use, and Sale of Consumer Data for Marketing Purposes." Committee on Commerce, Science, and Transportation: United States Senate.
www.commerce.senate.gov/p

Schmidt, Eric. 2011. "Google Exec Stokes Facial Recognition Privacy Debate." *Biometric Technology Today* 2011(6): 1.
doi:10.1016/S0969-4765(11)70101-1.

Singer, Natasha. 2014. "The Scoreboards Where You Can't See Your Score." *The New York Times*, December 27.
www.nytimes.com/2014/12/28/technology/the-scoreboards-where-you-cant-see-your-score.html.

Smith, Gavin J. D. 2012. "Surveillance Work(ers)." In *Routledge Handbook of Surveillance Studies*. Hoboken, NJ: Taylor & Francis.

Snyder, Howard N. 2012. "Arrest in the United States, 1990-2010." NCJ 239423. Bureau of Justice Statistics, United States Department of Justice. <http://www.bjs.gov/content/pub/pdf/aus9010.pdf>.

Solove, Daniel J. 2004. *The Digital Person: Technology and Privacy in the Information Age*. Ex Machina. New York: New York University Press.

Sorrell v. IMS Health Inc. 2011. 131 S. Ct. 2653. Supreme Court.

Stanley, Jay. 2013. "Police Body-Mounted Cameras: With Right Policies in Place, a Win For All." American Civil Liberties Union. <https://www.aclu.org/police-body-mounted-cameras-right-policies-place-win-all>.

Sullivan, Jennifer, and Steve Miletich. 2014. "Costly Public-Records Requests May Threaten SPD Plan for Body Cameras." *The Seattle Times*, November 20. <https://>

Sweeney, Latanya. 2015. "Only You, Your Doctor, and Many Others May Know." *Technology Science*, September. <http://techscience.org/a/2015092903/>.

Urban Institute. 2016. "Police Body-Worn Cameras: Where Your State Stands." February. <http://urbn.is/bodycam>.

Weise, Karen. 2016. "Will a Camera on Every Cop Make Everyone Safer? Taser Thinks So." *Bloomberg Businessweek*, July 12. <http://www.bloomberg.com/news/arti>

White, Michael D. 2014. "Police Officer Body-Worn Cameras: Assessing the Evidence." E0414256643. Washington, D.C.: Office of Justice Programs, United States Department of Justice. <http://permanent.access.gpo.gov/gpo56953/Police%20Officer%20Body-Worn%20Cameras.pdf>.

Williams, Timothy. 2015. "Facial Recognition Software Moves From Overseas Wars to Local Police." *The New York Times*, August 12. <http://www.nytimes.com/2015/08/>

Williams, Timothy, James Thomas, Samuel Jacoby, and Damien Cave. 2016. "Police Body Cameras: What Do You See?" *The New York Times*, April 1. <http://www>.

7 7. “The end of privacy as we know it”: Reconsidering public space in the age of Google Glass

Arendt, Hannah. 1990. *On Revolution*. 2nd ed. London: Penguin Books. Original edition, 1963.

Arendt, Hannah. 2013. *The Human Condition*. 2nd ed. Chicago, IL: University of Chicago Press. Original edition, 1958.

Barbour, Charles, and Magdalena Zolkos. 2011. “Action and Appearance: an Introduction.” In *Action and Appearance: Ethics and the Politics of Writing in Hannah Arendt*, edited by A. Yeatman, P. Hansen, M. Zolkos, and C. Barbour, 1-9. New York: Continuum.

Bentham, Jeremy. 1791. *Panopticon or the Inspection House*. Dublin: T. Payne.

Chenail, Ronald J. 2011. “YouTube as a Qualitative Research Asset: Reviewing User Generated Videos as Learning Resources.” *The Qualitative Report* 16(1): 229-235.

Data Protection Directive. 1995. “Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data. COM/95/ 375 COM/92/422 COM/90/314-2.” European Parliament, Council of the European Union.

Dickey, Megan Rose. 2014. “A Restaurant Claims Google ‘Glassholes’ Hurt Its Reviews.” *Business Insider*, May 24. Accessed March 26, 2017.

Edwards, Derek, and Jonathan Potter. 1992. *Discursive Psychology*. Vol. 8: London: Sage.

Firstenberg, Allen, and Jason Salas. 2014. *Designing and Developing for Google Glass*. Sebastopol, CA: O’Reilly Media, Inc.

Foucault, Michel. 1977. *Discipline and Punish: The Birth of the Prison*. Vintage.

Glass. 2013. “Glass Security & Privacy.” *Google Glass Website*. Accessed June 3, 2015.

Glass. 2015. “Wink.” *Google Glass Support Website*. Accessed June 3, 2015 from <https://support.google.com/glass/answer/4347178?hl=en>.

Goffman, Erving. 1978. *The Presentation of Self in Everyday Life*. Harmondsworth: Penguin Books.

Greenberg, Andy. 2014. "Cut off Glassholes' Wi-Fi with this Google Glass Detector." *Wired*, June 3. Accessed March 26, 2017. www.wired.com/2014/06/find-and-ban-glassholes-with-this-artists-google-glass-detector/.

Hewson, Claire, and Tom Buchanan, eds. 2013. *Ethics Guidelines for Internet-mediated Research*. Leicester: The British Psychological Society.

Hildebrandt, Mireille. 2006. "Privacy and Identity." In *Privacy and the Criminal Law*, edited by E. Claes, A. Duff, and S. Gutwirth, 61-104. Antwerp and Oxford: Intersentia.

Honan, Mat. 2013. "I, Glasshole: My Year With Google Glass." *Wired*, June 3. Accessed March 26, 2017. www.wired.com/2013/12/glasshole.

Hughes, Eric. 1993. "A Cypherpunk's Manifesto." *Activism: Cypherpunks*, March 9. Accessed March 26, 2017. www.activism.net/cypherpunk/manifesto.html.

Ihde, Don. 1990. *Technology and the Lifeworld: From Garden to Earth*. Indiana University Press.

Levy, Steven. 2017. "Google Glass 2.0 is a Startling Second Act." *Wired*, July 18. Accessed October 25, 2017. www.wired.com/story/google-glass-2-is-here.

Kiran, Asle H., Nelly Oudshoorn, and Peter-Paul Verbeek. 2015. "Beyond Checklists: Toward an Ethical-constructive Technology Assessment." *Journal of Responsible Innovation* 2(1): 5-19. doi:10.1080/23299460.2014.992769.

Koelle, Marion, Matthias Kranz, and Andreas Möller. 2015. Don't look at me that way!: Understanding User Attitudes Towards Data Glasses Usage. *Proceedings of the 17th International Conference on Human-Computer Interaction with Mobile Devices and Services* (362-372). ACM.

Mann, Steve. 2004. "Continuous Lifelong Capture of Personal Experience with EyeTap." *Proceedings of the 1st ACM workshop on "Continuous archival and retrieval of personal experiences"*, October 15, 1-21.

Margulis, Stephen T. 2003. "Privacy as a Social Issue and Behavioral Concept." *Journal of Social Issues* 59(2):

Markham, Annette, and Elizabeth Buchanan, eds. 2012. *Ethical Decision-making and Internet Research: Recommendations from the AoIR Ethics Working Committee (Version 2.0)*. Association of Internet Research. Accessed June 30, 2015. <http://aoir.org/reports/ethics2.pdf>.

Mashable. 2013. "Google Glass: Don't Be a Glasshole." Mashable YouTube Channel. Accessed June 1, 2015. www.youtube.com/watch?v=FlfZ9FNC99k.

Matzner, Tobias, Philipp K. Masur, Carsten Ochs, and Thilo von Pape. 2016. "Do-ItYourself Data Protection - Empowerment or Burden?" In *Data Protection on the Move*, 277-305. Springer.

Mayer-Schönberger, Viktor. 2009. *Delete: The Virtue of Forgetting in the Digital Age*. Princeton, NJ: Princeton University Press.

Microsoft Corporation. 2015. "HoloLens." HoloLens Website. Accessed June 16, 2015. www.microsoft.com/microsoft-hololens/en-us.

Mol, Annemarie. 2002. *The Body Multiple: Ontology in Medical Practice*. Duke University Press.

Office of the Privacy Commissioner of Canada. 2013. "Data Protection Authorities Urge Google to Address Google Glass Concerns." Office of the Privacy Commissioner of Canada [press release]. Accessed April 10, 2018. www.priv.gc.ca/en/opc-news/news-and-announcements/2013/nr-c_130618/.

Oliver, Julian. 2014. "Find a Google Glass and Kick It From the Network." Julian Oliver [personal blog], May 30. Accessed March 26, 2017. https://julianoliver.com/output/log_2014-05-30_20-52.

Patton, Jason W. 2000. "Protecting Privacy in Public? Surveillance Technologies and the Value of Public Places." *Ethics and Information Technology* 2(3): 181-187.

Potter, Jonathan. 1996. *Representing Reality: Discourse, Rhetoric and Social Construction*. Sage.

Potts, Amanda. 2014. "'LOVE YOU GUYS (NO HOMO)'" *Critical Discourse Studies* 12(2): 163-186. doi:10.1080/17405904.2014.974635.

- Regan, Priscilla M. 2002. "Privacy as a Common Good in the Digital World." *Information, Communication & Society* 5(3): 382-405.
- Reiman, Jeffrey H. 1976. "Privacy, Intimacy, and Personhood." *Philosophy and Public Affairs* 6(1): 26-44.
- Roessler, Beate, and Dorota Mokrosinska. 2013. "Privacy and Social Interaction." *Philosophy & Social Criticism* 39(8): 771-791.
- Sintumuang, Kevin. 2013. "Google Glass: An Etiquette Guide." *The Wall Street Journal*, May 3. Accessed March 26, 2017. www.wsj.com/articles/SB10001424127887323982704578453031054200120.
- Solove, Daniel J. 2002. "Conceptualizing Privacy." *California Law Review* 90(4): 1087-1155.
- Spectacles. 2017. Spectacles Website. Accessed March 30, 2017. www.spectacles.com.
- Steeves, V. 2009. "Reclaiming the Social Value of Privacy." In *Privacy, Identity, and Anonymity in a Network World: Lessons from the Identity Trail*, edited by I. Kerr, V. Steeves, and C. Lucock, 191-208. New York: Oxford University Press.
- Taylor, Charles. 2003. "Cross-purposes: The Liberal-communitarian Debate." In *Debates in Contemporary Political Philosophy: An Anthology*, edited by D. Matravers and J. Pike. London: Taylor & Francis, Routledge.
- The Economist. 2013. "The People's Panopticon." *The Economist* [briefing], November 14. Accessed April 10, 2018. www.economist.com/news/briefing/21589863-it-getting-easier-to-record-everything-you-see.
- Tonkiss, Fran. 2003. "The Ethics of Indifference Community and Solitude in the City." *International Journal of Cultural Studies* 6(3): 297-311.
- Van den Hoven, Jeroen, and Pieter E. Vermaas. 2007. "Nano-technology and Privacy: On Continuous Surveillance outside the Panopticon." *Journal of Medicine and Philosophy* 32(3): 283-297.
- Veen, Mario, Bart Gremmen, Hedwig te Molder, and Cees van Woerkum. 2011. "Emergent Technologies against the

Background of Everyday Life: Discursive Psychology as a Technology Assessment Tool.” *Public Understanding of Science* 20(6): 810-825.

Verbeek, Peter-Paul. 2005. *What Things Do: Philosophical Reflections on Technology, Agency, and Design*. Penn State University Press.

Verbeek, Peter-Paul. 2008. “Obstetric Ultrasound and the Technological Mediation of Morality: A Postphenomenological Analysis.” *Human Studies* 31(1): 11-26.
doi:10.1007/s10746-10007-9079-0.

Verbeek, Peter-Paul. 2011. *Moralizing Technology: Understanding and Designing the Morality of Things*. University of Chicago Press.

Warren, Samuel D., and Louis D. Brandeis. 1890. “The Right to Privacy.” *Harvard Law Review*: 193-220.

Wayback Machine. 2015. “Glass. What it Does.” The Internet Archive. Accessed March 26, 2017.

White, Elwyn Brooks. 2011. *Here is New York*. 4th ed. New York: The Little Bookroom. Original edition, 1949.

YouTube. 2017. “Policies, Safety, and Reporting.” YouTube Help Website. Accessed March 30, 2017.
<https://support.google.com/youtube/topic/2676378?hl=en>.

9 9. Emergency calls with a photo attached: The effects of urging citizens to use their smartphones for surveillance

boyd, danah, and Alice E. Marwick. 2011. "Social Privacy in Networked Publics: Teens' Attitudes, Practices, and Strategies." In *A Decade in Internet Time: Symposium on the Dynamics of the Internet and Society*. Accessed March 23, 2016. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1925128.

Certeau, Michel de. 1984. *The Practice of Everyday Life*. Berkeley: University of California Press.

Cohen, Julie E. 2013. "What Privacy is for." *Harvard Law Review* 126: 1904-1933.

Community Research and Development Information Service. 2015a. "Citizen Interaction Technologies Yield Community Policing (CITYCoP)." CORDIS. Accessed November 12, 2015. http://cordis.europa.eu/project/rcn/197273_en.html.

Community Research and Development Information Service. 2016b. "Inspiring CitizeNS Participation for Enhanced Community PoliCing ActIons (INSPEC2T)." CORDIS. Accessed May 18, 2016. http://cordis.europa.eu/project/rcn/194895_en.html.

Community Research and Development Information Service. 2016c. "TRusted, CITizen - LEA coILaboratIOn over sOcial Networks (TRILLION)." CORDIS. Accessed May 18, 2016. http://cordis.europa.eu/project/rcn/194841_en.html.

Community Research and Development Information Service. 2016d. "Unity." CORDIS. Accessed May 18, 2016. http://cordis.europa.eu/project/rcn/194893_en.html.

Deleuze, Gilles. 1992. "Postscript on the Societies of Control." *October* 59 (Winter): 3-7.

Doyle, Aaron. 2011. "Revisiting the Synopticon: Reconsidering Mathiesen's 'The Viewer Society' in the Age of Web 2.0." *Theoretical Criminology* 15(3): 283-299.

Dubbeld, Lynsey. 2006. "Telemonitoring of Cardiac Patients: User-Centred Research as Input for Surveillance Theories." In *Theorizing Surveillance: The Panopticon and Beyond*, edited by David Lyon, 182-205. Abingdon: Routledge.

ETSI. 2015. "Universal Mobile Telecommunications System

(UMTS); LTE; Service Aspects; Service Principles (3GPP TS 22.101 Version 11.10.0 Release 11).” Accessed January 26, 2016.

[www.etsi.org/deliver/etsi_ts%5C122100_122199%5C122101%5C11.10.00_60%5Cts_122101v111000p.pdf](http://www.etsi.org/deliver/etsi_ts/50122100_122199/50122101/5011.10.00_60/50122101v111000p.pdf).

Federal Bureau of Investigation. 2016. “Next Generation Identification.” FBI. Accessed July 15, 2016.

www.fbi.gov/about-us/cjis/fingerprints_biometrics/ngi.

Fishwick, Elaine, and Heusen Mak. 2015. “Fighting Crime, Battling Injustice: The World of Real-Life Superheroes.” *Crime, Media, Culture* 11(3): 335-356.
doi:10.1177/1741659015596110.

Foucault, Michel. 1995. *Discipline and Punish: The Birth of the Prison*. Translated by Alan Sheridan. 2nd Vintage Books ed. New York: Vintage Books.

Fox, Jesse, and Jennifer J. Moreland. 2015. “The Dark Side of Social Networking Sites: An Exploration of the Relational and Psychological Stressors Associated with Facebook Use and Affordances.” *Computers in Human Behavior* 45 (April): 168-176. doi:10.1016/j.chb.2014.11.083.

Galic~, Maša, Tjerk Timan, and Bert-Jaap Koops. 2016. “Bentham, Deleuze and Beyond: An Overview of Surveillance Theories from the Panopticon to Participation.” *Philosophy & Technology*, May. doi:10.1007/s13347-016-0219-1.

Gandy, Oscar H. Jr. 2000. “Exploring Identity and Identification in Cyberspace.” *Notre Dame Journal of Law, Ethics & Public Policy* 14(2): 1085-1111.

Gandy, Oscar H. Jr. 2006. “Quixotics Unite! Engaging the Pragmatists on Rational Discrimination.” In *Theorizing Surveillance: The Panopticon and Beyond*, edited by David Lyon, 318-336. Abingdon: Routledge.

Gelles, David. 2016. “Taser International Dominates the Police Body Camera Market.” *The New York Times*. July 12. Accessed December 15, 2016. www.nytimes.com/2016/

Goff, Tanguy le, Virginie Malochet, and Tiphaine Jagu. 2011. “Surveiller à distance. une ethnographie des opérateurs municipaux de vidéosurveillance.” Île-de-France: Institut d’aménagement et d’urbanisme.

Goold, Benjamin J. 2006. “Open to All? Regulating Open Street CCTV and the Case for Symmetrical Surveillance.”

Criminal Justice Ethics 25: 3-17.

Groombridge, Nic. 2002. "Crime Control or Crime Culture TV?" *Surveillance & Society* 1(1): 30-46.

Haggerty, Kevin D. 2015. "What's Wrong with Privacy Protections? Provocations from a Fifth Columnist." In *A World without Privacy: What Law Can and Should Do*, edited by Austin Sarat. New York: Cambridge University Press.

Haggerty, Kevin D., and Richard V. Ericson. 2000. "The Surveillant Assemblage." *British Journal of Sociology* 51(4): 605-622.

Harshaw, Pendarvis. 2015. "Nextdoor, the Social Network for Neighbors, is Becoming a Home for Racial Profiling." *Fusion*. March 24. Accessed December 12, 2016.

Hier, Sean P., Kevin Walby, and Josh Greenberg. 2006. "Supplementing the Panoptic Paradigm: Surveillance, Moral Governance and CCTV." In *Theorizing Surveillance: The Panopticon and Beyond*, edited by David Lyon, 230-244. Abingdon: Routledge.

Joh, Elizabeth E. 2016. "The New Surveillance Discretion: Automated Suspicion, Big Data, and Policing." *Harvard Law & Policy Review* 10(1): 15-42.

Kammerer, Dietmar. 2012. "Surveillance in Literature, Film and Television." In *Routledge Handbook of Surveillance Studies*, edited by Kirstie Ball, Kevin D. Haggerty, and David Lyon, 99-106. Abingdon: Routledge.

Kinsley, Samuel. 2016. "Vulgar Geographies? Popular Cultural Geographies and Technology." *Social & Cultural Geography* 17(6): 793-796. doi:10.1080/14649365.2016.1152394.

Koskela, Hille. 2003. "'Cam Era' - the Contemporary Urban Panopticon." *Surveillance & Society* 1(3): 292-313.

Lauer, Josh. 2012. "Surveillance History and the History of New Media: An Evidential Paradigm." *New Media & Society* 14(4): 566-582. doi:10.1177/1461444811420986.

Lee, Stan. 1962. "Spider-Man!" In vol. 15 of *Amazing Fantasy*. New York: Marvel Comics.

Leistert, Oliver. 2013. *From Protest to Surveillance: The Political Rationality of Mobile Media: Modalities of*

Neoliberalism. Frankfurt am Main; New York: PL Academic Research.

Levin, Sam. 2016. "What Happens When Tech Firms End up at the Center of Racism Scandals?" *The Guardian*. September 30. Accessed December 12, 2016.

Los, Maria. 2006. "Looking into the Future: Surveillance, Globalization and the Totalitarian Potential." In *Theorizing Surveillance: The Panopticon and Beyond*, edited by David Lyon, 69-94. Abingdon: Routledge.

Mantelero, Alessandro. 2016. "Personal Data for Decisional Purposes in the Age of Analytics: From an Individual to a Collective Dimension of Data Protection." *Computer Law & Security Review* 32: 238-255.

Marx, Gary T. 2013. "The Public as Partner? Technology Can Make Us Auxiliaries as Well as Vigilantes." *IEEE Security & Privacy* 11(5): 56-61. doi:10.1109/MSP.2013.126.

Milaj, Jonida, and Jeanne Pia Mifsud Bonnici. 2014. "Unwitting Subjects of Surveillance and the Presumption of Innocence." *Computer Law & Security Review* 30(4): 419-428. doi:10.1016/j.clsr.2014.05.009.

Nationale Politie. 2015. "Politie App." Accessed December 3, 2015. www.politie.nl/app.

Nederlandse Omroep Stichting. 2016. "Contact Met de Politie? Stuur Een Appje!" NOS. December 8, 2016. <http://nos.nl/artikel/2147234-contact-met-de-politie-s-tuur-eeen-appje.html>.

Nolan, Christopher. 2008. *The Dark Knight*. Burbank, C: Warner Bros.

Norris, Clive, and Gary Armstrong. 1999. "CCTV and the Social Structuring of Surveillance." *Crime Prevention Studies* 10: 157-178.

PredPol. 2015. "How PredPol Works: We Provide Guidance on Where and When to Patrol." PredPol. Accessed May 9, 2016. www.predpol.com/how-predpol-works/.

RapidsOS. 2016. "Haven." Accessed December 9, 2016. <http://www.rapidsos.com>.

Reilly, Paul. 2015. "Every Little Helps? YouTube, Sousveillance and the 'Anti-Tesco' Riot in Stokes Croft."

New Media & Society 17(5): 755-771. doi:10.1177/
1461444813512195.

Schneider, Christopher J., and Daniel Trottier. 2012. "The
2011 Vancouver Riot and the Role of Facebook in
Crowd-sourced Policing." *BC Studies* (175): 57-72.

Simon, Bart. 2005. "The Return of Panopticism: Supervision,
Subjection and the New Surveillance." *Surveillance &
Society* 3(1): 1-20.

Smith, Gavin J. D. 2016. "Surveillance, Data and
Embodiment: On the Work of Being Watched." *Body & Society*
22(2): 108-139. doi:10.1177/1357034X15623622.

The National 911 Program. 2016. "The Future of 911."
911.gov. Accessed December 19, 2016.
www.911.gov/futureof911.html.

Timan, Tjerk, and Anders Albrechtslund. 2015.
"Surveillance, Self and Smartphones: Tracking Practices in
the Nightlife." *Science and Engineering Ethics*, August.
doi:10.1007/s11948-015-9691-8.

Timan, Tjerk, and Nelly Oudshoorn. 2012. "Mobile Cameras as
New Technologies of Surveillance? How Citizens Experience
the Use of Mobile Cameras in Public Nightscape."
Surveillance & Society 10(2): 167-181.

Trottier, Daniel. 2014. "Crowdsourcing CCTV Surveillance on
the Internet." *Information, Communication & Society* 17(5):
609-626. doi:10.1080/1369118X.2013.808359.

Vigilant Solutions. 2014. "LPR Data." Accessed December 15,
2016. www.vigilantso

Welsh, Brandon C., and David P. Farrington. 2002. "Crime
Prevention Effects of Closed Circuit Television: A
Systematic Review." Home Office Research Study 252. London:
Home Office Research, Development and Statistics Directorate.
Accessed May 20, 2016.

Westin, Alan F. 1967. *Privacy and Freedom*. London: The
Bodley Head.

Winston, Ali. 2015. "Los Angeles Sheriff Invests in New Tech
to Expand Biometric Database." *Reveal*. July 3. Accessed
April 13, 2016. www.revealnews.org/article/los-a

10 10. "I'm a creep, I'm a weirdo": Street photography in the service of the male gaze

- Adam, Allison. 2002. "Cyberstalking and Internet Pornography: Gender and the Gaze." *Ethics & Information Technology* 4(2): 133-142.
- Baker, Katie. 2012a. "Here's a New, Totally Legal Reddit Hub Devoted to Creep Shots." *Jezebel*, June 27. Accessed April 18, 2016. <http://jezebel.com/5921747/>
- Baker, Katie. 2012b. "How to Shut Down Reddit's CreepShots Once and for All: Name Names." *Jezebel*, October 10. Accessed April 19, 2016. <http://jezebel.com/5949379/>
- Boyle, James. 1997. "Foucault in Cyberspace: Surveillance, Sovereignty, and Hardwired Censors." *University of Cincinnati Law Review* 66: 177-206.
- Bygrave, Lee. 2001. "The Place of Privacy in Data Protection Law." *University of New South Wales Law Journal* 24: 277-283.
- Calogero, Rachel M. 2012. "Objectification Theory, Self-Objectification, and Body Image." In *Encyclopedia of Body Image & Human Appearance*, Vol. 2, edited by Thomas F. Cash, 574-580. San Diego: Academic Press.
- Cialdini, Robert B., and Melanie R. Trost. 1997. "Social Influence: Social Norms, Conformity, and Compliance." In *The Handbook of Social Psychology*, 4th ed., Vol. 2, edited by Daniel T. Gilbert, Susan T. Fiske and Gardner Lindzey, 151-192. New York: Oxford University Press.
- Cockfield, Arthur J. 2003. "Who Watches the Watcher? A Law and Technology Perspective on Government and Private Sector Surveillance." *Queen's Law Journal* 29: 364-407.
- Cohen, Julie E. 2008. "Privacy, Visibility, Transparency, and Exposure." *University of Chicago Law Review* 75: 181-202.
- CreepShots. n.d. "About." *CreepShots*. Accessed April 21, 2016. <http://creepshots.com/about/>.
- Denton, Nick. 2008. "A Drug Deal from Every Angle." *Valleywag*, March 24. Accessed June 12, 2016.
- Dobson, Amy Shields, and Jessica Ringrose. 2016. "Sext

Education: Pedagogies of Sex, Gender, and Shame in the Schoolyards of Tagged and Exposed.” *Sex Education* 16 (1): 8-21.

Dowas, Edward, and Stacy L. Smith. 2010. “Keeping Abreast of Hypersexuality: A Video Game Character Content Analysis.” *Sex Roles* 62(11-12): 721 -733.

Doxy Spotting. n.d.a. “Project: Doxy Spotting.” DoxySpotting.com, April 6, 2015. Internet Archive. Accessed May 16, 2016. <https://web.archive.org/web/20150406072644/http://doxyspotting.com/>.

Doxy Spotting. n.d.b. “Project: Doxy Spotting.” DoxySpotting.com, November 8, 2015. Internet Archive. Accessed May 16, 2016. <https://web.archive.org/web/20151108040621/http://doxyspotting.com/>.

Doxy Spotting. n.d.c. “Doxy Spotting.” DoxySpotting.com. Accessed April 5, 2016. <http://doxyspotting.com/about/>.

Ericson, Richard V., and Kevin D. Haggerty. 2006. “The New Politics of Surveillance and Visibility.” In *The New Politics of Surveillance and Visibility*, edited by Richard V. Ericson and Kevin D. Haggerty, 1-25. Toronto: University of Toronto Press.

Flores, Arturo, and Serge Belongi. 2010. “Removing Pedestrians from Google Street View.” In *Proceedings of the 2010 IEEE Computer Society Conference on Computer Vision and Pattern Recognition - Workshops (CVPRW)*, 53-58.

Foucault, Michel. 1995. *Discipline and Punish: The Birth of the Prison*. 2nd Vintage Books ed. New York: Vintage Books.

Fredrickson, Barbara L. and Tomi-Ann Roberts. 1997. “Objectification Theory: Toward Understanding Women’s Lived Experiences and Mental Health Risks.” *Psychology of Women Quarterly* 21: 173-206.

Frome, Andrea, German Cheung, Ahmad Abdulkader, Marco Zennaro, Bo Wu, Alessandro Bissacco, Hartwig Adam, Hartmut Neven, and Luc Vincent. 2009. “Largescale Privacy Protection in Google Street View.” In *Proceedings of the IEEE International Conference on Computer Vision (2009)*, 2373-2380. doi:10.1109/ ICCV.2009.5459413.

Galdi, Silvia, Anne Maass, and Mara Cadinu. 2014. “Objectifying Media: Their Effect on Gender Role Norms and Sexual Harassment of Women.” *Psychology of Women Quarterly*

38(3): 398-413.

Google. n.d. "Google Maps Street View: Image Acceptance & Privacy Policies." Google.com. Accessed May 22, 2016. www.google.com/maps/streetview/policies/#privacy-and-blurring.

Google Sightseeing. 2007. "Half Naked Sunbathing Girls on Google Street View." GoogleSightSeeing.com, May 31. Accessed April 5, 2016. <http://googlesightseeing.com>.

Google Sightseeing. 2009. "Naked Street View." GoogleSightSeeing.com, March 24. Accessed April 18, 2016. <http://googlesightseeing.com/2009/03/naked-people-on-google-street-view/>.

Grasmick, Harold G., Robert J. Bursik, Jr., and Bruce J. Anneklev. 1993. "Reduction in Drunk Driving as a Response to Increased Threats of Shame, Embarrassment, and Legal Sanctions." *Criminology* 31(1): 41-67.

Gray, Mitchell. 2003. "Urban Surveillance and Panopticism: Will We Recognize the Facial Recognition Society?" *Surveillance and Society* 1(3): 314-330.

Haggerty, Kevin D. 2006. "Tear Down the Walls: On Demolishing the Panopticon." In *Theorizing Surveillance: the Panopticon and Beyond*, edited by David Lyon, 23-45. Cullompton: Willan Publishing.

Hargreaves, Stuart. 2014. "'Jones-ing' for a Solution: Commercial Street Surveillance and Privacy Torts in Canada." *Laws* 3(3): 388-409.

Herman, John. 2012. "Reddit General Manager Explains Why He Won't Ban Creepy." *Buzzfeed*, October 12. Accessed April 19, 2016. www.buzzfeed.com/jwherrman/reddit-general-manager-explains-why-he-wont-ban-c.

Hern, Alex. 2015. "How Reddit Took on its Own Users - and Won." *The Guardian*, December 30. www.theguardian.com/technology/2015/dec/30/reddit-ellen-pao.

Imgur. n.d.a. "Part II: Creeping through High Schools" (anonymously captured screenshot of r/creepshots thread). *Imgur.com*. Accessed April 18, 2016. <http://imgur.com/a/KkoyV>.

Imgur. n.d.b. "/r/creepshots Has Been Removed Due to Doxing

of the Main Mod ” (anonymously captured screenshot of reddit thread). Imgur.com. Accessed April 19, 2016. <http://imgur.com/AL52y>.

Johnson, Deborah G., and Kent A. Wayland. 2010. “Surveillance and Transparency as Sociotechnical Systems of Accountability.” In *Surveillance and Democracy*, edited by Kevin D. Haggerty and Minas Samatas, 19-33. New York: Routledge.

Koskela, Hille. 2000. “The Gaze Without Eyes: Video-Surveillance and the Changing Nature of Urban Space.” *Progress in Human Geography* 4(2): 243-265.

Koskela, Hille. 2003. “‘Cam Era’ - the Contemporary Urban Panopticon.” *Surveillance and Society* 1(3): 292-313.

Linkous, Taylor. 2014. “It’s Time for Revenge Porn to Get a Taste of its Own Medicine: An Argument for the Federal Criminalization of Revenge Porn.” *Richmond Journal of Law & Technology* 20(4), art. 14: 1-39.

Los, Maria. 2006. “Looking into the Future: Surveillance, Globalization, and the Totalitarian Potential.” In *Theorizing Surveillance: the Panopticon and Beyond*, edited by David Lyon, 69-94. Cullompton: Willan Publishing.

Lyon, David. 2001. *Surveillance Society: Monitoring Everyday Life, Issues in Society*. Buckingham: Open University.

Lyon, David. 2002. “Surveillance Studies: Understanding Visibility, Mobility, and the Phenetic Fix.” *Surveillance and Society* 1(1): 1-7.

Lyon, David. 2006a. “9/11, Synopticism, and Scopophilia.” In *The New Politics of Surveillance and Visibility*, edited by Richard V. Ericson and Kevin D. Haggerty, 35-54. Toronto: University of Toronto Press.

Lyon, David, ed. 2006b. *Theorizing Surveillance: The Panopticon and Beyond*. Cullompton: Willan Publishing.

Microsoft. n.d. “Explore Streetside.” Microsoft.com. Accessed May 22, 2016. www.microsoft.com/maps/streetside.aspx.

Moradi, Bonnie, and Yu-Ping Huang. 2008. “Objectification Theory and Psychology of Women: A Decade of Advances and Future Directions.” *Psychology of Women Quarterly* 32(4):

377-398.

Moreham, Nicole. 2006. "Privacy in Public Places." *The Cambridge Law Journal* 65(3): 606-635.

Muehlenkamp, Jennifer J., and Renee N. Saris-Baglana. 2002. "Self-Objectification and its Psychological Outcomes for College Women." *Psychology of Women Quarterly* 26(4): 371-379.

Motraghi, Sebastian. 2010. "Picasa, Google Street View, and other over zealous facerecognition magic." April 1. Accessed April 12, 2016. <http://blog.motraghi.us/>

Mulvey, Laura. 1975. "Visual Pleasure and Narrative Cinema." *Screen* 16(3): 6-18.

Nelms, Ben. 2012. "Coweta Teacher Fired for Posting Pics of Students on Creepshots." *The Citizen*, September 28. Accessed April 18, 2016. <http://thecitizen.com/articles/>

Nodari, Angelo, Marco Vanetti, and Ignazio Gallo. 2012. "Digital Privacy: Replacing Pedestrians from Google Street View Images." In *Proceedings of the 21st International Conference on Pattern Recognition (ICPR2012)*, 2889-2893.

Predditors. 2012. *Predditors.com*, October 11. <http://predditors.tumblr.com>. Internet Archive.

Prosser, William L. 1984. "Privacy [A Legal Analysis]." *Philosophical Dimensions of Privacy: An Anthology*, edited by Ferdinand David Schoeman, 104-155. New York: Cambridge University Press.

Reddit. 2012a. "I am Barack Obama, President of the United States - AMA." *Reddit.com*, August 29. Accessed April 18, 2016. www.reddit.com/comments/z1c9z/i_am_barack_obama_president_of_the_united_states/.

Reddit. 2012b. "[EFFORT] Reddit's Voyeur Subreddits: Creeping through High Schools." *Reddit.com*, September 18. Accessed April 18, 2016. www.reddit.com/

Reddit. 2012c. "[META] [IMPORTANT] /r/creepshots mod blackmailed into shutting down the sub a.k.a. The Admins Sure Doxxed The Ball On This One." *Reddit.com*, October 10. Accessed April 19, 2016. www.reddit.com/r/Shi

Reddit. 2015. "Admins Have Just Quarantined my 3 year old Subreddit with 66 Thousand Subscribers,"

/r/CandidFashionPolice.” Reddit.com, December 11. Accessed April 19, 2016.

www.reddit.com/r/Blackout2015/comments/3wez2y/admins_ha_ve_just_quarantined_my_3_year_old/.

Reddit. 2016. “Down to Her Ass.” Reddit.com, April 12. Accessed April 19, 2016.

Reddit. n.d.a. “r/VolleyballGirls.” Reddit.com. Accessed April 19, 2016. www.reddit.com/r/volleyballgirls.

Reddit. n.d.b. “r/YogaPants.” Reddit.com. Accessed April 19, 2016. www.reddit.com/r/yogapants.

Rosen, Jeffrey. 2001. *The Unwanted Gaze: The Destruction of Privacy in America*. New York: Random House, Inc.

Ryan, Erin. 2012. “Teacher Posting Creepshots of High School Students to Reddit Rightfully Fired, But Perv Forum Still Exists.” Jezebel (blog), September 27. Accessed April 18, 2016.

<http://jezebel.com/5946931/teacher-posting-creepshot>

Sarkeesian, Anita. 2016. “Tropes vs Women in Video Games.” Feminist Frequency (YouTube.com). Accessed April 14, 2016. www.youtube.com/playlist?list=PLn4ob_5_ttEaA_vc8F3fjzE62esf9yP61.

Schleiner, Anne-Marie. 2001. “Does Lara Croft Wear Fake Polygons? Gender and Gender-Role Subversion in Computer Adventure Games.” *Leonardo* 34(3): 221-226.

Sterner, S. Paul, and Melissa Burkley. 2015. “SeX-Box: Exposure to Sexist Video Games Predicts Benevolent Sexism.” *Psychology of Popular Media Culture* 4(1): 47-55.

Street View Fun. n.d.a. “Sexy.” StreetViewFun.com. Accessed April 5, 2016. www.streetviewfun.com/category/sexy/.

Street View Fun. n.d.b. “Unblurred Faces.” StreetViewFun.com. Accessed April 12, 2016. www.streetviewfun.com/tag/unblurred-face/.

Suler, John. 2004. “The Online Disinhibition Effect.” *CyberPsychology and Behavior* 7(3): 321-326.

TheChive. 2014. “Hot Girls on Street View.” TheChive.com, April 2. Accessed April 5, 2016.

Vincent, Luc. 2007. “Taking Online Maps Down to Street

Level. ” Computer 40(12): 118-120.

Voat. 2015a. “Do I Have to Pretend this is about Fashion Anymore?” Voat.co, December 12. Accessed April 19, 2016. <https://voat.co/v/Candid/comments/720955>.

Voat. 2015b. “Those Leggings Fit You Fantastic Girl!” Voat.co, December 12. Accessed April 19, 2016. <https://voat.co/v/Candid/comments/721308>.

Voat. n.d. “Candid.” Voat.co. Accessed April 19, 2016. <https://voat.co/v/Candid>.

Warzel, Charlie. 2015. “Reddit is an Incubator of Hate.” BuzzFeed, June 26. Accessed April 20, 2016.

Weisenthal, Joe. 2008. “Google Takes Down Pictures of Vomiting British Dude.” Business Insider, March 20. Accessed July 12, 2017. www.businessinsider.com/google-takes-down-pictures-of-vomiting-british-dude-2009-3.

Yar, Majid. 2003. “Panoptic Power and the Pathologisation of Vision: Critical Reflections on the Foucauldian Thesis.” *Surveillance and Society* 1(3): 254-271.

Zittrain, Jonathan. 2008. “Privacy 2.0.” *University of Chicago Legal Forum* 2008(1): 65-119.

11 11. Legal standards of location privacy in light of the mosaic theory

Article 29 Data Protection Working Party. 2011. "Opinion 13/2011 on Geolocation Services on Smart Mobile Devices." 881/11/EN WP 185, May 26. http://ec.europa.eu/justice/policies/privacy/docs/wpdocs/2011/wp185_en.pdf.

Bedi, Monu. 2016. "The Curious Case of Cell Phone Location Data: Fourth Amendment Doctrine Mash-up." *Northwestern University Law Review* 110(2): 61-76.

Bernstein, Henry. 2016. "The Need for Fourth Amendment Protection from Government Use of Cell Site Simulators." *Santa Clara Law Review* 56(1): 177-206.

Bertagna, Patrick. 2010. "How Does a GPS Tracking System Work?" *EE Times*, October 26. www.eetimes.com/document.asp?doc_id=1278363.

Chesterman, Simon. 2011. *One Nation Under Surveillance: A New Social Contract to Defend Freedom Without Sacrificing Liberty*. Oxford: Oxford University Press.

Cimpanu, Catalin. 2016. "If you Clicked Anything Online, Google Probably Knows about it." *Softpedia*, May 19. <http://news.softpedia.com/news/if-you-clicked-anythin>

Defense Science Board Task Force. 2005. "The Future of Global Positioning System." October 28. www.acq.osd.mil/dsb/reports/2000s/ADA443573.pdf.

Dickman, Bethany. 2011. "Untying Knots: The Application of Mosaic Theory to GPS Surveillance in *United States v. Maynard*." *American University Law Review* 60(3): 731-742.

Durkee, Musetta. 2010. "Privacy Expectations in the Use of GPS Tracking Devices: *United States v. Maynard*." *Berkeley Technology Law Journal* (blog), November 4.

Ford, Madelaine. 2011. "Mosaic Theory and the Fourth Amendment: How Jones Can Save Privacy in the Face of Evolving Technology." *American University Journal of Gender Social Policy and Law* 19(4): 1351-1372.

Gatewood, Jace. 2014. "District of Columbia *Jones* and the Mosaic Theory - In Search of a Public Right of Privacy: The Equilibrium Effect of the Mosaic Theory." *Nebraska Law Review* 92(3): 504-536.

Gray, David, and Citron, Danielle. 2013. "A Shattered Looking Glass: The Pitfalls and Potential of the Mosaic Theory of Fourth Amendment Privacy." *North Carolina Journal of Law and Technology* 14(2): 381-430.

Kalis, Michael. 2013. "Ill Suited to the Digital Age: Fourth Amendment Exceptions and Cell Site Location Information Surveillance." *Pittsburgh Journal of Technology Law and Policy* 13(2): 1-18.

Kerr, Orin. 2011. "An Equilibrium-adjustment Theory of the Fourth Amendment." *Harvard Law Review* 125(2): 476-543.

Kerr, Orin. 2012. "The Mosaic Theory of the Fourth Amendment." *Michigan Law Review* 111(3): 311-354.

Nissenbaum, Helen. 1997. "Toward an Approach to Privacy in Public: The Challenges of Information Technology." *Ethics and Behavior* 7(3): 207-219.

Nissenbaum, Helen. 1998. "Protecting Privacy in an Information Age: The Problem with Privacy in Public." *Law and Philosophy* 17(5): 559-596.

Nissenbaum, Helen. 2004. "Privacy as Contextual Integrity." *Washington Law Review* 79 (1): 119-157.

Oliver, Nancy. 2013. "Location, Location, Location: Balancing Crime Fighting Needs and Privacy Rights." *University of Baltimore Law Review* 42(3): 485-512.

Ostrander, Benjamin. 2011. "The Mosaic Theory and Fourth Amendment Law." *Notre Dame Law Review* 86(4): 1733-1766.

Sample, Ian. 2016. "Even Basic Phone Logs Can Reveal Deeply Personal Information, Researchers Find." *The Guardian*, May 16. www.theguardian.com/science/2016/may/16

Sloan, Robert, and Richard Warner. 2016. "The Self, the Stasi, the NSA: Privacy, Knowledge, and Complicity and the Surveillance State." *Minnesota Journal of Law Science & Technology* 17(1): 347-408.

Snowden, Edward. 2016. "Inside the Assassination Complex." *The Intercept*, May 3. <http://theintercept.com/2016/05/03/inside-the-assassination-complex/>

The Guardian. 2016. "The Guardian View on Pokémon Go: Augmented Merchandising." *The Guardian*, July 13. www.theguardian.com/commentisfree/2016/jul/13/the-guardian-view-on-pokemon-go-augmented-merchandising.

Tsai, Janice Y., Patrick Gage Kelley, Lorrie Faith Cranor, and Norman Sadeh. 2010. "Location-Sharing Technologies: Privacy Risks and Controls." *I/S: A Journal of Law and Policy for the Information Society* 6(2): 119-151.

Tsou, Ming-Hsiang, and Daniel Lusher. 2016. "Mapping Web Pages by Internet Protocol (IP) Addresses." *Human Dynamics*, December 18. http://humandynamics.sdsu.edu/document/A2_Mapping%20Web%20Pages.pdf.

Wagner, Stephen. 2014. "Stopping Police in their Tracks: Protecting Cellular Location Information Privacy in the Twenty-first Century." *Duke Law & Technology Review* 12 (1): 201-218.

Wessler, Nathan Freed. 2015. "Taking Warrantless Location Tracking to the Supreme Court." *American Civil Liberties Union*, July 31. www.aclu.org/blog/free-future/taking-warrantless-location-tracking-supreme-court.

Zimmer, Michael. 2005. "Surveillance, Privacy and the Ethics of Vehicle Safety Communication Technologies." *Ethics and Information Technology* 7(4): 201-210.

12 12. Surveillance and privacy in North American public spaces

Arteaga Botello, Nelson. 2015. "Surveillance Footage and Space Segregation in Mexico City." *International Sociology* 30(6): 619-636.

Arteaga Botello, Nelson. 2016. "Regulación de la videovigilancia en México. Gestión de la ciudadanía y acceso a la ciudad." *Espiral: Estudios sobre Estado y Sociedad* 23: 193-238.

CDHDF (Comisión de Derechos Humanos del Distrito Federal) Dirección General de Comunicación por los Derechos Humanos. 2016. CDHDF documenta tres quejas por presunta violación de DDHH con utilización de Periscope. Bulletin 031/2016 of February 23, 2016. Mexico City: CDHDF. Accessed June 12, 2017. <http://cdhdf.org>.

Gutiérrez Ortiz Mena, Alfredo. 2014. "El derecho a la intimidad en la era de la tecnología de las comunicaciones: una reflexión desde el Derecho Constitucional." In *Revista Mexicana de Derecho Constitucional*, N. 31, July-December, pp. 239-245. Mexico City: Instituto de Investigaciones Jurídicas, UNAM.

Haggerty, Kevin D., and Richard V. Ericson. 2006. "The New Politics of Surveillance and Visibility." In *The New Politics of Surveillance and Visibility*, edited by Kevin D. Haggerty and Richard V. Ericson, pp. 3-25. Toronto: University of Toronto Press.

Ibarra Sánchez, Ernesto. 2012. "Videovigilancia. Puntos de colisión entre derechos fundamentales y protección de datos personales en México." In *Jurismática: El Derecho y las Nuevas Tecnologías*, edited by Ernesto Ibarra Sánchez and Rodolfo Romero Flores, pp. 231-269. Monterrey: UANL.

Kerr, Orin S. 2015. "Katz Has Only One Step: The Irrelevance of Subjective Expectations." *University of Chicago Law Review* 82: 113-134(2015).

Lyon, David. 2007. *Surveillance Studies: An Overview*. Cambridge: Polity Press.

Slobogin, Christopher. 2007. *Privacy at Risk: The New Government Surveillance and the Fourth Amendment*. Chicago, IL: University of Chicago Press.

Suprema Corte de Justicia de la Nación. 2016. *Criterios del*

Poder Judicial de la Federación. Tercera edición. Ciudad de México: Suprema Corte de Justicia de la Nación.

Téllez Valdés, Julio. 2012. "La regulación jurídica de la videovigilancia bajo una perspectiva de derecho comparado." In *Jurismática: El Derecho y las Nuevas Tecnologías*, edited by Ernesto Ibarra Sánchez and Rodolfo Romero Flores, pp. 270-285. Monterrey: UANL.

Whitebread, Charles H., and Christopher Slobogin. 2015. *Criminal Procedure: An Analysis of Cases and Concepts*. Mineola, NY: Foundation Press.

References

- Barford, Vanessa. 2013. Who are vigilante group Letzgo Hunting? *BBC*, 19 September. www.bbc.com/news/magazine-24143991.
- Barnes, Susan B. 2006. A privacy paradox: Social networking in the United States. *First Monday* 11(9). <http://firstmonday.org/article/view/1394/1312>.
- Boyd, Danah and Eszter Hargittai. 2010. Facebook privacy settings: Who cares? *First Monday* 15(8). <http://journals.uic.edu/ojs/index.php/fm/article/view/3086/2589>.
- Burns, Matt. 2014. Google explains how not to be a glasshole. *TechCrunch*, 18 February. <https://techcrunch.com/2014/02/18/google-explains-how-not-to-be-a-glasshole/>.
- CBC. 2018. Alberta Creep Catcher gets fine, probation for “repugnant and malicious” crime. *CBC News*, 22 January. www.cbc.ca/news/canada/calgary/red-deer-creep-catcher-carl-young-sentence-fine-probation-1.4498940.
- Chulkovskaya, Yekaterina. 2016. StopHam: The end of the road for Russia’s parking vigilantes? *Russia Beyond The Headlines*, 4 April. http://rbth.com/politics_and_society/2016/04/04/stopham-the-end-of-the-road-for-russias-parking-vigilantes_581711.
- Davis, Jenny. 2010. Architecture of the personal interactive homepage: constructing the self through Myspace. *New Media & Society* 12(7): 1103–1119.
- Efstathiou, Zoe. 2016. Shamed businessmen DENY claims they “refused to give up seats for disabled woman”. *Daily Star*, 23 September. www.dailystar.co.uk/news/latest-news/547395/Disabled-woman-furious-after-businessmen-refused-to-give-up-her-reserved-seats-on-train.
- Evans, Jessica. 2003. Vigilance and vigilantes: Thinking psychoanalytically about anti-paedophile action. *Theoretical Criminology* 7(2): 163–189.
- Foucault, Michel. 1977. *Discipline and Punish: The Birth of the Prison*. London: A. Lane.
- FTC. 2014. Snapchat settles FTC charges that promises of disappearing messages were false. *Federal Trade Commission Press Releases*, 8 May. www.ftc.gov/news-events/press-releases/2014/05/snapchat-settles-ftc-charges-promises-disappearing-messages-were.
- Galtung, Johan. 1990. Cultural violence. *Journal of Peace Research* 27(3): 291–305.
- Gandy, Oscar H. 2009. *Coming to Terms with Chance: Engaging Rational Discrimination and Cumulative Disadvantage*. Farnham: Ashgate.
- Goffman, Erving. 1959. *The Presentation of Self in Everyday Life*. New York: Anchor Books.
- Goffman, Erving. 1963. *Stigma: Notes on the Management of Spoiled Identity*. New York: Simon & Schuster Inc.
- Harvey, David. 1989. *The Condition of Postmodernity*. Oxford: Blackwell.
- Johnston, Les. 1996. What is vigilantism? *British Journal of Criminology* 36(2): 220–236.
- Kohm, Steven A. 2009. Naming, shaming and criminal justice: Mass-mediated humiliation as entertainment and punishment. *Crime, Media, Culture* 5(2): 188–205.
- Krishnan, Manisha. 2016. An Edmonton woman killed herself after being confronted by creep catchers. *Vice.com*, 29 September. www.vice.com/en_ca/article/an-edmonton-woman-killed-herself-after-being-busted-by-creep-catchers.
- Leinwand Leger, Donna. 2011. Social media aid Vancouver police in identifying rioters. *USA Today*, 23 June. http://usatoday30.usatoday.com/tech/news/2011-06-22-facebook-vancouver-riots_n.htm.

- Madrigal, Alexis C. 2013. Hey Reddit, enough Boston Bombing vigilantism. *The Atlantic*, 17 April. www.theatlantic.com/technology/archive/2013/04/hey-reddit-enough-boston-bombing-vigilantism/275062/.
- Mann, Bill. 2011. Social media “vigilantes” I.D. Vancouver rioters – and then some. *The Huffington Post Canada*, 2 July. www.huffingtonpost.ca/bill-mann/vancouver-riot-social-media_b_889017.html.
- Moore, Charlie. 2018. Are these Australia’s worst parkers? Facebook page dedicated to shaming “road muppets” returns – and the pictures will INFURIATE you. *Daily-Mail.co.uk*, 28 February. www.dailymail.co.uk/news/article-5445249/Are-Australia-s-worst-parkers.html.
- Myles, David and Daniel Trottier. 2017. Leveraging visibility, gaining capital? Social media use in the fight against child abusers: The case of *The Judge Beauce*. *Social Media + Society*. (online first) <https://doi.org/10.1177/2056305117691998>.
- Papacharissi, Zizi. 2010. Privacy as a luxury commodity. *First Monday*, 15(8). <http://journals.uic.edu/ojs/index.php/fm/article/view/3075/2581>.
- Poltash, Nicole A. 2013. Snapchat and sexting: a snapshot of baring your bare essentials. *Richmond Journal of Law & Technology* 29(4): 1–24.
- Reddit. 2015. Promote ideas, protect people, 14 May. www.redditblog.com/2015/05/promote-ideas-protect-people.html.
- Ronson, Jon. 2015. How one stupid tweet blew up Justine Sacco’s life. *New York Times Magazine*, 12 February. www.nytimes.com/2015/02/15/magazine/how-one-stupid-tweet-ruined-justine-saccos-life.html?_r=0.
- Rose, Rebecca. 2016. Meet the Orthodox woman behind ‘Move the fuck over, Bro’ blog. *Jezebel*, 15 January. <http://jezebel.com/meet-the-orthodox-woman-behind-move-the-fuck-over-bro-1501688008>.
- RTL Nieuws. 2013. Welke straf krijgen de kopschoppers van Eindhoven? *RTL Nieuws*, 11 December. <http://www.rtlnieuws.nl/nieuws/binnenland/welke-straf-krijgen-de-kopschoppers-van-eindhoven>.
- Ryan, Denise. 2011. Rioting teen Nathan Kotylak and family face backlash, forced to leave home. *Vancouver Sun*, 11 June. www.vancouversun.com/technology/Rioting+teen+Nathan+Kotylak+family+face+backlash+forced+leave+home/4972283/story.html.
- Schneider, Christopher and Daniel Trottier. 2012. The 2011 Vancouver Riot and the role of Facebook in crowd-sourced policing. *BC Studies: The British Columbian Quarterly* 175 (Autumn): 57–72.
- Starbird, Kate, Jim Maddock, Mania Orand, Peg Achterman and Robert M. Mason. 2014. Rumors, false flags, and digital vigilantes: misinformation on Twitter after the 2013 Boston Marathon Bombing. *iConference 2014 Proceedings*, 654–662. doi:10.9776/14308.
- Trottier, Daniel. 2012. *Social Media as Surveillance: Rethinking Visibility in a Converging World*. Farnham: Ashgate.
- Vancouver. 2011. *Vancouver Riot Pics: Post Your Photos*. www.facebook.com/vancouverriotphotos.
- Verschuren, Corné. 2013. Rechter laat tonen bewakingsbeelden zwaar wegen in Eindhovense ‘kopschopperszaak’. *Omroep Brabant*, 28 August. www.omroepbrabant.nl/?news/1984791483/Rechter+laat+tonen+bewakingsbeelden+zwaar+wegen+in+Eindhovense+%E2%80%98kopschopperszaak%E2%80%99.aspx.
- Warren, Samuel and Louis D. Brandeis. 1890. The right to privacy. *Harvard Law Review* 15(5): 193–220.

Westin, Alan. 1967. *Privacy and Freedom*. Atheneum.

Williams, Andy and Bill Thompson. 2004. Vigilance or vigilantes: The Paulsgrove Riots and policing paedophiles in the community Part II: The lessons of Paulsgrove. *The Police Journal* 77(3): 193–205.