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7 Bibliography

- Akandji-Kombe J-F, *Positive Obligations under the European Convention on Human Rights* (Directorate General of Human Rights, Council of Europe 2007)
- Alang N, 'Turns Out Algorithms Are Racist' [2017] *The New Republic*
<<https://newrepublic.com/article/144644/turns-algorithms-racist>> accessed 19 March 2019
- Albrecht JP, 'GDPR Inofficial Consolidated Version after LIBE Committee Vote Provided by the Rapporteur' (2013) <<http://www.janalbrecht.eu/wp-content/uploads/2018/05/DPR-Regulation-inofficial-consolidated-LIBE.pdf>> accessed 13 February 2019
- Aleem Z, 'All the Secret Ways You're Being Tracked That You Don't Even Realize' (*Mic*, 23 March 2015) <<https://mic.com/articles/113078/all-the-secret-ways-you-re-being-tracked-that-you-don-t-even-realize>> accessed 13 February 2019
- Andrews N, 'Fundamental Principles of Civil Procedure: Order Out of Chaos' in Xandra Ellen Kramer and others (eds), *Civil litigation in a globalising world* (TMC Asser Press; Springer 2012)
- Angwin J and others, 'Machine Bias' (*ProPublica*, 23 May 2016)
<<https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing>> accessed 19 March 2019
- Anrig B, Browne W and Gasson M, 'The Role of Algorithms in Profiling' in Mireille Hildebrandt and Serge Gutwirth (eds), *Profiling the European Citizen: Cross-Disciplinary Perspectives* (Softcover reprint of hardcover 1st ed 2008 edition, Springer 2008)
- Aoki M, *Toward a Comparative Institutional Analysis* (1st edition, The MIT Press 2001)
- Arnbak A and others, 'Security Collapse in the HTTPS Market' (2014) 57 Communications of the ACM 47 <<http://dl.acm.org/citation.cfm?doid=2661061.2660574>> accessed 19 March 2019
- Arora N, 'Seeds Of Apple's New Growth In Mobile Payments, 800 Million iTunes Accounts' (*Forbes*, 24 April 2014) <<https://www.forbes.com/sites/nigamarora/2014/04/24/seeds-of-apples-new-growth-in-mobile-payments-800-million-itune-accounts/>> accessed 19 March 2019
- Article 29 Data Protection Working Party, 'Opinion 2/2010 on Online Behavioural Advertising' (2010) 00909/10/EN WP 171
- , 'Opinion 03/2013 on Purpose Limitation' (2013) 00569/13/EN WP 203
<https://ec.europa.eu/justice/article-29/documentation/opinion-recommendation/files/2013/wp203_en.pdf> accessed 20 March 2019
- , 'Opinion 05/2014 on Anonymisation Techniques' (2014) 0829/14/EN WP216
<https://ec.europa.eu/justice/article-29/documentation/opinion-recommendation/files/2014/wp216_en.pdf> accessed 13 February 2019

7. Bibliography

- , 'Guidelines on Data Protection Impact Assessment (DPIA) and Determining Whether Processing Is "Likely to Result in a High Risk" for the Purposes of Regulation 2016/679' (Article 29 Data Protection Working Party 2017) 17/EN WP248
- Autoriteit Persoonsgegevens, 'Microsoft Windows 10 - De Verwerking van Persoonsgegevens via Telemetrie' (Autoriteit Persoonsgegevens 2017) Rapport definitieve bevindingen met correcties <https://autoriteitpersoonsgegevens.nl/sites/default/files/01_onderzoek_microsoft_windows_10_okt_2017.pdf> accessed 19 March 2019
- Bakos Y, Marotta-Wurgler F and Trossen DR, 'Does Anyone Read the Fine Print? Consumer Attention to Standard Form Contracts' (2014) 43 *Journal of Legal Studies* <<http://papers.ssrn.com/abstract=1443256>> accessed 13 February 2019
- Baldwin R, Cave M and Lodge M, *Understanding Regulation: Theory, Strategy, and Practice* (2nd edition, Oxford University Press 2013)
- Barnett M and Duvall R, 'Power in International Politics' (2005) 59 *International Organization* 39 <<http://www.jstor.org/stable/3877878>> accessed 13 February 2019
- Bartlett III RP and Plaut VC, 'Blind Consent? A Social Psychological Investigation of Non-Readership of Click-through Agreements.' (2012) 36 *Law and human behavior* 293 <<http://psycnet.apa.org/journals/lhb/36/4/293/>> accessed 19 March 2019
- Baruh L and Popescu M, 'Big Data Analytics and the Limits of Privacy Self-Management' (2017) 19 *New Media & Society* 579 <<http://dx.doi.org/10.1177/1461444815614001>> accessed 19 March 2019
- Bar-Yam Y, *Dynamics of Complex Systems* (Addison-Wesley 1997)
- BBC News, 'Artificial Intelligence: Google's AlphaGo Beats Go Master Lee Se-Dol' (*BBC News*, 12 March 2016) <<http://www.bbc.com/news/technology-35785875>> accessed 19 March 2019
- Beck U, *Risikogesellschaft. Auf Dem Weg in Eine Andere Moderne* (1st ed., Suhrkamp Verlag 1986)
- , *Risk Society: Towards a New Modernity* (Sage Publications 1992)
- , *World at Risk* (Polity Press 2009)
- Beck U and Beck-Gernsheim E, *Individualization: Institutionalized Individualism and Its Social and Political Consequences* (1st edition, SAGE Publications Ltd 2002)
- Bentham J, *The Panopticon Writings* (Miran Božovic ed, Verso 1995)
- Berghel H, 'Equifax and the Latest Round of Identity Theft Roulette' (2017) 50 *IEEE Computer* 72
- BEUC, 'Annual Report 2016' (BEUC 2017) <<http://www.beuc.eu/publications/beuc-x-2017-045-annual-report-2016.pdf>> accessed 19 March 2019
- Bishop CM, *Pattern Recognition and Machine Learning* (Springer 2006)
- Blessing M, 'Het Verzet Tegen de Volkstelling van 1971' (2005) 15 *Historisch Nieuwsblad* <<https://www.historischnieuwsblad.nl/nl/artikel/6697/het-verzet-tegen-de-volkstelling-van-1971.html>> accessed 19 March 2019

- Bogaarts R and Dekker W, 'De Dagelijkse Volkstelling' *De Volkskrant* (21 February 1998) 50
- Böhme R and Grossklags J, 'The Security Cost of Cheap User Interaction', *Proceedings of the 2011 workshop on New security paradigms workshop* (ACM 2011)
<<https://dl.acm.org/citation.cfm?id=2073284>> accessed 13 February 2019
- Boucher P, 'Safari Ou La Chasse Aux Français' *Le Monde* (Paris, 21 March 1974)
<<http://rewriting.net/2008/02/11/safari-ou-la-chasse-aux-francais/>>
- Bowman J, 'EU Data Protection Regulation: A Tipping Point Has Been Reached' (*The Privacy Advisor: The official Newsletter of the IAPP*, 7 November 2014) <<https://iapp.org/news/a/eu-data-protection-regulation-a-tipping-point-has-been-reached/>> accessed 13 February 2019
- Breindl Y, 'Promoting Openness by "Patching" European Directives: Internet-Based Campaigning during the EU Telecoms Package Reform' (2011) 8 *Journal of Information Technology & Politics* 346 <<http://dx.doi.org/10.1080/19331681.2011.595326>> accessed 13 February 2019
- Brickell J and Shmatikov V, 'The Cost of Privacy: Destruction of Data-Mining Utility in Anonymized Data Publishing', *Proceedings of the 14th ACM SIGKDD international conference on Knowledge discovery and data mining* (ACM 2008)
- Briscoe B, Odlyzko A and Tilly B, 'Metcalfe's Law Is Wrong - Communications Networks Increase in Value as They Add Members-but by How Much?' (2006) 43 *Spectrum*, IEEE 34
- Bughin J, 'Big Data, Big Bang?' (2016) 3 *Journal of Big Data* 2
<<https://journalofbigdata.springeropen.com/articles/10.1186/s40537-015-0014-3>> accessed 19 March 2019
- Bultmann Dr jur. F, '30 Jahre Praxis Der AGB-Verbandsklage: Kurzfassung Des Gutachtens Im Auftrag Des Verbraucherzentrale Bundesverbandes'
<http://www.vzbv.de/sites/default/files/mediapics/kurzfassung_gutachten_verbandsklage_2008.pdf> accessed 19 March 2019
- Bundeskartellamt, 'Bundeskartellamt Eröffnet Verfahren Gegen Facebook Wegen Verdachts Auf Marktmachtmissbrauch Durch Datenschutzverstöße' (*Meldung*, 3 March 2016)
<https://www.bundeskartellamt.de/SharedDocs/Meldung/DE/Pressemitteilungen/2016/02_03_2016_Facebook.html> accessed 19 March 2019
- Burrell J, 'How the Machine "Thinks": Understanding Opacity in Machine Learning Algorithms' (2016) 3 *Big Data & Society* 2053951715622512 <<http://dx.doi.org/10.1177/2053951715622512>> accessed 19 March 2019
- Calders T and Žliobaitė I, 'Why Unbiased Computational Processes Can Lead to Discriminative Decision Procedures' in Bart Custers and others (eds), *Discrimination and Privacy in the Information Society - Data Mining and Profiling in Large Databases* (Springer 2013)
- Cate FH and Mayer-Schönberger V, 'Notice and Consent in a World of Big Data' (2013) 3 *International Data Privacy Law* 67 <<http://idpl.oxfordjournals.org/content/3/2/67>> accessed 19 March 2019

7. Bibliography

- Center for Disease Control, 'Cigarette Brand Preference Among Middle and High School Students Who Are Established Smokers - United States, 2004 and 2006' (2009) 58 *Morbidity and Mortality Weekly Report* 112
<<https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5805a3.htm>> accessed 19 March 2019
- Centola D and Baronchelli A, 'The Spontaneous Emergence of Conventions: An Experimental Study of Cultural Evolution' (2015) 112 *Proceedings of the National Academy of Sciences* 1989
<<http://www.pnas.org/content/112/7/1989>> accessed 19 March 2019
- Chun R, 'Big In... China: Machines That Scan Your Face' [2018] *The Atlantic*
<<https://www.theatlantic.com/magazine/archive/2018/04/big-in-china-machines-that-scan-your-face/554075/>> accessed 19 March 2019
- Citron DK, 'Technological Due Process' (2007) 85 *Wash. UL Rev.* 1249
- Citron DK and Pasquale FA, 'The Scored Society: Due Process for Automated Predictions' (2014) 89 *Wash. UL Rev.* 1 <<http://papers.ssrn.com/abstract=2376209>> accessed 19 March 2019
- Clarke L and Perrow C, 'Prosaic Organizational Failure' (1996) 39 *American Behavioral Scientist* 1040 <<http://abs.sagepub.com/content/39/8/1040.short>> accessed 13 February 2019
- Coase RH, 'The Problem of Social Cost' (1960) 3 *Journal of Law and Economics* 1
- Cofone IN, 'Privacy Tradeoffs in Information Technology Law' (Erasmus University 2015)
- Cohen JE, 'Turning Privacy Inside Out' (2019) 20 *Theoretical Inquiries in Law* (forthcoming)
<<https://papers.ssrn.com/abstract=3162178>> accessed 19 March 2019
- Cohn-Gordon K and others, 'A Formal Security Analysis of the Signal Messaging Protocol', *Security and Privacy (EuroS&P), 2017 IEEE European Symposium on* (IEEE 2017)
- Collingridge D, *The Social Control of Technology* (Frances Pinter 1980)
- Commission des Clauses Abusives, 'Recommandation n° 2014-02 relative aux contrats proposés par les fournisseurs de services de réseaux sociaux' <<http://www.clauses-abusives.fr/recommandation/contrats-de-fourniture-de-services-de-reseaux-sociaux-nouveau/>> accessed 18 March 2019
- Committee of Experts on Internet Intermediaries (MSI-NET), 'Study on the Human Rights Dimensions of Algorithms (Second Draft)' (Council of Europe 2017) MSI-NET(2016)06 rev
<<https://rm.coe.int/16806fe644>> accessed 19 March 2019
- Committee on Legal Affairs and Human Rights and Omtzigt P, 'Mass Surveillance' (Parliamentary Assembly, Council of Europe 2015) Doc. 13734
<<http://assembly.coe.int/nw/xml/XRef/X2H-Xref-ViewPDF.asp?FileID=21583&lang=en>> accessed 13 February 2019
- Computer Says No, 'Computer Says No', *Wikipedia* (2017)
<https://en.wikipedia.org/wiki/Computer_says_no> accessed 19 March 2019
- Constantiou ID and Kallinikos J, 'New Games, New Rules: Big Data and the Changing Context of Strategy' (2015) 30 *Journal of Information Technology* 44

- Consumentenbond, 'Review: ANWB Veilig Rijden' (*Consumentenbond*, 21 July 2016) <<https://www.consumentenbond.nl/autoverzekering/anwb-veilig-rijden>> accessed 19 March 2019
- , 'Jaarverslag 2016' (Consumentenbond 2017) Jaarverslag <<https://www.consumentenbond.nl/binaries/content/assets/cbhippowsite/over-ons/wie-zijn-we/consumentenbond-jaarverslag-2016.pdf>> accessed 13 February 2019
- Council of Europe, 'Explanatory Report to the Convention for the Protection of Individuals with Regard to Automatic Processing of Personal Data' (Council of Europe 1981) Explanatory Report 108
- , 'Convention 108 and Protocol: Background' (*Data Protection*) <<https://www.coe.int/en/web/data-protection/convention108/background>> accessed 19 March 2019
- Council of the OECD, 'Recommendation of the Council Concerning Guidelines Governing the Protection of Privacy and Transborder Flows of Personal Data - C(80)58/FINAL' <<http://www.oecd.org/internet/ieconomy/oecdguidelinesontheprivacyandtransborderflowsofpersonaldata.htm>> accessed 19 March 2019
- , 'OECD Guidelines Governing the Protection of Privacy and Transborder Flows of Personal Data - C(80)58/FINAL, as Amended on 11 July 2013 by C(2013)79' (Organization for Economic Cooperation and Development 2013) <<http://www.oecd.org/sti/ieconomy/2013-oecd-privacy-guidelines.pdf>> accessed 19 March 2019
- Crawford K and Schultz J, 'Big Data and Due Process: Toward a Framework to Redress Predictive Privacy Harms' (2014) 55 BCL Rev. 93 <http://heinonlinebackup.com/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/bclr55§ion=5> accessed 19 March 2019
- Cullen J and others, 'Seven-Year Patterns in US Cigar Use Epidemiology Among Young Adults Aged 18–25 Years: A Focus on Race/Ethnicity and Brand' (2011) 101 American Journal of Public Health 1955 <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3222378/>> accessed 19 March 2019
- Custers B and others (eds), *Discrimination and Privacy in the Information Society - Data Mining and Profiling in Large Databases* (Springer 2013)
- Datta A, 'Privacy through Accountability: A Computer Science Perspective' in Raja Natarajan (ed), *Distributed Computing and Internet Technology* (Springer International Publishing 2014)
- De Hert P and Gutwirth S, 'Data Protection in the Case Law of Strasbourg and Luxembourg: Constitutionalisation in Action' in Serge Gutwirth and others (eds), *Reinventing Data Protection?* (Springer Netherlands 2009)
- de Tocqueville A, *Democracy in America* (JP Mayer and George Lawrence eds, Harper Perennial Modern Classics 2006)
- Dembosky A, 'Facebook Spending on Lobbying Soars' *Financial Times* (24 January 2013)
- Diebold FX, 'A Personal Perspective on the Origin(s) and Development of "Big Data": The Phenomenon, the Term, and the Discipline' (2012)

7. Bibliography

<http://www.ssc.upenn.edu/~fdiebold/papers/paper112/Diebold_Big_Data.pdf> accessed 20 March 2019

Digital Rights Ireland, 'We Need Your Help to Keep Working for European Digital Rights in 2014' (*Digital Rights Ireland*, 1 January 2014) <<http://www.digitalrights.ie/support-us-in-2014/>> accessed 13 February 2019

Digital transformation, 'Digital Transformation', *Wikipedia* (2018) <https://en.wikipedia.org/wiki/Digital_transformation> accessed 19 March 2019

DLA Piper, 'Part 4: The Future of Online Privacy and Data Protection' (European Union 2009) SMART 2007/0037 <http://ec.europa.eu/newsroom/dae/document.cfm?doc_id=833> accessed 13 February 2019

Domingos P, 'A Few Useful Things to Know about Machine Learning' (2012) 55 Communications of the ACM 78 <<http://dl.acm.org/citation.cfm?id=2347755>> accessed 19 March 2019

Duhigg C, *The Power of Habit: Why We Do What We Do in Life and Business* (Random House Trade Paperback Edition, Random House Trade Paperbacks 2014)

Dür A and De Bièvre D, 'The Question of Interest Group Influence' (2007) 27 Journal of Public Policy 1 <https://www.cambridge.org/core/product/identifier/S0143814X07000591/type/journal_article> accessed 17 May 2019

Dwork C and Mulligan DK, 'It's Not Privacy, and It's Not Fair' (2013) 66 Stanford Law Review Online 35 <<http://www.stanfordlawreview.org/online/privacy-and-big-data/its-not-privacy-and-its-not-fair>> accessed 19 March 2019

EDRi - European Digital Rights, 'EU: The Global Standard Setter for Privacy and Data Protection' (EDRi - European Digital Rights 2013) Issue 2 <<http://edri.org/files/eudatap-02.pdf>> accessed 13 February 2019

—, 'Annual Report, January 2013 - December 2013' (EDRi - European Digital Rights 2014) <https://edri.org/wp-content/uploads/2014/04/EDRi_Annual_Report_2013.pdf> accessed 13 February 2019

—, 'Annual Report 2016: January 2016 - December 2016' (EDRi - European Digital Rights 2017) <https://edri.org/files/edri_annual_report_2016.pdf> accessed 13 February 2019

Engelfriet A and others, *De algemene verordening gegevensbescherming: artikelsgewijs commentaar* (Ius mentis 2017)

European Agency for Fundamental Rights, 'Data Protection in the European Union: The Role of National Data Protection Authorities. Strengthening the Fundamental Rights Architecture in the EU II' (European Union Agency for Fundamental Rights 2010) <doi:10.2811/47216>

—, 'Fundamental Rights Report 2016' (European Union Agency for Fundamental Rights 2016) <<http://fra.europa.eu/en/publication/2016/fundamental-rights-report-2016>> accessed 19 March 2019

- European Commission, 'Proposal for a Council Directive on the Protection of Individuals with Regard to the Processing of Personal Data' (European Commission 1990) COM(90) 314 final
- , 'Amended Proposal for a Council Directive on the Protection of Individuals with Regard to the Processing of Personal Data and on the Free Movement of Such Data' (European Commission 1992) COM (92) 422 final
- , 'Guidelines on Vertical Restraints' (European Commission 2010) OJ 2010/C 130/01
- , 'A Common European Sales Law to Facilitate Cross-Border Transactions in the Single Market' (European Commission 2011) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions COM/2011/0636 final <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52011DC0636>> accessed 13 February 2019
- , 'Impact Assessment, Accompanying the Document "Regulation of the European Parliament and of the Council on the Protection of Individuals with Regard to the Processing of Personal Data and on the Free Movement of Such Data (General Data Protection Regulation)" and "Directive of the European Parliament and of the Council on the Protection of Individuals with Regard to the Processing of Personal Data by Competent Authorities for the Purposes of Prevention, Investigation, Detection or Prosecution of Criminal Offences or the Execution of Criminal Penalties, and the Free Movement of Such Data"' (European Commission 2012) Accompanying document SEC(2012) 72 final
- , 'Proposal for a Regulation of the European Parliament and of the Council on the Protection of Individuals with Regard to the Processing of Personal Data and on the Free Movement of Such Data (General Data Protection Regulation) COM(2012) 11 (FINAL)' (European Commission 2012) <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52012PC0011>> accessed 19 March 2019
- , 'Safeguarding Privacy in a Connected World. A European Data Protection Framework for the 21st Century' (European Commission 2012) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions COM(2012) 9 final <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0009:FIN:EN:PDF>> accessed 20 March 2019
- , 'A European Consumer Agenda - Boosting Confidence And Growth' (European Union 2012) Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and The Committee of the Regions COM(2012) 225 final <https://ec.europa.eu/commission/sites/beta-political/files/consumer_agenda_2012_en.pdf> accessed 13 February 2019
- , 'Antitrust: Commission Fines Microsoft for Non-Compliance with Browser Choice Commitments' (6 March 2013) <http://europa.eu/rapid/press-release_IP-13-196_en.htm> accessed 19 March 2019

7. Bibliography

—, ‘Towards a European Horizontal Framework for Collective Redress COM(2013) 401 Final’ (European Commission 2013) <<https://eur-lex.europa.eu/procedure/EN/202773>> accessed 13 February 2019

—, ‘Proposal for a Directive of the European Parliament and of the Council on Certain Aspects Concerning Contracts for the Supply of Digital Content’ (European Commission 2015) COM(2015) 634 final; 2015/0287 (COD) <<https://ec.europa.eu/transparency/regdoc/rep/1/2015/EN/1-2015-634-EN-F1-1.PDF>>

—, ‘Antitrust: Commission Fines Google €2.42 Billion for Abusing Dominance as Search Engine by Giving Illegal Advantage to Own Comparison Shopping Service’ (27 June 2017) <http://europa.eu/rapid/press-release_IP-17-1784_en.htm> accessed 19 March 2019

—, ‘State Aid: Commission Refers Ireland to Court for Failure to Recover Illegal Tax Benefits from Apple Worth up to €13 Billion’ (4 October 2017) <http://europa.eu/rapid/press-release_IP-17-3702_en.htm> accessed 19 March 2019

—, ‘Adequacy of the Protection of Personal Data in Non-EU Countries’ (*European Commission - European Commission*) <https://ec.europa.eu/info/law/law-topic/data-protection/data-transfers-outside-eu/adequacy-protection-personal-data-non-eu-countries_en> accessed 19 March 2019

European Data Protection Supervisor, ‘Privacy and Competitiveness in the Age of Big Data: The Interplay between Data Protection, Competition Law and Consumer Protection in the Digital Economy’ (2014) Preliminary Opinion of the European Data Protection Supervisor <https://edps.europa.eu/sites/edp/files/publication/14-03-26_competition_law_big_data_en.pdf> accessed 13 February 2019

European Digital Rights, ‘Proceed with Caution: Flexibilities in the General Data Protection Regulation’ (EDRI - European Digital Rights 2016) <https://edri.org/files/GDPR_analysis/EDRI_analysis_gdpr_flexibilities.pdf> accessed 19 March 2019

European Union Agency for Fundamental Rights and European Court of Human Rights, *Handbook on European non-discrimination law* (Publications Office of the European Union 2011) <http://fra.europa.eu/sites/default/files/fra_uploads/1510-fra-case-law-handbook_en.pdf> accessed 19 March 2019

European Union Agency for Fundamental Rights, European Court of Human Rights and Council of Europe, *Handbook on European Data Protection Law* (Publications Office of the European Union 2014)

Executive Office of the President, ‘Big Data: A Report on Algorithmic Systems, Opportunity, and Civil Rights’ (Executive Office of the President 2016) <https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/2016_0504_data_discrimination.pdf> accessed 13 February 2019

Experian, ‘Determine the Best Offer: Make Credit Decisions That Yield the Best Results’ (2018) <<http://www.experian.com/business-services/customer-leads.html>> accessed 19 March 2019

- Federal Trade Commission, 'Data Brokers: A Call for Transparency and Accountability' (2014) <<https://www.ftc.gov/reports/data-brokers-call-transparency-accountability-report-federal-trade-commission-may-2014>> accessed 13 February 2019
- Feng QY and others, 'An Exploratory Statistical Approach to Depression Pattern Identification' (2013) 392 *Physica A: Statistical Mechanics and its Applications* 889 <<http://linkinghub.elsevier.com/retrieve/pii/S0378437112009211>> accessed 19 March 2019
- Ferenstein G, 'Google's Cerf Says "Privacy May Be An Anomaly". Historically, He's Right.' (*TechCrunch*, 20 November 2013) <<http://social.techcrunch.com/2013/11/20/googles-cerf-says-privacy-may-be-an-anomaly-historically-hes-right/>> accessed 19 March 2019
- Fisher AW and McKenney JL, 'The Development of the ERMA Banking System: Lessons from History' (1993) 15 *IEEE Annals of the History of Computing* 44
- Flach P, *Machine Learning: The Art and Science of Algorithms That Make Sense of Data* (1 edition, Cambridge University Press 2012)
- Floridi L, 'Philosophical Conceptions of Information' in Giovanni Sommaruga (ed), *Formal theories of information: from Shannon to semantic information theory and general concepts of information* (Springer 2009)
- Fontanella-Khan J, 'Brussels: Astroturfing Takes Root' *Financial Times* (26 June 2013)
- Foucault M, *Discipline and Punish: The Birth of the Prison* (Second Vintage Books edition, Vintage 1991)
- Foyer M, 'Projet de Loi (No 2516) et Propositions de Loi (Nos 1004 et 3092)' (Assemblée Nationale 1977) 3125 <<http://www.senat.fr/rap/l77-3125/l77-31251.pdf>> accessed 19 March 2019
- Frantziou E, 'The Horizontal Effect of the Charter of Fundamental Rights of the EU: Rediscovering the Reasons for Horizontality' (2015) 21 *European Law Journal* 657 <<http://doi.wiley.com/10.1111/eulj.12137>> accessed 19 March 2019
- Galanter M, 'Why the Haves Come out Ahead: Speculations on the Limits of Legal Change' (1974) 9 *Law & Society Review* 95 <<https://www.jstor.org/stable/3053023>> accessed 13 February 2019
- Ganley P and Allgrove B, 'Net Neutrality: A User's Guide' (2006) 22 *Computer Law & Security Review* 454 <<http://www.sciencedirect.com/science/article/pii/S0267364906000902>> accessed 19 March 2019
- Gellert R and others, 'A Comparative Analysis of Anti-Discrimination and Data Protection Legislations' in Bart Custers and others (eds), *Discrimination and Privacy in the Information Society - Data Mining and Profiling in Large Databases* (Springer 2013)
- Genin-Meric R, 'Droit de la preuve: l'Exemple Français' in José Lebre de Freitas (ed), *The law of evidence in the European Union = Das Beweisrecht in der Europäischen Union = Le droit de la preuve dans l'Union Européenne* (Kluwer Law International 2004)
- Giesen I, 'Sommige Procespartijen Zijn "More Equal than Others". De Macht van de Tabaksindustrie En de Nederlandse Rechtspleging' in Nienke Doornbos, Nick Huls and Wibo

7. Bibliography

- van Rossum (eds), *Rechtspraak van Buiten. Negenendertig door de rechtssociologie geïnspireerde annotaties (Liber Amicorum prof. dr. J.F. Bruinsma)* (Kluwer 2010)
- Gomes O, 'The Economy as a Complex Object' in Bernardo Alves Furtado, Patricia AM Sakowski and Marina H Tóvolli (eds), *Modeling Complex Systems for Public Policies* (IPEA 2015)
- Gomez F, 'EC Consumer Protection Law and EC Competition Law: How Related Are They? A Law and Economics Perspective' in Hugh Collins (ed), *The Forthcoming EC Directive on Unfair Commercial Practices - Contract, Consumer and Competition law implications* (Kluwer Law International 2004)
- Gouyet J-F and Mandelbrot B, *Physics and Fractal Structures* (1 edition, Springer 1996)
- Graham-Harrison E and Cadwalladr C, 'Revealed: 50 Million Facebook Profiles Harvested for Cambridge Analytica in Major Data Breach' (*the Guardian*, 17 March 2018) <<http://www.theguardian.com/news/2018/mar/17/cambridge-analytica-facebook-influence-us-election>> accessed 20 March 2019
- Gram-Hanssen K and others, 'Do Homeowners Use Energy Labels? A Comparison between Denmark and Belgium' (2007) 35 *Energy Policy* 2879 <<http://linkinghub.elsevier.com/retrieve/pii/S0301421506004071>> accessed 13 February 2019
- Grassegger H and Krogerus M, 'Ich Habe Nur Gezeigt, Dass Es Die Bombe Gibt' [2016] *Das Magazin* <<https://www.dasmagazin.ch/2016/12/03/ich-habe-nur-gezeigt-dass-es-die-bombe-gibt/>> accessed 20 March 2019
- Great Britain Commission for Racial Equality, *Medical School Admissions: Report of a Formal Investigation Into St. George's Hospital Medical School* (Commission for Racial Equality 1988)
- Greenberg A, 'Whatsapp Just Switched on End-to-End Encryption for Hundreds of Millions of Users' <<https://www.wired.com/2014/11/whatsapp-encrypted-messaging/>> accessed 20 March 2019
- Greenfield A, 'China's Dystopian Tech Could Be Contagious' [2018] *The Atlantic* <<https://www.theatlantic.com/technology/archive/2018/02/chinas-dangerous-dream-of-urban-control/553097/>> accessed 20 March 2019
- Grimm V and others, 'Pattern-Oriented Modeling of Agent-Based Complex Systems: Lessons from Ecology' (2005) 310 *Science* 987 <<http://science.sciencemag.org/content/310/5750/987>> accessed 20 March 2019
- Guess AR, 'Artificial Intelligence Had a Breakthrough Year in 2015' (*DATAVERSITY*, 9 December 2015) <<http://www.dataversity.net/artificial-intelligence-had-a-breakthrough-year-in-2015/>> accessed 20 March 2019
- Gueye A and others, 'Defensive Resource Allocations with Security Chokepoints in IPv6 Networks' in Pierangela Samarati (ed), *Data and Applications Security and Privacy XXIX* (Springer, Cham 2015) <https://link.springer.com/chapter/10.1007/978-3-319-20810-7_19> accessed 20 March 2019
- Guibault LMCR and others, *Digital Consumers and the Law. Towards a Cohesive European Framework* (Kluwer Law International 2012)

- Guinness M, 'France Maintains Long Tradition of Data Protection' (*DW.COM*, 26 January 2011) <<http://www.dw.com/en/france-maintains-long-tradition-of-data-protection/a-14797711>> accessed 20 March 2019
- Gutwirth S and de Hert P, 'Een Theoretische Onderbouw Voor Een Legitiem Strafproces. Reflecties over Procesculturen, de Doelstellingen van de Straf, de Plaats van Het Strafrecht En de Rol van Slachtoffers' (2001) 31 *Delikt & delinkwent* 1048 <<http://www.vub.ac.be/LSTS/pub/Gutwirth/006.pdf>> accessed 13 February 2019
- Hammond G, 'Your Phone Dial Computes Your Bill' (1949) 154 *Popular Science* 175
- Harkous H and others, 'Polisis: Automated Analysis and Presentation of Privacy Policies Using Deep Learning' [2018] arXiv preprint arXiv:1802.02561
- Havard C, "'On the Take": The Black Box of Credit Scoring and Mortgage Discrimination' (2011) 20 *Boston University Public Interest Law Journal* 241 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1710063> accessed 13 February 2019
- Hecht J, 'Is Keck's Law Coming to an End?' (2016) 2016 *IEEE Spectrum* 11 <<https://spectrum.ieee.org/semiconductors/optoelectronics/is-kecks-law-coming-to-an-end>>
- Hempel L and Lammerant H, 'Impact Assessments as Negotiated Knowledge' in Serge Gutwirth, Ronald Leenes and Paul de Hert (eds), *Reforming European Data Protection Law* (2015 edition, Springer 2014)
- Hill R, *The New International Telecommunication Regulations and the Internet* (Springer Berlin Heidelberg 2014)
- Hirsch DD, 'Protecting the Inner Environment: What Privacy Regulation Can Learn from Environmental Law' (2006) 41 *Ga. L. Rev.* 1
- Holland JH, *Complexity: A Very Short Introduction* (Oxford University Press 2014)
- Holvast J, 'Op weg naar een risicoloze maatschappij? De vrijheid van de mens in de informatiesamenleving' (Leiden University 1986)
- Hoogstraaten H and others, 'Black Tulip: Report of the Investigation into the DigiNotar Certificate Authority Breach' (Fox-IT BV 2012) <https://roselabs.nl/files/audit_reports/Fox-IT_-_DigiNotar.pdf> accessed 13 February 2019
- Hopkins A, 'Discussion: The Limits of Normal Accident Theory' (1999) 32 *Safety Science* 93 <<https://linkinghub.elsevier.com/retrieve/pii/S0925753599000156>> accessed 16 May 2019
- Horowitz M, 'Visualizing Big Data: Bar Charts for Words' (2008) 16 *Wired Magazine* <<https://www.wired.com/2008/06/pb-visualizing/>>
- Houlder V, Barker A and Beesley A, 'Apple's EU Tax Dispute Explained' *Financial Times* (London, 30 August 2016) <<https://www.ft.com/content/3e0172a0-6e1b-11e6-9ac1-1055824ca907>> accessed 20 March 2019
- International Telecommunication Union, *International Telecommunication Regulations. Final Acts of the World Administrative Telegraph and Telephone Conference, Melbourne, 1988, (WATTC-88)*. (ITU 1989)

7. Bibliography

- Issacharoff S, 'Group Litigation of Consumer Claims: Lessons from the U.S. Experience' (1999) 34 *Texas International Law Journal* 135
- ITU-T, 'The International Public Telecommunication Numbering Plan - Recommendation ITU-T E.164' (Telecommunication Standardization Sector of ITU 2010) Recommendation E 36438
- , 'Overview of the Internet of Things' (International Telecommunication Union 2012) Recommendation ITU-T Y.4000/Y.2060
- Jerome JW, 'Buying and Selling Privacy: Big Data's Different Burdens and Benefits' (2013) 66 *Stanford Law Review Online* 47 <<https://www.stanfordlawreview.org/online/privacy-and-big-data-buying-and-selling-privacy/>> accessed 13 February 2019
- Jones D, 'Solidarity and Public Participation: The Role of the Aarhus Convention in Containing Environmentally Induced Social Conflict' (2008) 20 *Global Change, Peace & Security* 151 <<http://dx.doi.org/10.1080/14781150802079706>> accessed 13 February 2019
- Jue N, 'ING En Het Gebruik van Klantgegevens. Open Brief van ING Aan Haar Klanten' (maart 2014) <https://www.ing.nl/nieuws/nieuws_en_persberichten/2014/03/ing_en_het_gebruik_van_klant_brief.html> accessed 13 February 2019
- Kannan PK and Kopalle PK, 'Dynamic Pricing on the Internet: Importance and Implications for Consumer Behavior' (2001) 5 *International Journal of Electronic Commerce* 63 <<https://doi.org/10.1080/10864415.2001.11044211>> accessed 20 March 2019
- Kellert SH, *In the Wake of Chaos: Unpredictable Order in Dynamical Systems* (University of Chicago press 1994)
- Kerr I and Earle J, 'Prediction, Preemption, Presumption: How Big Data Threatens Big Picture Privacy' (2013) 66 *Stanford Law Review Online* 65 <<http://www.stanfordlawreview.org/online/privacy-and-big-data/prediction-preemption-presumption>> accessed 13 February 2019
- Klaver M-J, 'Bits of Freedom Staakt Strijd Op Web; Oprichter: Digitale Burgerrechtenbeweging Harder Nodig Dan Ooit' *NRC Handelsblad* (5 August 2006) 26 <<https://www.nrc.nl/nieuws/2006/08/05/bits-of-freedom-staakt-strijd-op-web-1172796-a826780>> accessed 13 February 2019
- Klinke A and Renn O, 'A New Approach to Risk Evaluation and Management: Risk-Based, Precaution-Based, and Discourse-Based Strategies' (2002) 22 *Risk Analysis* 1071 <<http://onlinelibrary.wiley.com/doi/10.1111/1539-6924.00274/full>> accessed 13 February 2019
- Knight W, 'Google's AI Chief Says Forget Elon Musk's Killer Robots, and Worry about Bias in AI Systems Instead' (*MIT Technology Review*, 3 October 2017) <<https://www.technologyreview.com/s/608986/forget-killer-robotsbias-is-the-real-ai-danger/>> accessed 20 March 2019
- Komesar NK, *Imperfect Alternatives: Choosing Institutions in Law, Economics, and Public Policy* (University Of Chicago Press 1997)

- , *Law's Limits: The Rule of Law and the Supply and Demand of Rights* (Cambridge University Press 2001)
- , 'Governance, Economics and the Dynamics of Participation' in Neil Komesar and others (eds), *Understanding global governance: institutional choice and the dynamics of participation* (European University Institute 2014)
- Koops B-J, 'The Trouble with European Data Protection Law' (2014) 4 *International Data Privacy Law* 250 <<https://academic.oup.com/idpl/article-abstract/4/4/250/2569063/The-trouble-with-European-data-protection-law>> accessed 20 March 2019
- Kosinski M, Stillwell D and Graepel T, 'Private Traits and Attributes Are Predictable from Digital Records of Human Behavior' (2013) 110 *Proceedings of the National Academy of Sciences* 5802 <<http://www.pnas.org/cgi/doi/10.1073/pnas.1218772110>> accessed 20 March 2019
- Kristensen V, Aven T and Ford D, 'A New Perspective on Renn and Klinke's Approach to Risk Evaluation and Management' (2006) 91 *Reliability Engineering & System Safety* 421 <<https://linkinghub.elsevier.com/retrieve/pii/S0951832005000785>> accessed 16 May 2019
- Krugman P and Wells R, *Economics* (Third Edition, Worth Publishers 2012)
- Kumar V and Reinartz W, *Customer Relationship Management: Concept, Strategy, and Tools* (Springer Science & Business Media 2012)
- Ladyman J, Lambert J and Wiesner K, 'What Is a Complex System?' (2013) 3 *European Journal for Philosophy of Science* 33 <<http://link.springer.com/article/10.1007/s13194-012-0056-8>> accessed 20 March 2019
- Lanier J and Weyl EG, 'A Blueprint for a Better Digital Society' (*Harvard Business Review*, 26 September 2018) <<https://hbr.org/2018/09/a-blueprint-for-a-better-digital-society>> accessed 20 March 2019
- Leveson N and others, 'Moving beyond Normal Accidents and High Reliability Organizations: A Systems Approach to Safety in Complex Systems' (2009) 30 *Organization Studies* 227 <<https://journals.sagepub.com/doi/abs/10.1177/0170840608101478>> accessed 20 March 2019
- Levin SA, 'Ecosystems and the Biosphere as Complex Adaptive Systems' (1998) 1 *Ecosystems* 431
- Levine ME and Forrence JL, 'Regulatory Capture, Public Interest, and the Public Agenda: Toward a Synthesis' (1990) 6 *Journal of Law, Economics, and Organization* 167 <http://jleo.oxfordjournals.org/cgi/doi/10.1093/jleo/6.special_issue.167> accessed 13 February 2019
- Li T and Li N, 'On the Tradeoff between Privacy and Utility in Data Publishing', *Proceedings of the 15th ACM SIGKDD international conference on Knowledge discovery and data mining* (ACM 2009)
- Lichter A, Loeffler M and Siegloch S, 'The Economic Costs of Mass Surveillance: Insights from Stasi Spying in East Germany' (IZA Discussion Papers 2015)
- List of public corporations by market capitalization, 'List of Public Corporations by Market Capitalization', *Wikipedia* (2018)

7. Bibliography

- <https://en.wikipedia.org/wiki/List_of_public_corporations_by_market_capitalization> accessed 20 March 2019
- Lohr S, 'How Big Data Became So Big - Unboxed' *The New York Times* (11 August 2012) <<https://www.nytimes.com/2012/08/12/business/how-big-data-became-so-big-unboxed.html>> accessed 20 March 2019
- Lynch C, 'How Do Your Data Grow?' (2008) 455 *Nature* 28 <<http://dx.doi.org/10.1038/455028a>>
- Madala HR and Ivakhnenko AG, *Inductive Learning Algorithms for Complex Systems Modeling* (CRC Press 1994)
- Madan A and others, 'Sensing the "Health State" of a Community' (2012) 11 *IEEE Pervasive Computing* 36 <<http://ieeexplore.ieee.org/document/6072198/>> accessed 20 March 2019
- Maldoff G, 'The Risk-Based Approach in the GDPR: Interpretation and Implications' <https://iapp.org/media/pdf/resource_center/GDPR_Study_Maldoff.pdf> accessed 13 February 2019
- Malik O, 'Zimmermann's Law: PGP Inventor and Silent Circle Co-Founder Phil Zimmermann on the Surveillance Society' (*Gigaom*, 11 August 2013) <<https://gigaom.com/2013/08/11/zimmermanns-law-pgp-inventor-and-silent-circle-co-founder-phil-zimmermann-on-the-surveillance-society/>> accessed 13 February 2019
- Manjoo F, 'Tech's Frightful Five: They've Got Us' *The New York Times* (10 May 2017) <<https://www.nytimes.com/2017/05/10/technology/techs-frightful-five-theyve-got-us.html>> accessed 20 March 2019
- Mascetti S and others, 'Anonymity: A Comparison Between the Legal and Computer Science Perspectives' in Serge Gutwirth and others (eds), *European Data Protection: In good health?* (Springer 2013)
- Mayer-Schönberger V and Cukier K, *Big Data: A Revolution That Will Transform How We Live, Work, and Think* (Houghton Mifflin Harcourt 2013)
- , 'The Rise of Big Data: How It's Changing the Way We Think about the World' (2013) 92 *Foreign Affairs* 28
- McAfee RP and Te Velde VL, 'Dynamic Pricing in the Airline Industry' in Terrence Hendershott (ed), *Economics and Information Systems* (1st edition, Elsevier 2006)
- McDonald AM and Cranor LF, 'The Cost of Reading Privacy Policies' (2008) 4 *I/S: A Journal of Law and Policy for the Information Society* 540
- McGregor C, 'Big Data in Neonatal Intensive Care' (2013) 46 *IEEE Computer* 54
- Mele C, 'No Anonymity for Plaintiffs Suing Ashley Madison Over Hack, Judge Rules' *The New York Times* (21 April 2016) <<http://www.nytimes.com/2016/04/22/technology/no-anonymity-ashley-madison-hack-case.html>> accessed 20 March 2019
- Microsoft, 'Privacy Statement' <<https://privacy.microsoft.com/en-us/privacystatement/>> accessed 13 February 2019

- Mittelstadt BD and others, 'The Ethics of Algorithms: Mapping the Debate' (2016) 3 *Big Data & Society* 2053951716679679 <<http://journals.sagepub.com/doi/abs/10.1177/2053951716679679>> accessed 20 March 2019
- Moerel L, *Big Data Protection: How to Make the Draft EU Regulation on Data Protection Future Proof: Oratie 14 Februari 2014* (Tilburg University 2014)
- Moore GE, 'Cramming More Components onto Integrated Circuits' (1965) 38 *Electronics Magazine* 114 ff <<https://ieeexplore.ieee.org/abstract/document/4785860>> accessed 20 March 2019
- Morgan, Glenn and others, 'Introduction' in Glenn Morgan and others (eds), *The Oxford Handbook of Comparative Institutional Analysis* (Oxford University Press 2010)
- Mythen G, *Ulrich Beck: A Critical Introduction to the Risk Society* (Pluto Press 2004)
- Nafus D and Sherman J, 'This One Does Not Go Up To 11: The Quantified Self Movement as an Alternative Big Data Practice' (2014) 8 *International Journal of Communication* 1784 <<http://ijoc.org/index.php/ijoc/article/view/2170>> accessed 13 February 2019
- Nilsson NJ, *The Quest for Artificial Intelligence* (1 edition, Cambridge University Press 2009)
- Nissenbaum H, *Privacy in Context: Technology, Policy, and the Integrity of Social Life* (Stanford Law Books 2009)
- Nordin S and others, 'A Longitudinal Descriptive Study of Self-Reported Abnormal Smell and Taste Perception in Pregnant Women' (2004) 29 *Chemical Senses* 391 <<https://academic.oup.com/chemse/article/29/5/391/368321/A-Longitudinal-Descriptive-Study-of-Self-reported>> accessed 13 February 2019
- North DC, *Institutions, Institutional Change and Economic Performance* (Cambridge University Press 1990)
- Nunan D and di Domenico M, 'Big Data: A Normal Accident Waiting to Happen?' [2015] *Journal of Business Ethics* 1
- OECD, 'Data-Driven Innovation for Growth and Well-Being: Interim Synthesis Report' (OECD 2014)
- (ed), *Data-Driven Innovation: Big Data for Growth and Well-Being* (OECD 2015)
- Office of Applied Studies, 'Cigarette Brand Preferences in 2005' (United States Department of Health and Human Services, Substance Abuse and Mental Health Administration 2007) Short reports <<https://www.datafiles.samhsa.gov/study-publication/cigarette-brand-preferences-2005-nid15156>> accessed 20 March 2019
- O'Neil C, *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy* (Crown 2016)
- Oxford Dictionaries, 'Tweet Geekery and Epic Crowdsourcing: An Oxford English Dictionary Update' (*Oxford Words blog*, 13 June 2013) <<https://blog.oxforddictionaries.com/2013/06/13/oed-june-2013-update/>> accessed 20 March 2019

7. Bibliography

- Packard V and Miller MC, *The Hidden Persuaders* (Reissue Ed, Ig Publishing 2007)
- Pariser E, *The Filter Bubble: What the Internet Is Hiding from You* (Penguin Press 2011)
- Parliamentary Assembly, 'Human Rights and Modern Scientific and Technological Developments' (Council of Europe 1968) Recommendation 509 (1968)
- Parris R, 'Online T&Cs Longer than Shakespeare Plays – Who Reads Them? - Online T&Cs Word Counts Compared to Famous Books' (*Which? Conversation*, 23 March 2012) <<https://conversation.which.co.uk/technology/length-of-website-terms-and-conditions/>> accessed 20 March 2019
- Pedreschi D, Ruggieri S and Turini F, 'The Discovery of Discrimination' in Bart Custers and others (eds), *Discrimination and Privacy in the Information Society - Data Mining and Profiling in Large Databases* (Springer 2013)
- Peissl W, 'Information Privacy in Europe from a TA Perspective' in Serge Gutwirth, Yves Poulet and Paul De Hert (eds), *Data protection in a profiled world* (Springer 2010)
- Peppet SR, 'Unraveling Privacy: The Personal Prospectus & the Threat of a Full Disclosure Future' [2010] Northwestern University Law Review <<http://papers.ssrn.com/abstract=1678634>> accessed 3 November 2015
- Perlroth N, 'How Superfish's Security-Compromising Adware Came to Inhabit Lenovo's PCs' *The New York Times* (1 March 2015) <<http://www.nytimes.com/2015/03/02/technology/how-superfishs-security-compromising-adware-came-to-inhabit-lenovos-pcs.html>> accessed 13 February 2019
- Perrow C, *Normal Accidents: Living with High-Risk Technologies* (Basic Books 1984)
- , 'The Limits of Safety: The Enhancement of a Theory of Accidents' (1994) 2 *Journal of Contingencies and Crisis Management* 212 <<https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-5973.1994.tb00046.x>> accessed 16 May 2019
- , 'Accidents, Normal', *International Encyclopedia of the Social & Behavioral Sciences* (Elsevier 2001) <<http://linkinghub.elsevier.com/retrieve/pii/B0080430767045095>> accessed 13 February 2019
- Posner RA, 'The Social Costs of Monopoly and Regulation' (1975) 83 *Journal of Political Economy* 807 <<https://www.jstor.org/stable/1830401>> accessed 20 March 2019
- Postel J, 'NCP/TCP Transition Plan' (1981) Request for Comments RFC 801 <<https://tools.ietf.org/html/rfc801>> accessed 20 March 2019
- Prevelakis V and Spinellis D, 'The Athens Affair' (2007) 44 *Spectrum, IEEE* 26
- Prins C, 'When Personal Data, Behavior and Virtual Identities Become a Commodity: Would a Property Rights Approach Matter?' (2006) 3 *SCRIPT-ed* 270 <<https://script-ed.org/wp-content/uploads/2016/07/3-4-Prins.pdf>> accessed 13 February 2019

- Purtova N, 'Who Decides on the Future of Data Protection? Role of Law Firms in Shaping European Data Protection Regime' (2014) 28 *International Review of Law, Computers & Technology* 204 <<http://dx.doi.org/10.1080/13600869.2013.801591>> accessed 20 March 2019
- Richards NM, 'The Dangers of Surveillance' (2013) 126 *Harvard Law Review* 1934
- , *Intellectual Privacy: Rethinking Civil Liberties in the Digital Age* (Oxford University Press 2015)
- Richards NM and King JH, 'Three Paradoxes of Big Data' (2013) 66 (2013) *Stanford Law Review Online*
- Riley T, 'Artificial Intelligence Goes Deep to Beat Humans at Poker' (*Science*, 3 March 2017) <<http://www.sciencemag.org/news/2017/03/artificial-intelligence-goes-deep-beat-humans-poker>>
- Ring T, 'Keeping Tabs on Tracking Technology' (2015) 2015 *Network Security* 5 <<http://www.sciencedirect.com/science/article/pii/S1353485815300477>> accessed 13 February 2019
- Rochet J-C and Tirole J, 'Platform Competition in Two-Sided Markets' (2003) 1 *Journal of the European Economic Association* 990 <<http://onlinelibrary.wiley.com/doi/10.1162/154247603322493212/abstract>> accessed 20 March 2019
- , 'Two-Sided Markets: An Overview' (Institut d'Economie Industrielle working paper 2004) <<https://pdfs.semanticscholar.org/1181/ee3b92b2d6c1107a5c899bd94575b0099c32.pdf>> accessed 20 March 2019
- Rudgard S, 'Origins and Historical Context of Data Protection Law' in Eduardo Ustaran and others (eds), *European Privacy: Law and Practice for Data Protection Professionals* (International Association of Privacy Professionals 2012)
- Sahota D, 'Global SMS Revenue Declines for First Time' (*Telecoms.com*, 14 January 2014) <<http://telecoms.com/212062/global-sms-revenue-declines-for-first-time/>> accessed 20 March 2019
- Salvi O and others, 'F-Seveso: Study of the Effectiveness of the Seveso II Directive (Final Report)' (European Virtual Institute for Integrated Risk Management (EU-VRI) 2008) Contract n°070307/2007/476000/MAR/A3 <https://relevant.nl/download/attachments/4096340/seveso_report.pdf> accessed 13 February 2019
- Sandvig C and others, 'Auditing Algorithms: Research Methods for Detecting Discrimination on Internet Platforms' (2014)
- Schelling TC, 'Dynamic Models of Segregation' (1971) 1 *Journal of mathematical sociology* 143
- Schermer BW, 'The Limits of Privacy in Automated Profiling and Data Mining' (2011) 27 *Computer Law & Security Review* 45 <<http://linkinghub.elsevier.com/retrieve/pii/S0267364910001767>> accessed 20 March 2019

7. Bibliography

- , ‘Risks of Profiling and the Limits of Data Protection Law’ in Bart Custers and others (eds), *Discrimination and Privacy in the Information Society* (Springer-Verlag 2013)
- Schermer BW and Wagemans T, ‘Onze Digitale Schaduw. Een Verkennend Onderzoek Naar Het Aantal Databases Waarin de Gemiddelde Nederlander Geregistreerd Staat.’ (Considerati 2009)
<https://autoriteitpersoonsgegevens.nl/sites/default/files/downloads/rapporten/rap_2009_onze_digitale_schaduw.pdf> accessed 13 February 2019
- Schlag P, ‘Rules and Standards’ (1985) 33 *UCLA Law Review* 379
- Schneier B, *Secrets and Lies: Digital Security in a Networked World* (1 edition, Wiley 2004)
- , ‘The Eternal Value of Privacy’ (*WIRED*, mei 2006)
<<http://archive.wired.com/politics/security/commentary/securitymatters/2006/05/70886>> accessed 20 March 2019
- , ‘The Myth of the “Transparent Society”’ (*WIRED*, 3 June 2008)
<<https://www.wired.com/2008/03/securitymatters-0306/>> accessed 20 March 2019
- , ‘The Battle for Power on the Internet’ [2013] *Internet and Security*
<<https://www.theatlantic.com/technology/archive/2013/10/the-battle-for-power-on-the-internet/280824/>> accessed 13 February 2019
- , ‘“Stalker Economy” Here to Stay’ (*CNN-Opinion*, 26 November 2013)
<<http://www.cnn.com/2013/11/20/opinion/schneier-stalker-economy/index.html>> accessed 13 February 2019
- , ‘Metadata = Surveillance’ (2014) 12 *IEEE Security & Privacy* 84
<<http://ieeexplore.ieee.org/lpdocs/epico3/wrapper.htm?arnumber=6798571>> accessed 20 March 2019
- , *Data and Goliath: The Hidden Battles to Collect Your Data and Control Your World* (1 edition, W W Norton & Company 2015)
- Schreurs W, Hildebrandt M and Vanfleteren M, ‘Cogitas, Ergo Sum. The Role of Data Protection Law and Non-Discrimination Law in Group Profiling in the Private Sector’ in Mireille Hildebrandt and Serge Gutwirth (eds), *Profiling the European Citizen: Cross-Disciplinary Perspectives* (Softcover reprint of hardcover 1st ed 2008 edition, Springer 2008)
- Schulte Nordholt E and others, *Dutch Census 2011: Analysis and Methodology*. (Statistics Netherlands 2014)
- Schwartz P, ‘Risk and High Risk: Walking the GDPR Tightrope’ (*Privacy Perspectives - Ideas and Insights on Data Protection*, 29 March 2016) <<https://iapp.org/news/a/risk-and-high-risk-walking-the-gdpr-tightrope/>> accessed 13 February 2019
- Seneviratne S and others, ‘Predicting User Traits from a Snapshot of Apps Installed on a Smartphone’ (2014) 18 *Mobile Computing and Communications Review* 1
<<http://dl.acm.org/citation.cfm?id=2636244>> accessed 20 March 2019
- Shapiro C and Varian HR, *Information Rules: A Strategic Guide to the Network Economy* (Harvard Business Press 1998)

- Sharma N and others, 'Predicting Solar Generation from Weather Forecasts Using Machine Learning', *Smart Grid Communications (SmartGridComm)*, 2011 *IEEE International Conference on* (IEEE 2011) <<http://ieeexplore.ieee.org/abstract/document/6102379/>> accessed 20 March 2019
- Sholtz P, 'Transaction Costs and the Social Cost of Online Privacy' (2001) 6 *First Monday* <<http://journals.uic.edu/ojs/index.php/fm/article/view/859>> accessed 13 February 2019
- Siegel E, *Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die* (2 edition, Wiley 2016)
- Skouma G and Léonard L, 'On-Line Behavioral Tracking: What May Change After the Legal Reform on Personal Data Protection' in Serge Gutwirth, Ronald Leenes and Paul de Hert (eds), *Reforming European Data Protection Law* (2015 edition, Springer 2014)
- Slawson WD, 'Standard Form Contracts and Democratic Control of Lawmaking Power' (1970) 84 *Harvard Law Review* 529
- Solove DJ, 'A Taxonomy of Privacy' (2006) 154 *U. Pa. L. Rev* 477
- , 'What Is Sensitive Data? Different Definitions in Privacy Law' (*Privacy + Security Blog*, 31 July 2014) <<https://teachprivacy.com/sensitive-data-different-definitions-privacy-law/>> accessed 20 March 2019
- statista.com, 'Gmail: Global Active Users Worldwide 2016' (*Statista*, 2017) <<https://www.statista.com/statistics/432390/active-gmail-users/>> accessed 20 March 2019
- , 'Facebook Users Worldwide 2018' (*Statista*, 2018) <<https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/>> accessed 20 March 2019
- Steinfeld N, "'I Agree to the Terms and Conditions": (How) Do Users Read Privacy Policies Online? An Eye-Tracking Experiment' (2016) 55 *Computers in Human Behavior* 992 <<http://linkinghub.elsevier.com/retrieve/pii/S0747563215301692>> accessed 20 March 2019
- Strömbäck P, 'Digital Myth: Competition Is Only One Click Away' (*Netopia*, 23 August 2016) <<http://www.netopia.eu/competition-one-click-away/>> accessed 21 March 2019
- Study Group on a European Civil Code and Research Group on EC Private Law (Acquis Group), *Principles, Definitions and Model Rules of European Private Law: Draft Common Frame of Reference (DCFR). Outline Edition* (Sellier European Law Publishers 2009)
- Tene O, 'For Privacy, European Commission Must Be Innovative | Center for Democracy & Technology' (*Center for Democracy & Technology*, 28 February 2011) <<https://cdt.org/blog/for-privacy-european-commission-must-be-innovative/>> accessed 13 February 2019
- , 'Vint Cerf Is Wrong. Privacy Is Not An Anomaly' (*Center for Internet and Society at Stanford Law School - Other writing*, 22 November 2013) <<https://cyberlaw.stanford.edu/publications/vint-cerf-wrong-privacy-not-anomaly>> accessed 21 March 2019

7. Bibliography

- Tene O and Polonetsky J, 'Big Data for All: Privacy and User Control in the Age of Analytics' (2013) 11 *Northwestern Journal of Technology and Intellectual Property* 239
<<http://papers.ssrn.com/abstract=2149364>> accessed 21 March 2019
- ter Huurne EFJ and Gutteling JM, 'How to Trust? The Importance of Self-efficacy and Social Trust in Public Responses to Industrial Risks' (2009) 12 *Journal of Risk Research* 809
<<http://dx.doi.org/10.1080/13669870902726091>> accessed 13 February 2019
- Tessone CJ, 'The Complex Nature of Social Systems' in Bernardo Alves Furtado, Patricia AM Sakowski and Marina H Tóvolli (eds), *Modeling Complex Systems for Public Policies* (IPEA 2015)
- Thaler RH and Sunstein CR, *Nudge: Improving Decisions About Health, Wealth, and Happiness* (Revised & Expanded edition, Penguin Books 2009)
- TNS Opinion and Social, 'Special Eurobarometer 359: Attitudes on Data Protection and Electronic Identity in the European Union' (European Commission 2011) Survey
- , 'Special Eurobarometer 431: Report' (European Commission 2015) DS-02-15-415-EN-N
<<https://ec.europa.eu/COMMFrontOffice/publicopinion/index.cfm/ResultDoc/download/DocumentKy/66372>> accessed 13 February 2019
- Turner JS, 'New Directions in Communications (or Which Way to the Information Age?)' (2002) 40 *IEEE Communications Magazine* 50
- Uleman JS, Adil Saribay S and Gonzalez CM, 'Spontaneous Inferences, Implicit Impressions, and Implicit Theories' (2008) 59 *Annual Review of Psychology* 329
<<http://www.annualreviews.org/doi/10.1146/annurev.psych.59.103006.093707>> accessed 21 March 2019
- Uleman JS, Newman LS and Moskowitz GB, 'People as Flexible Interpreters: Evidence and Issues from Spontaneous Trait Inference' (1996) 28 *Advances in experimental social psychology* 211
<<http://www.sciencedirect.com/science/article/pii/S0065260108602397>> accessed 5 August 2017
- United Nations Conference on Environment and Development, 'Rio Declaration on Environment and Development' <http://www.unesco.org/education/pdf/RIO_E.PDF> accessed 13 February 2019
- United Nations Economic Commission for Europe, 'Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters Done At Aarhus, Denmark, On 25 June 1998'
- van Alsenoy B and others, 'From Social Media Service to Advertising Network: A Critical Analysis of Facebook's Revised Policies and Terms, v.1.3' (ICRI - The Interdisciplinary Centre for Law & ICT, Katholieke Universiteit Leuven 2015)
<<https://www.law.kuleuven.be/citip/en/news/item/facebooks-revised-policies-and-terms-v1-3.pdf>> accessed 13 February 2019
- van der Kroft D, 'Persbericht: Bits of Freedom Roept KPN-Abonnees Op Om Aangifte Te Doen Tegen Aftappen' (12 May 2011) <<https://www.bof.nl/2011/05/12/persbericht-bits-of-freedom-roept-kpn-abonnees-op-om-aangifte-te-doen-tegen-aftappen/>> accessed 13 February 2019

- Van Der Sloot B, 'Privacy as Virtue: Moving beyond the Individual in the Age of Big Data' (Universiteit van Amsterdam 2017)
- van Eijk N, Hoofnagle CJ and Kannekens E, 'Unfair Commercial Practices: A Complementary Approach to Privacy Protection' (2017) 3 *Eur. Data Prot. L. Rev.* 325
- van Rhee CH, 'De Ontwikkeling van het Burgerlijk Procesrecht in het Twintigste-Eeuwse Europa: Een Terugblik' in D Heirbaut, G Martyn and R Opsommer (eds), *De Rechtsgeschiedenis Van De Twintigste Eeuw. the Legal History of the Twentieth Century: Handelingen van het contactforum* (Peeters Bvba 2006)
- van Schendelen MP, *Machiavelli in Brussels: The Art of Lobbying the EU* (2nd edn, Amsterdam University Press 2005)
- Verbraucherzentrale Bundesverband, 'Samsung App-Store: Viele Klauseln Unzulässig' (*Samsung App-Store: Viele Klauseln unzulässig*, 6 June 2013) <<https://www.vzbv.de/urteil/samsung-app-store-viele-klauseln-unzulaessig>> accessed 13 February 2019
- Verhelst EW, *Recht Doen Aan Privacyverklaringen: Een Juridische Analyse van Privacyverklaringen Op Internet* (Kluwer 2012)
- Verplanken B and Weenig MWH, 'Graphical Energy Labels and Consumers' Decisions about Home Appliances: A Process Tracing Approach' (1993) 14 *Journal of Economic Psychology* 739 <<http://linkinghub.elsevier.com/retrieve/pii/016748709390019H>> accessed 13 February 2019
- Vincent Fleming N, 'Sharing Your Location... In a Flash' (*FTC Consumer information blog*, 5 December 2013) <<https://www.consumer.ftc.gov/blog/sharing-your-location-flash>> accessed 21 March 2019
- Visser M, 'KPN Investor Day: Consumer Wireless. Strengthen - Simplify - Grow' (KPN Investor Day, London, 10 May 2011) <https://ir.kpn.com/download/companies/koninkpnnv/Presentations/KPN_Investor_Day_-_Selective_topics.pdf> accessed 21 March 2019
- Von Lewinski K, 'Zur Geschichte von Privatsphäre Und Datenschutz-Eine Rechtshistorische Perspektive' [2012] *Datenschutz: Grundlagen, Entwicklungen und Kontroversen*, Bundeszentrale für politische Bildung, Bonn 23
- Wachter S, Mittelstadt B and Floridi L, 'Why a Right to Explanation of Automated Decision-Making Does Not Exist in the General Data Protection Regulation' (2017) 7 *International Data Privacy Law* 76 <<https://academic.oup.com/idpl/article/7/2/76/3860948>> accessed 13 February 2019
- Walter C, 'Kryder's Law' (2005) 293 *Scientific American* 32
- Wang M, 'China's Chilling "Social Credit" Blacklist' *Wall Street Journal* (11 December 2017) <<https://www.wsj.com/articles/chinas-chilling-social-credit-blacklist-1513036054>> accessed 21 May 2019

7. Bibliography

Wang Y and Kosinski M, 'Deep Neural Networks Are More Accurate than Humans at Detecting Sexual Orientation from Facial Images' (2017) (in press) *Journal of Personality and Social Psychology* <<https://osf.io/fk3xr/>> accessed 21 March 2019

Watson Marketing, '10 Key Marketing Trends for 2017 and Ideas for Exceeding Customer Expectations' (IBM Marketing Cloud 2017) WRL12345USEN <<https://www-01.ibm.com/common/ssi/cgi-bin/ssialias?htmlfid=WRL12345USEN>> accessed 21 March 2019

Wauters E, Lievens E and Valcke P, 'A Legal Analysis of Terms of Use of Social Networking Sites, Including a Practical Legal Guide for Users: "Rights & Obligations in a Social Media Environment"' (iMinds-ICRI 2013) D1.2.4 <https://limo.libis.be/prim-explore/fulldisplay?docid=LIRIAS1709099&context=L&vid=Lirias&search_scope=Lirias&tab=default_tab&lang=en_US> accessed 13 February 2019

—, 'Social Networking Sites' Terms of Use Addressing Imbalances in the User-Provider Relationship through Ex Ante and Ex Post Mechanisms' (2014) 5 *JIPITEC* <<https://www.jipitec.eu/issues/jipitec-5-2-2014/4001>> accessed 13 February 2019

Weatherall K, 'Three Lessons from ACTA and Its Political Aftermath' (2012) 35 *Suffolk Transnational Law Review* 575

Weatherill S, *EU Consumer Law and Policy* (Edward Elgar Publishing 2013)

Weick KE, 'Normal Accident Theory As Frame, Link, and Provocation' (2004) 17 *Organization & Environment* 27

Weinberger S, 'Son of TIA: Pentagon Surveillance System Is Reborn in Asia' (*WIRED*, 22 March 2007) <<https://www.wired.com/2007/03/son-of-tia-pentagon-surveillance-system-is-reborn-in-asia/>> accessed 21 March 2019

Weng SF and others, 'Can Machine-Learning Improve Cardiovascular Risk Prediction Using Routine Clinical Data?' (2017) 12 *PLOS ONE* e0174944 <<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0174944>> accessed 21 March 2019

Wildberger AM, 'Alleviating the Opacity of Neural Networks', 1994 *IEEE International Conference on Neural Networks, 1994 IEEE World Congress on Computational Intelligence* (1994)

Williams EW and Coase RH, 'Discussion' (1964) 54 *The American Economic Review* 192 <<http://www.jstor.org/stable/1818503>> accessed 21 March 2019

Winseck D, 'Netscapes of Power: Convergence, Network Design, Walled Gardens, and Other Strategies of Control in the Information Age' in David Lyon (ed), *Surveillance as social sorting: Privacy, risk and digital discrimination* (Routledge 2003)

World Administrative Telegraph and Telephone Conference and International Telecommunication Union, 'International Telecommunication Regulations: Melbourne, 1988 (WATTC-88).', *Final acts of the World Administrative Telegraph and Telephone Conference* (ITU 1989)

- Yang K and others, 'A Nutritional Label for Rankings', *Proceedings of the 2018 International Conference on Management of Data* (ACM 2018)
- Youyou W, Kosinski M and Stillwell D, 'Computer-Based Personality Judgments Are More Accurate than Those Made by Humans' (2015) 112 *Proceedings of the National Academy of Sciences* 1036 <<http://www.pnas.org/content/112/4/1036>> accessed 21 March 2019
- Zarsky T, 'Incompatible: The GDPR in the Age of Big Data' (2017) 47 *Seton Hall Law Review* 995 <<http://scholarship.shu.edu/shlr/vol47/iss4/2>>
- Zhao J and others, 'Men Also Like Shopping: Reducing Gender Bias Amplification Using Corpus-Level Constraints', *arXiv:1707.09457 [cs, stat]* (2017) <<http://arxiv.org/abs/1707.09457>> accessed 21 March 2019
- Zikopoulos P and Eaton C, *Understanding Big Data: Analytics for Enterprise Class Hadoop and Streaming Data* (McGraw-Hill Osborne Media 2011)
- Zuboff S, 'Big Other: Surveillance Capitalism and the Prospects of an Information Civilization' (2015) 30 *Journal of Information Technology* 75
- Zuiderveen Borgesius FJ, 'Improving Privacy Protection in the Area of Behavioural Targeting' (Universiteit van Amsterdam 2014) <<http://hdl.handle.net/11245/1.434236>>
- Zuiderveen Borgesius FJ and others, 'Online Political Microtargeting: Promises and Threats for Democracy' (2018) 14 *Utrecht Law Review* 82 <<https://www.utrechtlawreview.org/article/10.18352/ulr.420/>> accessed 21 March 2019
- Zwenne G-J, *Diluted Privacy Law* (Leiden University 2013) <<http://papers.ssrn.com/abstract=2488486>> accessed 13 February 2019