

Critical Perspectives on Law, Technology, & Society

Reading Group

Faculty of Law, University of Cambridge

Conveners: [Dr Christopher Markou](#) (Faculty of Law) and Dr Jennifer Cobbe (Department of Computer Science and Technology)

This reading group explores topics at the intersection of law and emerging technologies such as Artificial Intelligence, Big Data, pervasive surveillance, the Internet of Things, and the future of work. Each of these poses legal and societal challenges that are imperative for law and regulation to apprehend. The materials and discussions in this reading group will require participants to grapple with how these technologies, and the paradigms they create, are impacting our lives now and into the future. We will examine how technological change interacts, challenges, subverts, and co-evolves with the law and society. Although law-led, this reading group offers an interdisciplinary survey of emerging technologies and will orient students within the ongoing discourse between law and technological change, encouraging critical perspectives that challenge traditional legal and tech orthodoxies. For each week we provide a selection of relevant reading materials and some questions to be considered by the group.

Michaelmas 2019

Week One: Critical Perspectives on Technology and Society

[Marshall McLuhan, 'Chapter 1: The Medium is the Message' in *Understanding Media: The Extensions of Man* \(MIT Press 1964\).](#)

[Leo Marx, 'Technology: The Emergence of a Hazardous Concept' \(2010\) 51 *Technology and Culture* 3](#)

[Langdon Winner, 'Do Artifacts Have Politics?' \(1980\) 109 *Daedalus* 1.](#)

Questions:

- 1) Does technology shape society, or society shape technology?
- 2) Is there a technical solution to every problem?
- 3) What is the role of law in an increasingly automated and connected society?

Week Two: Big Data

[Jose van Dijck, 'Datafication, dataism and dataveillance: Big Data between scientific paradigm and ideology' \(2014\) 12 *Surveillance & Society* 2](#)

[Nicole Kobie, 'The complicated truth about China's social credit system' \(*Wired*, 7 June 2019\).](#)

[danah boyd and Kate Crawford, 'Critical Questions for Big Data' \(2012\) 15 *Information, Communication & Society*](#)

Questions:

- 1) To what extent can a complex world be quantified?
- 2) What kinds of ideological assumptions underpin big data?
- 3) If data can be collected and analysed, does it follow that it should be collected and analysed?

Week Three: Artificial Intelligence I (From Machine Learning to Governance by Numbers)

[David Lehr and Paul Ohm, 'Playing with the Data: What Legal Scholars Should Learn About Machine Learning' \(2017\) *UC Davis Law Review* 51](#)

Christopher Markou, 'Governance by Numbers When Numbers Don't Lie: The Cybernetic Path of Law Towards Legal Singularity' in M Tinerello and T Lozano (eds) *Global Politics of Artificial Intelligence* (CRC Press 2019).

[Evan Selinger and Timothy Engström, 'A moratorium on cyborgs: Computation, cognition, and commerce' \(2008\) 7 *Phenomenology and the Cognitive Sciences* 327.](#)

Questions:

- 1) How do machine learning systems differ from previous technologies?
- 2) Should machine learning systems be free from errors and biases before they replace human decision-making?
- 3) How should the law promote algorithmic accountability?

Week Four: Artificial Intelligence II (From Human Minds to Artificial Agents)

[Joanna Bryson, Mihailis E Diamantis, Thomas D Grant, 'Of, for, and by the people: the legal lacuna of synthetic persons' \(2017\) 25 *Artificial Intelligence and the Law* 3.](#)

[Rosa M Ballardini, Kan He, and Teemu Roos, 'AI-Generated Content: Authorship and Inventorship in the Age of Artificial Intelligence' in Taina Pihlajarinne, Juha Vesala and Olli Honkkila \(eds\) *Online Distribution of Content in the EU* \(Edward Elgar 2019\).](#)

[Daniel C Dennett, 'Consciousness in Human and Robot Minds' in M Ito, Y Miyashita, and ET Rolls \(eds\) *Cognition, Computation, and Consciousness* \(Oxford University Press 1997\).](#)

Questions:

- 1) Why do *things* hold rights?
- 2) Can machines be creative? Do they deserve IP protections?
- 3) Are robots responsible for their actions?

Week Five: Ethics, Ideology and Technology

[John Seely Brown and Paul Duguid, 'The Social Life of Information, Chapter 1: Limits to Information' in *The Social Life of Information* \(Harvard Business School Press 2000\).](#)

Michel Puech, 'Technosapiens: The Coevolution of Nature, Humankind, and Technology' in *The Ethics of Ordinary Technology* (Routledge 2016).

[Oscar Williams, 'How Big Tech funds the debate on AI ethics' \(*New Statesman*, 6 June 2019\).](#)

Questions:

- 1) To what extent has ethics become a proxy for law?
- 2) What is the role of law in validating, or rejecting, the effects of science and technology on society and the individual?

Week Six: Technological Singularity

[Ray Kurzweil, 'The Law of Accelerating Returns' \(2001\)](#)

[Bill Joy, 'Why the Future Doesn't Need Us' \(2000\)](#)

[Theodore Kaczynski, 'Industrial Society and Its Future' \(1995\)](#)

Questions:

- 1) How does law 'keep pace' during a period of exponential technological growth?
- 2) Is it possible or desirable to stop technological advancement?
- 3) Would technological singularity render people superfluous?

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Week One: Surveillance Society

[Shoshana Zuboff, 'Big Other: Surveillance Capitalism and the Prospects of an Information Civilisation' \(2015\) *Journal of Information Technology* 30](#)

[Zygmunt Bauman et al, 'After Snowden: Rethinking the Impact of Surveillance' \(2014\) *8 International Political Sociology* 2](#)

[David Lyon, 'Surveillance Society' \(2008\)](#)

Questions:

- 1) How can corporate surveillance business models be reconciled with rights to privacy and data protection and with individual agency?
- 2) To what extent are surveillance capitalism and state surveillance practices intertwined?
- 3) Is extensive internet surveillance by the state compatible with the fundamental norms of a free and democratic society?

Week Two: Smart Cities and the Internet of Things

[Jatinder Singh and Julia Powles, 'The internet of things - the next big challenge to our privacy' \(*The Guardian*, 28 July 2014\)](#)

[Ellen P Goodman and Julia Powles, 'Urbanism Under Google: Lessons from Sidewalk Toronto', *Fordham Law Review*](#)

[Lilian Edwards, 'Privacy, Security and Data Protection in Smart Cities: A Critical EU Law Perspective' \(2016\) *European Data Protection Law Review*](#)

Questions:

- 1) Who benefits from the pervasive tracking and monitoring of behaviour in the internet of things?
- 2) How can the law respond to the potential for exclusion and exploitation in a smart city?

Week Three: Politics and the Public Sphere

[Zeynep Tufekci, 'Engineering the Public: Big Data, Surveillance, and Computational Politics' \(2014\) 19 *First Monday* 7](#)

[Mark Leiser, 'AstroTurfing, 'CyberTurfing' and other online persuasion campaigns' \(2016\) 7 *European Journal of Law and Technology* 1](#)

[Jennifer Cobbe and Jatinder Singh, "Regulating Recommending: Motivations, Considerations, and Principles" \(2019\)](#)

Questions:

- 1) Can political parties' right to campaign freely online be reconciled with the need to protect the electoral process from algorithmic manipulation?
- 2) After the [*Citizens United v FEC*](#) decision in the US, money is a protected form of speech under the 1st amendment. Given the influence and reach of major tech companies, what protections might be necessary to prevent a similar outcome in the UK/EU?

Week Four: Platform Power and the Gig Economy

[Zeynep Tufekci, 'As the Pirates Become CEOs: The Closing of the Open Internet' \(2016\) 145 *Daedalus* 1](#)

[Hannah Bloch-Wehba 'Global Platform Governance: Private Power in the Shadow of the State' \(2019\) 72 *SMU Law Review* 1](#)

[Antonio Aliosi, 'Commoditized Workers: Case Study Research on Labor Law Issues Arising from a Set of on-Demand/Gig Economy Platforms' \(2016\) 37 *Comparative Labor Law & Policy Journal* 3](#)

[Emma Jacobs, 'The gig economy: freedom from a boss, or just a con?' \(2017\) *New Statesman*](#)

Questions:

- 1) Can law and regulation challenge the monopoly power of dominant platforms?
- 2) The 'gig economy' is having a major toll on the wellbeing of its workers. How should these concerns factor into prospective regulation?

Week Five: The Future of Work

[Karl Marx, *Capital: A Critique of Political Economy Volume I: The Process of Production of Capital*, Chapter 7, pages 127-141.](#)

[Simon Deakin and Christopher Markou, 'The Law-Technology Cycle and the Future of Work' \(2018\) *University of Cambridge Faculty of Law Research Paper No. 32/2018*](#)

[E McGaughey, 'Will Robots Automate Your Job Away? Full Employment, Basic Income, and Economic Democracy' \(2018\) *TLI Think! Paper 3/2018, King's College London Law School Research Paper No. 2018-12.*](#)

Question:

- 1) Assess proposals for Universal Basic Income. Is this a solution or does it just hasten the inevitability of widescale automation?
- 2) What is the role of policymaking in ensuring the pace of automation is indexed to re-skilling, re-training, and re-deployment of workers and safeguarding against wide-scale unemployment?

Week Six: The Rule of Technology

[Roger Brownsword, 'In the year 2061: From Law to Technological Management' \(2015\) 7 *Law, Innovation and Technology* 1](#)

Christopher Markou and S Deakin, 'Ex Machina Lex: The Limits of Law's Computability' (2019)

[Karen Yeung, 'Algorithmic Regulation: A Critical Interrogation' King's College London Law School Research Paper No. 2017-27.](#)

Questions:

- 1) Is law computable?
- 2) What is the rule of law, and can it be sustained, in the context of increasingly powerful and pervasive technological paradigms?