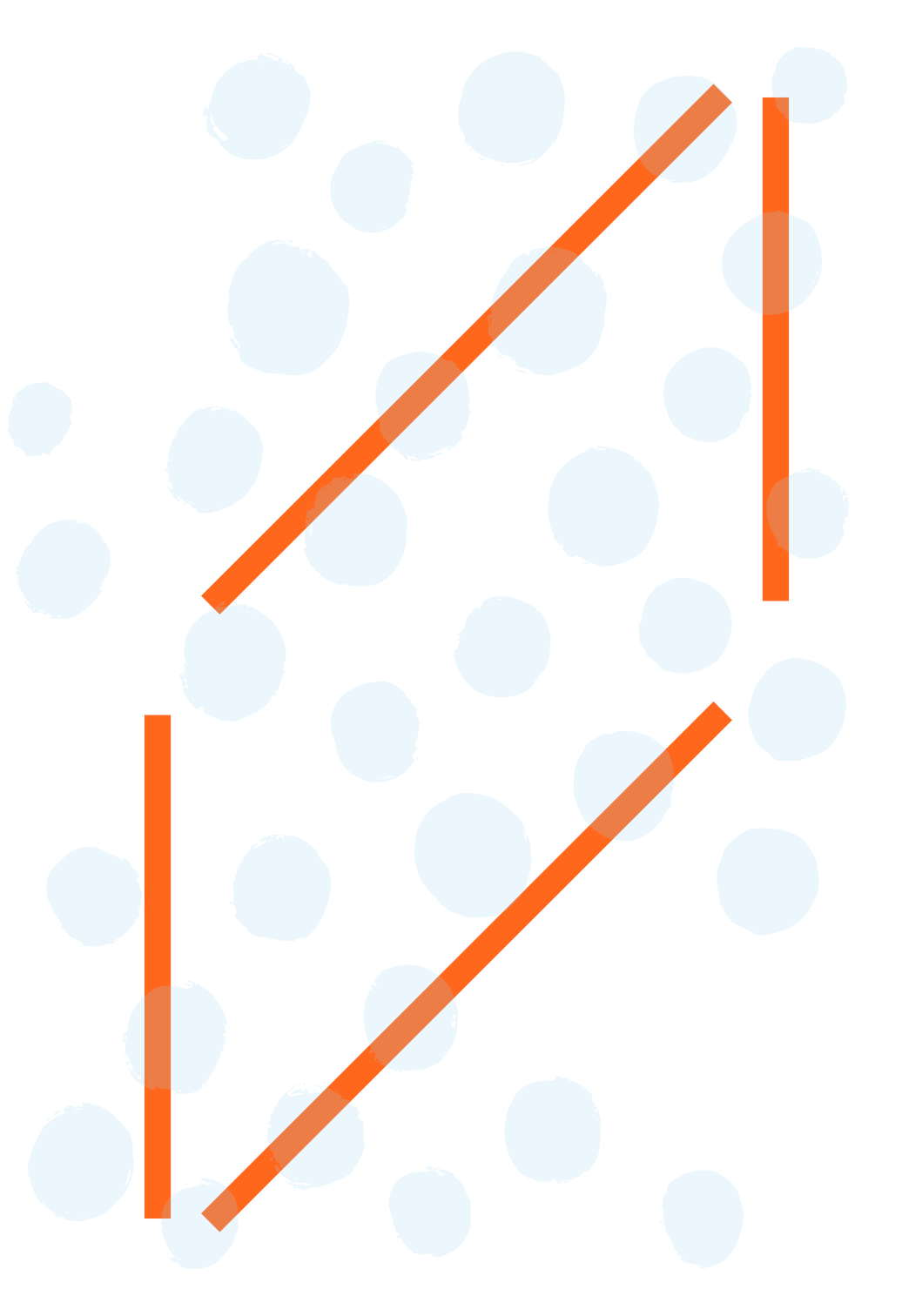
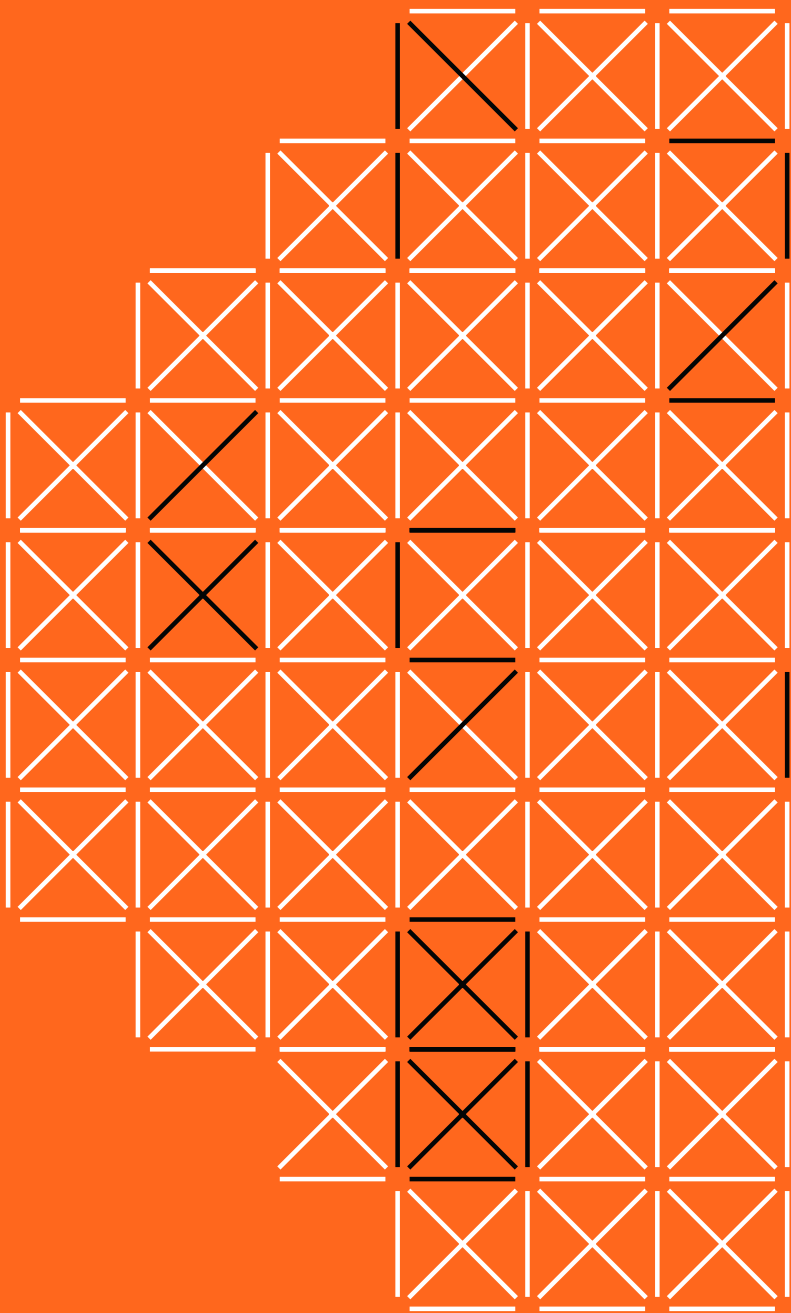


The background is a solid light orange color. It features several large, irregular, darker orange circles of varying sizes scattered across the surface. Along the left edge, there is a vertical border consisting of a light blue background with a pattern of small, dark orange dots of varying sizes.

**BEING PROFILED:COGITAS ERGO SUM**





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10 YEARS OF 'PROFILING  
THE EUROPEAN CITIZEN'**


**EMRE BAYAMLIOĞLU,  
IRINA BARALIUC,  
LIISA JANSSENS,  
MIREILLE HILDEBRANDT  
(EDS)**

# Foreword **TABLE OF CONTENTS**

Paul Nemitz 


Introitus:

what Descartes did not get

Mireille Hildebrandt 

## **PART I** Theories of normativity between law and machine learning

From agency-enhancement intentions to profile-based optimisation tools: what is lost in translation

Sylvie Delacroix 


Mathematical values and the epistemology of data practices

Patrick Allo 

Stirring the POTs: protective optimization technologies

Seda Gürses, Rebekah Overdorf, Ero Balsa 


On the possibility of normative contestation of automated data-driven decisions

Emre Bayamlioğlu 



## **PART II** Transparency theory for data-driven decision making


How is 'transparency' understood by legal scholars and the machine learning community?

Karen Yeung and Adrian Weller 

Why data protection and transparency are not enough when facing social problems of machine learning in a big data context

Anton Vedder 

Transparency is the perfect cover-up (if the sun does not shine)

Jaap-Henk Hoepman 

Transparency as translation in data protection Gloria González Fuster 

## **PART III** Presumption of innocence in data-driven government

The presumption of innocence's Janus head in data-driven government Lucia M. Sommerer 



Predictive policing. In defence of  
'true positives' Sabine Gless



The geometric rationality of  
innocence in algorithmic decisions

Tobias Blanke



On the presumption of innocence in  
data-driven government.

Are we asking the right question?

Linnet Taylor



## **PART IV** Legal and political theory in data-driven environments

A legal response to data-driven  
mergers

Orla Lynskey



Ethics as an escape from regulation.  
From "ethics-washing" to ethics-  
shopping?

Ben Wagner



Citizens in data land

Arjen P. de Vries



## **PART V** Saving machine learning from p-hacking





From inter-subjectivity to multi-subjectivity: Knowledge claims and the digital condition

Felix Stalder



Preregistration of machine learning research design. Against P-hacking

Mireille Hildebrandt



Induction is not robust to search

Clare Ann Gollnick



**PART VI**  
The legal and ML status of micro-targeting

Profiling as inferred data. Amplifier effects and positive feedback loops

Bart Custers



A prospect of the future. How autonomous systems may qualify as legal persons

Liisa Janssens



Profiles of personhood. On multiple arts of representing subjects

Niels van Dijk



Imagining data, between Laplace's demon and the rule of succession

Reuben Binns



This book contains detailed and nuanced contributions on the technologies, the ethics and law of machine learning and profiling, mostly avoiding the term AI. There is no doubt that these technologies have an important positive potential, and a token reference to such positive potential, required in all debates between innovation and precaution, hereby precedes what follows.

The Law neither can nor should aim to be an exact replica of technology, neither in its normative endeavour nor indeed in its use of terminology. Law and ethics need to be technology neutral wherever possible, to maintain meaning in relation to fast evolving technologies, and so should be the writing about the law and ethics.

The technological colonisation of our living space raises fundamental questions of how we want to live, both as individuals and as a collective. This applies irrespective of whether technologies with potentially important negative effects also have an important positive potential, even if such negative effect are unintended side effects.

While the technological capabilities for perfect surveillance, profiling, predicting, and influencing of human behaviour are constantly evolving, the basic questions they raise are not new.

It was Hans Jonas (1985), who in his 1979 bestseller *The imperative of responsibility* criticized the disregard, which the combined power of capitalism and technology shows for any other human concern. He laid the ground for the principle of precaution, today a general principle of EU law,<sup>1</sup> relating to any technology, which fulfils two conditions: Long-term unforeseeable impacts, and a possibility that these long term impacts can substantially negatively affect the existence of humanity. While his motivator at the time were the risks of nuclear power, he already in the 'Principle of responsibility' mentioned other examples of trends, which needed a precautionary approach, such as increasing longevity. Nuclear power at the time contained the great promise of clean and cheap, never-ending energy, alongside the risks of the technology which were known early on. And today again, the great promises of the internet and artificial intelligence are accompanied by risks which are already largely identified.

Large-scale construction of nuclear power plants proceeded, in part because the risk of radiation was invisible to the public. Only after the risks became visible to the general public through not only one, but a number of successive catastrophic incidents, did the tide change on this high risk technology.

And again today, digital technologies proceed largely unregulated and with numerous known risks, which however are largely invisible to the general public.

The politics of invisible risks, whether relating to nuclear power, smoking or digital surveillance, artificial intelligence, profiling and manipulative nudging, consists of a discourse of downplaying risks and overstating benefits, combined with the neo liberal rejection of laws that constrain enterprises, in order to maintain the space for profit as long as possible.

The question thus could be, following the example of nuclear power: How many catastrophes of surveillance, profiling and artificial intelligence going wild do we have to go through before the tide changes, before the risks are properly addressed?

With the technologies of the internet and artificial intelligence, we cannot afford to learn only by catastrophe, as we did relating to nuclear power. The reason is that once these technologies have reached their potential to win every game, from the stock markets to democratic decision-making, their impacts will be irreversible. There is no return from a democracy lost in total surveillance and profiling, which makes it impossible to organise opposition. And there is no return to the status quo ante due to a stolen election or popular vote, as we are now witnessing with the Brexit. The British people will go through a decade-long valley of tears because their vote on Brexit was stolen by the capabilities of modern digital technological manipulation of the vote. A whole generation of British youth pays the price for a lack of precaution as regards these technologies.

Like in relation to nuclear power, it is vital that those who develop and understand the technology step forward and work with rigour to minimise the risks arising from the internet, surveillance, profiling and artificial intelligence. We need the technical intelligentsia to join hands with social science, law and democracy. Technological solutions to achieve risk mitigation must go hand in hand with democratic institutions taking their responsibility, through a law, which can be enforced against those actors who put profit and power before democracy, freedom and the rule of law.

Constitutional democracy must defend itself again against absolutist ambitions and erosions from within and from the outside.<sup>2</sup> In the times of German Chancellor Willy Brandt, a drive to convince the technical intelligentsia to engage for a just society, for democracy and environmental sustainability took off, spurred by both his principles of 'Mehr Demokratie wagen' ('Dare more Democracy')<sup>3</sup> and 'Wehrhafte Demokratie' ('A democracy which defends itself') and its critical reception.<sup>4</sup> It is this spirit of post-1968, which we need to bring back into the digital global debate.

From the Chinese dream of perfecting communism through surveillance technology and social scoring to the Silicon Valley and Wall Street dream of perfect predictability of market related behaviour of individuals: The dystopian visions of total surveillance and profiling and thus total control over people are on the way of being put in practice today. We are surrounded by regressive dreams of almightiness based on new technology (Nida-Rümelin and Weidenfeld 2018).

Individuals in this way become the objects of other purposes – they are being nudged and manipulated for profit or party line behaviour, disrobed of their freedom and individuality, their humanity as defined by Kant and many world religions.

Finding ways of developing and deploying new technologies with a purpose restricted to supporting individual freedom and dignity as well as the basic constitutional settlements of constitutional democracies, namely democracy, rule of law and fundamental rights is the challenge of our time.



And continuing to have the courage to lay down the law guiding the necessary innovation through tools such as obligatory technology impact assessments and an obligation to incorporate principles of democracy, rule of law and fundamental rights in technology, is the challenge for democracy today: Let us dare more democracy by using the law as a tool of democracy for this purpose. And let us defend democracy through law and engagement. Europe has shown that this is possible, the GDPR being one example of law guiding innovation through 'by design' principles and effective, enforceable legal obligations regarding the use of technology.

*Paul Nemitz*<sup>5</sup>

Brussels, November 2018

## Notes

<sup>1</sup> See to that effect the blue box on page 3 of the Strategic Note of the European Political Strategy Centre of the European Commission (2016), available at [https://ec.europa.eu/epsc/sites/epsc/files/strategic\\_note\\_issue\\_14.pdf](https://ec.europa.eu/epsc/sites/epsc/files/strategic_note_issue_14.pdf); see also ECJ C-157/96, Para 62 ff, C-180/96, Para 98 ff. and C-77/09, Rn. 72.

<sup>2</sup> Nemitz (2018), see also Chadwick (2018).

<sup>3</sup> See Brandt (1969).

<sup>4</sup> A key action of 'Wehrhafte Demokratie' under Willy Brandt was the much contested order against radicals from the left and the right in public service of 28 January 1972, available at [https://www.1000dokumente.de/index.html?c=dokument\\_de&dokument=0113\\_ade&object=translation&st=&l=de](https://www.1000dokumente.de/index.html?c=dokument_de&dokument=0113_ade&object=translation&st=&l=de). On this, see also Wissenschaftlicher Dienst des Deutschen Bundestages (2017), and more recently the translation of 'Wehrhafte Demokratie' as 'militant democracy' in the press release of the German Constitutional Court (2018) on an order rejecting constitutional complaints against prohibitions of associations. This order recounts in part the history of 'Wehrhafte Demokratie' and the lack of it in the Weimar Republic.

<sup>5</sup> The author is Principal Advisor in DG JUSTICE at the European Commission and writes here in his personal capacity, not necessarily representing positions of the Commission. He is also a Member of the German Data Ethics Commission, a Visiting Professor of Law at the College of Europe in Bruges and a Fellow of the VUB, Brussels.

## References

Brandt, Willy. 1969. Regierungserklärung (Government declaration) of 28 October 1969, available at

[https://www.willy-brandt.de/fileadmin/brandt/Downloads/Regierungserklaerung\\_Willy\\_Brandt\\_1969.pdf](https://www.willy-brandt.de/fileadmin/brandt/Downloads/Regierungserklaerung_Willy_Brandt_1969.pdf).

Chadwick, Paul. 2018. 'To Regulate AI We Need New Laws, Not Just a Code of Ethics | Paul Chadwick'. The Guardian, 28 October 2018, sec. Opinion. <https://www.theguardian.com/commentisfree/2018/oct/28/regulate-ai-new-laws-code-of-ethics-technology-power>.

European Political Strategy Centre of the European Commission. 2016. "Towards an Innovation Principle Endorsed by Better Regulation", Strategic Note 14 of June 2016, available at [https://ec.europa.eu/epsc/sites/epsc/files/strategic\\_note\\_issue\\_14.pdf](https://ec.europa.eu/epsc/sites/epsc/files/strategic_note_issue_14.pdf).

German Constitutional Court. Press Release No. 69/2018 of 21 August 2018 on the Order of 13 July 2018 1 BvR 1474/12, 1 BvR 57/14, 1 BvR 57/14, 1 BvR 670/13, available at <https://www.bundesverfassungsgericht.de/SharedDocs/Pressemitteilungen/EN/2018/bvg18-069.html>.

Jonas, Hans. 1985. The Imperative of Responsibility: In Search of an Ethics for the Technological Age. Chicago (Ill.): University of Chicago Press.

Nemitz, Paul. 2018. 'Constitutional Democracy and Technology in the Age of Artificial Intelligence'. Phil. Trans. R. Soc. A 376 (2133): 20180089. <https://doi.org/10.1098/rsta.2018.0089>.

Nida-Rümelin, Julian, and Nathalie Weidenfeld. 2018. Digitaler Humanismus: Eine Ethik für das Zeitalter der Künstlichen Intelligenz. München: Piper.

Wissenschaftlicher Dienst des Deutschen Bundestages. 2017. Parlamentarische und zivilgesellschaftliche Initiativen zur Aufarbeitung des sogenannten Radikalenerlasses vom 28. Januar 1972, Ausarbeitung WD 1 - 3000 - 012/17, available at <https://www.bundestag.de/blob/531136/a0a150d89d4db6c2b-dae0dd5b300246d/wd-1-012-17-pdf-data.pdf>.

