The Good, the Bad and the Regulated: In Search of a Common Denominator for AI in Business and Society

KU Leuven Centre for IT & IP Law has the pleasure to announce the second edition of its Leuven Al Law & Ethics Conference (LAILEC) – #LAILEC2020. The event will take place on **18 February 2020** in Leuven.

The conference aims to gather researchers from multiple disciplines, incl. law, philosophy, political and social sciences, computer sciences to discuss the contemporary legal, ethical, regulatory and governance challenges of artificial intelligence. Following the success of the first edition of LAILEC, we are pleased to announce we're also organising a parallel track with paper presentations from both aspiring and established scholars.

Theme

Artificial intelligence is a multifaceted technology which has pervaded virtually every aspect of our lives. Such technological changes carry the potential to yield new solutions for society and business. However, they create not only new opportunities, but also new risks. Al technologies are being developed and deployed in multiple contexts, at all societal levels. They are, therefore, governed through multiple sets of legal, ethical, social and other norms in a global normative order characterised by a diversity of regulatory structures.

New **risks** might require swift regulatory responses, systemic changes and perhaps even a complete overhaul of this global, regional and national regulatory infrastructure. However, is our legal infrastructure capable of dealing with the risks of Al development?

Just recently, the United Nations Secretary-General's High-level Panel on Digital Cooperation has emphasised the need of further deepening of digital cooperation between actors on different levels; a cooperation rooted in shared human values, multilateralism and multi-stakeholder participation. Importantly, the panel suggested a controlled "systems" approach for cooperation and regulation based on adaptivity, agility, inclusiveness, fitness for purpose and anticipatory small-scale testing – all towards accelerated attainment of the sustainable development goals.¹

Undoubtedly, the achievement of the sustainable development goals is reliant upon concerted action regarding the production, utilisation and sharing of various types of digital technologies and content in cyberspace – collectively referred to as 'digital public goods'.² However, the continuing fragmentation in the legal and regulatory landscape at global, regional and national level has

1 | Page

¹ UN Secretary-General's High-level Panel on Digital Cooperation, 'The Age of Digital Interdependence. Report of the UN Secretary-General's High-Level Panel on Digital Cooperation' (United Nations Secretary General 2019) 5 https://www.un.org/en/pdfs/DigitalCooperation-report-for%20web.pdf>. ² ibid 10.

contributed to unprecedented diffusion of control making it unfit to deal with the emergence of new risks and new accountability challenges.

For example, **Industry 4.0** and its highly automated 'factories of the future', Industrial Internet of Things, collaborative robots, cyber ranges and industrial cyber-physical systems promise optimised, more secure and more efficient manufacturing processes. Unlike traditional manufacturing, however, smart manufacturing is fuelled by fundamentally different 'raw' materials, namely operational data, machine learning models, digital twins and other digital assets. **Smart manufacturing** is manifest not only in cyberspace, but also in the physical world. It depends on underlying operational and information technology infrastructure, such as cloud-based infrastructure which may be geographically spread across multiple States. **This results in the emergence of new, 'digital supply chains' overlaying the traditional manufacturing value chain.** These assets and infrastructure are increasingly interconnected, automated and geographically distributed which exposes the digital supply chain actors to greater risk of non-compliance with internationally recognised human rights. For example, datasets used to train machine learning models may originate from non-democratic regimes and their original collection may be the result of flagrant violations of the right to privacy. The same holds true of foundational AI technologies (eg, facial recognition, emotion detection, etc.) which are deemed essential in future manufacturing processes.

Another example where the potential of Al-supported technology is tremendous is the healthcare sector. Al could, for instance, be used to enhance patients' capabilities, augment healthcare professionals' performance beyond what is considered normal, it could help better understand medical knowledge, and facilitate sharing and usage of medical data for advanced patient care irrespective of national boundaries, in a cost-effective and safe manner. At the same time, the risks brought along should not be underestimated. Legal issues of liability, privacy and data protection rights, inequality, algorithmic non-transparency, safety and security are yet to be addressed, as well as ethical concerns regarding personal autonomy, identity and justice.

Against this background, the conference ponders over a number of difficult questions. How to protect international human rights and the commercial interests of businesses in such collaborative settings where AI tools are increasingly being installed at critical nodes in both public and private decision-making processes? Which principles should underpin the production and use of these (new) 'raw' materials? How to operationalise in a context (allegedly) universal concepts such as fairness, equity and justice? How to protect the fundamental objectives of liability in an environment where no single actor decides anything alone? Who has the "duty of vigilance" in an environment where control is diffused far beyond the physical boundaries of a single object, single actor or the territory of a single State? Have companies, and not nation-states, become the new 'trustees of humanity'?³ If so, how should they be governed in a world which increasingly escapes the logic of Westphalian sovereignty? What is the role of international, regional and national law against regulation embedded in chips and enforced by the inexorable precision of Boolean algebra? What is the potential of new ways of regulation such as public and private certification, standardisation, voluntary

2 | Page

³ Eyal Benvenisti, 'Sovereigns as Trustees of Humanity: On the Accountability of States to Foreign Stakeholders' (2013) 107 American Journal of International Law 295.

schemes, regulatory sandboxing and mere "soft" law to deal with the challenges of AI and AI-backed collaboration? And will they cast the death spell on law or, rather, revamp it entirely?

Al is not good or bad. It is not binary although binary is what Al 'understands'. Its developers, designers and deployers constantly move along a sliding scale of risks with a dangerously thin line between infinitesimally small- and infinitesimally large-scale risks.⁴ In a fragmented multilevel legal order the proper understanding and assessment of such risks is crucial and should become the common denominator of any effort to build a multilateral and multi-stakeholder 'systems' approach to Al.

The following three panels of the conference will be composed of paper presentations:

Accountability in the Risk Society: risks, responsibility and forensics in AI settings of diffuse control

This panel will focus on various aspects related to accountability and Al. From an international perspective, submissions dealing with technology-induced diffusion of control and the challenges of international responsibility of States and international organisations are particularly encouraged. Equally welcome are abstracts addressing more general questions concerning liability allocation in complex technological and organisational setting involving Al-driven decision making. To what extent are existing liability mechanisms adequate to deal with situations of multiple attribution of conduct? How does the use of artificial intelligence to manage complex risk impact the duties of the involved subjects? Does more knowledge (or data?) mean increased liability exposure? How can technological tools such as event data recorders, or operational technology forensics help deal with fact-finding and liability allocation in geographically distributed settings, particularly in collaborative activities such as smart manufacturing?

Al and Health: the ethics and regulation of human enhancement

Human enhancement is – as the terminology suggests – improvement of human capacities, abilities and performance above levels of normality. Human enhancement technologies (HETs) have the potential to radically alter the human body and mind and accelerate changes in the human condition. In the era of e-Health, big data and AI, the boundaries between what is considered normal 'treatment' and what is considered to be enhancement are strained even further. This panel will explore how ethics and the law can deal with the possibly ensuing adverse impact. Is there a need for establishing an EU regulatory framework for HETs? Submissions may discuss this potential need from an ethical perspective, the perspective of fundamental rights, medical devices legislation, intellectual property and pharma law, (cyber-)security, safety and liability law, or consumer protection law.

3 | Page

⁴ Mónika Ambrus, Rosemary Rayfuse and Wouter Werner, 'Risk and International Law', *Risk and the Regulation of Uncertainty in International Law* (Oxford University Press 2017) http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780198795896.001.0001/acprof-9780198795896-chapter-1 accessed 7 March 2019.

RIP Law: have we gone beyond the Event Horizon?

The panel aims to explore a futuristic vision of the world and the role law is to play in it. We consider the rapid evolution of AI a catalyst to evolution in law itself, which will challenge legal, ethical, and philosophical principles that have existed for hundreds of years. The panel strives to present different parallel scenarios where technological development fundamentally changes law or even destroys it. Topics we highly value concentrate around the issues of AI and global governance, the relationship between AI and the judiciary, algorithmic checks and balances, the death of law to the 'tyranny' of Boolean logic, etc.

Abstracts

The deadline for submission of extended abstracts is **Friday**, **10 January 2020**. Submissions should be made to: lailec@kuleuven.be.

Abstracts of 500 words in a freely chosen format should be submitted together with a CV of the author(s). Successful applicants will be notified by email by Friday, 24 January 2020.

More information

For more information and questions or concerns regarding the conference, please consult the website or send a message to: lailec@kuleuven.be. We look forward to receiving your submissions.

Preliminary Programme

08.30 - 09.15

Registration & coffee

09.15-09.30

Welcome: Prof Marie-Christine Janssens, Head of Centre for IT & IP Law, KU Leuven (BE)

09.30-10.05

Keynote

10.05-10.40

Keynote

10.40-11.00

Coffee break

11.00-12.30

Parallel sessions

Sustainability in the Risk Society: Business, Humans rights and Sustainable Development Goals

In the recent years it has been well recognized that digital technologies and especially AI are key to achieving the Sustainable Development Goals (SDGs). Using artificial intelligence to cure deadly diseases more effectively, to eradicate poverty, to preserve the oceans and so on seems like a modern-day utopia and as every utopia it does have a catch. The unique nature of AI raises new risks to human rights that need to be answered by the international community, by the nation-states and the business itself. Could this require a rethinking of the developing business and human rights international framework or can we adapt it under the paradigm of traditional legal institutions? Join us to find out.

Accountability in the Risk Society: risks, responsibility and forensics in Al settings of diffuse control (paper presentations)

This panel will focus on various aspects related to accountability and AI. From an international perspective, submissions dealing technology-induced diffusion of control and the challenges of international responsibility of States and international organisations are particularly encouraged. Equally welcome are abstracts addressing more general questions concerning liability allocation in complex technological and organisational involving AI-driven decision making. To what extent are existing liability mechanisms adequate to deal with situations of multiple attribution of conduct? How does the use of artificial intelligence to manage complex risk impact the duties of the involved subjects? Does more knowledge (or data?) mean increased liability exposure? How can technological tools such as event data recorders, or operational technology forensics help deal with fact-finding and liability allocation in geographically distributed settings, particularly in collaborative activities such as smart manufacturing?

12.30-13.30

Lunch

13.30-14.05

Keynote

14.05 - 15.35

Parallel sessions

Al in Industry 4.0: collaborative manufacturing and the new 'raw' materials in the factories of the future

Al in Health: The ethics of human enhancement (paper presentations)

Smartphones, smartwatches, smart TVs, etc., we have them all in our smart homes and smart cars in the smart cities that transitioned from science fiction to reality. And everything starts from the smart factories. We do like our smart devices and we most certainly need to know how they are made. The amazing rate of economic growth and prosperity promised by Industry 4.0 does, however, carry the legacy of the past and should also carry the lessons we learnt. Data might be the new 'raw' material, but they still need regulation, supply chains should be transparent and accountable, products should be created and exported with care for the humans that are going to use them or who might be impacted by them. Is this possible though and how to reconcile regulation and innovation, we will try to answer these and many more burning questions.

Human enhancement is – as the terminology suggests - improvement of human capacities, abilities and performance above levels of normality. Human enhancement technologies (HETs) have the potential to radically alter the human body and mind and accelerate changes in the human condition. In the era of e-Health, big data and AI, the boundaries between what is considered normal 'treatment' and what is considered to be enhancement are strained even further. This panel will explore how ethics and the law can deal with the possibly ensuing adverse impact. Is there a need for establishing an EU regulatory framework for HETs? Submissions may discuss this potential need from an ethical perspective, the perspective of fundamental rights, medical devices legislation, intellectual property and pharma law, (cyber-)security, safety and liability law, or consumer protection law.

15.35 - 16.00

Coffee Break

16.00-17.30

Parallel sessions

Multilevel regulation of Al: are new regulatory tools the future or simply the emperor's new | Horizon? (paper presentations) clothes?

RIP Law: have we gone beyond the Event

By now it has become evident that Al technologies are unlike anything we have faced. The unique system of risks they create, combined with their fast-phased evolution challenge the law in a way that questions the foundations of the legal system as a whole. There is a well-established need for the legislators and regulators to adapt their approach to regulating disruptive technologies. At the same time new soft law mechanisms of regulation are vastly supported by the industry.

The panel aims to explore a futuristic vision of the world and the role law is to play in it. We consider the rapid evolution of AI a catalyst to evolution in law itself, which will challenge legal, ethical, and philosophical principles that have existed for hundreds of years. The panel strives to present different parallel scenarios where technological development fundamentally changes law or even destroys it. Topics we highly value concentrate around the issues of AI and global governance, the relationship between Al The common denominator remains the necessity of an established collaboration and information exchange between state and non-state actors that would challenge the very nature of the law as a prerogative of the state. Which approach is the best? Is it viable to talk about regulating AI stricto sensu and can we rely on it to assist lawmakers to solve the puzzle of its own regulation? Is "automated law" still "law" and can "automation" itself be a regulatory tool?

and the judiciary, algorithmic checks and balances, the death of law to the 'tyranny' of Boolean logic, etc.

17.30-18.00

Closing

18.00-19.00

Networking cocktail