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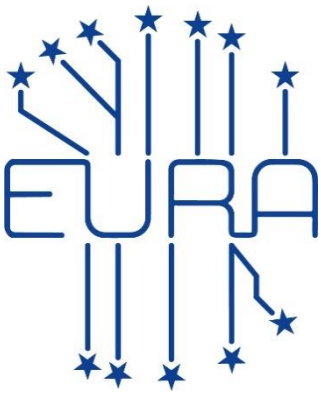

Regulating UncertAInty

8-9 April 2021

Zoom

CONFERENCE DESCRIPTION

The debate around artificial intelligence (AI) worldwide focuses as much on the potentials of such disruptive innovation as on the need for regulation. Innovation is favoured, since the potentials for social and economic growth are clearly identified, together with the improvement it could bring in everyday life, in all sectors of human endeavours. At the same time, however, dystopic accounts – often favoured by science-fiction depictions – as well as contemporary savant's warnings, loudly resound allowing for a number of more or less reasonable fears to arise, acquiring the attention of the general public, experts, and policymakers alike.

Understood in its broadest meaning, as typically referred to in the public debate, AI is something «you know it when you see it», but which is not clearly defined. On the one hand, in fact, the spectrum of applications recalled within its paradigm is extremely broad and diversified[1]. On the other hand, the possible applications of AI are hard to foresee, as well as its true capacities and potentials, given the blurred line separating – often inflated – expectations from true – realistic and ascertainable – technological advancement. There is indeed a large degree of uncertainty with respect to the object that needs regulation.

In such an articulate scenario «good regulation» is perceived as the optimal tool to discern and select the uses and impacts we desire among those AI could deliver, discarding all others. The debate is indeed essential, and regulation could play a fundamental role as a primary tool for social engineering. Technology might be tamed – or at least we ought to tame it – through adequate and timely regulation.

To do so, however, the very notion of regulation, as well as its characteristics and tasks, need to be defined and discussed. We intend to do so with the second EURA Conference, by addressing three fundamental issues that deserve clarification.

The relationship between law and ethics

Often, when debating the regulation of AI, ethics and law are brought together. Indeed, social sciences influence one another. Ethical considerations ground legal norms, even the most fundamental ones, typically expressed through constitutional rights and international treatises.

However, each domain has its specificities. Philosophical considerations are not constrained within the academic debate. Any position might be argued and defended, with possibly the sole limitation of logical coherence. To the contrary, the law has a solid hierarchy that defines the relationship between norms and determines how the conflicts among opposing interests are to be composed. Constitutional principles and fundamental rights might not be violated, affected, nor limited in any way by norms of lesser value.

For the same reason, the philosophical frameworks that may conflict with said fundamental rights and principles are not admissible in the policy debate aimed at developing – either soft or hard –

[1] Indeed, the general public considers AI as a branch of studies that aims to create machines or programs possessing human-like qualities, but AI applications more commonly pursue a specific function or use (driving, analysing data, controlling a smart-home environment), that is not related to human capacities (so called «light AI»), with only a limited part of AI-related research aims at replicating human-like capabilities (so called general «AI»). Likewise, in the technical debate, there is no consensus on a viable definition of AI, since the characteristics of a given AI-application are defined by (i) the functions it pursues, and the (ii) environment it operates in. The resulting spectrum of applications is broad and diversified – from a driverless vehicle, to a chatbot, from a high-frequency trading software to a collaborative industrial robot – with limited commonalities. Moreover, AI suffers from the «AI effect» or the «odd paradox», that is when a new technology works, no one calls it AI anymore (e.g. search engines). See, A Bertolini, *Artificial Intelligence and Civil Liability* (2020) .

law solutions, also in the field of AI. For instance, the transhumanist claim whereby dignity is not equally possessed by all human beings – for it comes in different degrees, according to the rational capacities of the individual[2] – clearly conflicts with the fundamental principle proclaimed by the Charter of Fundamental Rights of the European Union (CFREU) and all national constitutions, such as the German *Grundgesetz*, after the fall of Nazism[3]. Therefore, even if philosophy comes first, once the law consolidates a specific stance, it prevails over the former and its subsequent changes.

Yet, philosophy is often said to be capable of influencing the interpretation of norms. Even in such cases, however, legal formants[4] – the law as is, its doctrinal elaboration, and court application – set a more narrowly defined path, within which only social and cultural considerations might operate. Said otherwise, legal interpretation, the evolution of its concepts, notions and definitions, and the policies that are thereto related, abide their own rules on interpretation, so much so that even socio-cultural considerations, including philosophical ones, might only partially influence the conclusions achieved.[5] Otherwise, we would witness a fatal loss of legal certainty, in favour of arbitrary considerations by the individual called upon to apply the rule – typically a judge – who would be asked to abide the *Volksgeist*[6] rather than the law.

Finally, philosophy is also said to fill the gaps left by the legal system, adding additional criteria that might further specify what is desirable and commendable in a given circumstance. In such a perspective, considerations about the use of data are typically drawn, to complement already existing regulation, such as the GDPR[7]. Even in such a perspective, however, two considerations arise. On the one hand, if such a claim were to be understood as the legal system being incomplete, then that would violate a fundamental principle of the very theory of law, namely its necessary completeness[8]. It would be indeed inadmissible to conclude that a specific event or aspect is not regulated, for a judge, invested with the specific case, would always need to come to a conclusion. Absent specific or narrow tailored norms he would need to resort to other parts of the legal orderings, through *analogia – legis aut iuris* – or extensive interpretation.

On the other hand, if the claim were to be understood as a further specification of what is already said by the law – thence the philosophical intervention being *secundum legem* – its role would be very much limited indeed, like that of a custom[9]. In such perspective ethics would be limited to a code of conduct, or soft law, that does not profoundly influence – much less is capable of governing – a profound, if not radical, social change, such as that brought about by AI.

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[2] Cfr. N Bostrom, 'Dignity and Enhancement' in ED Pellegrino, A Schulman and TW Merrill (eds), *Human Dignity and Bioethics* (University of Notre Dame, 2009) 173.

[3] «Human dignity is inviolable. It must be respected and protected»: art. 1 Charter of Fundamental Rights of the European Union, OJ C 326, 26.10.2012, 391.

[4] R Sacco, 'Legal formants. A Dynamic Approach to Comparative Law' (1991) I The American Journal of Comparative Law 343.

[5] R Alexy, *Theorie der juristischen Argumentation. Die Theorie des rationalen Diskurses als Theorie der juristischen Begründung* (1978).

[6] FC von Savigny, *Of the Vocation of Our Age for Legislation and Jurisprudence* (1831).

[7] Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) OJ L 119, 4.5.2016, 1. On this point, see High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI* (2019) where Privacy and data governance is included in the list of non-exhaustive requirements indicated as fundamental to ensure the respect of those ethical principles – respect for human dignity, prevention of harm, fairness and explicability –, which are deemed necessary for achieving a «trustworthy AI».

[8] L Bonatti (ed), *Uncertainty. Studies in Philosophy, Economics and Socio-political Theory* (1984), 13.

[9] DM Walker, *The Oxford Companion to Law* (Oxford University Press, 1980).

This complex interaction of law and philosophy, so strongly recalled in the field of technology regulation, deserves a more attentive theoretical debate and assessment, too often neglected due to the speed at which the policy debate in this matter occurs. Indeed, it is very necessary not only for its possible theoretical implications, but also – and primarily – for the consequences it would most certainly bring in its application.

Good regulation: global vs local, hard vs soft

A fundamental question to be addressed when designing «good regulation» – one capable of taming technological innovation – revolves around the level at which the latter shall be adopted: namely, if it shall be developed at an international, European or local level[10]. The matter does not lead itself to simple, one-size-fits-all answers, and deserves to be carefully addressed under multiple perspectives.

With the cross-border relevance of technological development, deployment and commercialization, as well as the social impacts deriving therefrom, legal systems cannot help being called upon to deal with AI applications which have been developed abroad. Yet, different rules on product safety, standardization, certification, as well as liability and insurance may directly or indirectly affect the successful exportation of given AI application to different markets, either outright preventing their commercialization or requiring different models and products to be developed, as to meet heterogeneous demand around the word. This legal and market fragmentation – and the burdens associated thereof – may limit the commercial capabilities of local firms to the benefit of bigger companies leveraging economies of scales and commercial partnership worldwide, increasing the cost of technological innovation and limiting the benefits of its diffusion.

On the one hand, it is thus clear that there is a push for uniformity, carried out by means of both hard and soft law. Yet, uniform regulations, may be difficult to achieve, and is better seen as a dynamic project complementary to more local-centred regulation, and may be more apt for certain profiles of regulation – namely technical standards – than others.

Although soft law and hard law often work in collaboration[11], the latter mainly operates through legal harmonization – such as the already recalled GDPR – and international agreements – such as the much-contested Privacy Shield[12] –. However, the wider the geographical and political scope of these instruments is, the more limited the object of their convergence will be, often covering only some elementary content, which is insufficient for governing such complex matters.

At the same time, soft law is often carried out by professional organization operating at the international level – such as ISO and IEEE –, which, among other things, work on the development of shared technical and ethical standards. Indeed, those standards help remove trade barriers, support regulatory convergence at the international level and avoid the emergence of protectionist measures. They allow industries and businesses to establish worldwide partnerships and sell their products or services globally, fostering interoperability of products and enhancing international competitiveness. By being more proximate to the issues and the actors it aims to regulate, soft law results in aims less difficult to achieve and agree on, but is also less neutral, independent and inclusive, suffering from legitimacy and democratic bias.

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[10] European Commission, *Commission Staff Working Document. Better Regulation Guidelines* (2017)

[11] The European Standardisation Organisations CEN, CENELEC and ETSI are encouraged to closely link European and international standardisation. See: the Vienna Agreement between the International Organisation for Standardisation (ISO) and the European Committee for Standardisation (CEN); the Dresden Agreements between the International Electrotechnical Commission (IEC) and the European Committee for Electrotechnical Standardization (CENELEC).

[12] See http:privacyshield.gov/eu-us-framework.

On the other hand, not all types of market and legal fragmentation are mere obstacle to international commerce and competitiveness, or outright forms of protectionists, which need to be overcome. As recalled before, legal rules mirror and are constrained by fundamental constitutional principles and human-rights protection recognised within a legal system. In this sense, more local-based regulation may allow a more limited harmonization, which is governed by and respectful of common values.

To achieve «good regulation», it is thus fundamental to understand whether there is a specificity in the European approach. In its Communication of 25th April 2018, the EU Commission has defined its own idea of AI-regulation, as one which aims at boosting the European technological and industrial capacity and AI uptake across the economy, while anticipating and addressing socio-economic changes, and ensuring an appropriate ethical and legal framework, based on the Union's values, and in line with the CFREU. It is a major step for building trust, essential in the long term for both people and companies. In this view, the EU must therefore ensure that AI is developed and applied in an appropriate framework which promotes innovation and respects the Union's values and fundamental rights as well as ethical principles such as accountability and transparency, also to lead this debate on the global stage.[13] For this purpose, different initiatives have been undertaken, including the elaboration of the Guidelines for a Trustworthy AI by the High level expert group[14].

In this sense, a possible differentiation may be traced among the EU approach to AI and that of other western countries, such as the US, also reflecting the diverse background that the two have displayed in the field of bioethics.

When to regulate

There is no real doubt that regulation will and should occur at some point. Anything that exists is regulated – given the inherent completeness of the legal system – including the time machine should it ever be invented. At the same time, and more specifically, any good or service offered or activity performed, when socially relevant, and diffused, attracts the attention of both the public and policy makers alike. In all such cases, a need for regulation is perceived and typically seconded.

Indeed, regulation might be intended to favour the emergence or diffusion of a practice deemed desirable – eventually through diversified incentives (e.g.: especially favourable taxation for environmental friendly vehicles over older and more polluting ones) – or sanction something considered to be dangerous and violating either specific individual or collective rights or fundamental principles of the legal system (e.g.: hate speech and discriminatory practices). In other cases, more simply, it attempts to engineer a solution that is capable of exploiting the desirable traits of a particular practice, situation, – and more specifically – technology, while limiting the negative and undesirable consequences that would or could arise therefrom. In such a perspective, it shall also be recalled that regulation is not a battle, but a war. Solutions are, in fact, not conceived just once by achieving all intended outcomes, but more realistically, adaptations become necessary over time, possibly learning from past mistakes and applications.

However, determining when to intervene is an additional element of this already complex equation. Early intervention may be preferred as a way to shape technological development and functionalize it to perceived needs and awaited gains. At the same time, it could be based on partial information, and fail to account for some uses and applications that might then prove of primary importance and widespread use, ultimately failing the correct identification of the object to be regulated. One

[13] European Commission*, Commission communication of 25 April 2018 on Artificial Intelligence for Europe COM(2018) 237 final.*

[14] High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI*.

specific epiphany of this mistake is represented by all attempts to regulate science fiction, namely technologies that are not yet developed and yet typically referred to or perceived as imminent due to inflated expectations, and non-technical accounts.

The opposite approach, nonetheless, is also problematic. Delayed intervention could prove most detrimental, allowing for path dependencies to be created that are non-virtuous if not altogether infringing on individual or collective rights, in a way that first is tolerated then eventually plainly accepted. Market mechanisms might lead – if left completely unrestrained – towards similar outcomes, for individuals – even when formally informed – might find it difficult, if not impossible, to discount all eventual negative effects of possible present and apparent benefits provided by single applications.

A clearer starting point for analysis appears to be the need to prefer technology-specific interventions to extremely broad ones. The wider the notion of the object being regulated – in the attempt to develop future-proof solutions – the greater uncertainty resides, as well as the more likely it becomes the risk to miss the correct focus of the normative intervention.

However, such a point – which is also open to debate – is certainly insufficient. In that perspective, it is necessary to learn from past experience, looking at how preceding technological developments were handled, to see if some relevant criteria and considerations may be drawn, and possibly mistakes avoided. At the same time, such comparative analysis needs to be grounded on analytical considerations justifying why those examples are deemed analogous to the emergence of AI or whether some elements induce to conclude otherwise.

AI *in* and *vs* global challenges

What role can AI play in dealing with climate change and other global challenges? Could AI be a threat, rather than a solution, to coping with global crises such as climate change and pandemics? And if so, what does that mean for the ethics and regulation of AI?

Moreover, is AI ethics and regulation a postcolonial hobby of Western/Northern states, neglecting potentially more urgent issues at a global level? Or is it possible to do ethics of AI and build legal frameworks to regulate AI in a way that is sensitive to concerns people in the Global South/developing countries have? Can AI help these countries to deal with their problems? And who will make the decisions about AI: a handful of powerful Western multinationals? Again: can we find democratic forms of regulation, and what does that mean in a global context of socio-economic, geopolitical, and cultural difference?

Indeed, the discussion on the level and timing of AI regulation, and the relationship between law and ethics in shaping technological innovation – which was tackled in the previous panels – is of fundamental importance for ensuring a 'good regulation' in the light of global challenges related to technological development itself, as well as to other, conceptually distinct yet strictly correlated planetary changes and issues, such as but also global crises such as covid-19 or financial crashes.

In this sense, this final panel will discuss some of the aforementioned problems – climate change, the global crisis in the financial and health sectors, the growing gap between rich and developing countries –, taken not just as relevant of and in themselves, but also as 'case studies' to test the theoretical discussions which will be undertaken throughout the Conference.

CONFERENCE PROGRAM

DAY 1 – Thursday 8 April

Welcome
15:00-15.30
Sabrina Nuti, Andrea Bertolini

Panel I. **The relationship between law and ethics**
15:30-17:30
Chair: Giovanni Sartor
Speakers: Andrea Bertolini, Paul De Hert, Ben Wagner

Presentation of the 'EURA Young Scholar Prize' Paper
17:45-18.15

DAY 2 – Friday 9 April

Panel II. **Good regulation: global vs local, hard vs soft**
09:30 – 12:30
Chair: Peter Drahos
Speakers: Dominik Boesl, Tatjana Evas, Oreste Pollicino, Kees Stuurman,

Panel III. **When to regulate**
14.00-16.00
Chair: Alessandro Nuvolari
Speakers: Norberto Andrade, Roger Brownsword, Liz Fisher, Koen Frenken

Panel IV. **AI *in* and *vs* global challenges**
16.30-18.30
Chair: Gianluigi Palombella
Speakers: Mark Coeckelbergh, Luke Kemp, Mihalis Kritikos, Nathalie Smuha

THE CENTRE OF EXCELLENCE

The EURA Jean Monnet Centre of Excellence constitutes a focal point of competence and knowledge on Robotics and AI, focusing on their ethical, legal, social and economic (ELSE) implications. EURA's mission is to promote innovative multidisciplinary research, offer advanced educational programs, and foster the dialogue with policy makers, increasing social awareness and promoting an informed debate. Through its activities, as well as its interdisciplinary and functional-based approach, EURA creates a worldwide network of experts, professionals, stakeholders, and policy makers, facilitating cross-fertilization among different fields and interest groups. Ultimately, EURA intends to identify, assess, discuss, and promote the European Approach to AI and advanced robotics, as defined by European Commission in its communication of the 25th April 2018.

For further info about the Centre and its activities, visit us at: https://www.eura.santannapisa.it/

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