Editorial

When attending a conference on the automation of law through artificial intelligence and deep learning, I was struck by how well computer scientists aligned their understanding of the legal realm with the common approach to law adopted in legal theory. Essentially, law is viewed as a hierarchical set of rules, with a ground rule, such as the constitution, formal laws that follow from that rule, by-laws, specifying in more detail how the rules contained in a law must be interpreted in specific contexts, etc. The ground rule has priority over the rules in the law, the rules in a formal law over those in the by-laws, etc. Ideally, there should be no conflicts between the various rules. To the extent that the current legal regime is not logically and hierarchically structured, this is due to human error, our incapacity to be perfectly logical, or perhaps due to political motivations, that lead to ad hoc rules being adopted without thinking through their position vis-à-vis other existing legal instruments. Here is where AI could help, the computer scientists stressed. It could help formalise rules, further their logical coherence and hierarchical consistency and reduce ambiguity.

This brought me back to attempts I encountered when studying law and philosophy. One branch of philosophy is concerned with logic and natural language and the continuous endeavour since the beginning of this field has been to design a 'perfect language' that is logically coherent, unambiguous and precise. Gottlob Frege,[1] inter alia, set out to design an ideal language, that was based on symbols that represented axioms, properties and causal relationships. Many others have expanded on that system since and have perfected it.[2] A basic example of such language could be. "By→¬Mi", which could mean "If You (y) are bald (B), (→) I (i) will not (¬) Marry (M)." Or "Si↔Ay"; "If I (i) am asleep (S), (→) you (y) are awake (A), and if you (y) are awake (A), (←) I (i) am asleep (S)."

A similar dream was prevalent among professors of law, for example claiming that law properly understood was nothing more and nothing less than mathematics. In fact, both dominant theories of law – legal positivism and natural law theory – adopt a hierarchical approach to rules and stress the need for their inner consistency. Legal positivists, such as Austin, Kelsen and Hart, holding that law is manmade and that there is no higher rule or unwritten moral principle that prevails over manmade law, have proposed to design a legal regime that is based on a *grundnorm* or foundational principle, that provides the basis for the legal competence of the legislature to adopt a constitution, which forms the basis of formal laws, etc; if laws violate that *grundnorm*, they are null and void. Natural law theorists, such as Aquinas, Filmer and Locke, holding that there are rules and principles that precede and supersede manmade law, are no less hierarchical in their thinking. Perhaps the only difference is that they believe the

DOI: 10.21552/edpl/2021/1/3

1 Frege, G. (1879). Begriffsschrift, eine der arithmetischen nachgebildete Formelsprache des reinen Denkens.

2 Van der Sandt, R. A. (1989). Presupposition and discourse structure. Semantics and contextual expression, 11, 278-294.

ground rule or basis for legislative competence lies outside human nature - either based on God (e.g. Kings being the direct descendent of Adam, giving them divine authority to reign) or the state of nature – have equally found that (manmade) laws cannot violate the natural rights that are innate to human beings and exist even in the state of nature. If they do, again, they are to be considered null and void.

Adopting this perspective on law would mean that formalising and codifying law through AI would at least in theory be possible and that indeed, technology could help smooth out imperfections and inconsistencies in the current legal framework. But although this interpretation of law as a logically coherent and hierarchical set of rules is dominant, there are other, perhaps more convincing understandings of the legal domain. One of the most famous legal philosopher that critiqued this interpretation of law was Lon L. Fuller, who rose to fame through the Hart-Fuller debate in the 1950s. Fuller's interpretation of law has important consequences for the dream of codifying and perfecting law through AI. Let me briefly sum up six challenges that follow from his work.

1. *Law can only be understood through social practices and customs*

The origin of law, according to Fuller, lies in customs and social practices, in customary or common law. These are implicit agreements and practices that are common in normal social relationships and are so standard in a given society that they need not be formalised or explicated when parties enter into an agreement of sorts. 'Customary law can be viewed as being implicit law in a double sense. In the first place, the rules of customary law are not first brought into being and then projected upon the conduct they are intended to regulate. They find their implicit expression in the conduct itself. In the second place, the purpose of such rules never comes to explicit expression.' When societies grow bigger, contract law arises as a way to formalize these habits and customs. 'Customary law may, indeed, be described as the inarticulate older brother of contract.' Contractual law, Fuller believes, is the first legal domain that came into existence, even before criminal law and administrative law. This means that instead of a top-down approach, Fuller is offering a bottom-up account of the legal realm.

'The prevailing tendency to regard all social order as imposed from above has led to a general neglect of the phenomenon of customary law in modern legal scholarship. Outside the field of international law and that of commercial dealings legal theorists have been uncomfortable about the use of the word law to describe the obligatory force of expectations that arise tacitly through human interaction. The most common escape from this dilemma is to downgrade the significance of customary law and to assert that it has largely lost the significance it once had for human affairs. Another and more radical way out was that take by Austin and followed explicitly by many writers since his time. This is to assert that what is called customary law becomes truly law only after it has been adopted by a court as a standard of decision and thus received the imprimatur of the state.'[3]

3 Citations from: L. L. Fuller, 'Anatomy of the law', Penguin Books, Harmondsworth, (1971) 44, 194 and 195.

Instead of saying that customary law becomes law proper only when formalised in a legal contract, Fuller asserts that legal contracts and other written law can be considered law proper only when they arise from and align with existing customs. To interpret what a legal contract means, for example, requires an understanding of the practice it is trying to codify. A contract using the same wording could mean different things in different contexts; different contracts using different terminology could mean the same thing. When interpreting a contract, a judge must have knowledge of the context and the social practice the contract is applied to.

2. *Law cannot and should not be perfectly consistent*

Legal positivists such as Hart stress that *is* (is this a law?) should be separated from *ought* (is this a good law?). Even the laws adopted by the Nazi-regime were laws proper, though they were clearly immoral. Fuller believes that is and ought cannot not be separated, because laws have an 'inner morality', with which he means that they are manmade constructs that serve a purpose: they try to regulate society. Consequently, like customary law, which Fuller believes are implicit both because they are uncodified and because their goal is not made explicit, there is an implicit goal not only in specific formal laws, but of the legal realm as such. Fuller distinguishes between minimum conditions and maximum conditions of manmade constructs. A chair that has three uneven legs, we would normally call defunct; a chair without legs, we would not call a chair but a cushion (minimum requirements). We can also attribute values to a chair, like that it should be cheap, environmentally friendly, comfortable to sit on, etc. (maximum requirements). The minimum and the maximum requirements are the extreme ends of the same line (e.g. a chair that is so uncomfortable that nobody wants to sit on it at one point quits serving the purpose for which it was made).

Fuller believed the Nazi legal regime did not meet the minimum requirements, inter alia because the laws were often vague, unpublished and applied retroactive. He coins eight routes to legislative failure. 'The first and most obvious lies in a failure to achieve rules at all, so that every issue must be decided on an ad hoc basis. The other routes are: (2) a failure to publicize, or at least to make available to the affected party, the rules he is expected to observe; (3) the abuse of retroactive legislation, which not only cannot itself guide action, but undercuts the integrity of rules prospective in effect, since it puts them under the threat of retrospective change; (4) a failure to make rules understandable; (5) the enactment of contradictory rules or (6) rules that require conduct beyond the powers of the affected party; (7) introducing such frequent changes in the rules that the subject cannot orient his action by them; and, finally, (8) a failure of congruence between the rules as announced and their actual administration.'[4] If laws change per minute, are unclear, contradictory or not published at all, etc., they are simply unable to regulate society and steer human behavior, which is the purpose of the legal regime.

4 L. L. Fuller, 'The Morality of Law', Yale University Press, London, (1969) 39.

Pointing to the fifth route to legislative failure, it could be argued that Fuller, like legal positivists and natural law theorists, believes that the legal regime should be consistent. True, but although he does believe that there is a point at which laws become so contradictory that they are no longer capable of serving their purpose of regulating society, as an aspiration, it can never be achieved in full, because aspirations conflict with each other. Just like a chair cannot be perfectly comfortable and be produced carbon neutral and be cheap and be designed by a famous artist and …, the law cannot achieve all aspirations at the same time in full: achieving one comes at the price of the other. Fuller recounts the attempt of communist Poland, which tried to ensure that literally everyone could understand each and every law; the attempt, however, came at the price of legal consistency.

3. *Law can only be understood through its non-codified legislative motive*

Legal language itself is not objective; even 'facts' cannot do without meaning. Fuller speaks of "Direction-giving Quality of purposive facts". Legal language essentially gives an instruction, but lawmakers must take into account who is reading the instruction, just as the reader must put herself in the shoes of the regulator. Suppose a technician gives an instruction on how a machine should be put together and his instruction is read by both another technician and a professor of English language. The technician will understand the text best, Fuller suggests, because the latter is more likely to get lost in what the instruction says literally, instead of looking at the intention behind it. Just like the legal regime has a motive, specific laws can only be understood through its motive.

In his debate with Hart, he gives two examples. First, a rule prohibiting vehicles in a park. Of course, Fuller stresses, this does not mean that an old military tank that is placed on a pedestal in a park as a war memorial should also be prohibited. The goal of the rule is to ensure that pedestrians can roam the park freely and safely. Second, a rule stressing that it is not allowed to sleep on a bench at the train station, is not intended for a normal traveller who dozes off while waiting for her connecting train to arrive, but for vagrants, who use the benches for more permanent purposes.[5] Consequently, legal texts must not be interpreted literally. 'When I hire the neighbor's boy to mow my lawn I do not begin by imposing on him a long and abstruse definition of what I mean by "lawn"; I assume he will have the good sense not to push the mower into my tulip bed just because he sees a few blades of grass growing up among the tulips. Simply from the standpoint of engineering efficiency in achieving a goal, some discretion and choice must, then, be accorded the human agent. This conclusion is reinforced when we recall that a favored and often successful mode of revolt is to carry out instructions with a wooden literalness; many a domineering parent has had his inclinations toward tyranny curbed by the retort, "But I did just what you told me to do!'[6]

5 L. L. Fuller, Positivism and fidelity to law: A reply to Professor Hart. *Harvard law review* (1958) 630-672.

6 L. L. Fuller, 'Freedom as a Problem of Allocating Choice', Proceedings of the American Philosophical Society (1968) 112, 2, 105-106.

4. *Law cannot be perfectly logical*

Fuller stresses that on many accounts, law gives rise to and is dependent on legal fictions. Again, he adopts an interpretation counter to that of legal positivists, such as Bentham, who

stressed that in 'English law, fiction is a syphilis, which runs in every vein, and carries into every part of the system the principle of rottenness.'[7] Legal fictions are widely occurrent in law. After marriage, a couple is treated as one (economic) unit; liability law often attributes responsibility, for example holding that all traffic accidents between a motor vehicle and a pedestrian will deemed to be caused by the driver of the motor vehicle; an adopted child is legally treated as if it were the biological child of the adopting couple; if a person has gone missing and has not surfaced after 20 years' time, she will be presumed dead; judges often adopt 'it must be presumed that' types of reasoning; law creates 'legal persons'; etc. This is not an inconvenience that should be smoothened out, Fuller suggest, but is precisely what a legal order aims to do. It substitutes the legal reality for the factual reality. Although the ideal legal system of legal positivists would be to arrive at a clean legal language, that is unambiguous and factual, Fuller suggest that both law and language are symbolic orders per sé.[8] The legal system itself is based on a presumption that is known to be incorrect, namely that every citizen knows the law (*Nemo censetur ignorare legem*).

5. *Law is not intended to give answers*

In a famous essay, Fuller elaborates on the position of five judges in a hypothetical case, that of the speluncean explorers. The case revolves around cave explorers who get stuck and decide to kill and eat one of them in order to survive. The question that the court should decide on is: should the surviving explorers be convicted of murder? Judge 1 stresses that the law is clear: murder. Judges must apply the law, not make it. At the same time, he asks the executive branch to pardon the survivors (their prerogative, not that of the judges). Judge 2 states that the survivors found themselves in an exceptional situation; *necessitas non habet legem,* the legal regime does not apply to such exceptional situations. One of the aims of criminal law is to have a deterrent effect, which would not be the result of a conviction in this case. Judge 3 states that criminal law has several goals, such as retribution and rehabilitation. The various objectives underlying the law cannot be reconciled in this case. That is why Judge 3 does not arrive at a verdict. Like Judge 1, Judge 4 finds that the law is clear: murder. However, unlike Judge 1, Judge 4 thinks that advising the executive branch on the appropriate course of action would go against the separation of powers. Finally, Judge 5 refers to public opinion and common sense. Both lead this Judge to the conclusion that the death penalty should not be imposed and the conviction set aside.[9] It is im-

7 J. Bentham, *The Works of Jeremy Bentham* (Vol. 5), 1843, delivered by W. Tait.

8 L. L. Fuller, Legal fictions. *Ill. L. Rev.*, (1930) *25*, 363.

9 L. L. Fuller, The case of the speluncean explorers. *Harv. L. Rev.*, (1948) *62*, 616.

portant to Fuller that each of these positions are perfectly legitimate. Each judge positions herself within a specific legal tradition, adopting one of the accepted ways of reasoning. The added benefit of law is not that it gives concrete answers to difficult legal questions; rather, through legal reasoning and the debate that precedes a verdict (both parties bringing forth different arguments) and the legal reasoning that leads up to that verdict, a judgement begets legitimacy.

6. *Law requires reciprocity*

For Fuller, finally, law is based on reciprocity. The goal of the law is to enlarge the scope of human freedom and interpersonal relationships. Setting administrative rules, such as traffic rules, ensures that citizens can safely travel and a 'rule against murder, effectively enforced, serves to enlarge the scope of the individual's interactions with others. In many of our cities are areas that strangers cannot enter without some risk to their physical safety. Here a failure of legal control results in a restriction on interaction, an interaction that in the long run might promote reciprocal understanding and, with it, a reduction in the risks that now aggravate distrust.'[10] In addition, law is based on reciprocal relationships between the various legal actors. The regulator has a duty to see citizens as human beings, with their own capacities and desire for individual autonomy. Even a rational tyrant, Fuller suggests, will adopt liberal laws because she understands that in the end, repression of citizens will undermine her authority and lead to civil disobedience. Citizens have to realize that rules ultimately increase their own freedom and adhere to them. Using the metaphor of language, Fuller stresses that the grammar of the English language imposes restrictions on how citizens can communicate with each other; but it is not despite those restriction, but because of the linguistic rules that comprehensible communication is possible.

Similar reciprocal relations exist between the legislature, the executive and the judiciary. For example, if laws are too strict, judges might decide not to impose them or to impose no sanctions on citizens that violate them; or, if judges go too far in (re)interpreting the law, the legislator will correct that interpretation. The legislator cannot and should not attempt to adopt laws that are absolute, it should leave room for both the judiciary and the executive branch to apply the general rules contained in the law and allow them to take into account the circumstances of a specific case. Laws are not specific instructions for specific contexts; they give guiding principles, ground rules and general norms that the judiciary and the executive branch should use when dealing with a specific case at hand.

These six points do not mean that automation of law through AI is impossible, but it would suggest that a very different approach is needed, if a Fullerian understanding of law is adopted, than is currently the case. Legal automation should not aim to smoothen out imperfections and inconsistencies, should accept that legal reasoning is sometimes

10 L. L. Fuller, 'Law as an Instrument of Social Control and Law as a Facilitation of Human Interaction', 1975 Birmingham Young University Law Review 89 (1975) 90.

untrue, should understand the logic and rationale behind a rule and the legal system as such, allow a context specific interpretation of the general rule and invest especially in the legal reasoning leading up to a judgement, or even better, provide five equally convincing but different outcomes per case.

Let me introduce the current edition of EDPL. We open with two great forewords by Nicole Falkenhayner and Firmin Debrabander. Both call for new modes of reflection on developing technologies and the way they affect our life. Both on a personal, cultural and societal level, new narratives are necessary. They share insights from the filed of Cultural Studies and Virtue Ethics on how to find new ways of thinking about our own position vis-à-vis the rapid developments that affect our lives.

We continue our Young Scholars Award series. Each year, we distribute a call for papers for young scholars to send in a paper. Of the more than 30 submission, the chair, Franziska Boehm, has selected the best 10 papers, which were subsequently evaluated and assessed by the jury, consisting of Hielke Hijmans, Gloria Gonzalez Fuster, Alessandro Spina and the chair herself. The top 5 articles are published in this edition of EDPL. The authors of the 3 best papers were invited to give a presentation at last edition of the Computers, Privacy and Data Protection (CPDP) conference. These were the papers by Isabel Hahn, Taner Kuru and Katherine Quezada Tavárez. Taner Kuru was awarded the Young Scholars Award for writing the best paper. Bravo to all of the five young scholars!

Pier Giorgio Chiara has written a thoughtful paper, warning against using the overly broad term 'security' for very different aspects, such as general safety issues, prevention of data breaches and cybersecurity issues. Isabel Hahn discusses perhaps the hottest topic in the current academic debate, the purpose limitation principle, arguing that if enforced more strictly, the principle can help tackle some of the concerns that have been signalled vis-à-vis the bigger internet companies. Taner Kuru critically analyses the GDPR's regulation of genetic data and suggests that the Regulation either expands the scope of its protection to the extent that causes ambiguous, contradictory and disproportionate outcomes or excludes genetic groups from the scope of its protection. Katherine Quezada-Tavarez deals with a topic that has been left relatively unexplored in academic literature, the right to access in the law enforcement context, which she demonstrate is highly important. Finally, Matthew White evaluates the way in which Britain has dealt with mass surveillance activities, how the Investigatory Powers Tribunal has addressed matters concerning privacy and how such should be evaluated by the EU Court of Justice.

In the report section, led by Mark Cole, Giorgia Bincoletto assess how the Italian DPA deals with conflicts between data protection and the freedom of expression, Sandra Schmitz-Berndt and Fabian Anheier deal with a new guideline by the NIS Cooperation Group and Lisette Mustert evaluates the EDPB's first decision under the dispute mechanism set out by Article 65 GDPR. Natalija Bitiukova has written a detailed report on Lithuania in the GDPR's implementation series and finally, Annika Selzer has

written a very enlightening piece for the Practitioner's Corner on the matter of the appropriate technical and organisational measures organisations must adopt under the GDPR.

This edition has three case notes. Jos De Wachter and Charlotte Peeters deal with the EU Court of Justice's Advocate General assessment of the One-Stop Shop Mechanism, Pierre Notermans evaluates the Breyer v. Germany judgement by the European Court of Human Rights, concerning the obligation to identify oneself when acquiring a mobile telephone card, and I assess the L.B. v. Hungary case by the same court, on the matter of making tax defaulters' names public.

Finally, the Book review section led by Gloria Gonzalez Fuster, contains two book reviews, one by Francesca Episcopo on Raphaël Gellert's 'The Risk-Based Approach to Data Protection' and the other by Zihao Li on Brendan McGurk's Data Profiling and Insurance Law.

For those interested in submitting an article, report, case note or book review, please e-mail our Executive Editor Jakob McKernan (mckernan@lexxion.eu) and keep in mind the following deadlines:

- Issue 2/2021: 15 April 2021;
- Issue 3/2021: 1 July 2021;
- Issue 4/2021: 1 October 2021;
- Issue 1/2022: 15 January 2022.

I hope you enjoy reading this edition of the European Data Protection Law Review!

Bart van der Sloot
Tilburg Institute for Law, Technology, and Society (TILT) Tilburg University, Netherlands