AI&Law Breakfasts

6ᵗʰ edition: Predictive Policing and Rule of Technology

Summary of interventions

(not revised by the authors, only webinar is authoritative)

Guests: Marine Kettani, Policy Officer at Ministry of Justice (France) and member of the Ad Hoc Committee on Artificial Intelligence (CAHAI) of the Council of Europe, **Christopher Markou**, Leverhulme Fellow and Lecturer, Faculty of Law, Cambridge University (United Kingdom) and **Antoinette Rouvroy,** senior researcher at the Research Centre Information, Law and Society, Law Faculty, University of Namur (Belgium).

The 6th edition of "AI and Law Breakfasts" dealt with the topic of predictive policing and rule of technology. The three experts analysed the current state of affairs in Europe and shared their views on the consequences of the increasing use of algorithms in public policies. The purpose of the webinar was to explore in depth the concrete applications of algorithmics and learning machines in public policy, as well as to analyse the relationship between these new technologies and justice.

Marine Kettani

Policy Officer at Ministry of Justice (France) and member of the Ad Hoc Committee on Artificial Intelligence (CAHAI) of the Council of Europe

The use of algorithms in the implementation of public policies is now commonplace and sometimes raises a few questions. These algorithms are traditionally based on predefined rules which they apply. The implementation of public policies and decision making by administrative authorities has recently be enriched with numerical tools based on statistical learning methods. Broadly speaking, what we can called predictive policing consists in the use of this new form of quantification. This calculation technique take advantage of the development of massive data to allow algorithm to learn automatically characteristic structures in databases in order to extract classifications and based on observed regularities with computational devices rationalize the future by making it available for forms or preventive action.

In France we have specifically a few tools that choose the previously exposed method in support of public policies. For example, the gendarmerie has developed a software that aims at predicting vehicles damages and burglaries. The system looks at where burglaries and damages to vehicles have taken place in the last six years in order to deduce, to detect where the next ones are likely to take place. The first results tend to show that both the tools predict correctly from 83 to 85% the places where burglaries are committed and the decreases in committed crimes is not significant with this technique. So, we see that predictive policing is in a way putting in two successive algorithm two major aspects of police action: knowing the crime and preventing it in a way that can be measured in order to ensure public performance. Another example comes from the general direction of Finance: they use a system that analyses and cross check public database and files in order to identify the files deserving a deeper analysis by gents in charge of fraud repression. It is said to have increase the chances of useful controls with half the predicted files were followed by an actual inquiry against 10 to 20% with former methods.

So, what are the benefits and risk to tackle with this method? We must not deny that IA makes it possible to improve the quality of service for users by making the action carried out by the service more effective. It can also offer greater equity in that sometimes-extreme individual biases in people in charge of handling cases can be mitigated using such tools. Finally, it should not be denied that these tools are likely to improve the economic efficiency of the resource allocated to public services. However, these tools can generate significant risks for many fundamental rights for most among with is a right to privacy.

It is also immensely important not to give up the task of making what predictive machine do intelligible for human being in order to enable people to follow or not the prediction and to be able to contest afterwards its appropriateness. Indeed, the more those tools are accurate and appropriate, the harder it will get to challenge the predicted results as for the decision maker as for the person who would like to challenge the decision afterwards. Analyzing the biases of machine learning algorithm has also became a field of research of its own occupying computer scientists, mathematicians, and lawyers. Indeed, by relying on past data and decision and decision that may be subject to human biases, those tools can reproduce and disseminate them in a way that is much less perceptible to users.

So, what do we do with these tools and what is the role of the CAHAI?

Multiple charters have already been written in order to regulate AI. We also have some hard law either sectoral or general for instance like the GDPR. We also see that there might be a need for a specific instrument to bring a global vision on this technology and to complete all the existing sector specific regulation. In this context, the council of Europe have a committee on AI that is aimed at examining the risks carried out by this type of technology and the responses that can be made to them.

So, CAHAI mission is to examine on the basis of broad multi stakeholders consultation the feasibility and the potential elements for a legal framework for the development , design, and application of arterial intelligence based on Council of Europe standards in the field of Human rights , democracy and the rule of Law. To conclude, the challenge is to find the right balance between innovation that are useful and regulation needed to protect rights and freedom.

Christopher Markou

Leverhulme Fellow and Lecturer, Faculty of Law, Cambridge University (United Kingdom)

AI gives us a lens trough which to reinterpret fundamental questions that have always fascinated humanity but are becoming all the more pressing. The main question is: is law computable? For something to be computable, we first have to know what law is and depending on how you understand law, what you expect it to be, its function, your perspective will change.

The first example is the proposition of defunding the police. Defunding the police would lead to use IA that is less costly. However, IA have been used by the police in the past and is now questioned. For example, the "stop and frisk campaign" in New York was ended because a disproportionate number of black and ethnic minorities people were stopped in frisk and the program was ruled unconstitutional. If an algorithm gives effect to the structural biases and prejudices of a society, we should not expect a racist society to do anything other than find a way to totalize and legitimize their racism.

So, what are the red lines for AI in law? Where are the contexts in our world in society where, for whatever reason, we should prohibit these tools?

The industrial revolution in Europe, certainly in the UK, automated the physical domain of labor. Machines have long been able to do work better than humans, faster than humans, cheaper than humans and do coast less that humans. AI however is the automation of the cognitive domain. That is the human brain, the human mind, whatever it is that give consciousness. But will people miss lawyers? Lawyers are stubborn and change adverse, so maybe automation and automating human decision making in some contexts has a case. Trouble is that the logic we use to optimize AI systems and algorithm does not really map on to what optimization means in law. We do not really know what we are optimizing towards: rule of law? Justice? fairness? Can we really define it in a way that we would need to define it mathematically to allow an algorithm to optimize towards it? We could but what we would lose in the process is perhaps what we consider sacrosanct about

justice: flexibility. We need flexibility, flexibility make things brittle, brittle things break, and often in unpredictable and dramatic ways and more so now than ever in a increasingly plural society. We need flexibility because society is immensely complex and full, if not entirely, composed of grey areas. Very few cases that judges deal with are black and white even if they are deeply familiar. So, AIs need to be flexible or it will break and so might society.

Computing lax is difficult it takes place through this thing called natural language, this semantic and subjective thing that allows judges and lawyers to twist it but that same use of language that can have rhetorical reinterpretation, is what allow law to evolve and to get flexibility

Dr. Markou insists on the fact that law, and specifically jurisprudence is not merely about the output but about the process and the use of IA tools will make that disappear.

In conclusion:

- there is no science of the future: we cannot prognosticate extremely far into the future;
- simulating legal judgment is not the same as legitimate legal authority: no one elected it, no one appointed it, no one accredit it, it is not educated itself even if it's underwent a deep learning process. Learning is only one component of what judges and lawyers do because their personal conduct also matters. Dr. Markou calls for the same kind of Profession regulation scrutiny a solicitor, a barrister or a judge has, for legal tech enterprises because unless we find a way to connect people to the consequences of what they do, they'll do whatever comes to mind;
- a prediction can become a decision depending on the confidence you put in it. We cannot predict the future because we should not be able to model what judges do.

If Europe is to have a place in this debate, it is not by winning an arm race with the US or China nor should it try. What it should do is what it has always been good at: being the adult in the room, meaning not allowing promises of future of vast technological prosperity to overshadow even a modicum of democratic deliberation. You cannot automate people future underneath them, but you also should be careful about the ingress of technology into the legal system specifically. We should be skeptical of theses thing even if it means the rendering potential benefits because we cannot adequality quantify the risks that they pose.

Antoinette Rouvroy

Senior researcher at the Research Centre Information, Law and Society, Law Faculty, University of Namur (Belgium)

Antoinette Rouvroy presented her insightful research on algorithmic governmentality. She put in evidence the changes and challenges respectively for the society and the lawyers in this digital era: data today either personal, anonymous, relational or contextual data are really the new coordinates of society in almost all sectors of activities and government. It is on the basis of digital data rather than on the basis of institutional deliberative, cultural and symbolic processes that the categories through which individuals are classified, evaluated, rewarded or sanctioned are detected. This new reality represents a big challenge for the lawyers because law is nothing else than a long and a slow sedimentation of meaningful science texted thanks to civilization. Nowadays we are really

on a threshold of a shift towards another civilization: a civilization of digital signals and algorithmics. The issue is that the machines appear blind towards what makes the similarity of each life and what inspires each life in collective context; they are focalized on what links each life statistically to impersonal but predictive profiles.

In her view, algorithmics present limits of linguistic representativity or representability: they cannot be descriptive of any real-world reality. Even if, similarly to law, algorithmics produce synthetic realities, -as law produces presumptions for example- the limit of representability is different in legal and digital universes. The distinction is between a kind of metaphysic of pure digital presence and a metaphysic of differences which is specific to the law. For a judge for example there is a distinction between a subject, a legal subject and its behaviour, whereas for algorithmics subjects are merely deduced from data. From AI side subjects are deduced from profiles; they are all meant to be predictive. In this way subjects are deprived from the possibility to give account to themselves because they are already predicted and when a person is already predicted, he/she cannot say anything anymore for himself/herself.

A second very crucial aspect for the law is the distinction between law and justice. When a judge has to decide about a case, he tries to approximate justice because justice has never been registered into data about pre-existing situations. Indeed, justice is a principle of perfectibility of the society. This is the reason why Antoinette Rouvroy believes that it is impossible to compute law completely just by processing algorithmics: the result of this computation process takes nothing about justice. The algorithmics objectivity has nothing to do with justice because justice is the dimension that really excides the optimization of the state of facts.

The third aspect she enshrined about justice is the distinction between the world and its representation: justice is the son of the struggles about representation, it is the way to make law evolve. As consequence, technical ideology of big data, presupposing or pretending to exhaust the world in all its dimensions (past, present and future), is just incompatible with the distinction between world and its representation. In her opinion justice is really irreducible to algorithms.

Furthermore, Antoinette Rouvroy pointed out the need to find new ways for protecting a specific dimension of human beings: the one of potentiality. Humans in their essence need and have to confront ourselves in public space, a space that has not been created for us, a space that has not been adapted for our own individual needs. The latter circumstance highlights that humans need to decide collectively about their future. This is another reason why she thinks that a judge who would follow the results of a calculation is not a judge, it is a calculator, it is a machine to compute.

In conclusion, Antoinette Rouvroy advised the lawyers to be careful in using the machines learning. Undoubtedly, they have extraordinary capacities, such as the skill to detect regularities of the world, but the lawyers, as all human beings should be attentive to their own mode of creation of reality.

Finally, she stated that: "as lawyers we cannot live as pure machines. In fact, we cannot live in hyper speculative space because we are beings who are obsessed with truth and truth finding. We have to produce and stabilize the truth; truth is never in the data, it is never immanent, truth is what happens to facts, but it is not in the facts themselves".