"COGITO ERGO SUM"? SOME ISSUES ABOUT ARTIFICIAL INTELLIGENCE AND HUMAN WILL – A LEGAL APPROACH

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ABSTRACT: When a person meets another one, sometimes has the strange feeling of "déjà vu", thinking "I met this person before". Psychology explains it as a path which is crossed between people. The same happens when people tries to predict the next friend they will meet. Which facts are most likely to lead to the connection? In the world of social networks, these are called nods. Each link shared among people is a line connecting them. In the computer world these graphs exist in an unlimited dimension, and artificial intelligence is calculating the importance of each edge, and distinguishing friends and enemies, important texts and insignificant publications, putting all the numbers together and creating a composite profile of the most likely "normal" person. That profile is used for advertising purposes but also is used to the electronic hunt for terrorists. This bring us to a central problem: Are the artificial intelligence, with the path and the algorithm, really making choices and choosing for us? Descartes said "I think. I am", that´s the course of humanity. Now computers are flummoxing the way we see the concepts of thought, will and action. Are these concepts exclusives to the mankind? With a view to developments in robotics and artificial intelligence, the Committee on Legal Affairs deemed it time for the European Union to act in respect of the legal and ethical issues raised by these new technologies. To this end, the JURI Committee set up a working group in 2015 with the primary aim of drawing up "European" civil law rules in this area, leading to the 2017´s European Parliament's resolution on European Civil Law Rules on Robotics. Developments in civil robotics and artificial intelligence also call for reflection on the big ethical questions they raise. In this regard, it is essential that the big ethical principles which will come to govern robotics and artificial intelligence develop in perfect harmony with Europe's humanist values. In this article we will try to establish the link between human will and electronic will, not forgetting that the thousands of world's leading computers, with billions of patterns and algorithms, will never replace the human perception of justice and fairness.

Keywords: artificial intelligence; ethical principles; robotics law; human will; European law.

INTRODUCTION

Free will is the idea that we are able to have some choice in how we act and assumes that we are free to choose our behaviour, in other words we are self-determined. For centuries, philosophers have held that civilization depends on a common belief in free will, assuming that we can freely choose between right and wrong [1]. One of the main assumptions is that the human behaviour is not determined.

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On the opposite, in artificial intelligence (AI) the choices and therefore actions are calculated. So, we can say that their behaviour is pre-determined. However, those actions haven't yet been performed. The question here is this: is any different performance simply a part of their programming or can artificial intelligence have free will?

When a person meets another one, sometimes has the strange feeling of "déjà vu", thinking "I met this person before". Psychology explains it as a path which is crossed between people. The same happens when people try to predict the next friend they will meet. Which facts are more likely to lead to the connection? In the world of social networks, these are called nods. Each link shared among people is a line connecting them. In the computer world these graphs exist in an unlimited dimension, and AI is calculating the importance of each edge, and distinguishing friends and enemies, important texts and insignificant publications, putting all the numbers together and creating a composite profile of the most likely "normal" person.

That profile is used for advertising purposes, but also is used in the electronic hunt for terrorists. This brings us to a central problem: Are the artificial intelligence, with the path and the algorithm, really making choices and choosing for us? Descartes said "*I think, therefore I am*"[2], that's the course of humanity. Now computers are flummoxing the way we see the concepts of thought, will and action.

The highest goal of AI has been to create a being that can be considered as equal or even superior to a human. We have already created machines that can sometimes deceive us into believing that they are intelligent. Machines like these would have shocked Descartes.

On the other hand, there are philosophers who consider that man's spiritual life is no more free than the physical process. The human soul is in nature infinitely further complex than any data program, but various think that in principle we are just as unfree as those data programs.

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Even if we establish a link between human free will and electronic will, we could not fail to remember that the thousands of world's leading computers, with billions of patterns and algorithms, will never replace the human perception of justice and fairness. As so the reality and perception of ethical procedures, could not be casuistic pre-determined.

In this article we are going to look at AI at a philosophical, social and legal point of view.

THE PHILOSOPHICAL PROBLEM

The uppermost aim of AI has been to create a being that can be considered as identical or even superior to a human.

That goal raises a set of questions and philosophical tribulations.

For John McCarthy[3], the machines, which have AI capability, are a deterministic system. But we ask ourselves how a deterministic model can produce indeterministic results.

That it should be possible to make machines as intelligent as humans involves a lot of philosophical premises. As McCarthy wrote these premises are: The world exists independently of humans. A logical robot represents what it believes about the world by logical sentences. AI also needs a correspondence theory of reference, that a mental structure can refer to an external object and can be judged by the accuracy of the reference. The important consequence of the correspondence theory is the need to keep in mind the relation between appearance, the information coming through the robot's sensors, and reality. The premise of compatibility of determinism and free will - A logical robot needs to consider its choices and the consequences of them.

Some of these premises, were discussed by philosophers among centuries, on a human perspective.

Berkeley defended the theory that the world exists independently of humans, assuming that God never close his eyes. [4]

The theory of a mental reference was pursued by Descartes in his famous sentence "cogito ergo sum", which was refuted by Kierkegaard and more recently by António Damásio, defending the existence over essence. [5]

Albert Camus wrote in the early pages of "*The Myth of Sisyphus" [6]* that suicide was the only philosophical problem that matters. This was the very expression of the existentialism. The anguish as the idiom of human existence, which represents our uniqueness, was spread by Sartre. [7]

We must believe what we see, and what we see is precisely that nature changes. Empedocles and Heraclitus [8] agreed that we should creed on the verification of our senses.[9] A computer has its own reality, believes in its own perceptions, including the social ones. But it is difficult to imagine a computer with philosophical problems, feeling anguished and wanting to destroy itself.

As Gabriel Marcel wrote, human freedom consists, also, in the desire that we have to be happy and to live in peace. [10] And in this matter, we must see that AI device couldn't share our aspirations and dreams. Besides, dreaming is well connected to free will, and machines could establish a huge amount of connections, but will be never to crave or dream.

For others, the pursuit of the beauty represents the free will. The aesthetic couldn't be tangible in an algorithm.

We really have the need of the particular and the universal, the human being and the individual. That's a path of mankind. No artificial artefact should be capable of understand or make a distinction between these two dimensions.

However, the biggest problem emerges with the compatibility of determinism and free will.

In fact, one of the dangers of the AI, is precisely if the machines have a monistic sense of the world, like Espinoza did [11]. If a machine could see that everything that exists can be reduced to one single reality which he simply called substance, that reality could be an

artificial one. And by this assumption, a machine could glance the human world like we look to the machines, as a useful tool. Reducing nature and the condition of all things to one single substance, an AI could begin a perilous Manicheism dialectic.

Another hazard could be the "*I think, therefore I am* "concept introduced on a machine. If the Descartes theory would be uploaded to a device, it could perceive not only that it was thinking, realizing at the same time that this thinking was more real than the material world which it recognizes with its sensors. If a machine believes that there is a connection between reason and being, more self-evident a thing is and more certain it is that it exists. The AI is nothing that we are, and don't really exist at all, but it could "think "that it is. That's the illusion of the illusions and the hazard of the hazards.

We believe that the concept of free will is a human exclusive. Machine is a determined system by nature. Nevertheless, the threat inhabits in the probability of an algorithm could in somehow give the machine the illusion of thinking and as a consequence the illusion of existence.

THE SOCIAL PROBLEM

The AI is grappling with complexity. They are looking for patterns in data about human life and human behaviour. They are on the social networking, collecting privacy data, expelling fake news or censuring most unusual posts. They are hundreds of computers working together, revolving our lives, seven days a week, twenty-four hours a day and we didn't even notice.

But the AI machines are doing much more that managing the social networking. They are in the financial markets, buying, selling, making speculation. In fact, they are the markets. With their huge data capabilities, the AI is predicting micro and macro-economic scenarios.

Also, on the security field the AI devices are operating. Indeed, the thousands of city cameras trough the world, with a facial recognition system, are managed by these machines. They are operating to protect us by at the same time, they are collecting data, establishing a pattern of our behaviours on the streets, of our usual routines and routes.

This brings us to a central problem. The AI intervention on social networks, expelling fake news and censuring some posts, are rising a problem of freedom of speech and they are putting in jeopardy our concept of democracy. Democracy is a concept that emerges from freedom, freedom of speech and freedom to choose who we want to represent us. However, if censure exists and if the people are a flood of fake news, it is impossible for democracy fulfil its goal. We cannot have a democratic system without a trustful source of news. On the other hand, the AI intervention in the markets, are dangerous to the economy, because their goal is the profit, the most possible amount of profit, and they are incapable to see that, sometimes, they are putting on the line smaller companies and jeopardizing countries with minor economies. And that´s a real threat to the stability of the world. Still, the AI operating in the security field brings us to a difficult issue, should our personal data be used to establish a pattern of routines and behaviours? And, could these contribute to a real Huxley´s world of alphas and betas?

THE LEGAL PROBLEM

With a view to developments in robotics and artificial intelligence, the Committee on Legal Affairs deemed it time for the European Union to act in respect of the legal and ethical issues raised by these new technologies. To this end, the JURI Committee set up a working group in 2015 with the primary aim of drawing up "European" civil law rules in this area, leading to the 2017's European Parliament's resolution on European Civil Law Rules on Robotics.

On these historical resolutions we can see that "*T - whereas Asimov's Laws1 must be regarded as being directed at the designers, producers and operators of robots, including robots assigned with built-in autonomy and self-learning, since those laws cannot be converted into machine code; U. whereas a series of rules, governing in particular liability, transparency and accountability, are useful, reflecting the intrinsically European and universal humanistic values that characterise Europe's contribution to society, are necessary; whereas those rules must not affect the process of research, innovation and development in robotics;*".

This recommendation urges the Union to play an essential role in establishing basic ethical principles to be respected in the development, programming and use of robots and AI and in the incorporation of such principles into European Union legislation, with the scope of shaping the technological revolution so that it serves humanity. Also, advises to make an important start with civil liability issues.

On 12 February, a Motion for a European Parliament Resolution was adopted in Plenary, following the adoption of the own-initiative report on "A comprehensive European industrial policy on artificial intelligence and robotics".

By adopting this Motion, the Parliament acknowledges the potential of the use of AI and robotics in healthcare and more particularly regarding the promotion of personalized medicine, healthcare technologies as well as improving quality of life and fostering innovative processes in the medical field. The Commission and Council will now consider the Motion adopted in Plenary. After careful examination, the Commission may decide to act on it.

In December, the European Commission presented the development and use of AI in Europe. Moreover, the High-Level Expert Group on Artificial Intelligence released the first draft of its Ethics Guidelines for the development and use of artificial intelligence and open a public consultation on 19 December 2018. This first draft sets out how developers and users can make sure the AI respects fundamental rights, applicable regulation and core principles, and how the technology can be made technically robust and reliable.

In these guidelines we can see that "*Artificial Intelligence (AI) can help us address some of the world's biggest challenges. It can enable doctors to improve diagnoses and develop therapies for diseases for which none exist yet; it can reduce energy consumption by optimising resources; it can contribute to a cleaner environment by lessening the need for pesticides; it can help improve weather prediction and anticipate disasters; and so on. The list is virtually endless. AI will be the main driver of economic and productivity growth and will contribute to the sustainability and viability of the industrial base in Europe1. Like the steam engine or electricity in the past, AI is transforming the world.*"

This set of legislation about IA, raises some issues [12].

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First of all, the problem of juridical personality of the AI. Manner of fact, the doctrine is now discussing if should be granted an electronic personality to these devices [13]. A legal status for a robot cannot arise from the model of the natural person, since the robot would then have human rights.

The legal status of a robot cannot derive from the model of the legal person, since it involves the existence of natural persons behind it to represent and direct it.

The legal status of a robot cannot derive from the Anglo-Saxon model of the trust. This regime is extremely complex. More than that, it would always involve the existence of a human being as a last resort.

But, the creation of an electronic legal person status for robots is justified, by some experts, by the erroneous assertion that liability for damage caused would be impossible to prove. Some authors consider that robots and AI devices should have a limited juridical personality, as the slaves on the ancient roman empire. [14]

In second, the problem of liability [15]. The European parliament in the 2017 resolution urges the commission to take measures is sort of creating an insurance policy for civil liability for damages originated by these mechanisms. Indeed, when these devices are autonomous and they are taking their own decisions, we face a problem of liability, because we cannot apply the Directive 85/374/CEE, since the producer didn't interfere with the machine own decisions but on the hand it's not peaceful that consumers should take the liability. As so, a new insurance policy for the AI should be the most balanced solution. In fact, we have already insurance policies for autonomous vehicles, which are "res" and don't have juridical personality. The same solution could be adopted to solve the liability problem concerning to AI machines.

CONCLUSION

We have, since the Myth of Prometheus, a common believe that our civilization is based on the human free will and on our ability to freely choose between right and wrong. One of the most important assumptions is that the human behaviour is not determined.

As human beings, we know what we are, and we certainly know that each fingerprint that we left in the world leads us to a different course.

The uppermost aim of AI has been to create a being that can be considered as identical or even superior to a human intelligence. That scope raises a set of questions and philosophical tribulations. The machine could suppose that it thinks and therefore exists. But what could it think? That it is a person or a machine? And this question is creating on mankind a huge burden, because the problem of existence, and therefore free will are a human exclusivity and we should be aware of the hazards inside the illusion of thinking created by an algorithm.

The AI intervention on social networks, expelling fake news and censuring some posts, is increasing the problem of freedom of speech and they are putting at risk our concept of democracy. Besides, the AI intervention in the markets, could be disastrous to economy, threatening world's stability.

The set of European legislation about IA, raises some legal issues, about the juridical personality of the AI and its liability. If the juridical personality of IA is not a peaceful

subject, on the opposite, it's generally agreed that we should have insurance policies for damages caused by IA devices.

But one thing is for sure, even if we establish a link between human free will and electronic will, even if we could suppose that a machine could have the ability to think for its own, we could not fail to remember that a chip always will be a chip and a human at all times will be a human. Also, the pursuit of justice and fairness will be until the very end of times a struggle and a dream for mankind, which no artefact nor machine could realize.

REFERENCES

[1] REVEL, Jean-François, História da Filosofia Ocidental. A Filosofia no Tempo da Ciência, vol. II, Lisboa, Moraes Editores, 1972.

[2] DESCARTES, R., Discurso do Método e Tratado das Paixões da Alma, 5ª edição, Lisboa, Livraria Sá da Costa, 1968.

[3] MCCARTHY, John, The Philosophy of AI and the AI of philosophy, 2006, http://jmc.stanford.edu/articles/aiphil2/aiphil2.pdf

[4] RUSSELL, Bertrand, The Problems of Philosophy, CreateSpace Independent Publishing Platform, 2016.

[5] DAMÁSIO, António R., O Erro de Descartes. Emoção, Razão e Cérebro Humano, 12ª edição, Lisboa, Publicações Europa-América, 1995.

[6] CAMUS, Albert, O mito de Sísifo, Livros Do Brasil, Lisboa, 2016.

[7] SARTRE, J.P, L'existentialisme est un humanisme, Nagel, Paris, 1970.

[8] MARTINEZ, Pedro Soares, Filosofia do Direito, Almedina, Coimbra, 2012.

[9] LONG, A. A., Helenistic Philosophy, Stoics, Epicureans, Sceptics, 2ª ed., Berkley, University of California Press, 1986.

[15] MARCEL, Gabriel, *Gabriel* Marcel interrogé par Pierre Boutang suivi de Position et approches concrètes du mystère ontologique, Paris, J.-M. Place Éditeur, 1977.

[11] SPINOZA, Baruch, Traité de la réforme de l'entendement. Principes de la philosophie de Descartes, trad. et notes par Charles APPUHN (GF, 34) GF-Flammarion, Paris 1964.

[12] SURDEN H., "Machine learning and law", Washington Law Review, vol. 89, 2014, pp. 87-115.

[13] SPARROW R., "Can Machines Be People? Reflections on the Turing Triage Test", in Robot Ethics, the ethical and social implications of robotics, Cambridge, MIT Press, 2012, pp. 301-316.

https://doi.org/10.5593/sgemsocial2019V/2.1

[14] PAGALLO, Ugo, "Three roads to complexity, artificial intelligence and the law of robots: on crime, contracts and torts", in AI Approaches to the Complexity of Legal Systems - Models and Ethical Challenges for Legal Systems, Legal Language and Legal Ontologies, Argumentation and Software Agents, International Workshop AICOL-III, Held as Part of the 25th IVR Congress, Frankfurt am Main, Germany, August 15-16, 2011.

[15] STREEL, Alexandre de, JACQUEMIN, Hervé et al. L'intelligence artificielle et le droit, Bruxelles, Coll. Crids, Éditions Larcier 2017.