

## CURRENT SELECTED LEGAL AND ETHICAL ISSUES OF REGULATION IN THE FIELD OF ROBOTICS

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### ABSTRACT

The contribution focuses on the analysis of the most urgent and relevant issues in the field of legal regulation of robotics, including the prospects of future development and the proposals *de lege ferenda*. In particular, it will be dedicated to the determination and delimitation of the relevant terms, the issues of liability for harm caused by autonomous robots, the eventuality of the creation of electronic personality and its possible impacts, including correlation with the field of human rights. The comparative method was widely used, as well as deductive and inductive methods, which enabled to proceed from general hypothesis to the special and concrete manifestation in certain areas.

*Keywords:* *autonomous robot, smart robot, artificial intelligence, liability, electronic personality*

### INTRODUCTION

Huge interference of robots and other kinds of artificial intelligence in everyday life is raising a lot of legal and ethical problems, which are still waiting for their proper solution.

#### **Terminological issues and the differentiation of the relevant notions.**

The terminology itself in the mentioned area is not yet unified and is very confusing. This fact was *expressis verbis* pointed out by the Commission in its response to the European Parliament resolution on Civil Rules on Robotics, where it states, that : „The diversity in this field makes it difficult to clearly make a distinction between what constitutes Artificial Intelligence/Robotics and what does not. More analysis is necessary to decide about suitable definitions and criteria in particular when it comes to their use for regulation purposes.“ [1]

Even a slight glance on different documents confirms these concerns, as it is possible to meet with a broad variety of the used terms, as for instance „robot“, „artificial intelligence“, „electronic person“, even „electronic agent“, etc. That is why the primary question, which must be satisfactorily solved, is a proper determination of the relevant notions.

The European Parliament Legal Committee in its study on European Civil Rules in Robotics [2] operates with notions: „autonomous robot“ and „smart robot“. In particular, this document is seeking for elaboration of a generally acceptable definition of „autonomous robot“, while analysing the different proposals. In this respect it supported the description of autonomous robots as „the ability to take decisions and implement them in the outside world, independently of external control or influence; whereas this autonomy is of a purely technological nature and its degree depends on how sophisticated a robot’s interaction with its environmental has been designed to be“.

This definition is been accepted with only one reservation namely, the requirement to delete the words „or influence“ as too vague and capable to make the confusions. [2] Concerning the

content of the term „smart robot“ as an appropriate starting point can be used the description, which is given in the European Parliments Resolution [3] of the common characteristic elements of it, that includes:

- the acquisition of autonomy through sensors and/or by exchanging data with its environment (inter-connectivity) and the trading and analysing of those data;
- self-learning from experience and by interaction (optional criterion);
- at least a minor physical support;
- the adaptation of its behaviour and actions to the environment;
- absence of life in the biological sense.

Especially, the last-mentioned characteristic feature (absence of life in the biological sense) means that so-called „hybrid systems“ (hybrid robots and brain computer interface)[4] are unambiguously excluded. Special attention in the content of terminological interpretation undoubtedly deserves the notion of „hybrid robot“ (called also „hybrobot“), which is briefly defined by the doctrine as „a robot controlled by living neurons“. [5] In this light the exclusion of such a semi-artificial life from the list of the „smart robots“ is reasonable only in the case, if the hybrid robots will create their own category and its own legal status, as undoubtedly these entities are smart and even more intelligent than the entirely Artificial constructs. In this respect it can be supported the creation of a specific status of „hybrid person“, who differs from the electronic person by the biological core of such a person. [4]

The relationship between the concept of „robotics“ and „Artificial Intelligence“ is clarified in the Opinion of the European and Social Committee in which the notion of „Artificial Intelligence“ is considered to be as „a catch-all term for a large number of sub(fields) such as: cognitive computing (algorithms that reason and understand at a higher (more human) level, machine learning (algorithms that can teach themselves tasks), augmented intelligence (cooperation between human and machine) and AI robotics (AI imbedded in robots)“. [6] In other words, Artificial Intelligence is the widest notion, which serves as a joint umbrella concept for different notions in the relevant areas.

The term „electronic agent“ as a concept of the American Law (regulated by Uniform Electronic Transaction Act), which is considered to be a type of the software agent, will not be the objective of this study.

### **Robots and the certain issues of their liability. Starting of the discussion on the legal personality for autonomous robots.**

The determination and delimitation of the relevant notions do not create only the academic issues, but have also a decisive impact in practical terms, as it is serving as a key factor in the proper identification of legal regulation.

Just the necessity of solving liability issues in the connection of eventual harm caused by robots gave a very strong impetus for a searching of a proper model of legal status for robots.

For instance, the European Parliament's Legal Affairs Committee in its study „European Law Rules in Robotics has outlined, that in the respect of the liability of robots exist 2 options: 1) either a physical person is the true legal actor behind, or 2) the robot itself is a legal actor.“ „... if we consider there to be a person behind the autonomous robot, then this person would represent the electronic person, which legally speaking, would-like the legal person – simply be a fictional intellectual construct.“ [2]

The second option is based on the idea, that „the most autonomous robots are, the less they can be considered simple tools in the hands of other actors“ and once „a robot is not longer controlled by another actor, it becomes the actor itself“[2]

These premises had served as a basis for the opening of the discussion on the eventuality of future legal personality of robots.

In particular, The European Parliament in its Resolution of February 2017 [3] called for the most sophisticated autonomous robots „as having status of electronic persons responsible for working good any damage they may cause, and possibly applying electronic personality to cases were robots make autonomous decisions or otherwise interact with third parties independently.“ [3]

The reaction to this appeal of the EP has been met mostly with refusal or even condemnation.

For instance, the European Commission, to which this Resolution was addressed, in its response [1] had totally omitted the issues of electronic personality of robots.

The group of the experts in the field of robotics, law, ethics and the industry leaders in their Open Letter to European Commission [7] had expressed their strong concerns about the creation of the status of electronic persons, „which is justified by incorrect affirmation that damage liability would be impossible to prove“. [7]

The authors of this letter absolutely refused the idea of the legal personality of robots as inappropriate from the ethical and legal perspective.

They have serious reservations against both models of legal status. Concerning the natural person model due to the fact, that if robots will hold certain human rights (right to dignity, to integrity, to citizenship) it will be in contradiction with the Charter of Fundamental Rights of the EU and European Convention on Human Rights. In case of legal entity model, the reservation consists in the fact, that it implies the existence of human persons behind the legal person to represent and direct it. Under the Open letter, it is not a case for a robot.[7]

Scientific doctrine transmitted some other very serious arguments for the refusal of the mentioned concept of electronic personhood. For instance, Thomas Burzi pointed out that the European Union and its institutions „lack the power principally to determine who is a person“. [8] This author from St. Gallen University in Switzerland underlined that it is up to each Member state to determine who as a natural person [8], as well as national law equally determines when an entity becomes a legal person. In all cases, „even though the EU cannot determine who is a person, it would, arguably, have the power to counter abuse practice, at least to the extent in which it impacts the internal market“. [8]

On the other hand, some arguments can be found in favour of the introduction of an electronic personality. For instance, Steven De Schrijver supposes that „the creation of separate status for an electronic person would introduce a clear separate entity in which actions of robots are controlled and managed separately from the owner. This also clarifies what happens when entering into a legal relationship with robots and defines the relationship both between third party and robot and between robot and owners (shareholder)“. [9]

Other authors had pointed out on the example how current Company law in the US can be used to establish a legal person, i.e. a company, that is wholly and solely controlled by an artificial intelligence, the result being that artificial intelligence gains legal personality on the basis of the law as it presently stands. This indirect way of the creation of a legal personality of Artificial Intelligence is an American „backdoor scenario“, which would not be a proper example for inspiration in the intention of this article.

### **From electronic personhood to human rights? Several glosses on future prospects.**

Raising the question of liability for harm caused by autonomous robots via the creation of their personhood had opened Pandora's box of other crucial issues, which must be solved in the wider context and in the deeper connections.

Primarily, it is necessary to stress, that the liability issues must be solved by other mechanisms, than by the introduction of a new type of personhood – electronic person. For instance, the creation of the insurance fund can be considered as an appropriate measure. So, it can be shared the opinion of those experts, who are convinced that the proposed by European Parliament legal status for robots is based on the incorrect and faulty construct.

In my opinion, the granting of legal status to certain kinds of artificial intelligence means also the necessity of solving of the theorem of „robots versus human rights“. The question of human rights in the connection of legal status of robots has de facto 2 levels:

- 1) the eventuality of granting to robots of certain entitlements; and
- 2) the impact of these entitlements on the field of protection of fundamental rights of human beings.

Granting of legal status is assuming, that it's addressee will perform the duties, as well as it will have at its disposal certain rights. In the case of autonomous robots it means that artificial beings should provide self- consciousness for rights and understanding of obligations.

The granting of any rights to autonomous robots under the situation, when it is not yet solved the legal regulation at the global level of animal rights (at least for the most advanced animal species, who undoubtedly have a similar level of biologic complexity and they are conscious..., etc.) is seemed to be non-conceptual and precipitate.

That is why it is not surprising the appearance in doctrine of a very critical view, that „any proposal of robot rights means a necessary elevation of the legal status of machines above that of animals and to the level of the status afforded to humans and which is, therefore, a blatant, almost „blasphemous“. [10]

The European Parliament's proposal to grant the autonomous robots the status of an electronic person is raising also the question of what rights related to this status would there be? Would they be only those entitlements, which are connected directly with the performance of their duties in the process of providing their services? Or it can be some other rights as well and the whole concept of their personality would be much wider?

The views is scientific doctrine differ greatly and it can be stated, that currently there does not exist yet any generally recognized list of these entitlements. It can be supposed only, that in the case of the granting of electronic personhood to certain kinds of Artificial Intelligence could be recognized certain rights of autonomous robots, such as for instance right to integrity, the

right to dignity, rights to access to certain information (including limits of this right), maybe the rights to remuneration, etc. On the contrary to the mentioned entitlements which are connected closely with the performance of duties by autonomous robots, most of the experts refuse the idea of granting to them some other rights, which are belonging to the traditional catalogues of human rights and connected closely with the personality of human being. This is confirmed by the argumentation, that „legal personhood would not make robots virtual people who can get married and benefit from human rights..“ [11]

Although the fact, that it can be agreed at the beginning of this argument („robots are not virtual people“..), the same is not wholeheartedly true of its end („...who can get married and benefit from human rights“), as currently there exist serious indications that the last-mentioned eventuality could not be a priori excluded. Because the granting of certain rights in the relation to the introduction of electronic personhood will be logically accompanied and followed by the granting of other rights (including of those of purely human rights in nature) and thus Pandora's box would not be closed anymore. This assumption has been already confirmed by the very impressive examples from practice.

For instance, the humanoid robot created in March 2016, had already received a human name (Sophia), as well as being granted Saudi Arabian citizenship, later on it „was given a title from the United Nations and opened the Munich Security Conference in 2018“. [11]

Some sources also describe even the marriage of the Chinese citizenship with a humanoid robot named as Yingying [12] (it is not possible to verify, whether it was an officially recognized marriage or not). At the airport in Dubai a humanoid robot has already been employed as a policeman. [12]

So it is quite obvious, that humanoid robots are gradually taking over the roles of people not only in the sphere of industry and services, but even in the fields of civil matters and family life of human beings. The consequence of this state is undoubtedly the necessity of proper legal regulation in the related areas, which must sooner or later reflect these changes in society.

The question is how these eventual rights of the sophisticated machines will correlate with the field of fundamental rights of human beings?

In this respect, it is necessary to stress, that the legal regulation of the liability issues (including the granting of related rights), as an integral part of electronic personhood will lead to their interference in the other fields as well. „A robotic person capable of entering into contracts could certainly understand decide and express its intention to enter into a marital contract“ [13]. Other authors pointed out the impact of this step in the wider context, especially on the fact, that „marriage is not about rights, it is not about robots rights; it is about the rights of humans to choose to marry a robot“. [14]

If it is so, then the issues of equality and non-dissemination are open, as a marriage is considered to be wedlock between equal partners. As a result, the whole concept of marriage in the case of artificial intelligence must be changed (including the relevant modifications in international instruments on human rights), as it was correctly pointed out in scientific doctrine, that marriage with a robot could not be considered as a marriage of two equal persons, as this would imply equality with people in other areas as well.

Some of the authors considered robots to be as slaves, as this artificial intelligence should be controlled at all times.[15] In this connection, the question is rising, whether this concept can

be morally acceptable in modern society at least towards the entities, which can get married and with whom some people have created the close relations? These issues will be even more urgent in the case of semi-artificial robots, which have partly the biological basis and origins.

## CONCLUSION

The solving of liability issues for harm caused by artificial intelligence, as it is proposed in the Resolution of European Parliament via the introduction of legal personhood of autonomous robots, is a faulty and impremeditated concept. This aim could be reached more effectively by using other mechanisms (for instance by the creation of an insurance fund).

The introduction of electronic personhood would open Pandora's box of other relevant legal and ethical problems, some of which it was pointed out in this article. It is quite obvious, that the granting of certain rights and the imposing of duties on autonomous robots in connection with their liability could not be done without the simultaneous solving of other relevant issues, which are inseperatedly connected with the legal status of artificial intelligence (as for instance their impact on the field of traditional human rights and their special regulation in the new fields, which are affected by artificial intelligence). Non-conceptual and separate legal regulation (of the selected issues only) would cause unimaginable damage to both sides (concerning humans as well as autonomous robots).

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