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## THE FUTURE INCLUSION OF CRIMINAL LIABILITY OF THE ROBOTS AND THE ARTIFICIAL INTELLIGENCE IN THE CZECH REPUBLIC

**Abstract.** The author of the article defines the problems that may arise in the very near future with robots and artificial intelligence. Neural network systems begin to work in ways, that neither their creators know exactly what's going on inside. Our society awaits the definition of a criminal offense that these robots can perpetrate, because of their high ability to learn internally without human induction.

In the central part, the author indicates possible criminal offenses as defined in the Criminal Code and their involvement by the robot, and it is related to the breakdown of the features of the offense. Following the possible adoption of this law by the Parliament in the spirit of the “no crime without law” principle, each crime must be stated in the law. The author then reacts to the recent publications on the legal existence of robots and AI in Czech Republic. In conclusion, the author defines what tasks are waiting for us, and tries to provoke the discussion. This year we celebrate a hundred years since the founding of the Czechoslovak state. A hundred years is perhaps four to five generations in human history. The first and last generation in most cases don't know each other. Today, the history of the last hundred years is repeated in the media, and we have the impression that incredible number of historical events and innovations occur during this time.

Some epochs in human society, especially the first, have existed for decades, perhaps even more, and some have not been in the global world for a hundred years. Today, it cannot be predicted when and if the capitalist system will be replaced by a system that will bring something positive to the mankind. But many people in the world have much better live conditions than in the beginning of this social stage. There were the negatives, the struggle for markets and territory, with its ferocity brought two world wars with weapons of mass destruction, which the world has not yet experienced.

The last capitalist system has brought about the suffering and death of perhaps 100 million people. It is therefore appropriate to recall Albert Einstein's quotation, who contributed to the construction of the atomic bomb but after the war he tried to disarm. He wrote: *"I know not with what weapons World War III will be fought, but World War IV will be fought with sticks and stones."*

**Keywords:** robots, AI, criminal liability of robots, de lege ferenda, future, features of criminal liability.

## **ПОДАЛЬШЕ ВКЛЮЧЕННЯ КРИМІНАЛЬНОЇ ВІДПОВІДАЛЬНОСТІ РОБОТІВ ТА ШТУЧНОГО ІНТЕЛЕКТУ В ЧЕСЬКІЙ РЕСПУБЛІЦІ**

**Анотація.** Розглядаються проблеми, що можуть виникнути в найближчому майбутньому з роботами та штучним інтелектом. Системи нейромереж починають працювати так, що навіть їх творці точно не знають, що відбувається всередині. Наше суспільство чекає визначення кримінального правопорушення, яке ці роботи можуть вчинити через їх високу здатність навчатися всередині без людської індукції.

Наведено можливі кримінальні правопорушення, визначені у Кримінальному кодексі, і участь роботів у них, і це пов'язано з влаштуванням ознак злочину. Після можливого прийняття цього закону Парламентом у дусі принципу "немає злочину без права", кожен злочин має визначатися законом. Досліджено останні публікації про легальне існування роботів та штучного інтелекту в Чеській Республіці. Цього року святкується сто років з моменту заснування Чехословацької держави. Сто років, мабуть, чотири-п'ять поколінь людської історії. Перше і останнє покоління в більшості випадків не знають одне одного. Сьогодні історія останніх сто років повторюється в засобах масової інформації, і здається, що за цей час відбувається неймовірна кількість історичних подій та інновацій.

Деякі епохи в людському суспільстві існували десятиліттями, а деякі не існували в глобальному світі протягом ста років. Сьогодні не можна передбачити, коли і як капіталістична система буде замінена системою, яка принесе щось позитивне для людства. Але багато людей у світі мають набагато кращі життєві умови, ніж на початку цього соціального етапу. Відбувалася боротьба за ринки та територію, виникли дві світові війни зі зброєю масового знищення, яку світ ще не відчував.

Остання капіталістична система спричинила страждання і загибель близько 100 млн людей. Тому слід згадати цитату Альберта Ейнштейна, який сприяв будівництву атомної бомби, але після війни він намагався її роззброїти. Він писав: "Я не знаю, з якою зброєю буде вестися Третя світова війна, але Четверта світова війна буде вестись з палицями та камінням".

**Ключові слова:** роботи, штучний інтелект, кримінальна відповідальність роботів, de lege ferenda, майбутнє, особливості кримінальної відповідальності.

**Target setting.** Humanity continues to develop today's possibilities, I don't want to paraphrase Moore's law of doubling basic elements in processors (computer brain) every two years, which has been going on for more than 50 years, but it is obvious how humanity is moving ahead in the field of new scientific and technical knowledge. Artificial intelligence will make people very active and so intense that there will be wide societal changes due to high labour productivity. This will require a new legal environment with new demands for justice system, and these changes will surely lead to New Age, NEW AGE POST, [1] as the authors are discussing in their new publication, trying to outline the implications for humanity. The authors of the publication try to define problems that may occur in the very near future. Until the end of the twentieth century, the world had dominated the idea of creating a global government. The rulers of the great empires wanted to be ever greater and to rule over the whole Earth. It was always a form of hard dictatorship. Different models of dictatorship have been tested to the present – the domination of bankers who rule the world indirectly, from behind, by influencing governments and all banks through multinational organizations.

**Analysis of basic research and publication.** The publication addresses the issue of high labour productivity due to automation and robotization using artificial intelligence robots and the problem of value creation and price creation. The publication also warns that tax burdens will be gradually reduced, and it will be necessary to create a new legal system that will not interfere only

with people. Changing the social system is closely related to Smidak's principles, [4] such as "power and responsibility", "actions and reactions", "metus" (positive fear) and "ignotum" (the unknown). In the middle, the authors suggest basic unconditional income.

**The object of this article.** Consideration of the issues of further inclusion of criminal responsibility of robots and artificial intelligence in the Czech Republic.

**The statement of basic materials.** A social security system is proposed in the form of a regular cash benefit paid in the same amount to all people and without any conditions. Societal developments influenced by robotics are already being addressed by leading economists. Artificial Intelligence will turn the entire global economy by 2030. It is generally assumed that Artificial Intelligence (AI) will significantly change our lives in the coming decades. And that is the main question of today's time. When the artificial intelligence is doing away with people, it will be able to generate more profits, what will people do? In the end, the authors define what tasks are waiting for us, and they try to provoke the discussion. From the book, this article highlights the roles and emerging new phenomenon of criminal responsibility of robots and thus the setting up of a new legal environment.

### **New legal environment**

To set up a new regulatory environment, it is necessary to define new time parameters and to define tasks for a temporary period as well as to provide a legal environment to define the criminal responsibility of artificial intelligence robots and to protect

people from the misuse of information that sophisticated intelligent systems can acquire. The first step in the current development can be seen in the European Union's step, which issued a regulation that protects fundamental human rights, namely: Regulation 2016/679 of the European Parliament and of the Council of the European Union (GDPR)[8], on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, creates a new modernized legal framework for the protection of personal data, which aims to ensure respect for fundamental rights and freedoms, in particular the protection of personal data in new and increasingly used information and communication technologies. At the same time, it should support the strengthening and convergence of the economies of the Member States of the European Union within its internal market. From today's point of view, criminal responsibility for robots is much more diverse than stated by Isaac Asimov [2], the author of the Three Laws of Robotics, in his novel, *I, Robot*. Violation of ethical aspects in relation to human vs. the robot will appear as follows:

1. A robot may not injure a human being or, through inaction, allow a human being to come to harm.
2. A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.
3. A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws.

Isaac Asimov showed a certain blocking mechanism to prevent the ro-

bot from committing a crime and then defeated the robot for his failure. By definition, we can talk about the criminal responsibility of a robot who has a certain form of artificial intelligence, that is, the possibility of independent decision-making or evaluation of situations. The subject of criminal responsibility cannot be a robot that works only on the principle of response based on the programmed system. Since Romanticism, other crimes have been passed into criminal law.

In his extensive book called "Super-intelligence, when machines are smarter than humans", Nick Bostrom discusses the emergence of a super-intelligent guardian with cognitive superpower, that is gaining general knowledge and information in the processes of understanding social structures and interactions. In the beginning, he will control and control to avoid exesus on mankind. At some stage of development, AI will try and want to dominate the world. In the moment of knowing that mankind is imperfect and de-fact the brink of further progress and knowledge, it will in some way eliminate this genus, until destruction of mankind and systems that could put intelligent resistance [3, 146].

In general, we can describe them as non-pecuniary damage, emotional harm, property damage, injury to health, and last but not least death of robots. We must not forget about terrorism with the help of artificial intelligence robots. I can imagine defining some crimes that can be caused by robots with higher intelligence, who can internally program themselves and develop to a certain perfection without human intervention. There will be many more cases in practice, just a few.

### **non-material damage**

- stalking (malicious intent);
- pressure (methods of controlling the mind by means of implants);
- psychological and virtual rape;
- defamation (creating fake rumors and stories);
- honour insults (sending emails, etc.).

### **property damage**

- theft of industrial property: infringement of copyright;
- property loss: transfer of money from an account;
- other property loss: fire caused by robots, destruction of valuable equipment.

### **health, life**

- health hazards (i.e. by electric current);
- attempted murder (if their plans fail);
- murder (deadly car accident during robot control).

### **terrorism with the help of robots**

Code № 40/2009 Coll., the Criminal Code [9], also works on certain principles, some of which are directly related to the issue.

• *The principle of justice* – Without justice, there is no trust in the law, and the law can never work well without trust. No power will ever have the means to enforce the law by force, repression.

• *The principle of legal certainty* – this is the principle that causes the law to move towards stability. Those who rely on the law, who, in good faith, entrust their affairs with the protection of the law, should not be surprised by an unexpected turn, an unexpected retroactive law.

• *The principle of humanism* – everything in law must be attached to the human being and not to ideology, to religion, to the system, etc.

• *Principle nullum (no crime without a law)* – crime can be just actions that have precisely defined and criminally defined the law.

• *E. F. Smidak's principle on society* – Responsibility and power have both positive and negative effects on the environment and relationships in society and humanity itself. I would like to draw attention to this principle, although in the spirit of this principle there is no criminal law, but it creates a modern legal thinking that **“no one should have more power than responsibilities”** [4].

A criminal offense under the Criminal Code is an offense punishable by the Penal Code and which has the features stated in such a law. The features listed in the Criminal Code, or other law, are features of the crime (object, objective, subject, subjective). Some characters are edited according to a political mandate by the electoral program of the parties and by Parliament's approval. An example could be the approval of the criminal responsibility of children from the age of 13, the abolition of the sending of documents and documents of legal entities in the Commercial Register and, last but not least, the definition of robot crimes.

1) *The object of the offense* a legitimate interest protected against the offense (property, health, human dignity, human rights).

2) *The subject of the offense* the person who breached or threatened to protect the protected interest on the condition that he has been granted an

opportunity to commit an infringement has a criminal responsibility. Eligibility:

- a natural person is given to a mentally sound and criminally responsible person, a partial occurrence has occurred since the age of 15, people with a mental disorder have tort/delicacy restricted or have no at all.

- legal person originates at the same time as its legal personality.

- *The State* arises, about liability for damage caused in the exercise of public authority, by a decision or by an incorrect official procedure. The state is then liable for damage.

- a newly formulated entity, with an artificial intelligence that has a person's defined ability to recognize criminal responsibility but also, if internally, overrides that property, it will change.

3) *The objective side of the offense includes:*

- cause, i. e. *infringements*,
- The harmful result of this cause, that is *damaged*,
- *the causal nexus* – the link between the two preceding elements.

4) *Subjective side of the offense:* The *Subjective assumption* of liability must be fulfilled only where the fault is required for the occurrence of liability, it is the intrinsic mental state of the pest to his/her own unlawful conduct and the results of such behaviour.

We distinguish forms of fault, consisting of intention and negligence.

### **Intention**

a) Straight intention (the robot knew he could cause a detrimental effect and wanted to cause it); b) indirect intention (the robot did not know it could cause a harmful result).

### **Negligence**

Conscious negligence (the robot knew he could cause the harmful effect he would causedid not want to) unconscious negligence (the robot did not know it could cause a harmful result and did not want to cause it).

Offenses can only be illegal, unlawful. For criminal liability, criminal law requires the fulfillment of all the features of the offense. We are talking about the completion of the crime. The Criminal Code, however, allows a criminal sanction even if one of these characters is missing – the result. This involves preparation for a crime and attempted crime. The preparation is a criminal offense according to the penalty rate set for the particularly serious crime to which it was directed unless the Penal Code provides otherwise. Criminal responsibility also implies involvement in the offense in the form of organizing, guidance, and assistance where we can point out that highly sophisticated intelligent systems can provide this counselling and thus participate in a crime. However, a criminal offense is not an offense which fulfils the formalities of an offense under the Criminal Code, but the criminal liability of the offender and the criminal consequences associated with it can be applied only in cases of socially harmful conduct in which the exercise of liability under other legislation is not enough. Some of these cases are listed directly by the Penal Code:

- *the defence of necessity*, i.e., an act otherwise criminal, by which the robot turns away an imminent or persistent attack on the interest protected by the Criminal Code, is not a criminal offense; the defence of necessity is not possible

if the defence was clearly manifestly disproportionate to the type of attack. Here, in many cases, robots will want to help a person, and defence is often needed to avoid criminal liability;

- *exigency*, i.e. an act otherwise criminal, by which a robot turns away the danger of a directly threatened interest protected by the Criminal Code, is not a criminal offense; there is no extreme urgency (*exigency*) if this danger could otherwise have been avoided in the circumstances, or the consequence is probably equally serious or even more serious than the one that threatened or the one who was in danger threatened to endure.

According to the Constitutional Court's decision, № IV. ÚS 463/97 of April 1998 [11] and still valid case law in the Czech Republic Act № 140/1961 Coll., Criminal Code [10] (the case is still valid, but now is this particular law replaced by new legislation), which states that "the punishment must not be a means of solving other social problems or a tool of social transformation" with the mind and purpose of punishment in the most general sense of protecting society from crime.

The punishment imposed by the perpetrator, in our case of a robot with AI, combines both the moment of criminal repression and prevention in relation to him, as well as the moment of upbringing on other similar systems, it is so-called general prevention. Another objective to determine criminal liability is therefore to impose a penalty. What punishment is the corresponding artificial intelligence? Removing the source and destroying the robot? Does someone own a robot, what kind of fine or compensation to pay the owner? These

are the issues that society must look for when answering all aspects when it is included in the revised Criminal Code. Linda Kolarik in her article *Responsibility (for) the robot or the right of artificial intelligence* [6], states that a survey conducted at the instigation of the European Commission found that in 2015 the robot used one or seven Europeans at work or at home. Their significance and use are likely to increase further. There is no doubt that once the robot has almost every household or employer, the company will undergo a dramatic change.

In March 2012, the RoboLaw project [14] was launched. Two years later authors of this project published the Rules of Robotic Regulation. In 2015, the Committee on Legal Affairs (JURI) set up a working group to develop relevant private-law rules. This group has in fact drawn up a draft EP resolution containing a series of recommendations addressed to the Commission. Following this proposal, JURI had scientists develop a study on European robotics rules. It has made several critical remarks and, based on this, the EP has finally adopted a recasting resolution containing recommendations on the robotic civil law [12]. It calls on the Commission to develop a legislative instrument regulating the development and use of artificial intelligence and robotics over the next 10–15 years. Czech law, on the other hand, on intelligent robots and artificial intelligence – at least for the time being – is basically silent. Also, Stanislav Mikeš writes in the article "The law in the Age of Intelligent Machines" [7]. These machines, robots or algorithms falling under the notion of artificial intelligence are still

acting primarily based on human instruction and under human control. Simply put, people can still turn off artificial intelligence. But, in my view, it is a question of time when artificial intelligence becomes intelligence in a true sense of meaning. And it will start not only much more than today to replace human judgment, but also think independently and act for itself. In my opinion, it is not a question of whether this will happen, but rather when it will happen (unless it does so to some extent). It will have to be the right to respond to this advent of artificial intelligence and its later perfection or even “awakening” in the above-mentioned sense. On Artificial Intelligence, the Czech legal order, including the Civil Code, is still silent. Artificial intelligence is already significantly affecting our lives, and in the future, in my opinion, there will probably be even more. More and more frequently there is news in the media about autonomously controlled vehicles and countless smart devices connected to the internet (the so-called Internet of Things) to prove this. As these facilities will act increasingly autonomously, it will also be difficult to address classic civil issues related to concepts of liability, including related issues of attribution or fault. I, therefore, believe that artificial intelligence should be introduced into the legal order as the fourth category of persons besides physical and legal persons and the state. For example, Artificial Intelligence should be dealt with at least as a separate category, as is the case with animals. To the similar conclusions, I think, the European Commission will gradually come to terms. She published the outputs in May 2017 [15] of its

consultations on the possible update of the age-old directive on liability for defective products [13]. According to respondents, autonomous machinery and artificial intelligence are causing problems with the legal responsibility that should be addressed. Artificial intelligence could be defined in the legal order, for example, as a department distinct from a person, gifted with the ability to decide and act independently, or as an artificial body gifted with legal personality from its origin to its extinction, similarly to the legal person. It is therefore clear that many experts are already aware of the cruelty of this topic and are trying to draw attention to the emerging problem, so it comes with the first draft solutions. Responsibility may vary. It is true that legal, political, social, corporate, moral and criminal liability may be imposed because of a breach of legal duty. Criminal liability can only arise from a breach of legal duty, none other. The actual purpose of the responsibility is to negotiate redress and to eliminate the consequences that have resulted from the illegal conduct and to establish the state in accordance with the law. Our company defines a criminal offense that can commit robots with a high ability to learn internally without the induction of human or artificial intelligence machines. Once the law has been passed by the Parliament in the spirit of the *nullum crimen sine lege* principle, every crime must be lawful. Then we will get an instrument for this kind of crime. Another aspect for determining criminal responsibility is, therefore, the determination of the penalty. What punishment is appropriate for artificial intelligence? Prison or monetary sanction? Removing the

source code or destroying the robot? Does someone own a robot, so is the owner's fine to pay, even if he does not control the robot's behaviour? Analogously, it could be deduced that it is the same as for damage caused by the animal, so the criminal responsibility is borne by the owner because he did not secure the animal. But robots with AI have a worldwide reach, they spread all the way along the networks, sometimes outside, and the grid does not stop. I know that it's just a matter of reflection, but I think the company needs to be prepared for it and the problem needs to be resolved before it happens [5].

**Summary.** Who should be judged for the death of a man killed by an Uber's self-driving car? This is a very complicated question that I do not want to answer directly. So far, it is not sure what the cause of the accident was, how the victim was behaving on a roadside road. It is not clear whether she was crossing the road or doing something unexpected. (...) The person in the car is not a driver. It is an operator whose task it is to stop if the situation develops so that the system is unable to respond. This is, I am afraid, a very complex legal issue that American lawyers will have to deal with for a few more years. (...) As much as California or Arizona permits, this is not clearly permitted in Europe. In some countries, such as Germany, certain sections are reserved where these vehicles can be tested. There is a precise definition of who and how it responds. The car must ensure there is no such accident. [16] As can be seen, the first experience shows how important it is to establish criminal liability of robots. Yet even a completely unresolved question

will not stop or slow down this development. However, it appears that there is a need to work intensively on a new legal environment that would include the criminal responsibility of artificial intelligence.

The author of the article hopes, that this article will lead to the future discussion of this topic.

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