

Legal Risk and Criminal Imputation of Strong Artificial Intelligence

Wei Lei

School of Criminal Justice, Shanghai University of Political Science and Law

weilei@shupl.edu.cn

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Abstract: The legal risk of artificial intelligence is concentrated on the strong artificial intelligence. It should be considered to modify the criminal law at the right time, give the criminal personalities of the strong artificial intelligence part of the artificial intelligence, and carry out the imputation treatment in combination with the identification of the ability of criminal responsibility. In view of the strong artificial intelligence that may surpass human beings, we should consider legislation prohibiting the development of criminal law, and criminally handle related research, support and application.

1. Introduction

In recent years, artificial intelligence has made great progress on the technical level, but there is only a small consensus on the connotation and system of artificial intelligence. It is mainly a common understanding of the classification of artificial intelligence, that is, whether artificial intelligence can recognize and control the computer program according to the operation of artificial intelligence, and divide artificial intelligence into weak person. Industrial intelligence and strong artificial intelligence: weak artificial intelligence refers to independent judgment and decision making in the range of design and programming, but it does not have the ability to identify and control, and it is only the will of the designer or the user. Strong artificial intelligence refers to the ability to identify and control. It is possible to decide independently and make decisions independently in the range of design and programming, to realize the will of the designer or user, and to go beyond the scope of the program designed and compiled, to make independent decisions and implement the corresponding behavior to realize its own. Will. The concept of "strong artificial intelligence" was originally created by John Rogers Hurler for computers and other information processing machines: "the computer is not only a tool for studying human thinking; on the contrary, the computer itself is thinking as long as it runs the appropriate program." [1]

Strong artificial intelligence control or implementation of the harmful act should be criminally charged, and its difficulty lies mainly in whether artificial intelligence has the qualification of a certain subject of responsibility. There are two opinions on whether artificial intelligence is subject qualification: tool theory and agency theory. The tool said that artificial intelligence is the technology created by human beings for the production and life application, and its essence is the tool for human service. Artificial intelligence has no independent meaning to express the ability and does not have independent legal personality. The agency says that all the actions of AI are controlled by human beings, and the actions and consequences of AI must be borne by the agent. In fact, the agent has partly acknowledged that artificial intelligence has an independent legal personality, that is, when artificial intelligence has the power and ability to act, it may be able to perform the act of acting as an agent. [2] The above views are quite inadequate: the tool has ignored the importance of artificial intelligence as an independent identification and control capacity development, and only regards artificial intelligence as an electronic slave, and therefore is inadequate; the agency has ignored the different meanings of artificial intelligence in different legal fields and only put forward only the possible alternative in the civil field. Therefore, it is not enough to take the concept. In the future, when necessary, the criminal law can consider giving the qualification of the intelligent robot the subject of criminal responsibility. [3] And in the future, when necessary, the criminal law can

further consider the qualification of the subject of the criminal responsibility entrusted to all the strong artificial intelligences, and make it cognizant and imputation according to the relevant provisions of the criminal law.

Whenever technology develops to a critical point, there will always be a question of value judgment about the development of this technology, such as the development of atomic bombs at the end of the Second World War. The scientists represented by Einstein worried about the great catastrophe of the development of the atomic bomb and the Nazi robbing of the atomic bomb. First invented, after a long and painful consideration, finally turned to the allied "Manhattan plan" and won a great opportunity for the victory of World War II. The rational classification of the development of artificial intelligence should be considered as follows: first, the development orientation of artificial intelligence should set up a reasonable reference system. The comparison between artificial intelligence and human reference is only the primary stage of the development of artificial intelligence. When the artificial intelligence is developed to the advanced stage, it is necessary to establish the reference comparison of the human intelligence itself and the artificial intelligence. It is only a matter of time to surpass some fields of human intelligence, but the future generation of artificial intelligence of future generations is the big challenge that human beings must face. Secondly, the single static testing standard does not truly evaluate the development of artificial intelligence, and the classification standard of artificial intelligence. We should adopt a dynamic and comprehensive idea. We should consider the rational classification of artificial intelligence by multiple detection standards, and carry out comprehensive testing from many aspects, such as natural voice, logical reasoning, image recognition, etc., instead of considering the individual performance in a single aspect. Thirdly, the classification of artificial intelligence needs to be considered. The participation of judgement, pure value neutrality should not exist in the field of artificial intelligence. The participation of various values in the field of artificial intelligence, including the ethics of robot, artificial intelligence policy and the legal rules of artificial intelligence, is of necessity. The type and force of the participation of value judgment is inversely proportional to the development of artificial intelligence. The primary stage of the development of artificial intelligence requires the regulation of ethics, policy and private law. In the advanced stage of the development of artificial intelligence, it needs the regulation of public law. In the development of artificial intelligence, the development of artificial intelligence has shown the sprout of the advanced stage of the present world. The intervention of the criminal law, which is the strong guarantee of public law, is an unavoidable option.

2. Legal risk types of strong artificial intelligence

At present, there are two viewpoints on whether or not the strong AI is endowed with qualification or personalities. The former thinks that intelligent robots should not be subject to qualification in criminal law field. Even in the future, there will be advanced, super intelligent robots. Nor can we recognize its complete criminal responsibility at the legislative and judicial levels. The ability to recognize and determine intelligent robots. It is dependent on the ability of identification and control of human beings, and it is a kind of ability to imitate others' abilities. As a result, the "will" of the intelligent robot is not free, and all the activities of the robot are not treated by the behavior of the natural person. If we give the main qualification of the intelligent robot criminal law, it will lead to the collapse of the criminal liability system. The latter thinks that, for human beings, intelligent robots are created by human simulation of their own neural networks, more similar than anything else in the world. Criminal law should respect their free will and consider giving them legal qualifications in a timely manner. The behavior of an intelligent robot may become a legal sense. The difference between an intelligent robot and a natural person is that a natural person is a life body while an intelligent robot is a nonliving body. Because this difference does not change the nature of the behavior, it is not inconvenient to establish the subject status of the criminal responsibility of the intelligent robot in the future criminal legislation.

It is realistic and reasonable to give special artificial intelligence or special personality to the

criminal law. The basic sign of the formation of strong artificial intelligence is that the machine or program has the ability to identify, analyze and control the intelligence equivalent to human intelligence. Although there is a view that artificial intelligence is not the same as human wisdom, it does not interfere with the measurement of strong artificial intelligence and human wisdom from the "man is" the "man of mechanical materialism in eighteenth Century." "Machine" to today's "machine like human" shows that there is a profound ideological source of comparison between human beings and non-human beings. The objection points out that artificial intelligence has no soul, free will or even the robot does not dream, so it cannot give strong artificial intelligence the main body qualification, which can be analyzed one by one. First, from the ancient times to the present, the views of the soul are derived from the religious doctrine, ancestor worship or literary creation, which have never been proved by the scientific reality, and the theory of the soul cannot be used as a reliable reason for negating the qualification of strong artificial intelligence. Second, the modern science has proved that dreaming is the psychological activity of a specific creature. In addition to people, most mammals have a dream, but it is impossible to assert that most mammals have intelligence, and a dream view cannot be used as a reliable reason for negating the qualification of strong artificial intelligence. Third, free will can be used as a symbol to define strong artificial intelligence in general, but there are great differences in the existence and existence of free will in different disciplines and different schools because of the view that free will has not been generally accepted. [4] Therefore, to discuss the subject qualification of the criminal field of strong artificial intelligence should first define the free will in the field of criminal law, and the free will in the field of criminal law is the ability to control the identification and behavior of the facts. Therefore, the strong artificial intelligence obviously has the free will and can become one of the main bodies of the criminal law.

It is normative and rational to give special artificial intelligence or special personality to the criminal law. The fact rationality of the free will is not necessarily the subject of the criminal law, such as the trained dolphin and the police dog whose ability to recognize and control is no longer inferior to the human beings, but it cannot be determined as the subject in the criminal law. It can also be the subject of criminal law, which is also necessary to regulate the freedom of the will in criminal law. Responsibility. The basis of the qualification of the subject of the criminal law is that it has its own independent identification and control ability instead of considering the source of the ability. The ability to identify and control natural people is the performance of life, the ability to identify and control units is the social performance, the ability to identify and control strong artificial intelligence is the performance of science and technology, with the persistence of strong artificial intelligence. In the future, it is possible to develop the social system of life, society and science and technology between the three people, not only the real human robots will appear, but other machines such as cats, dogs, plants and other machines will appear. It is obvious that a strong artificial intelligence robot with free will to kill the natural or other strong artificial intelligence robots should obviously bear criminal responsibility, and even kill other machines and animals in accordance with some national criminal law.

3. Criminal imputation path of strong artificial intelligence

Strong artificial intelligence is a design machine or program that can handle foreign information by itself, make logical decision independently, and do not need manual monitoring or interference in operation. Strong artificial intelligence can create weak artificial intelligence independently. Strong artificial intelligence can make progress in the field of integrated intelligence. It has a general intelligence similar to human being. It can make decisions and actions independently, and can quickly become the leader in the field because of its high learning ability. For example, after a brief study of a general artificial intelligence device, a general intelligent device has been learned. After entering the vehicle, it can become a high speed driver and understand the rules of the chess. After that, it can quickly become a high hand and master the fencing rules and will soon become a fencer. There are many development directions in the structure of strong artificial intelligence, such as

thinking cognition, action cognition, and emotion cognition and so on. The combination of application fields should be supplemented by private law guarantee priority and public law guarantee.

In general, the action of the strong artificial intelligence to harm the society should be included in the scope of the criminal law, but it may be different from the traditional criminal law in the structure and application of the criminal responsibility. Is there any difference in the ability of identification and control of AI? The ability of identification and control of natural people is restricted by factors such as physiological development and educational level. The identification and control ability of the unit is restricted by the factors such as the management structure and the scope of operation. The recognition and control ability of strong artificial intelligence is also restricted by the factors of deep learning mode and physical structure. For example, the auto people in the science fiction film "Transformers" obviously belong to the strong artificial intelligence, but the car can't fly, the size and performance of the car are also restricted by its own structure, and so the identification and control ability is different to the extent. When the strong artificial intelligence develops to a certain degree of socialization, there may be a professional difference, and the strong artificial intelligence distributed in different fields, such as industry, agriculture and service industry, will focus on the deep learning model in their respective fields, and their identification and control ability will also be divided into areas. There is a difference between intentional and negligent sin of strong AI. The difference between intentional and negligent is the difference between knowledge and foresight from the code of criminal law. In specific cases, there are many differences in cognitive level and degree. The difference is more obvious in the judgment of natural people and units, and can be distinguished from physiological development, educational level, and management status. But for strong artificial intelligence, especially strong artificial intelligence which is exclusive to a particular field, it is difficult to determine whether the harm phenomenon of a certain field is intentional or negligent. For example, whether the L5 level automatic car has a serious injury in the event that there is a crime, it is necessary to enter the whole data of the car. In the line of analysis, just as the judgment of man's crime is carried out by people, whether the crime of strong artificial intelligence is carried out by people or by other strong artificial intelligence, there is obviously a dilemma: from the data mastery, human intelligence is not as good as artificial intelligence; from the logical analysis, artificial intelligence is not as good as human intelligence, and the crime is judged. Breakage requires comprehensive data and logic. At the same time, the common sense admonished us that there is no omnipotence, but in theory, there is omnipotent artificial intelligence, which may have a significant influence on the cognitive basis of intentional and negligent, and thus lead to a major change in the form of a crime.

It is necessary to be liable for criminal responsibility to be liable for criminal responsibility, that is, to be able to bear the punishment or other criminal sanctions in accordance with the legal conditions. If the criminal subject lacks the legal conditions for the criminal responsibility, it needs to be changed or exempt from the punishment. Because the legal status of strong artificial intelligence is not complete, there are many restrictions on the qualification of criminal responsibility for strong artificial intelligence. For example, it is difficult to apply property punishment to the subject of strong artificial intelligence. The legal premise of the punishment of property punishment is that the subject of punishment has certain legal property, and whether the intellectual property of the strong man has legal property rights. There is no clear provision of the law. [5] Therefore, we should create a new type of criminal sanctions applicable to strong artificial intelligence. "Three kinds of penalties applicable to strong artificial intelligence products can be used, which are to delete data, modify procedures and destroy them permanently. It forms the penalty ladder which is specially applied to the strong artificial intelligence products, reflects the hierarchy of punishment, and can correspond to the social harmfulness of the actions carried out by the strong artificial intelligence products and their own personal danger." [6]

4. Legislative measures to deal with the legal risks of strong artificial intelligence in criminal law

The law should be the propeller of the development of science and technology, but not the resistance to the development of science and technology. But if the development of science and technology will bring the human society a risk which is difficult to control, the law, especially the criminal law, should be timely and put up the prevention and control of the risk of prevention and control. When AI is developed to the stage of strong AI, it is necessary to consider the legislation, prohibition, support and application of criminal law. This can be compared to the position of the criminal law on the development of another advanced science and technology. The significance of the development of the advanced science and technology is in fact no less than the super artificial intelligence, that is, cloning technology. Cloning is an artificially induced somatic cell asexual reproduction technology that can "produce" human (reproductive cloning) or organ (medical cloning) without the traditional sexual way. Medical cloning technology has brought dawn to human treatment of some serious diseases requiring transplant officers. Colonized cloning has brought about the subversive challenge of ethics and law for human society. As the two cloning techniques are actually only a line apart, it is more difficult to regulate cloning technology.

To this end, countries began to consider the use of criminal law to punish the research, support and application of cloning technology, typically such as Germany and Japan formulated a special law containing criminal provisions to regulate, clear the prohibition of reproductive cloning of the serious position; the most strict and comprehensive regulation of France, France has amended a number of sentences. The Code stipulates and sets up special regulations to prohibit cloning and even medical cloning. Compared with the legislative mode of criminal law in China, the French penal code has more reference significance. The main articles are as follows: 1. the first part of the second volume of the French penal code, the first part of the "anti-human and human felony", the first chapter "the serious crime of eugenics and clone reproduction", which is mainly the 214-2 of the crime involved in cloning. Article "30 years' imprisonment and a fine of 7 million 500 thousand euros" for the birth of a child who has the same gene as the gene of a living or dead child; and article 214-4 "participation in a group formed or the tacit agreement of one or more specific acts indicating the preparation for a certain felony in article 214-2." Shall be sentenced to life imprisonment and a fine of 7 million 500 thousand euros. 2. The first part of the fifth edition of the French Criminal Code, "crime in the field of public health", "crime in the field of biomedical ethics", the crime involved in cloning is mainly in article 511-1, "to allow a cell or gamete from itself, aimed at the birth of a baby with the same gene of another living or dead person, at a period of 10 years. The penalty is 150 thousand yuan penalty, and article 511-17 "for industrial or commercial purposes. The reproduction and reproduction of human embryos is subject to 7 years' imprisonment and a penalty of 100 thousand euros"; Article 511-18 "for research purposes. The human embryo cloning and reproduction is sentenced to 7 years of imprisonment and a fine of 100 thousand euros. Article 511-18-1 "the human embryo cloning and reproduction for the purpose of treatment is to be sentenced to 7 years in prison and a fine of 100 thousand euros". From the above provisions, it can be seen that the penal code of the French penal code is very severe on the punishment of cloning, completely prohibiting the research, support and application of cloning, whether for industrial, commercial, research or treatment purposes, and punishments for the preparation, common and admissible behavior of cloning, and the free punishment of cloning. It is often heavy. It can be seen that although cloning technology and medical value are huge, it is dwarfed by its risks to human society, and is worthy of being regulated by criminal law.

Therefore, it is suggested that the criminal law of China should amend the criminal law at the right time to add "the crime of illegal strong artificial intelligence research, support and application": "the illegal conduct of strong artificial intelligence research, support and application, the plot is serious, under 5 years' imprisonment, and under 200 thousand yuan and more than 1 million yuan penalty; the plot is especially serious, more than 5 years 1." A term of imprisonment of not more

than 5 years, with a fine of more than 1 million yuan or confiscation of property, and the establishment of a unit crime and the crime clause of strong artificial intelligence. The key to apply this provision is how to identify super artificial intelligence, which can be identified through the combination of technology identification and court evidence.

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References

- [1] Liu Xianquan, "Difficulties and criminal responsibility in the era of artificial intelligence", *Oriental Law*, Vol.1, 2018, PP32-46.
- [2] Yuan Ceng, "The limited legal personality examination of artificial intelligence", *Oriental Law*, Vol.5, 2017, PP98-106.
- [3] Liu Xianquan, "Criminal risk in the era of artificial intelligence and the response to criminal law", *Studies in Law and Business*, Vol.1, 2018, PP12-23.
- [4] Sam Harris, "Free Will", Hangzhou: Zhejiang people press, 2013, PP26.
- [5] Wu Handong, "Institutional arrangement and legal regulation in the era of artificial intelligence", *Oriental Law*, Vol.5, 2017, PP98-106.
- [6] Liu Xianquan, "Criminal risk in the era of artificial intelligence and the response to criminal law", *Studies in Law and Business*, Vol.1, 2018, PP12-23.