

Research on the Path of Legal Protection of Artificial Intelligence

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ABSTRACT

The rule of law of artificial intelligence industry depends on the coordination and cooperation of soft law guarantee path and hard law guarantee path. Compared with Western countries, China's artificial intelligence industry developed late, and its legislation mainly has some problems, such as insufficient power of soft law generation mechanism, fuzzy norms of hard law and fuzzy judgment standards of dispute settlement mechanism. This paper believes that China can learn from the legislative experience of European and American countries to implement graded assessment of artificial intelligence risks, and define the judgment criteria; Secondly, our country can draw on the soft law documents such as resolutions of international organizations as the basis of soft law generation; In terms of dispute settlement mechanism, China can try to use the "Maple Bridge experience" to introduce artificial intelligence dispute cases.

KEYWORDS

Artificial Intelligence; Specification Generation Theory; International Soft Law.

1. THE CONNOTATION OF THE PATH OF ARTIFICIAL INTELLIGENCE LEGAL PROTECTION

1.1. The Form of Artificial Intelligence Legal Protection Path

There are two basic forms of law: hard law and soft law, in which "hard law" refers to those legal norms that need to rely on state coercive force to ensure implementation, while "soft law" refers to those legal norms that may not be complete and need not rely on state coercive force to guarantee implementation, but can produce social effects. [1]The image of soft law varies according to the situation. The reason why soft law becomes law is because it has the basic characteristics of law. The reason why soft law can be independent from hard law and become a basic form of expression of law is that it is different from hard law. The reason why soft law can become a basic form of law and play an important role in the public domain is that it has an independent function of regulating and adjusting public relations. The reason why soft law and hard law can not contradict each other and complement each other is because of their complexity in legal logic, complementary advantages in legal functions, and mutual transformation in legal norms. Therefore, the role of hard law and soft law should be coordinated when constructing the legal guarantee path of future industries in China. From the perspective of basic jurisprudence, the path of legal protection refers to the institutional safeguard measures that are based on norms to maintain the operation order of the matters involved. In general, the legal protection path can be divided into the hard legal protection path and the soft legal protection path.

The guarantee of the hard law path mainly focuses on the implementation of the existing legal system by the state and the conversion of the law from the supposed level to the actual level. At the hard legal level, the legal protection of the future industry mainly includes: according to the existing laws, the investment risk of the future industrial development is controlled, that is, the relevant legal system of enterprise management is improved, the investment, loan and market access rules of the future industry are constructed, and the development environment of the future industry is guaranteed from the legislative level; Through the linkage of administrative law, criminal law and economic law, to provide relief measures to hinder and harm the future industrial development; Through relevant legislation, the general principles of civil and commercial law will be implemented and developed into the future industrial development process.

Soft law path protection is different from hard law path protection. From the perspective of sociology, soft law norms are mainly embodied in social rules, social norms and social concepts. The so-called social rules are the "benefit distribution" pattern formed by the interest game in the course of social operation, that is, the consensus on the existing benefit distribution. This consensus can provide normative basis for settling and stopping disputes in time when interest disputes occur. The social norm is the institutionalized regulation of the pattern of benefit distribution under the social rules. Social concept focuses on guiding the inherent regulation of new interests in industrial development through concept.

Soft law path protection is a supplement to hard law path to some extent. Mainly reflected in the soft law path guarantee can effectively complement the bucket effect of the hard law approach, it is difficult to achieve parallel and balanced development between different hard law norms, those lagging behind the development of law norms, especially some of the secondary rules of law norms, recognizing rules, collecting rules, enforcement rules, power rules, etc., will form a short board. If there is no soft law norm to fill the defects, it will restrict the improvement of the overall rule of law.

The legal protection path of artificial intelligence refers to the method of coordinating hard law governance and soft law management, and the way of providing solutions to the legal problems involved in artificial intelligence. Artificial intelligence has brought a new impact on the existing legal system, which is mainly reflected in the following aspects: First, the development of artificial intelligence industry has triggered the conflict between digital rule of law and traditional rule of law. The logical starting point of digital rule of law is to type analysis of various new things and problems emerging in the process of social and economic development, effectively respond to new issues formed in the digital era, and realize the integrated development of digital economy, digital society and digital government. The main form of its expression is the automatic operation of legal algorithm. Legal interests such as data interests generated by the AI industry face difficult problems of definition, such as copyright ownership/definition of AI Copyrights.[2] The second is the jurisdiction of artificial intelligence, the traditional jurisdiction is mainly territorial jurisdiction, in which the actual territory is an important basis for the division of jurisdiction. The data sovereignty of artificial intelligence breaks through the limitations of real territory, and the mobility of data leads to the ambiguity of the judicial and law enforcement provisions of virtual territory. As for the jurisdiction over the new data flow mode generated by artificial intelligence, countries maintain a more cautious attitude, and there is no jurisdiction convention regulating transnational crimes by artificial intelligence at the international community level.

2. THE DIFFERENCE IN VALUE JUDGMENT OF ARTIFICIAL INTELLIGENCE LEGISLATION

Value judgment is an important way for representative organs to legislate. According to the basic principles of law, the value of law is mainly embodied in four factors, namely, freedom value, justice value, order value and efficiency value. The difference of legislation is essentially the value judgment made by different countries based on national conditions and even political traditions. Therefore, the

value ranking of laws is one of the main reasons for legislative differences. The so-called value ranking of the law refers to the priority ranking made by the law according to the importance of each legal interest, or according to the danger degree of legal interest infringement. The legislation of artificial intelligence also follows the basic principle of the value order of law, and the value order of different law systems is not the same. Based on the text interpretation method, this paper selects the relevant legislation of the countries of the civil law system, the Marine law system and the socialist law system, so as to facilitate the research of this paper.

2.1. Marine Law System

There is a tradition of mercantilism in the maritime law system. The utilitarian legal theory holds that the state should follow the utilitarian principle when carrying out administrative management, that is, achieve the greatest social benefits through the least governance cost, so as to avoid the obstacles to economic development caused by the excessive administration of the state. Therefore, countries of the Marine law system attach great importance to the role of judicial precedent, the formation of judicial precedent is essentially the judicial organs' recognition of the existing trading and management habits, when people accept such habits, such habits will play a guiding role similar to the law on people's thinking, that is, people believe that when they do not follow such judicial precedent, they will face a greater risk of adverse legal consequences. For example, the California Senate proposed No. 1047 Cutting-edge Artificial Intelligence Model Safe and Reliable Innovation Act by clearly targeting cutting-edge model supervision, setting "serious damage" as a liability red line, increasing transparency and other ways, according to the popularity of artificial intelligence generated by the civil habits and business practices of legislation. The United States provides a solid legal guarantee for technological innovation through legislative means. Under the background of competitive market as the core mechanism of resource allocation, enterprises must rely on innovation drive to meet the increasing demand of consumers for product diversification and high quality in order to survive and develop. Therefore, in the legislative practice of artificial intelligence, whether through executive orders, congressional legislation or state-level regulations, the United States has significantly strengthened the legal protection of innovative activities, aiming to create a legal environment that encourages innovation. Second, the US legislative system embodies the principle of own risk in the field of artificial intelligence, and strictly limits excessive government intervention in the market.

2.2. Civil Law System

In contrast, the European Union, as a comprehensive political and economic union composed of many European countries, has shown more value considerations for artificial intelligence security. In order to maintain the harmonious operation of its internal single market, the EU has shown clear unity, security orientation and high standards in legislation and policy making. Specifically, the EU is committed to creating a stable and predictable business environment for market players through the establishment of a systematic legal framework aimed at removing market barriers. This principle is also implemented in the field of artificial intelligence legislation, where guaranteeing the respect and protection of fundamental human rights by artificial intelligence technology, especially its security value considerations, constitutes the core of EU legislation. The European Union is actively exploring the development of a classification and regulatory framework for artificial intelligence systems, aiming to strengthen the global influence of its legal system through the "Brussels effect" and strive to elevate EU standards into international benchmarks. In the face of the current disadvantageous position relative to the United States and China in the high-tech industry (hard power), the EU intends to use its advantages in rule-making (soft power) to achieve self-development leap-forward. However, although this kind of legislation mode emphasizing unified standards promotes the free circulation of resource elements, it also has the risk of inhibiting the vitality of technological innovation and development. It is worth noting that France, as an important member of the European Union, while

following the legal system of the European Union, actively promotes the domestic level of innovation-driven artificial intelligence legislation, aiming to make up for the limitations of the EU level legislation that may be insufficient to respond to the rapid development of science and technology, so as to maintain the unity of the law while maintaining the law. Stimulate the innovation vitality and development potential of the domestic artificial intelligence field.

To sum up, the value orientation of artificial intelligence legislation is also different in different legal systems. The Marine law system focuses on protecting the private rights of citizens and limiting the public power of the government in order to promote economic development, and in this aspect, it lists "efficiency value" as the first place. The civil law system focuses on the coherence of the legal system,[3] and in the legislation of artificial intelligence, the primary purpose is to maintain the legislative authority of the government, that is, the "obligation standard", and the order value of the law is listed as the first.

3. THE PROBLEM OF ARTIFICIAL INTELLIGENCE RULE OF LAW IN CHINA

3.1. Artificial Intelligence Soft Law Protection Mechanism is Not Mature

Soft law has unique functions that cannot be replaced by hard law. To a large extent, it embodies and realizes all the basic functions of law such as declaration, instruction, education, evaluation, prediction and punishment in a way different from hard law. First, the functional status of soft law is different from that of hard law, for example, hard law pays more attention to sanctions and punishment, while soft law pays more attention to declaration and evaluation. Hard law pays more attention to command and regulation, while soft law pays more attention to education and guidance. Second, soft law and hard law display the same legal function from different aspects. Taking the directive function as an example, in the hard law, it is mainly reflected in forcing the subject to make a certain behavior choice through commands, while in the soft law, it is mainly reflected in influencing the subject's behavior choice through suggestions. The third is the same legal function, soft law and hard law are located at different levels. For example, the hard law and the soft law in fact have the same function of punishment, but the punishment in the hard law is mainly state, external, and direct, while the soft law is mainly social, internal, and indirect. Fourth, for the same function, soft law often uses different mechanisms to achieve it than hard law. Taking the evaluation function as an example, there are significant differences between the two in the evaluation subject, evaluation procedure, evaluation conclusion, evaluation consequence, etc. The evaluation mechanism of the subject behavior in the hard law is mainly bureaucratic and closed, and the evaluation conclusion has strong legal effect, which may cause the compulsory execution of the state. However, the evaluation mechanism rules of soft law are mostly civil and open, and the evaluation conclusions have weak legal effect and can not directly cause national coercion[4].

First of all, the soft law norms of artificial intelligence are mainly reflected in the industry norms of the expert community, guiding documents formulated by national administrative organs, resolutions of international organizations or universal documents. The so-called industry norms of the expert community refer to the opinions of professional researchers in the artificial intelligence research community on the emergence of the artificial intelligence (legal) system, and this knowledge-based authority can exert influence on the national artificial intelligence legislation through international organizations or domestic ngos. According to the normative generation theory, the expert opinions of artificial intelligence submit reports on the operation and production of artificial intelligence to the representative legislature through the platform of international organizations/domestic ngos, and such reports on legal facts can have an impact on the concept definition of artificial intelligence legislation and the generation of rights/obligations to the greatest extent. The so-called guiding opinions formulated by the state administrative organs refer to the non-mandatory management norms issued

by the state that stipulate the basic guiding principles. Resolutions or universal instruments of international organizations are normative documents that build consensus on relevant issues at the level of international mechanisms based on the consent of member states. In the soft law level, there are obvious shortcomings in the above levels. The first is the industry norm of the expert community, China's artificial intelligence expert community has a high level, but China has a greater sovereignty sensitivity and vigilance for non-governmental organizations, it is difficult to form such an expert group in a short period of time. The second is the administrative guidance of artificial intelligence. Due to the lack of a unified artificial intelligence law in China, soft law, as a supplement to hard law, is difficult to generate in the absence of hard law norms. At the same time, as a customary factor affecting the generation of soft law, due to the late development of existing artificial intelligence in China. In this case, it is difficult for our country to form habitual rules.

3.2. The Risks of Artificial Intelligence are Blurred

The economic interests represented by the development of artificial intelligence industry appear in the form of legal interests. Because China's legislation on the emerging industries involved in artificial intelligence industry is in the initial stage, there are big loopholes in the definition of legal interests and risk evaluation standards of artificial intelligence industry. For example, the European Union's Artificial Intelligence Act, as the world's first comprehensive regulation of the field of artificial intelligence, divides artificial intelligence risks into four levels from low to high, and develops relevant early warning measures according to their different legal interests. However, according to the relevant laws of our country, the risk is not graded, and the different legal interests derived from the future industry are not clear. Secondly, the problem of enforcement is difficult. Taking the contract dispute of artificial intelligence products as an example, the contract law has enforcement problems for the enforcement of third-party beneficiaries due to the relativity of contracts, and the artificial intelligence industry may transfer value to a third party, for which the contract law does not provide specific enforcement measures. The coding of an AI treaty generally involves a payment for the formation of a remedy, unlike the contract law on fair and appropriate compensatory damages, in which case if a party files a request for restitution with the court, the court will reject the "restitution" because of the fluidity and uncertainty of the data. According to the methods of compensation for loss and restitution, it is difficult to apply to the judgment of tort in the future industry.

4. THE PRINCIPLES AND APPROACHES OF PERFECTING OUR COUNTRY'S ARTIFICIAL INTELLIGENCE LEGISLATION

4.1. The Way to Perfect Our Country's Artificial Intelligence Legislation

The approach of artificial intelligence legislation in our country can be divided into hard law path and soft law path. Specifically, the hard law path mainly refers to the realization of artificial intelligence legislation through multiple levels of legislation under the framework of "one yuan, two poles and multiple levels" in China. Specifically for the National People's Congress and its Standing Committee to formulate a basic law on artificial intelligence, the basic law covers the basic principles and purposes of legislation, as well as the connection between the artificial intelligence law and the Constitution. Each department of the Central ministries and commissions takes the Basic Law as a reference to formulate its own departmental rules to support/manage artificial intelligence, and then adopts local regulations and administrative rules. In this case, the hard legal approach to artificial intelligence legislation needs to follow a strict hierarchical system management, that is, artificial intelligence legislation at each level cannot violate the provisions of the upper law. As far as the soft law path is concerned, the soft law construction of artificial intelligence has no hierarchy, focusing on the standardization of existing customs and industry standards. Therefore, the hard and soft approaches of artificial intelligence legislation in China are different, and the hard approach focuses

on the logical integrity of the maintenance law and the system. The soft law approach focuses on interest issues such as interest distribution disputes.

4.2. The Principle of Perfecting Our Country's Artificial Intelligence Legislation

The following principles should be followed to improve the legislation of artificial intelligence in China: First, abide by the principle of public order and good customs, which is the basic principle of civil and commercial activities. Artificial intelligence legislation should be combined with local customs, political traditions, religious traditions and other factors, and no provisions should be made that violate public order and good customs; The second is to abide by the principle of sovereign equality and respect the principle of national sovereignty. Ai data runs often between virtual territories. In the process of using artificial intelligence, the issue of data sovereignty between countries is often involved, so artificial intelligence legislation should follow the principle of respecting the equality of countries, and artificial intelligence legislation should not interfere with the sovereignty of other countries.

4.3. Improve the Domestic Risk Assessment Hierarchical Legislative Hard Law Governance

The legislative improvement of artificial intelligence and network information technology is also crucial. At this level, China can draw on the EU's "Artificial Intelligence Act" and promulgate relevant artificial intelligence laws in our country. The European Union's "Artificial Intelligence Act" is the world's first comprehensive legal framework to regulate artificial intelligence technology, aimed at ensuring the safety, transparency and accountability of AI technology, risk classification management of various AI systems, and specifies the specific requirements that AI systems at different risk levels need to follow. As an important global force in the development of AI technology, China can learn from the relevant experience in the European Union's Artificial Intelligence Act to improve risk assessment legislation.

The focus is on hierarchical management and risk assessment, first of all, the Artificial Intelligence Act is divided into four categories according to the level of risk, unacceptable risk, high risk, limited risk and minimal risk. China can refer to this Act, classify the risk levels of artificial intelligence, and propose corresponding risk and legal interest protection measures according to different risk levels. The first level is unacceptable risk, which generally involves national security, such as cyber espionage, theft of national security data and other related data. This kind of crime infringes on the national security interests, which is urgent and uncompromising. Therefore, it is necessary to establish the corresponding mechanism to connect with the criminal law, the counterespionage Law and the national security legislation. The second level is for serious violent crimes and drug crimes, such as intentional murder, intentional injury, smuggling and drug trafficking through artificial intelligence and other crimes against personal property security, and the legal interests protected by this level are the personal property rights of Chinese citizens. Therefore, this paper suggests that the second level of legislation should focus on the effective connection with the anti-terrorism and anti-drug provisions in the criminal law; The third level is common property crimes, such crimes are generally intellectual property infringement, theft of electronic cryptocurrencies, plagiarism of relevant documents and other economic crimes. This kind of crime infringes on property rights, and the relevant legislation of this kind should be connected with civil law and commercial law. The fourth level of crime is the Internet violence on public security punishment, and the "open box" crime, which is a non-violent crime that does not involve the right to physical rights, and infringes on the right to privacy and reputation of citizens. In this way, the regulation of such crimes can only be achieved by improving the Law on Public Security Punishment.

4.4. Promote the Construction of Soft Law Guarantee Mechanism for Artificial Intelligence Industry

The generation of norms needs to go through three processes: normative creation, normative advocacy and normative internalization. As one of the norms of social governance, soft law also has a similar formation process. The so-called normative creation process refers to the consensus of interest distribution pattern formed in the process of the coordination of interests of all parties. The so-called normative advocacy refers to the spread of the benefits distribution plan proposed by the relevant subjects to the stakeholders in the process of social governance. The so-called standardized internalization refers to the recognition of the benefit distribution pattern by the stakeholders. Therefore, the soft law generation norms of the artificial intelligence industry also follow the following laws. In terms of the creation of soft law norms, the standard for the creation of artificial intelligence industry can be formulated by domestic research according to the law of industrial development, that is, according to China's basic national conditions, the division of labor and profit distribution of the future industry can be coordinated. Taking data rights as an example, data rights are an important production factor of the future industry, and data rights can only be transformed into economic benefits through the flow, integration and even reshaping of data. Therefore, workers in the process of data generation, flow and even integration are entitled to the right to profit, and the distribution of such right of profit needs to be formulated by authoritative folk normative industry. In terms of normative advocacy, ngos and civil groups have natural advantages. Most of the ngos and civil groups are established for public welfare, which is neutral and authoritative at the publicity level, so the soft law initiative of the artificial intelligence industry can be carried out through ngos and civil groups. In the process of standardization internalization, the generation of soft law can be recognized and promoted internalization through the way of national recognition.

4.4.1. Building Soft Law Norms for Artificial Intelligence Industry

Soft law norms on artificial intelligence industry are mainly divided into the following categories. The first category is the guidance documents of relevant science and technology associations and other academic authorities, which are the specific guidance for determining the future industrial income distribution, and can be used as the source of soft law norms for artificial intelligence industry; The second category is the internal resolutions and universal documents of international organizations, which have a relatively general binding force on member states, and member States realize the effective connection between international law and domestic law through domestic legislation, because the resolutions and universal documents of international organizations related to the artificial intelligence industry have soft law effect; The third category is the unified industry norms formed by Chinese enterprises. China can issue guiding norms through the resolutions and universal documents of international organizations, and advocate that China's artificial intelligence industry learn from the resolutions and universal documents of relevant international organizations, so as to realize the dual-track soft law operation mechanism of domestic and foreign countries, which mainly includes the following levels: 1. The Chinese government can regularly issue advanced artificial intelligence industry soft law system specifications through local administrative regulations and departmental rules for domestic artificial intelligence industry reference or as a management template; 2, China can through the Chinese Academy of Sciences, Chinese Academy of Engineering and other authoritative scientific institutions to develop the definition of future industrial rights and interests of the future industrial production, operation and sales of the benefits. So as to provide scientific and quantitative guidance for domestic enterprise industry norms.

4.4.2. Make Good Use of "Maple Bridge Experience" to Resolve Disputes

The diversification of the artificial intelligence industry has led to the diversification of disputes, and it is difficult to regulate the same by legal means alone. Under the background of the new era, the interests of the masses increasingly show complex and interlaced characteristics, indicating the practical needs of the transformation of the expression mechanism of the masses' demands under the

rule of law. The "Maple Bridge experience" in the new era and the expression mechanism of the masses' demands contain common elements of the rule of law, which determines that the latter can draw the power of the rule of law transformation in the scope of mutual interaction. However, the practice of the mass appeal expression mechanism is faced with the shortcomings of weak judicial force, insufficient system supply and urgent display of value rationality, which restricts the transition of the mechanism to rule by law. It is necessary to explore the beneficial experience from the "Maple Bridge experience" in the new era, and promote the further improvement of different levels of norms while promoting the appropriate integration of judicial forces. In addition, we should pay attention to the shaping of value rationality, avoid the unreasonable tendency of emphasizing technical rationality, and finally realize the governance goal of standardizing the grass-roots dispute resolution through the mass litigation expression mechanism. It further pointed out that the theme idea of "from the masses to the masses" advocated by the Maple Bridge experience should be analyzed in combination with the interests of the masses, so as to effectively apply the Maple Bridge experience to deal with various industrial fields such as social governance artificial intelligence and network industry. [5]If on the one hand, China can apply the experience of "Maple Bridge experience" to the dispute resolution of future industries. Set up a special civil mediation expert group to mediate disputes in the artificial intelligence industry.

4.4.3. Establish an "Amicus Curiae" System for Artificial Intelligence Industry Disputes

Amicus curiae was first introduced in Roman law, influenced by this, most common law countries recognize amicus curiae as a constituent system of the court. Even in some civil law countries that do not have amicus curiae, there are similar rights to intervene. Generally speaking, "amicus curiae" in the judiciary can be understood as any subject that has an interest in the case but is not a party to the dispute, such as state organs, non-governmental organizations or private entities, voluntarily submitting written opinions or oral statements on legal facts to the court or arbitral tribunal. From the definition of amicus curiae, it can be seen that in order to submit an opinion as amicus curiae, the subject shows an interest in the case, but it must be in the interest of the court or arbitral tribunal to better conduct the hearing. In social practice, international non-governmental organizations generally act as judicial "friends of the court" role, non-governmental international organizations acting as friends of the court, usually seek to submit "friends of the court" written opinions to the court to provide help for social justice, China can introduce "friends of the court", set up domestic and foreign expert groups to provide relevant help for disputes in the artificial intelligence industry.

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