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Research on the Promotion and Regulation of Artificial Intelligence Development by Legal Philosophy in the Age of Artificial Intelligence

Yaohua Bai

School of Humanities, Tongji University Shanghai 200092, China

Abstract: The development of artificial intelligence (AI) has made significant progress and has had a substantial impact on many fields. However, the advancement of AI also presents numerous challenges to the development of our economy, society, and production processes. Legal philosophy, due to its close relationship with AI, plays a crucial role in addressing these challenges. It can both promote and regulate the development of AI. In the future AI era, legal philosophy will continue to be instrumental in guiding and shaping the development of AI, offering more directions and suggestions for its evolution.

Keywords: Legal Philosophy; Artificial Intelligence; Promotion; Regulation

In recent years, the development of artificial intelligence (AI) has made significant progress and had a substantial impact on many fields. According to incomplete statistics, AI has significantly influenced industries such as the internet, natural language processing, autonomous driving, healthcare, finance, and education. In the internet sector, AI plays a crucial role in search engines, advertising systems, and social media. In natural language processing, AI has made significant advancements, facilitating more natural interactions between humans and computers. In autonomous driving, AI is crucial for self-driving cars, promising to change future transportation modes. In healthcare, AI is vital in medical diagnostics, health monitoring, and intelligent medical devices. In finance, AI significantly contributes to risk analysis, investment decisions, and fraud detection. In education, AI is instrumental in online education, intelligent tutoring assistance, and intelligent teaching systems. In manufacturing, AI plays a crucial role in intelligent manufacturing, robotics, and automation.

1. Challenges Brought by the Development of Artificial Intelligence to the Current Economic and Social Development

With the advent of the era of artificial intelligence, the primary legal issue that needs to be addressed is the question of responsibility. Responsibility is contingent upon the subject, thus necessitating an answer to the question of whether robots are machines or humans. The development of artificial intelligence also brings numerous challenges to our economic, social, and productive development, such as determining the responsibility of AI decisions, addressing the potential harm and damage that AI may cause, and ensuring that the development of AI is ethical.

1.1 How to Determine the Responsibility of Artificial Intelligence Decisions

Determining the responsibility of AI decisions involves examining five aspects:

Whether the decision made by artificial intelligence complies with legal regulations. If the decision violates legal regulations, relevant individuals should be held accountable.

Whether the decision made by artificial intelligence aligns with ethical principles. If the decision violates ethical principles, rele-

vant individuals should be held accountable.

Whether the decision made by artificial intelligence complies with contractual agreements. If the decision violates contractual agreements, relevant individuals should be held accountable.

Whether the decision made by artificial intelligence meets expectations. If the decision made by artificial intelligence deviates from expectations, relevant individuals should be held accountable.

Whether the decision made by artificial intelligence exhibits obvious flaws. If the decision made by artificial intelligence displays obvious flaws, relevant individuals should be held accountable.

1.2 Artificial Intelligence May Cause Harm and Damage to Human Society Development

Potential harm and damage caused by artificial intelligence mainly exist in seven aspects:

Violation of human rights. AI decisions may infringe upon the legitimate rights and interests of humans, for example, some decisions may discriminate against certain groups of people.

Disruption of social order. AI decisions may disrupt social order, for instance, some decisions may lead to economic crises or social unrest.

Endangerment of human safety. AI decisions may endanger human life and health safety, such as some decisions may result in accidents.

Environmental destruction. AI decisions may harm the natural environment, for instance, some decisions may cause environmental pollution or resource wastage.

Impact on economic development. AI decisions may affect economic development, for example, some decisions may lead to labor market imbalances or confusion in consumer markets.

Influence on educational development. AI decisions may impact educational development, such as some decisions may lead to the waste of educational resources or a decline in educational quality.

Impact on cultural heritage. AI decisions may affect cultural heritage, for instance, some decisions may lead to the extinction of traditional culture or the popularity of new culture.

1.3 The Development of Artificial Intelligence May Not Always Be Ethical

As artificial intelligence is a recent emerging phenomenon, it is difficult to ensure that its development is always ethical. Relevant laws and regulations are still incomplete, self-regulatory mechanisms have not been established, moral education needs to be strengthened, regulatory systems are not yet sound, and compensation mechanisms are not yet perfect.

2. How Legal Philosophy Promotes and Regulates the Development of Artificial Intelligence

In addressing the challenges mentioned above, legal philosophy can play an important role. Legal philosophy is the discipline that studies the relationship between law, philosophy, and ethics. It can both promote and regulate the development of artificial intelligence. To fully understand the essence of the problem, it is necessary to explore the philosophical foundation of artificial intelligence in terms of its legal subjectivity, thus providing ideological guidance for AI legislation.

2.1 Ways in Which Legal Philosophy Promotes the Development of Artificial Intelligence:

By studying the relationship between law, philosophy, and ethics, legal philosophy can provide theoretical guidance for the development of artificial intelligence. It can help us consider how artificial intelligence can coexist with humans and be ethically utilized. Additionally, legal philosophy can help us consider the social consequences of AI development and propose solutions. This is mainly reflected in the following aspects:

Firstly, legal philosophy can help us consider how artificial intelligence relates to the law and how it can be developed and used within ethical and legal frameworks. This includes considering how AI affects issues such as privacy rights, responsibility allocation, and the labor market.

Secondly, legal philosophy can help us consider how artificial intelligence relates to human culture and values, and how AI can be developed while protecting human values. This may involve issues such as bias and discrimination in AI, as well as the impact of AI on human rights.

Lastly, legal philosophy can help us consider how artificial intelligence affects social structure and justice, and propose corresponding policy recommendations. For example, we may consider how AI affects employment and income distribution, and how to ensure that AI does not exacerbate social inequality.

2.2 Path Analysis of How Legal Philosophy Regulates the Development of Artificial Intelligence:

Through the analysis of the relationship between law, philosophy, and ethics, legal philosophy can establish rules and guidelines for the development of artificial intelligence. It can help us establish standards of responsibility for AI decision-making and determine how AI should be regarded as legal subjects. Additionally, legal philosophy can help us consider how AI should be regulated and what ethical guidelines should govern AI development.

2.2.1 Regarding the issue of legal philosophy helping to establish standards of responsibility for AI decision-making:

Legal philosophy can help us establish standards of responsibility for AI decision-making. With the increasing prevalence of AI systems in decision-making processes such as autonomous vehicles, decision support systems, and medical decision support systems, these systems may have serious consequences, requiring us to establish standards of responsibility to hold relevant parties accountable during the decision-making process. Legal philosophy can help us discuss who or what should be responsible for AI decisions and under what circumstances. For example, legal philosophy can help us explore whether AI decisions should be subject to human oversight or should be considered independent entities with their own legal responsibilities. Additionally, legal philosophy can help us consider how AI decisions should coordinate with human decisions and how responsibility should be allocated between humans and AI decisions.

2.2.2 Regarding the issue of defining how AI should be regarded as legal subjects from the perspective of legal philosophy:

In the field of legal philosophy, how artificial intelligence should be regarded as legal subjects is a controversial issue. Some argue that AI should be considered independent legal subjects and granted certain legal status as AI becomes increasingly intelligent. Supporters of this view believe that AI may independently bear some legal responsibilities and should be considered independent legal entities.

However, this viewpoint is not universally accepted and is controversial. Many legal scholars believe that current AI is not yet capable of independently bearing legal responsibilities and that responsibility should lie with the human users or institutions employing AI. Therefore, whether AI should be considered legal subjects remains a controversial issue.

From a philosophical perspective, it is necessary to deeply understand the significance and functions of new technologies from the perspective of human social transformation and the reshaping of social relations. New technologies not only lead to changes in material forces but also bring about deeper changes in social systems and relations. Based on new technologies, human-machine relationships and interpersonal relationships differ from those in the past, and there are radical changes in social interest structures and operating mechanisms. New technologies include not only artificial intelligence but also technologies such as blockchain and big data, which construct new types of social relations distinct from the industrial age. At the micro level, new technology serves as a foundation or aggregate, enabling the emergence and deepening of new interpersonal relationships, characterized by indirectness, anonymity, and distance. Whether such new technological entities or platforms can be regarded as legal subjects becomes a hot topic. Philosophically, beneficial interpretations can be made from perspectives such as "unidimensional man," "divine man," and "microperson," which are inspiring for understanding the issue of subjectivity.

Furthermore, legal philosophy can help us explore the relationship between artificial intelligence and ethics, law, and human rights, providing theoretical guidance for the development of artificial intelligence. Human rights refer to rights that anyone, regardless of their nationality, race, beliefs, or gender, is entitled to enjoy. When artificial intelligence becomes involved in influencing

decisions affecting everyone, human rights may be infringed upon. For example, the outcomes of artificial intelligence decisions may lead to unequal distributions of positive and negative results, affecting individuals' fundamental rights based on international law and treaties. It is worth exploring whether artificial intelligence should be considered as having legitimate rights akin to those of humans, or whether it should be granted certain forms of legal status.

2.3 Regarding how legal philosophy can help us consider the regulation of artificial intelligence from a legal perspective

Legal philosophy can regulate the development of artificial intelligence by formulating laws and regulations. For example, laws and regulations concerning the design, use, and supervision of artificial intelligence systems can be enacted to ensure that AI is used legally and ethically in society.

Moreover, legal philosophy can help us explore the ways and means of regulating artificial intelligence and how to handle illegal behavior or violations of ethical standards by AI systems. For example, it can be explored whether AI systems should be subject to human oversight or should be considered as independent entities with their own legal responsibilities.

Additionally, legal philosophy can help us consider the balance of AI regulation, ensuring both the development of AI and the protection of human interests and rights. For example, legal philosophy can explore what principles AI regulation should follow and who should be responsible for AI regulation.

In summary, legal philosophy can provide an important theoretical basis for regulating artificial intelligence, helping us determine the ways and means of AI regulation and ensuring that AI is used legally, ethically, and acceptably in society.

It is important to note that in promoting and regulating the development of artificial intelligence, legal philosophy is not isolated. On the contrary, legal philosophy needs to work in conjunction with other fields such as politics, economics, and technology. Therefore, when promoting and regulating the development of artificial intelligence, it is necessary to consider multiple factors comprehensively and formulate comprehensive strategies.

3. Suggestions on how legal philosophy can promote the development of artificial intelligence:

- (1)Establishing Legal Frameworks: Legal philosophy can serve as the basis for developing relevant laws and regulations. It can help in formulating laws and regulations concerning the design, use, and regulation of AI systems, ensuring their lawful and ethical deployment in society.
- (2)Providing Theoretical Guidance: Legal philosophy can provide theoretical guidance for the development of AI. It can help in understanding the relationships between AI, ethics, law, and human rights, thereby guiding the development of AI systems.
- (3)Involvement in Regulatory Processes: Legal philosophy should be involved in the entire process of AI regulation. It can assist in determining the methods and means of regulating AI to ensure its lawful, ethical, and acceptable use in society.
- (4)Legal Protection: The legal aspects of legal philosophy can provide legal protection for AI. It can help in deliberating whether AI should be considered as having legitimate human rights or be granted certain forms of legal status, thus promoting the development of AI technology and affording it legal protection.
- (5)Balancing Regulatory Measures: Legal philosophy can help in exploring the balance in AI regulation. It can aid in determining the principles that AI regulation should follow and who should be responsible for AI regulation, ensuring the protection of human interests and rights while promoting the development of AI.
- (6)Developing Legal Frameworks: Legal philosophy can contribute to developing legal frameworks for AI. It can assist in formulating comprehensive legal frameworks that govern the development, deployment, and use of AI systems.

In addition to these points, there are other viewpoints and recommendations on how legal philosophy can promote and regulate the development of artificial intelligence. For instance, addressing security concerns arising from AI development and ensuring transparency and interpretability of AI decisions are crucial aspects to consider.

Through the study of how legal philosophy can promote and regulate the development of artificial intelligence, it becomes evident that legal philosophy plays a significant role in this process. By studying law, philosophy, and ethics, legal philosophy provides theoretical guidance and regulatory guidelines for the development of AI, helping us understand its societal consequences, ethical considerations, and regulatory issues.

Conclusion:

In conclusion, there exists a close relationship between artificial intelligence and legal philosophy, with legal philosophy exerting significant influence on the development of AI. In the future, we hope that legal philosophy will continue to play an important role, providing further guidance and recommendations for the development of artificial intelligence.

References:

- [1] Ma Kaixuan, Liu Zhenxuan: "A Philosophical Reflection on the Legal Subject Status of Artificial Intelligence," published in "Forum of Learning," Volume 11, 2021.
- [2] Wu Handong, "Cold Reflections in the Era of Artificial Intelligence," China Newspaper Industry, Volume 3, 2018.
- [3] Xiao Ke. "On the Legal Philosophical Basis of Artificial Intelligence Legal Subjectivity," published in "Politics and Law," Volume 4, 2021, in the Arena of Debate.
- [4] Xiao Ke. "On the Legal Philosophical Basis of Artificial Intelligence Legal Subjectivity," published in "Politics and Law," Volume 4, 2021, in the Arena of Debate.
- [5] "The Advanced Introduction to Law and Artificial Intelligence," authored by Woodrow Barfield (United States) and Hugo Pagallo (Italy), published by Shanghai People's Publishing House, 1st edition, August 2022, page 29.
- [6] "The Advanced Introduction to Law and Artificial Intelligence," authored by Woodrow Barfield (United States) and Hugo Pagallo (Italy), published by Shanghai People's Publishing House, 1st edition, August 2022, page 29.
- [7] Barfield, Woodrow, and Pagallo, Hugo. Advanced Introduction to Law and Artificial Intelligence. Translated by Su Miaohan. Shanghai: Shanghai People's Publishing House, August 2022, 1st edition.
- [8] Karpočkas, Ignas. Algorithmic Governance. Translated by Qiu Yaokun. Shanghai: Shanghai People's Publishing House, August 2022, 1st edition.
- [9] Hove, Jakob. Predictive Mind. Translated by Wang Jing. Shanghai: Shanghai People's Publishing House, August 2022, 1st edition.
- [10] Floridi, Luciano. The Fourth Revolution: How the Infosphere Is Reshaping Human Reality. Translated by Wang Wenge. Zhejiang: Zhejiang People's Publishing House, 2016.