RESEARCH ARTICLE

ARTIFICIAL INTELLIGENCE IN LEGAL RESEARCH: A SAVIOR OR A BUBBLE?

[*1,2]Haowei Lei

[1]School of Politics and Public Administration, Southwest University of Political Science and Law, Chongqing, China
[2]Institution of Inner-party Laws and Regulations, Southwest University of Political
Science and Law, Chongqing, China

ARTICLE INFO	ABSTRACT
	Although artificial intelligence is not a new subject, it has attracted wide attention from all walks of life in recent years. At present, we have entered the era of "artificial intelligence 2.0".During this period, the intersection and integration between artificial intelligence and other academic researches became increasingly close. For law, it is more closely integrated with artificial intelligence. Throughout the Chinese academic circle, there are numerous articles on the study of artificial intelligence law. Artificial intelligence has opened up new methods and fields of legal research. However, a great deal of academic research is superficial without theoretical depth. These studies only focus on the relationship between artificial intelligence and jurisprudence without systematically demonstrating the connection between artificial intelligence and jurisprudence. Artificial intelligence in legal research emphasizes the optimization of research methods and the transformation of research paths. The academic circle must reflect on it and break the "bubble" of legal research.

INTRODUCTION

In recent years, the application of artificial intelligence is more and more extensive. From computer science and engineering science in natural science, artificial intelligence has penetrated into all aspects of humanities and social science, such as law, sociology and so on. Clearly, the proliferation of emerging technologies is a significant and very welcome development for social science research. Artificial intelligence and the government management transformation (Yue Chuyan, 2019), artificial intelligence and computing the humanities innovation (Chen Yuehong, 2019), artificial intelligence and human resource management (Xiao Xingzheng, Ran Jingliang, Long Chengchun, 2018), and artificial intelligence and the legal trial applications (Huang Qiaojuan, Luo Xudong, ChuChencheng, 2018), academic research in these fields is endless. After the "artificial intelligence 1.0" in the 1980s, a new wave of artificial intelligence came into being. In order to visualize and understand, we summarize the new wave of artificial intelligence boom as "artificial intelligence 2.0" or "artificial intelligence +". Artificial intelligence is not a new topic in China. As early as the 1980s, a large number of scholars began to discuss these issues, such as "what is artificial intelligence?", "how does artificial intelligence develop?" and "how does artificial intelligence evolve?". It is true that the early theoretical researches on artificial intelligence in China are mostly from the United States, Japan, Germany and other countries (Li Jiazhi, Wang Yunjiu, Tu Xuyan, Guo Rongjiang, 1978).

The application of artificial intelligence in the field of legal research and legal trial is not a recent thing. However, since 2017, scholars in China's legal field have shifted their research focus to the field of "artificial intelligence law", and began to think about the legal positioning of artificial intelligence, the legal protection of artificial intelligence, the legal transformation in the era of artificial intelligence, the discipline construction in the era of artificial intelligence and so on. For a time, "The legal research seems to have ushered in an important period of opportunity rarely seen in a decade due to artificial intelligence. Seizing this opportunity, we will make a name for themselves in the academic world; if this opportunity is missed, we will fall behind step by step". [9]The "China artificial intelligence congress 2018" (CCAI 2018), co-hosted by the Chinese society for artificial intelligence and the Luohu District government, was held in Shenzhen on July 28, 2018.At the meeting, a number of well-known experts to alert to the current artificial intelligence field of many bubbles. In the field of artificial intelligence, China needs talents who are down-to-earth and dedicated to solving major breakthrough problems. In view of the artificial intelligence phenomenon in legal research, this paper attempts to put forward several new academic views. The writing objectives of this paper are as follows: first, to guard against the bubble of artificial intelligence legal research; second, to prevent the uselessness of artificial intelligence legal research; third, to provide theoretical suggestions for the future direction of artificial intelligence legal research. In practice, the Beijing higher people's court of China has developed and applied the "RUI FAGUAN" (Artificial Intelligence-judge) intelligent system as a preliminary judgment procedure for simple cases.

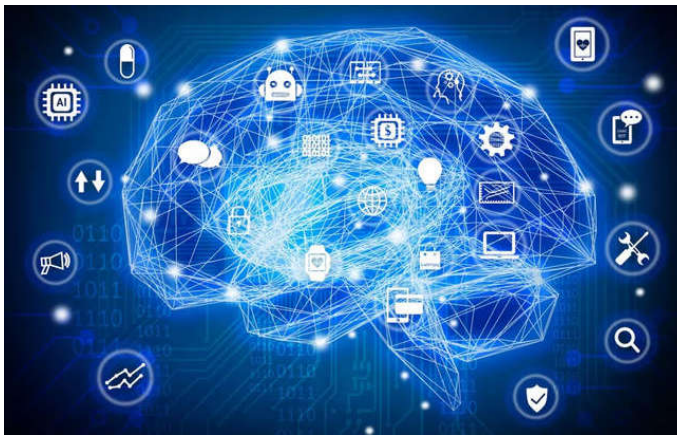**Corresponding author:* **Haowei Lei**

Figure 1. What is artificial intelligence?
(This figure is from the network)

Literature Review

More than 30 years ago, Susskind, a famous British law scholar, proposed that "the biggest change in the legal industry within 200 years is artificial intelligence"[11]. As he said, since 2017, two terms have prevailed in Chinese law: artificial intelligence and intelligent robot. In Chinese academic circles, there are many theoretical researches on artificial intelligence. As shown in Figure 2, relevant research appeared in 1978, accelerated in 2016, and showed a rapid growth trend in recent years.
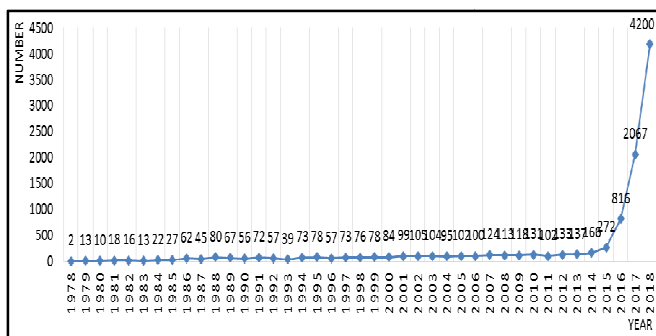

Figure 2. Trending analysis of literature searching for the keywords of "artificial intelligence" on CNKI

Microscopically, the widespread use of "artificial intelligence legal judgment systems" in China raises two significant questions: First, the impact of artificial intelligence on judicial trial. What beneficial or adverse effects will it bring to administrative law enforcement and judicial practitioners? Second, artificial intelligence changes law education. What adjustments will it bring to students of traditional law major and law discipline system? (Zhang Jianwen, 2018). With these three questions in mind, we can reflect on the impact of artificial intelligence on legal research and draw some new conclusions. Firstly, artificial intelligence brings new hope to legal research. In other words, at present, under the infiltration of artificial intelligence, legal research has new topics and contents: (1) protection of personality rights, (2) protection of data property, (3) identification of tort liability, (4) development of artificial intelligence by law (Wang Liming, 2018). Secondly, the "artificial intelligence + law" education system brings new opportunities for law education in colleges: (1) the application of machine learning in the review of legal documents is more technically feasible; (2) the application of

natural language processing in the retrieval of legal documents and data analysis is more common; (3) "artificial intelligence + law" education is strongly guaranteed by physical scientific research institutes (Jiang Ke, 2018). On this basis, some scholars have also discussed the goal and path from "legal artificial intelligence" to "artificial intelligence law". It also points out that the existing "legal artificial intelligence" research still has some problems, such as "the scientific research model lacks the law standard" and "the artificial intelligence law research depth level is not enough". In these studies, it further clarifies the realization path of ai legal research:(1) crossover participation of research subjects, (2) transformation of talent cultivation methods, (3) innovation of research methods, and (4) international exchanges and cooperation.(Cheng Long, 2018). As the academic scholars said: "Jurisprudence is full of expectations to meet the innovation and challenge of artificial intelligence to existing theories, and to realize the evolution of jurisprudence itself in the continuous progress of mankind." However, we should also be clearly aware that although law can be integrated with artificial intelligence, there are inevitably some difficulties and risks. Law is an all-embracing comprehensive subject. Is it necessary to combine each branch with artificial intelligence? Can each content be integrated into the core connotation of artificial intelligence? These problems need to be further explored and demonstrated by academic scholars.

Artificial Intelligence: Innovation and Risk of Legal Research

Macroscopically speaking, the resurgence of artificial intelligence has indeed brought the dawn to legal research. I think this is mainly reflected in the following two aspects.
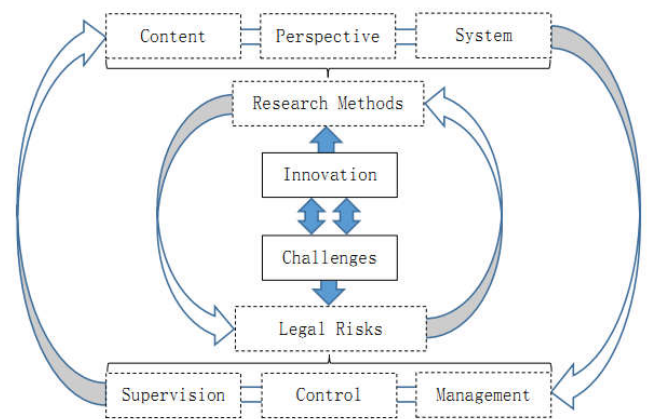

Figure 3. Innovation and Risk of Artificial Intelligence in Legal Research

Promoting the Innovation of Legal Research Methods

Generally speaking, legal research generally adopts traditional social science research methods such as literature research, comparative research and historical research. At present, with the highly developed network information technology, the study of jurisprudence has gradually integrated new research methods such as computational sociology. On the one hand, in the era of big data, the construction of big data platform of law has technical support and guarantee. Text content analysis and field information mining of laws and regulations do not need to spend a lot of human resources. Big data analysis

technology provides algorithm support, and artificial intelligence research technology provides intelligent simulation. In a word, the research method of artificial intelligence law embodies "the natural scientific thinking mode of artificial intelligence". In the future development process, the research methods of artificial intelligence law should include the following characteristics:(1) empirical, that is, the research method can be quantifiable and verifiable; (2)intelligent, that is, not relying on human resources;(3) forward-looking, that is, the research should be oriented towards the future.

Bringing New Challenges to Legal Research

Admittedly, artificial intelligence has brought about great changes to the modern legal system. It has a far-reaching and lasting influence on the subject system, object system and right system of law.(Gao Zhiming, 2019). Therefore, the study of law in the era of artificial intelligence has new research objects and contents. In addition, as far as the problems of artificial intelligence itself are concerned, its legal personality [18], legal supervision and legal regulation [19] and other issues need to be demonstrated and solved by successive scholars. However, more importantly, artificial intelligence brings inevitable challenges to the development of law and jurisprudence. On the one hand, the discussion on the electronic human rights of artificial intelligence will have a great impact on the traditional connotation of civil law. On the other hand, human beings rely too much on "artificial intelligence algorithm", which makes it difficult for traditional social equity and justice to be effectively served. To sum up, the development of artificial intelligence brings both opportunities and challenges to legal research. It is possible to overcome the disadvantages of traditional legal research and "completely change", but it is also possible to fall into the trap of "just making a superficial statement".

Legal Research: Beware of the Academic Bubble of Artificial Intelligence

Of course, both the innovation and risk of artificial intelligence are meaningful and valuable research contents for legal research. But legal research under the guise of artificial intelligence, or piggy-backing on its popularity, is meaningless. Specifically, the bubble of artificial intelligence in legal research is mainly reflected in the following aspects.

First, there is no innovation in research methods. Relevant research still emphasizes theory over practice, ignoring the integration and innovation of computer science, statistics and mathematics.

Second, there is no innovation in the research content. Relevant research broadly discusses the integration between artificial intelligence and law, but fails to point out the future direction of law research.

Third, it breaks away from the essence of legal research. Relevant research is too focused on the application of new terms such as artificial intelligence and big data, which highlights the technology but fails to be implemented. As a result, it is flashy.

Fourth, there is a lot of repetitive research. At present, legal supervision and other related researches on artificial intelligence are too centralized, and their conclusions are mostly the same. These repetitive studies are meaningless for the development and construction of artificial intelligence law.

Fifth, some research results are difficult to translate into application. At present, legal research is deliberately associated with artificial intelligence, so that some studies have neither theoretical basis nor application value.

To sum up, there are a lot of "academic bubbles" in the study of artificial intelligence law. As some scholars in China have said, in order to seize the "academic high ground" of artificial intelligence legal research, some scholars have left the research value and quality behind. For the purpose of "professional title evaluation" and "scientific research projects", they have produced a large number of "bubble research" that has no driving value for law and artificial intelligence.

Conclusion

While artificial intelligence brings prosperity to law, it also brings many problems. First of all, the change of academic scholars' research direction has shaken the foundation of legal theory research. The theoretical depth of artificial intelligence law research is far from enough. Secondly, the current legal research on artificial intelligence presents a bubble phenomenon of "false prosperity". Some scholars have carried out relevant researches without thinking in order to "ride the heat". Last but not the least, a large number of research results out of reality, resulting in the development of artificial intelligence law research into a dilemma. Therefore, we should not only see that artificial intelligence brings prosperity to legal research, but also realize that the research must be implemented rather than "on paper". Only then, artificial intelligence in legal research can realize its own value.

Science and Law) for their keen help in the topic selection, framework revision and data collection. Without their help, the study would have been difficult to carry on.

REFERENCES

2% will control the future, become them or be eliminated[DB/OL]. Sohu Net, 2018-04-10.

BaoWenjuan. Beware of the many bubbles in artificial intelligence [DB/OL]. Sina Net, 2018-07-30.

Chen Yuehong. Interdisciplinary research on artificial intelligence in poetics [J]. Zhejiang Social Sciences, 2019(01):135-138+160.

Chen Zhongfu. Beware of the artificial intelligence bubble of legal research [DB/OL].Daily Express, 2019-01-13.

Cheng Long. From legal artificial intelligence to artificial intelligence law: goal and path [J]. *Hubei Social Sciences,* 2018(06):135-143.

Cheng Long. From legal artificial intelligence to artificial intelligence law: goal and path [J]. *Hubei Social Sciences,* 2018(06):135-143.

Chu Chencheng. Stance and function of criminal law in the era of artificial intelligence [J]. Criminal Science,2018(06):77-94.

Gao Qiqi, Zhang Peng. Multi-dimensional challenge of artificial intelligence to future law [J]. *Journal of Huazhong University of Science and Technology (Social Science Edition),* 2018,32(01):86-96.

Gao Zhiming. Influence of new development of artificial intelligence on the generation mode and system of legal knowledge [J]. *Changbai Journal*, 2019(01):83-88.

http://m.sohu.com/a/227813209_100139695

http://news.sina.com.cn/c/2018-07-30/doc-ihfxsxzh7375980.shtml

https://kuaibao.qq.com/s/20190113B0FN8C00?refer=cp_1026

Huang Qiaojuan, Luo Xudong. Current situation and development trend of the combination of artificial intelligence and law [J]. Computer Science, 2018,45(12):1-11.

Japan department of science and technology on the future of artificial intelligence machine implementation time prediction [J]. Foreign Automation,1979(Z1):143-144.

Jiang Ke. Model of law education in science and technology universities under the background of "artificial intelligence +" [J]. Think Tank Era, 2018(23):74+77.

Li Jiazhi, Wang Yunjiu, Tu Xuyan, Guo Rongjiang.Summary of foreign research on artificial intelligence [J].Acta Automatica Sinica, 1979(01):74-87.

Ma Zhiguo, Xu Jikuan. Potential risks of artificial intelligence development and legal prevention and control supervision [J]. Journal of Beijing University of Technology (Social Sciences Edition), 2018, 18(06):65-71.

Overview of the research on artificial intelligence in the United States - according to the lecturing content of Dr. B. lafayette, an American expert on artificial intelligence [J]. Foreign Automation,1980(01):1-27+80.

Richard Susskind. Tomorrow's Lawyer: an Introduction to Your Future [M].*Oxford University Press*, 2013.

Wang Liming. New legal issues proposed in the era of artificial intelligence [J]. China Law Review, 2018(02):1-4.

Xiao Xingzheng, RanJingliang, Long Chengchun. Research on the influence of artificial intelligence on human resource management [J]. Journal of Sichuan University of Science & Engineering(Social Sciences Edition), 2018,33(06):37-51.

Yang Qingwang, Zhang Lei. On artificial intelligence's artificial legal personality [J]. *Journal of Hunan University of Science & Technology* (Social Science Edition),2018,21(06):91-97.

Yue Chuyan. Artificial intelligence revolution and government transformation [J]. Journal of Dialectics of Nature,2019,41(01):21-25.

Zhang Jianwen. Impact and countermeasures of the development of artificial intelligence technology on law education [J]. *Journal of Beijing University of Aeronautics and Astronautics* (Social Sciences Edition), 2008, 31(02):25-26.

****