Research on the Copyrightability of AI-Generated Results

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Abstract: The rapid development and widespread application of Generative AI have made the determination of copyright for its generated results an urgent issue. This paper examines three key aspects: the standard of originality, legal subject qualification, and the creative tool theory. Users can influence AI-generated results through instructions and parameters, but the primary role of algorithms in production raises questions about originality. The mainstream view currently holds that AI should not possess legal subject status, although some scholars propose the possibility of granting it in the future. The creative tool theory posits that AI is a tool for human creation, but defining user contributions and distinguishing between tools and results remain challenging. By analyzing relevant domestic and international judicial cases and applying the "minimum originality" standard, this paper argues for upholding the principle of natural per-sons as authors and using this standard to differentiate the results of generated works.

1 INTRODUCTION

With the rapid development of artificial intelligence technology, the application of generative artificial intelligence in fields such as text, images, music, and video is becoming increasingly widespread. Taking ChatGPT as an example, since OpenAI launched ChatGPT in 2022, generative AI represented by it has garnered phenomenal attention both in application and academia (Chen, Jiang, 2024)The results it generates are highly similar in form to works created by humans, sparking discussions about whether these generated results should be protected by copyright law. The results it generates not only represent a breakthrough in technical terms but also provoke profound reflections and discussions in various fields such as law, ethics, and socio-economics. The widespread application of generative artificial intelligence has made the issue of copyright determination for its generated results increasingly prominent. On one hand, the content generated by generative artificial intelligence reflects certain characteristics of human creation, such as creativity, aesthetic value, and practicality; on the other hand, its generation process entirely relies on algorithms, data, and models, which significantly differs from works directly created by humans in the traditional sense. This difference has sparked intense discussions about whether the results generated by generative artificial

intelligence should be protected by copyright law. Granting copyright protection could have a significant impact on the existing copyright legal system, creative incentive mechanisms, and the ecology of the cultural industry; conversely, completely denying copyright protection could stifle innovation and development in generative artificial intelligence technology, hindering its application and promotion in fields such as the cultural and creative industries. Therefore, conducting in-depth research on the copyright determination of results generated by generative artificial intelligence is not only of significant theoretical value but also holds great practical significance for balancing technological development with legal protection and promoting the healthy development of the cultural industry.

The global academic community has also engaged in intense discussions regarding the copyrightability of results produced by artificial intelligence. For instance, the U.S. Copyright Office, when handling related cases, insists that content generated by generative artificial intelligence is not the result of human creation and therefore should not be protected by copyright law. This position has received widespread support in U.S. judicial practice. European scholars, on the other hand, tend to explore the copyright issues of results generated by generative artificial intelligence from the perspective of legal fiction. They argue that generative artificial

intelligence or its developers and users can be regarded as legal authors through legal attribution, thereby granting copyright protection to the generated results. However, this viewpoint faces numerous challenges and controversies in practice.

At the same time, in domestic judicial practice, a series of typical judicial cases, including the case of Filin Law Firm vs. Baidu, the case of Tencent vs. Yingxun Technology regarding copyright infringement, the case of Li vs. Liu regarding the infringement of work attribution rights and information network dissemination rights, and the 'AI Image Infringement Case' in Wuhan High-tech Zone, showcase the judicial context regarding the determination of generative AI (Beijing Internet Court, 2019; People's Court, 2021; Beijing Internet Court, 2024; Wuhan East Lake High-tech Zone Court, 2025). They also illustrate the evolution of China's approach to generative AI from a conservative judgment based on traditional copyright law subjects to innovative practical explorations.

This article aims to explore the copyrightability of results generated by generative artificial intelligence, analyzing the controversies and challenges related to originality standards, legal subject qualifications, and the theory of creative tools. It combines domestic and international judicial practice cases to propose reasonable determination standards and suggestions. Through the review and analysis of existing literature, this article summarizes the key issues and points of contention in determining the results generated by generative artificial intelligence and discusses the applicability of the 'minimum originality' standard in this field. Finally, based on a global perspective, it provides theoretical support and reference for relevant legal practices through comprehensive analysis and overview.

2 THEORETICAL OVERVIEW

2.1 Judgment of Originality Standards Page Setup

Originality is the key standard for determining whether a work is protected by copyright law. Article 3 of China's Copyright Law states: 'The works referred to in this law are intellectual achievements in the fields of literature, art, and science that possess originality and can be expressed in a certain form (Standing Committee of the National People's Congress, 2020). Therefore, the results generated by generative artificial intelligence must meet the requirements of originality to constitute a work.

The judgment of originality for results generated by generative artificial intelligence is subject to much controversy. Zhu Ge believes that the originality of AI-generated content should depend on the intellectual input of the user during the generation process. By inputting prompts, setting parameters, and other means to design and adjust the generated content, users reflect personalized choices and judgments. This intellectual input endows the generated content with originality, which should be protected by copyright law (Zhu, 2024). On the other hand, Wang Qian emphasizes that the judgment of originality for AI-generated content should be based on the autonomy of the algorithms. He argues that AI-generated content is an application of algorithms, rules, and templates, lacking the personalized choices and judgments of human creators, and therefore does not meet the requirements of originality under copyright law (Wang, 2023). Zhu Ge's viewpoint highlights the actual participation and intellectual input of users in the AI creation process, which not only aligns with the realities of technological development but also better accommodates the widespread application of AI in the creative field. In contrast, while Wang Qian's viewpoint is logically clearer and emphasizes the requirements of copyright law for creative subjects, it may be overly strict in practical application. Completely excluding copyright protection for AI-generated content could overlook the actual contributions of users in the creative process, resulting in some original AI-generated content failing to receive the legal protection it deserves. Furthermore, as technology advances, the quality and complexity of AI-generated content continue to improve, and the influence of users on the generated content is also increasing. This makes Zhu Ge's viewpoint more flexible and adaptable in the current domestic judicial practice, while Professor Wang Qian's viewpoint has not yet gained widespread recognition in domestic practice.

2.2 Legal Subject Qualification

Regarding whether generative artificial intelligence possesses legal subject qualification, there are differing opinions in academia. The mainstream view holds that humans are always the legal subjects, while another view suggests that artificial intelligence may potentially constitute a legal subject. For instance, Shi Yongjing believes that with the continuous development of artificial intelligence technology, it may be possible to grant legal subject qualification to artificial intelligence in the future, allowing it to enjoy rights such as copyright (Shi, 2019). However, this

viewpoint has not yet gained widespread acceptance. Nonetheless, it is undeniable that under the wave of generative artificial intelligence development, the discussion of legal subject qualification will be further explored in the future, and this viewpoint holds significant thought-provoking value. However, does this contradict the spirit of human subjectivity? Is it a confusion regarding the subjects of legal protection? Could it potentially enter judicial practice? These are among the many legal issues that this viewpoint needs to address, and it is evident that the current level of productivity cannot yet support it.

Professor Wang Qian believes that copyright law aims to protect human creative achievements, and as a technological tool, artificial intelligence cannot understand or utilize the incentive mechanisms of copyright law; therefore, it should not be granted legal subject qualification (Wang, 2023). Furthermore, even if artificial intelligence possesses high intelligence and autonomy in the future, whether it should be granted legal subject qualification still requires careful consideration to avoid disrupting the existing legal system and social order.

2.3 The Theory of Creative Tools

Cui Guobin supports the viewpoint of the theory of creative tools, arguing that generative artificial intelligence is a tool for human creation, and the results it generates should be regarded as works created by humans using the tool. He suggests that while users cannot fully predict the generated results when using generative artificial intelligence for creation, the prompts and parameters they input to some extent determine the direction and style of the generated content, and therefore should be seen as contributing to the creation of the work (Cui, 2024). The author believes that this viewpoint aligns with the development and demand for new productive forces in the era of artificial intelligence, encouraging human use and creation of new tools, and reflecting the innovative spirit promoted by copyright law. It is a theoretical basis that is more in line with the existing copyright law under current circumstances and more favorable for the development of new productive forces. However, this viewpoint faces practical challenges in defining user contributions and distinguishing between creative tools and generated results. Therefore, there is an urgent need to clarify a clear determination standard through the reference and exploration of judicial practices both domestically and internationally.

3 EXPLORATION OF JUDICIAL PATHWAYS FOR COPYRIGHT OF AI-GENERATED WORKS

3.1 The Cautious Attitude of Early Cases

Before 2023, courts generally adhered to the traditional copyright law principle of 'natural person creation' as the core, denying the work attributes of AI-generated content and strictly upholding the 'natural person creation' principle. In the 2019 case of Filin Law Firm vs. Baidu, the court ruled that content generated by computer software intelligence does not constitute a work in the sense of copyright law. The legal logic behind this is that current laws stipulate that works should be completed by natural persons, and AI-generated content does not reflect the original expression of a natural person; the actions of software developers and users do not fall under creative acts. The court emphasized that although AI-generated content possesses a certain degree of originality, any deviation from the 'natural person creation' principle should be approached with caution and should protect relevant intellectual contributions within the existing legal framework (Beijing Internet Court, 2019). In 2020, the case of Tencent vs. Yingxun marked a new development, where the court recognized AI-generated articles as works. In this case, Tencent generated articles through its developed intelligent writing system, and the court found that this process reflected human intellectual investment in data selection, judgment, and analysis, meeting the requirements of copyright law for works. This ruling indicates that the court began to pay attention to the human intellectual contributions behind AI-generated content and recognized its work attributes under specific circumstances (People's Court, 2021). Overall, early legal determinations regarding the copyright of AI-generated results were relatively cautious, emphasizing the 'natural person creation' principle while gradually exploring the originality of AI-generated content and the human intellectual contributions behind it.

3.2 The Emergence of Landmark Cases

After 2023, judicial practice began to recognize the copyrightability of AI-generated works under specific conditions, with landmark cases including: the Beijing Internet Court's 'AI Text-to-Image' case, where the court explicitly stated that if AI-generated images reflect the user's 'personalized expression'

(such as inputting prompt words and adjusting parameters), they meet the originality requirements of works and are protected by copyright law (Beijing Internet Court, 2024). This case provides an important precedent for subsequent rulings. The Wuhan East Lake High-tech Zone Court's 'AI Image Infringement Case' (2025): The plaintiff, Wang, generated images by adjusting keywords and style parameters and completed copyright registration. The court recognized that his creative process reflected conceptualization and aesthetic choices, deeming the generated work an intellectual achievement, and ordered the defendant to pay 4,000 yuan in damages (Wuhan East Lake High-tech Zone Court, 2025). This case further refined the 'human participation' standard, emphasizing the user's control and foresight. Notably, the Wuhan court adopted a 'minimum originality' standard in this case, downplaying the examination of creative motivation and focusing more on the distinctiveness of the results. The author believe this determination method can serve as an important reference for contemporary judicial and legislative practices. Additionally, this ruling is conducive to stimulating the widespread application and innovative development of artificial intelligence generation technology in the field of artistic creation. It also clarifies that China's copyright law protects original expressions rather than ideas or concepts themselves.

3.3 Global Perspectives and Experiences

The determination of copyright for content generated by generative artificial intelligence has also formed several controversies internationally. Among them, the United States has consistently maintained that humans are always the subjects of copyright. In 2023, the "Copyright Registration Guide: Works Containing AI-Generated Materials" was published, stating that the author must be a natural person, and the term "author" in copyright law does not include non-human entities such as artificial intelligence. If a work is entirely generated by artificial intelligence without any human creative input, it is not protected by copyright. When a work contains elements of human creativity, such as creative selection and arrangement of AI-generated materials, or modifications that meet copyright protection standards, making the work as a whole reflect the creative control of a human author, copyright protection can be applied for. Copyright only protects the aspects of the work that are created by humans U.S. (Copyright Office, 2023). For example, in the

landmark case Stephen Thaler v. Shira Perlmutter et al., the court held that human authorship is a fundamental requirement for copyright protection, and the authors referred to in copyright law only mean humans; non-human authors are not the objects of creative incentives under U.S. copyright law (Stephen Thaler v. Shira Perlmutter et al, 2023). Furthermore, the notion that authors must be natural persons is affirmed by international copyright conventions. The moral rights of authors stipulated in Article 6bis of the Berne Convention, as well as the rights of authors after death as provided in Article 7bis, are universally recognized as the legal basis that authors can only be natural persons, which has continuously influenced subsequent global copyright legislation (Xiong, Zhang, 2024). Additionally, the European Union has adopted a comprehensive and flexible legislative and policy framework regarding copyright protection for generative artificial intelligence outputs. Through the AI Act and copyright directives, the EU seeks to find a balance between protecting creators' rights and promoting technological innovation. Purely AI-generated content is generally not considered to meet the conditions for copyright protection, as only natural persons can be regarded as authors. However, for AI-assisted content, if it demonstrates creative human input, it may obtain copyright protection (Jones, 2025). Countries around the world reflect a cautious yet innovative attitude towards the challenges of copyright for artificial intelligence-generated works.

4 CONCLUSION

In summary, the determination of the results generated by generative artificial intelligence is a complex and multidimensional issue that requires a comprehensive consideration of legal, technical, ethical, and socio-economic aspects. The author believes that, based on a review of domestic and international literature, the determination of copyright related to the results generated by generative artificial intelligence should still adhere to the principle that natural persons are the authors, and the "minimum originality" standard can be used to distinguish the results of generated works. Future research can further explore the specific applications and legal issues of generative artificial intelligence results in different fields and scenarios, as well as how to promote the healthy development of generative artificial intelligence technology through institutional design and policy guidance. At the same time, it is necessary to strengthen international

communication and cooperation, learn from advanced experiences and practices abroad, and jointly promote the resolution of issues related to the determination of generative artificial intelligence results.

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