Study on the Attribution of Rights in Generative Artificial Intelligence Works

Jiacheng Jiang*

China Jiliang University, Hangzhou, Zhejiang, China
*Corresponding Author.

Abstract: In modern life with ever-changing science and technology, artificial intelligence has become more and more popular, existing in all aspects of people's lives, playing an important and difficult to replace role. However, the lag of the law leads to the fact that it can not solve all disputes, especially in the copyright ownership of artificial intelligence works, whether it is infringement, contract disputes or copyright protection. It is an urgent problem to be solved. Because most of the disputes in the present stage of artificial intelligence are in the aspect of economic property, this paper discusses the ownership of the rights of works from the perspective of law and economics and economic principles. Based on the incentive principle in economics, the feasible path in academic research and the subject of legal responsibility, this paper should ascribe its rights to investors. However, in order to avoid conflicts between the right to use and the right to publish, the node where the user "pays fees" should be regarded as the investor's transfer of the ownership of the work in a "silent" way. If the investment company refuses, it shall do so in an express manner.

Keywords: Attribution of Rights; Generative Artificial; Investors; Benefit Maximization

1. Introduction

Recently, generative AI has rapidly swept through all walks of life and has had a considerable impact on the artificial intelligence industry. Compared with the traditional learning models CNN, DNN and RNN, it has more outstanding performance in interactive learning ability, knowledge answering ability and text production ability. However, based on the endogenous defects of large-scale language training model, it still has shortcomings such as lack of explanation and reference, difficult to identify the authenticity of data, strong subjective speculation, slow knowledge update, etc., which is highly likely to lead to legal problems such as algorithm discrimination, data security, personal information protection and copyright disputes. In this context, the issue of copyright protection of "works" generated by generative artificial intelligence has aroused great concern in the academic community. Before building a reliable protection model, we need to discuss a key issue "who enjoys the copyright of the creation". In fact, the traditional "creation is all" principle has been greatly challenged in the era of artificial intelligence, by mechanical parts instead of human rights sounds bizarre things. Moreover, according to the relevant provisions of China's current copyright law, there are only two types of qualified author subjects: The first is a natural person created by intelligence alone, and the second is a legal person created as a subject under certain conditions. Although generative AI is the direct subject of its creation content, it cannot have the status of copyright subject according to the current law, and few scholars advocate it as a copyright subject. But in the old civil law era, intellectual property is also difficult to tolerate things, so can we re-examine the status of artificial intelligence works in copyright law, skip the traditional civil law category to consider such new things? This paper mainly analyzes the problems that each subject will have if it is the copyright subject from the perspective of three subjects, as well as its unique advantages, and then draws a conclusion about the copyright ownership of artificial intelligence creations.

2. "Generative Artificial Intelligence" Creative Subjectivity

On the contrary, those who hold positive views are committed to exploring the subject status of AI on the basis of "labour empowerment theory" and "substantial contribution theory". Those who hold the "labour empowerment theory" believe that "whoever works owns the rights" makes AI robots the subject of copyright and enjoys the rights; those who hold the "substantial contribution theory" believe that the use of the Those who hold the "Substantial Contribution Theory" believe that using the creator's tenure model to examine the substantive contribution of the subject involved in the creative process will enable the AI to enjoy rights over the creation; or they may refer to the historical experience of granting legal persons a legal personality by the law to give AI robots a similar legal personality. In fact, all of the above paths have obvious shortcomings. First of all, the "who" in Locke's idea of labour property theory refers to the person who has natural rights, because he or she enjoys his or her own body before enjoying the creation, and artificial intelligence robots can't be classified into this category [1]. Secondly, one of the important reasons why legal persons are granted legal personality is that they need the status of legal subjects capable of assuming risks and legal liabilities so as to protect the legitimate interests of all parties. To summarize, the negative argumentation is concerned that the establishment of the subject status of AI will trigger a new round of ethical risks, while the affirmative argumentation is interested in affirming the contribution of AI from the labour and contribution theory in economics. Therefore, under the existing theoretical reserve, the conditions are not ripe to explore whether artificial intelligence, including "generative artificial intelligence", belongs to the authorial sequence.

In the context of "generative artificial intelligence", the "human-like" characteristics of artificial intelligence are becoming more and more obvious, and it is getting closer to the abstract "human being" in law, but it is still different from the real abstract "human being". However, there is still a certain gap between it and the real abstract "human being". In my opinion, if a criterion must be established for the judgement of the subject, this criterion must be objective. The reason for excluding the criterion of emotion is that "law, as a kind of institutional setting, should not carry the setting that certain emotional criteria must be met, because human beings themselves do not possess legal subjectivity because of their emotions, personalities, etc." [2]. Consideration of the status of the creative subject of "generative artificial intelligence" should be carried out from the following four aspects. Firstly, whether it has the corresponding creative ability; secondly, whether it has the specific behaviour of creation; thirdly, whether the content of its creation belongs to the category of works; fourthly, whether it has the ability to bear responsibility independently. Regarding whether "generative artificial intelligence" has "corresponding creative ability" and "creative behaviour", the previous article has adopted the "idea-expression" and "originality" as the basis for its creation. The previous article has already proved through its attribute of "idea-expression" and "originality", and the thing generated by it can be attributed to the category of works when it meets the constituent elements of works. What remains controversial is whether it has an independent capacity to bear responsibility. Liability is the material basis of natural person's "behavioural capacity" and legal person's "independent personality", which is one of the core constituent elements of "person" in legal abstraction. From the present point of view, it is clear that "generative artificial intelligence" is unable to bear responsibility independently, especially

3. Exclusion of User, Developer Subject Status

Firstly, as to whether developers can still be the owners of generated works, developers of "generative AI" such as ChatGPT, who are responsible for writing programmes, architecting algorithms, and iterating and updating, are mostly regarded as the creators or nurturers of AI. Academics have formed two diametrically opposed views on whether they can be the owners of the generated works. For example, Professor Xiong Qi believes that AI creations can be regarded as creative acts on behalf of the developer's will in copyright law [3]. "Generative AI" technology-enabled large-scale language models are usually constructed at the will of the developer. The knowledge base and mindset of "generative

AI" come from the developers who trained and designed them, and it can even be said that the process of using chat software such as ChatGPT can actually be considered as communicating with virtual developers. Professor Sun Yurong, on the other hand, believes that the developer is only responsible for the structure of the algorithm and the input of the data in the early stage, and the final generation of the content may be completely irrelevant to the developer's expectations, and the developer can not actually become the subject of copyright [4]. This viewpoint essentially holds that the process of software development is separate from the process of generating works by "generative artificial intelligence", and that "generative artificial intelligence" does not embody the will of the developer when it is able to create independently. The author is in favour of the latter view. The author is in favour of the latter point of view, which is a significant difference between "generative AI" and traditional AI, as it can independently create and express its own thoughts in certain carriers through algorithms and data with the support of deep neural networks. In other words, ChatGPT and other "generative AI" can train language independently based on algorithmic structure and knowledge content, and the generated works do not necessarily reflect the will of the developer.

Secondly, in terms of whether the user can become the owner of the generated work, it can be said that the user of "generative AI" such as ChatGPT plays a direct role in influencing the process of generating the content of the work by inputting "instructions" to make the work come into being. Although the user provides key information to the AI "creation process," he or she cannot predict the content of the generated work, does not reflect his or her will, and lacks the "idea" element of a work. As mentioned above, the object of protection under copyright law is the "idea-expression" presented in various forms in a work, and the "inspiration" of the subject matter and theme of the work is not included in this category. However, the service agreement between the user and the investor or the operating company, which is formed by mutual agreement (contract), objectively gives the user the right to use the service in a legitimate manner. This is a reflection of the application of "licence to use" in the field of "Generative Artificial Intelligence" in copyright, which respects the autonomy of the parties. In order to avoid disputes, investors or operating companies can embed relevant format terms and conditions before using "generative AI", so that the rights and obligations of both parties are clearly stipulated in a contract.

Furthermore, in terms of the protection of users' rights and interests. Firstly, if the rights of the generated works are attributed to the investor, whether it has the legitimacy to "compete" for the ownership. The aforementioned logical premise that the user cannot become the owner of the work is based on its role in the generation of works by "generative artificial intelligence", and the conclusion is made from its lack of "corresponding creative behaviour". In practice, if the user fulfils the four elements identified by the author in generating the work, he or she is still justified in "competing" for ownership. As some scholars have said, in the absence of agreement or unclear agreement, the attribution of benefits should still be based on the contributions and inputs of different subjects of interest [5]. Secondly, if only the user is granted the right to use, whether it will conflict with the former in the application and publication of the specific generation. The licence only grants the user the right to use the work in a specific way and in a specific field, and does not give the user the right to dispose of it. If the user publishes the generated work, a conflict of rights will arise. In my opinion, the node of "payment" by the user can be regarded as the investor's or operating company's agreement to transfer the ownership of the work to the user. The possibility of consent can be resolved by adopting the "implied rules" arising from custom in commercial transactions. However, if the investor or the operating company refuses, the refusal should be expressed explicitly. Implied consent protects the user's rights and interests by allowing him or her to become a new owner through a transfer, and prevents him or her from having a problem with the use and publication of the copyrighted material.

4. Investor Sovereignty

Firstly, analysed from the perspective of economics, investors should be regarded as the subject of rights. Protecting and balancing

economic interests is one of the important goals of intellectual property law. Giving authors and distributors of works the exclusive right to receive due rewards can stimulate creativity and promote the healthy development of the cultural industry. As a statutory monopoly right, copyright is created on the basis that the state encourages creators to actively carry out intellectual creations and disclose their creations by granting them statutory monopoly rights for a specific period of time, so that members of the society can enjoy the contents of their intellectual creations; and the creators of the works themselves can profit from the disclosure and dissemination of their works, and ultimately realise the cultural value and economic value of the works themselves. The creators of the works can also profit from the disclosure and dissemination of the works, thus realising the cultural and economic value of the works [6]. The cost of large-scale language training under "generative artificial intelligence" is extremely high, and if its products and technological achievements are not well protected, it will definitely frustrate the enthusiasm of investors, thus destroying the good ecological environment of the industry. Investors have paid a huge amount of labour and money for the creation of AI, and they play an extremely important role in today's creative activities, playing a decisive role in the start, output and dissemination of works. In terms of market optimisation, the legal protection of investors' interests is also the optimal allocation of the cultural industry [7].

Secondly, from the perspective of the most feasible path of analysis, investors should be regarded as the subject of rights. At present, the investor becomes the "generative artificial intelligence" to generate the right of the work supported by many scholars. For example, Professor Wu Han Dong believes that when "algorithmic creation" is mostly made by legal person organisations as the main developer or owner of intelligent technology, then the "investor ownership model" applies, and the relevant provisions of the legal person's work or work of duty can be applied to determine the attribution of copyright [8]; Some scholars use the theory of fruits to explore the close connection between immaterial intellectual property fruits and the subject of fruits, artificial intelligence robots [9], and thus concluded that the copyright of AI creations should be attributed to the owner of the object, i.e., the investor; some scholars proposed that AI creations can be regarded as commissioned works, in order to recognise the "autonomy" of AI at this stage, and also reflect its "controlled" nature as a certain type of tool. Some scholars believe that the investment principle is more suitable for the healthy development of the AI market from the point of view of social benefits, and that with the improvement of productivity level and the emergence of new forms of works such as films and recordings, it is more reasonable to adopt the investment principle as the principle of tenure arrangement [10].

5. Conclusions

According to the general criteria for the identification of works under the Copyright Law, when the content generated by "generative artificial intelligence" meets the basic requirements of "expression of ideas + originality + intellectual achievements" and fulfils the limitations of the fields of "literature, art and science", it should be included in the scope of protection of works. The content generated by "generative AI" meets the basic requirements of "expression of ideas + originality + intellectual achievement" and fulfils the qualification of "literature, art, science". In terms of the attribution of the rights of the "work", based on the principle of incentives in economics, feasible paths in academic research and the consideration of the main body of legal responsibility, the rights should be attributed to investors. Based on the consideration of balance of interests, in order to safeguard the legitimate rights and interests of users and avoid the conflict of rights between the right of use and the right of publication, the node of users' "payment" should be regarded as the investor's transfer of ownership of the work in the form of "silence". If the investor or the operating company refuses, the meaning of refusal should be expressed explicitly.

References

[1] Yao Zhiwei and Shen Ying. On the Attribution of Copyright to Artificial Intelligence Creations. Journal of Xiangtan University (Philosophy and Social Science Edition), 2018(03): 29-33.

[2] Xu Chunming, Yuan Yuling. On the Legal Subjectivity of Artificial Intelligence - Taking the Copyright Protection of Artificial Intelligence Generated Objects as a Perspective. Science, Technology and Law, 2019, No. 138(02).

[3] Xiong Qi. Copyright Determination of Artificial Intelligence Generated Content. Intellectual Property Rights, 2017, No. 193(03).

[4] Sun Yurong. Research on Hot Issues at the Frontier of Copyright Law. Beijing: Intellectual Property Publishing House, 2020.

[5] Xiong Qi. Institutional Innovation in China's Copyright Legislation. China Social Science, 2018(07).

[6] Zhu Mengyun. On the Copyright Protection of Artificial Intelligence Generated Works. Beijing: Intellectual Property Publishing House, 2021: 187-188.

[7] Xiong Qi. The Institutional Arrangement of Considering Investors as Authors in Copyright Law. Jurisprudence, 2010(09):3-8.

[8] Wu Handong. The Copyright Law of Works Generated by Artificial Intelligence. China and Foreign Law,2020,32(03):653.

[9] Huang Yuye, Sima Hang. The Attribution of Rights to Works Generated by Artificial Intelligence under the Perspective of Yield. Journal of Henan Normal University (Philosophy and Social Science Edition), 2018, 45(04): 23.

[10] Yao Zhiwei and Shen Xiaoyi. On the Copyright Attribution of Artificial Intelligence Creations. Journal of Xiangtan University (Philosophy and Social Science Edition), 2018, 42(03).