

Research on Copyright Protection of Works Generated by ChatGPT

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Abstract: There has been a debate about whether ChatGPT should have copyright. On the one hand, some people believe that AI creations meet the protection requirements of the Copyright Law, and their creative ability and creativity are comparable to those of human creators; On the other hand, there are also those who disagree, arguing that artificial intelligence, as a machine, lacks the qualities of perception and emotion, cannot be treated on an equal footing with human creators, and therefore should not enjoy copyright. In addition, the global legislative status and controversy regarding the copyright ownership of artificial intelligence is also an issue worthy of concern. This article will explore the essential difference between human authors' works and ChatGPT creations, so as to determine whether ChatGPT and other artificial intelligence should enjoy copyright at the legal level. The protection of artificial intelligence copyright is conducive to the more effective and convenient development of the creative field of this era, and artificial intelligence creations can also expand human creative capabilities to a certain extent, human authors do not need to reject artificial intelligence too much, artificial intelligence as a tool, but will create greater commercial value.

Keywords: Artificial Intelligence; Copyright Law; Copyright Attribution; Copyright Market.

1. Introduction: Controversy over Whether ChatGPT should have Copyright

ChatGPT's process and legal requirements for generating works Artificial intelligence such as ChatGPT has three stages of "input-learning-output" [1] from writing programs to creating and using. Humans provide the database, and after programming, the artificial intelligence starts self-learning, and finally they generate relevant creations based on the user's keywords. Are such creations in accordance with copyright law? Copyright law requires a work to be original and legal. The subject of copyright is the author of the work, which mentions that the author must be a natural person. From the first point of view, originality, artificial intelligence has originality. They can produce original works through the reserve and algorithm creation in the database. But legality is disputed. There is ambiguity in the step of data entry into the artificial intelligence database, artificial intelligence data inventory has massive resources, some scholars believe that artificial intelligence data input is plagiarism, is illegal, but at present, companies in the field of intelligent platforms in countries around the world use this platform, there are similar provisions in their terms of service or user statements, that is, users grant the company free use of works, including digital use. A licensing market for machine-read works, i.e., data entry, has been formed in a certain field and scope. However, artificial intelligence cannot become the subject of copyright in the current law. [2] -The current global legislative status and controversy regarding the copyright ownership of artificial intelligence. At present, there are three views on the question of "whether artificial intelligence creations are copyrightable": affirmative, negative and compromise. [3] Some scholars believe that artificial intelligence is only a tool used in the creation process, and cannot be regarded as the main body of creation, and originality is embodied by the user,

who enters the general idea into the artificial intelligence creation interface and is generated by artificial intelligence collecting massive data, and artificial intelligence creations are not considered legal works. Some scholars believe that the works created by artificial intelligence through a series of learnings such as data input are original, and the work and its copyrightability cannot be denied just because the subject of the creator is not a natural person. The existence of copyright law is to encourage creators to actively create, but artificial intelligence does not have a sense of subjectivity, copyright does not play an encouraging role for them, and will greatly discourage the creative passion of human authors. However, the creation process of artificial intelligence is to imitate the creative process of human authors, and the input data corresponds to the learning of human authors, and algorithm creation is the process of human authors to create. Artificial intelligence creations have also largely expanded more new thinking and fields for human beings.

2. The Impact of ChatGPT Creation on Law and Economics

How does the emergence of ChatGPT creation affect copyright law and related laws? In the field of copyright law, we want to expand the scope of application of copyright law. The current copyright law only applies to humans. According to the current development trend of ChatGPT, humans will use artificial intelligence creations more widely. In the future, it may be expanded to cover works created by artificial intelligence, so as to ensure that these works are properly obtained. copyright protection. At present, some countries in the world have legally stipulated that the copyright of artificial intelligence creations should belong to artificial intelligence itself or its users. In order to adapt to the current trend, the copyright law may also need to be revised, so as to better explain the copyright of works created by artificial intelligence, and regulate and manage these works. At the

same time, we also need to regulate the creation of artificial intelligence through the formulation of laws. The learning of artificial intelligence requires a large amount of information and data. These data may violate privacy or violate the copyright of human authors. Therefore, we need to formulate data protection Relevant legal provisions to ensure the legality of artificial intelligence to obtain data. In addition, we also need to provide some creative convenience for human authors to encourage them to persist in creating and achieve a cooperative relationship between man and machine.

How does the relationship between ChatGPT creation and the cultural industry change the current copyright market? ChatGPT creation can greatly improve the efficiency and quality of creation and reduce the cost of creation. It can accelerate the development of the cultural industry, bring more creative opportunities, shorten the cost of creative time and maximize benefits. But it will also put pressure on the current market. On the one hand, the creation of artificial intelligence is accompanied by a series of copyright issues. The algorithms and massive data involved in the process of artificial intelligence creation have copyright issues in themselves. In addition, the ownership of artificial intelligence copyright and the ownership of the products also need solutions from the copyright market. And once ChatGPT creation is popularized, a large part of human authors will face the risk of unemployment, consumers will tend to choose artificial intelligence creations with low creation costs, and the original market will continue to shrink.

ChatGPT creation brings opportunities and challenges to creators, copyright owners and media industry. The opportunities brought by the creation of ChatGPT, first of all, as AI, it can reduce the cost of creation while having high efficiency. Because AI creation can run autonomously and complete tasks quickly and with high quality, it will greatly improve the traditional production process. Its creative characteristics enable the achievements of cultural and creative industries to be displayed in a relatively short period of time, and these characteristics can reduce production costs in all aspects. Therefore, artificial intelligence creation can provide creators, copyright owners and the media industry with broader development opportunities, and promote the innovation of more new art forms and business models. Artificial intelligence creation can analyze, simulate and predict the creative process in different situations through algorithms to achieve faster, more efficient and innovative creative forms. Therefore, artificial intelligence creation can break through the technical barriers of traditional cultural industries, expand the field of creation, activate the market, and provide more possibilities for the development of new media and digital media. The rapid development of artificial intelligence creation also means that it is necessary to strengthen the supervision of autonomous creation robots, and strengthen the protection of legal liabilities and copyright rights arising from creation. Works created by artificial intelligence, copyright ownership, and rights protection mechanisms all need to be considered and regulated. Many legal issues need to be clearly resolved to protect the rights and interests of creators and copyright owners.

3. Problems Faced by ChatGPT Creation and Unresolved Legal Difficulties

Are there moral and ethical dilemmas in ChatGPT creation?

While ChatGPT creation is developing rapidly, it also brings some moral and ethical dilemmas. Among them, there are mainly the following aspects: Who should be responsible for the creation? The results of ChatGPT creation can simulate, predict and show the human mind more realistically, but it cannot completely escape the rules of the designers and training data behind its programs. In this context, the ownership, causality and responsibility of ChatGPT creations are difficult to define. Infringement of intellectual property rights: Content created by ChatGPT involves intellectual property issues, such as copyright, copyright, etc. The ownership of intellectual property rights in these creations is also difficult to be clearly maintained because of the lack of provisions on the subject of creation and the designer. At present, the developer of artificial intelligence is the subject of rights [4], and the creation of legitimate users should be regulated, and the person in charge of the final creation should also be the company. Possibility impact on imitation objects: The emergence of artificial intelligence creations may greatly weaken the market appreciation of the original work. For example, a robot-generated artwork may end up subverting the traditional art recognition system because its own craftsmanship and cost are too easy. Although ChatGPT creation can accelerate the evolution of the creative industry, bring us more possibilities and inspire people to treat and understand new ideas about art, we need to be cautious about the moral and ethical issues involved, and guide its development under the principle of relative responsibility and health.

How to solve legal issues such as copyright ownership, protection, and licensing arising from AI creation? At present, legal issues such as copyright ownership, protection, and licensing arising from artificial intelligence creation have not been completely resolved. Here are some possible solutions: Designers need to credit the content created by the machine and claim copyright attribution. Current copyright law applies to automated creations, so AI-generated works can still be protected under copyright law. Creators and designers can jointly declare version attribution and copyright protection, and enter into a license agreement. In this case, designers and creators work together to manage and maintain machine-generated works. Given the early stages of machine generation, training with certain samples is often required. This involved copyright issues in the training samples, so licensing agreements needed to be negotiated to ensure that the rights and interests of all were protected. Given the difference between AI-generated works and human artworks, the law also needs to be adjusted accordingly. In such cases, the inventiveness and originality of machine-generated works may need to be assessed to determine whether they meet the requirements of copyright law. In short, solving the problem of copyright attribution and protection of AI creations is key, and it is necessary to improve laws and regulations to protect the interests of all parties involved.

Future trends in ChatGPT creation and directions for promoting innovation and progress in the creative industries. In the future, ChatGPT creation will continue to develop and generate new fields and innovations, promoting the progress and development of the creative industry. Here are some possible trends and directions: Collaborative Creation: Collaboration between ChatGPT and human creators will become widespread. Machines can provide useful context, materials, and ideas, and humans can be responsible for processing and integrating these elements to create more

creative and original works. New art forms: ChatGPT creation will continue to create new art forms and art styles. For example, AI-generated music, AI-generated art, etc., may have beauty and novelty that cannot be achieved by humans. Self-learning and optimization: ChatGPT creation will improve its creative ability and quality through continuous learning and self-optimization, and further improve its collaboration and creativity with humans. Practical applications: ChatGPT creation will be more used in practical fields, such as automatic image recognition, speech synthesis, and machine translation. These applications will allow the machine to generate works and products that are more in line with the needs and actual needs of the user. In short, ChatGPT creation is a field that is still being explored and developed, which not only brings more possibilities and opportunities to the creative industry [5], but also brings us more thinking and exploration.

4. Conclusion

ChatGPT can also expand human creative capabilities to a

certain extent, and artificial intelligence and human authors can reach partnerships to create greater commercial value. I think we need to continue to expand the field of AI creators, which will be richer. This will also make it easier for people and machines to work together.

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