

CHATGPT & COPYRIGHT: KEY LEGAL AND MORAL IMPLICATIONS

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Abstract: *Chat-GPT being Generative AI, is known for its writing potential. ChatGPT's capabilities to generate text, answer questions, and engage in meaningful conversations is growing exponentially, offering immense potential for both personal and business applications. This transformation is impacting society, raising concerns in copyrights about the AI generated content. Authors and platforms should adopt practices that transparently acknowledge the contributions of both humans and AI. It will help ensure that the produced content is consistent with moral guidelines. Major risks posed by ChatGPT, their legal and ethical implications, findings, and tentative solutions are shared in this research.*

Key words: *Artificial Intelligence (AI), ChatGPT, Copyright, Legal, Ethical.*

1. Introduction

The OpenAI interactive chat platform, namely ChatGPT was released in December 2022. Its powerful in-context learning and naturally generation ability has deeply impacted the world. Before ChatGPT, there were some powerful large language models (LLM) like GPT (Radford, et al. (2018) or BERT (Devlin et al., (2018). While many natural languages processing (NLP) models excel in specific tasks but required meticulously crafted inputs during the querying process, ChatGPT stands out by demonstrating remarkable interactive capabilities (Lim et al., 2023). It can adeptly handle a wide array of questions, showcasing versatility in responding to various styles and addressing diverse queries. Unlike other machine learning tools limited to specific tasks with rigid inputs, ChatGPT can, for instance, generate code with comments for specific issues upon user request (Huynh-The et al., 2023; Sahoo et al., 2023). Additionally, it excels at summarizing texts and providing detailed explanations for complex concepts. Notably, ChatGPT delivers lengthy yet natural responses that align with human knowledge, integrating diverse NLP abilities. It can elucidate its knowledge boundaries and reject inappropriate queries. Right now, more than 100 million people use ChatGPT, and in June 2023, there were over 1.6 billion visits. ChatGPT's capabilities are the result of its pre-training on large amounts of textual data, allowing it to learn language patterns,

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syntax and semantics. Its applications are many and varied, from natural language understanding to content creation and automation. The advanced version/model of this tool is GPT-3.5 architecture, upon which ChatGPT is based, which can understand, and generate human-like text in response to user prompts, making it a versatile tool for a wide range of applications (Lim et al., 2023). ChatGPT is different from search engines like Google which generate results by crawling the internet and returning the result which the user must manage taking a lot of time and even not reaching a conclusion.

Copyright protects the creations of the human mind and plays a pivotal role in fostering innovation, creativity, and the dissemination of knowledge. These rights are essential for creators, as they incentivize them to produce new and original content, knowing that they can benefit from their creations. Copyright balances the interests of creators with those of the public by eventually allowing these works to enter the public domain, where they can be freely accessed and used by all. In the digital age, the landscape of copyrights is rapidly evolving. The internet has transformed the way content is created, shared, and consumed. Copyright content has become progressively far and wide and requires legitimate considerations. We need regulations to control the copyrights of what ChatGPT creates, i.e. both images and words. This study will navigate the intricate legal and ethical terrain, seeking to determine whether AI-generated content produced by ChatGPT falls within the bounds of legality or ventures into the realm of infringement. The present study has been designed to examine the current legal framework, emerging precedents, and the broader ethical considerations surrounding this fascinating intersection of technology and copyright.

2. ChatGPT and Copyright

ChatGPT can generate high-quality, contextually relevant content, which can be a valuable tool for content creators. It can assist writers and content producers in generating ideas, drafting articles, and even automating certain tasks. This can lead to increased productivity and efficiency in content creation, benefiting both creators and consumers. However, this capability also raises questions about the ownership of the ChatGPT output, i.e., owner of copyright. ChatGPT's impact on copyright is multifaceted and requires careful consideration. The issues below result from the intersection of ChatGPT and the law:

3. Authorship

ChatGPT is fed huge amounts of data such as text, images, sounds and videos in any form including for example news, articles, poems, and program codes. Determining the ownership and attribution of content created with the assistance of ChatGPT is a complex issue (Chavez et al., 2023). Copyright laws are primarily designed for human creators and applying them to ChatGPT-generated content needs deliberation. Clear guidelines are needed to specify who holds the rights to content produced with ChatGPT and to ensure fair compensation and recognition for human creators. Whether the trained ChatGPT method infringes the copyright of the first creators remains

unanswered. Is the ChatGPT output "derivative work" and would such duplication of a derivative work fall under the "fair use" exemption of copyright law are still unanswered questions.

The same question can produce different answers and vice versa. According to ChatGPT terms of use "[...] OpenAI hereby assigns to you all its right, title and interest in and to Output ", the user is the owner of the output, but whether they can use it for commercial purposes is unclear. It's also unclear whether two users who get the same output which can be copyrighted, who can own its copyright? If a human being and ChatGPT give identical answers can they be copyrighted and which one will be preferred and why? Will human creativity dominate, or machine black box answer will lead? Should the input not contain copyrighted material to protect the output? Usually, the works created by machines are not copyrighted. Does this unpredictable behavior of ChatGPT matter at any level? Although the user has rights on output, he can't claim it as his own according to ChatGPT terms, "You may not [...] represent that output from the Services was human-generated when it is not". But ChatGPT can't be listed as an author as only humans fulfill the authorship requirement according to most copyright laws around the globe. What if the user modifies the text and claims copyright on this ChatGPT output?

The Berne Convention and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) [1] are main international treaties that determine minimum standards for copyright protection and enforcement. In the United States, AI is not recognized as a creator, and the law considers only humans as copyright holders. The United States Copyright Office (USCO) states that things made by machines or AI can't get copyright protection. In December 2014, the United States Copyright Office stated that creations made by non-human entities, like photos taken by animals, do not qualify for copyright protection. In 2022, the USCO, declared that "[s]ince copyright law, as outlined in the 1976 Act, necessitates human authorship, the [AI Generated] Work is ineligible for registration." This decision reflects a series of similar statements from the USCO, explicitly stating that copyright will not be granted for works created entirely by machines or computer programs. The human authorship prerequisite of the USCO is expressed as: *The Human Authorship Requirement- The USCO will register an original work of authorship if it is created by a human being. Copyright protection extends exclusively to the "fruits of intellectual labor" originating from the "creative powers of the mind," as established in the Trade-Mark Cases, 100 U.S. 82, 94 (1879).* According to US copyright law, the copyright holder has the exclusive right "to prepare derivative works based upon the copyrighted work." A "derivative work" is "a work based upon one or more preexisting works." ChatGPT is trained on pre-existing works and generates output based on that training. It suggests that ChatGPT generated content is derivative work. European laws, especially the GDPR, strongly urge protecting data and privacy rights. This could affect who owns the data used to train AI models. Since people began using AI that creates things, the EU has been trying to establish rules for it, but it's been a bit slow. The EU's AI Act is the closest regulation for using AI, but they still haven't made specific laws regarding copyrighting materials made by AI. However, there is a

part of the AI Act that states that companies using AI should inform everyone if they used any copyrighted materials in teaching their AI systems (Euronew,2023).

ChatGPT can serve as a creative partner or collaborator, helping artists, writers, and musicians generate ideas, overcome creative blocks, and explore new concepts. This collaborative potential can lead to innovative and unique creations that may not have been possible without AI assistance. Determining the respective contributions of humans and AI in the creative process can be complex and may require legal clarification. Most researchers don't think ChatGPT should be recognized as an author, especially if it helped with designing, completing, or writing and editing educational work. However, some articles have listed ChatGPT as a co-author (ChatGPT & Zhavoronkov, 2022; King, 2023; O'Connor, 2023; Kung et al., 2022).

The Science and Nature editors opine that ChatGPT doesn't meet the standards for being an author. They argue that being an author means taking responsibility for the work and giving authorizations/permissions, which ChatGPT can't (Thorp, 2023). When asked about authorship, ChatGPT agreed with Nature and Science, stating, "I'm just a computer program and can't be a co-author on a research paper. But I can help you with your research, like doing literature reviews, forming questions, and analyzing data. You can mention me as a source, but always check with your school or advisor about citing and authorship rules." This means ChatGPT can't legally own any work or creation, making it easier for authors to use it. Although ChatGPT does not own any work, authors should inform publishers when they use ChatGPT for their work. Currently, there is no clear and consistent way to include ChatGPT as coauthor in work created with the help of ChatGPT (Stokel-Walker, 2023). Some authors have mentioned ChatGPT in their articles, but publishers such as Nature (Nature, 2023) [and Science (Thorp, 2023) [12] say that these computer programs should not be included in their magazines. It indicates that ChatGPT is not the creator, rather merely a tool employed by a human creator.

ChatGPT does not copy from data it was fed verbatim but structures its output which looks like it has been crafted by a human. As per Open AI stance, it uses copyrighted material following all legal norms and rules. Users should be aware of terms of use of ChatGPT which indicate that service should not be used in a way to harm rights of any third party, i.e., he should not input copyrighted data without prior permission from the right holder. The reason being that these data are used to refine the output. There is no opt-out for individual users although organizations can request OpenAI not to use their input data.

4. Translation Works

ChatGPT's multilingual capabilities are a significant boon for translation and localization efforts. It can help break down language barriers, making information and creative works more accessible to a global audience. This can be particularly advantageous for authors, publishers, and businesses seeking to expand their reach. However, the question of copyright infringement can arise when content is automatically translated by ChatGPT. If the translated work is substantially like the

original, it may infringe on the copyright of the original creator. This raises the need for clear guidelines on what constitutes acceptable use of AI for translation and localization.

5. Moral Implications

Moral considerations are essential in determining the eventual fate of ChatGPT and altering copyright concerns. Society may develop ethical guidelines for the use of AI in content creation, utilizing ethical and respectful practices helping authors navigate the ethical complexities of AI-generated content. It is crucial to cultivate trust in ChatGPT produced content within the inventive local area and society at large.

6. Knowledge Dissemination

ChatGPT can be an effective instrument for disseminating knowledge by answering questions, providing explanations, and offering educational content. This can empower individuals to access information more easily and efficiently, promoting a culture of continuous learning and information sharing. ChatGPT can help with writing and editing text, improving how sentences are put together. This could be useful for researchers and teachers in creating study questions, coming up with ideas, and analyzing data (Graf, and Bernardi, 2023). However, since the source of the information provided by ChatGPT is not always transparent, there is a risk of misinformation or plagiarism. This poses challenges to the accuracy of information dissemination and the protection of original works. Detecting and addressing such issues can be challenging, requiring advanced technology and legal frameworks that account for AI-generated content (Yong, and Hongxuyang, 2021).

7. Expediting Research Activities

ChatGPT can be a helpful tool for students, teachers, and researchers of all levels. It can assist with various research tasks, like finding information, helping with reviews of existing studies, analyzing data, and getting manuscripts ready. It can even offer suggestions on how to improve a researcher's current work to make it ready for publication. However, a big question arises: When is it okay to use it in research? Should it be allowed to co-write academic/scholarly articles? (Stokel-Walker, 2023; Thorp, 2023). Because ChatGPT can learn from large datasets with natural and human-like language, there's a risk it might encourage plagiarism and impact scientific research. However, if researchers use ChatGPT responsibly and take steps to avoid misusing it, they can create better and authentic work supported by different information sources available through such tools. ChatGPT, as a language model, has access to various information sources during its training, and it might generate text like article summaries, introductions, and literature-related content on different topics. It can produce abstracts that resemble original work to some extent. ChatGPT should include in-text citations and bibliography indicating the original source of work.

8. Quality and Accuracy

AI-generated content, while impressive, may lack the depth of understanding and context that a human creator can provide. This raises concerns about the quality and accuracy of information and creative works generated by AI, which can impact the credibility and reliability of such content. GPT-3 can generate news segments that were high-quality, coherent, and accurate, just like those written by human journalists (Brown et al. 2020). GPT models are not limited to this; they've been applied in various other situations like language translation, analyzing feelings, and providing customer support. Alongside chatbots and content creation, GPT-3 has shown good accuracy in performing sentiment analysis, especially in recognizing complex emotions, as highlighted in a study by Engelbrecht et al. (2021).

9. Clarity

Moral contemplations stretch out to straightforwardness and divulgence. Clients who use ChatGPT created content may not know that it is machine-produced. Social acknowledgment of ChatGPT created content relies upon its quality and innovation. On the off chance that simulated intelligence produced content can't match the close to home profundity and innovativeness of human-composed content, it could adversely affect social and creative scenes.

10. Biasness and Liability

ChatGPT being trained on existing information, and if information contains inclinations, the created content might mirror those predispositions. This raises worries about fair portrayal and the likely propagation of generalizations in simulated intelligence created works. If the output is misleading or incorrect, then who will be responsible?

11. Promoting Collaboration

Empowering the joint effort between ChatGPT frameworks and human makers could lighten a few moral worries. Human oversight guarantees that man-made intelligence created content lines up with cultural qualities and social subtleties. Bringing issues to light about the utilization of computerized reasoning in happy creation is vital. Educating customers and policymakers about the capacities and restrictions of simulated intelligence can encourage a more educated and mindful way to deal with the incorporation of ChatGPT.

12. Conclusions

The future of ChatGPT and its impact on copyright is uncertain but promising. As technology continues to advance, it is essential for society to adapt and evolve alongside

it. AI-generated content may not always align with cultural sensitivities or ethical standards. Ensuring that AI respects these considerations is essential to avoid potentially offensive or inappropriate content. Clear laws are essential to explore the advancing process of man-made intelligence produced content and address copyright concerns as the current laws do not satisfactorily address the unforeseen challenges encountered by advancements such as ChatGPT. Policymakers should establish a comprehensive regulation that characterizes the authorship, and exceptions, related to AI created content and address issues of fair use, groundbreaking works, and the utilization of ChatGPT produced content. Advanced technologies for content recognition and plagiarism detection should be developed to assist in identifying and managing AI-generated content. These tools will be crucial in enforcing copyright regulations and ensuring the protection of original works. This would be beneficial in determining attribution and following the use of human created works.

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