Research Article

Legal Protection of Copyright on Creative Industrial Work Made by Artificial Intelligence

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Abstract.

In recent years, technological advancement has been rapid. Artificial intelligence refers to the availability of applications capable of completing tasks involving the imitation of human intellectual processes by computers, particularly computer systems. A major developing concern nowadays is who owns the copyright of images created by artificial intelligence, notably in the Creative Industry. It's a tricky issue—professional artists are outraged, copyright officials are baffled, and attorneys are preparing to have a field day. The issue lies in the effectiveness regarding the protection of copyright on creative industry work, made by the Artificial Intelligence itself. Since it is a machine/computer system capable of possessing human intelligence in performing complex tasks such as creating creative industrial work, it creates difficulty in how far such protection can be provided for creative industrial work. Therefore, it is difficult to prove the legal aspect of an artwork made by a machine, not by humans.

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1. Introduction

Artificial intelligence (AI) is affecting more on the aspects of daily life. It is everywhere, it affects everyone, and its capabilities are always expanding. AI may help us in a variety of ways, one of which is helping difficult works for us. It can help us save lives and cope with disasters, and it can entertain us and make our daily lives more enjoyable. AI systems handle complex, data-intensive tasks including monitoring credit card networks for fraudulent activity, enabling high-frequency stock trading, aiding with medical diagnostics, and detecting cybersecurity threats. AI will soon be embodied into robots that will move and operate among us as service, transportation, medical, and military robots. Nonetheless, existing ideas and expectations about AI's capabilities varies greatly, and agreement on the societal implications of AI is difficult to come by [1].

The application of artificial intelligence in the creation of works may have major implications for copyright law. Traditionally, ownership of copyright in computer-generated works was not contested since the program, like a pen and paper, were tools that aided in the creative process. Copyright protects original creative works, with most definitions of originality requiring a human creator.

Legal experts compare technology to humans, emphasizing its potential to "mimic human traits such as reason, creativity, and learning." [2]. This human connection is typically portrayed as the basis of the legal problem, and nowhere is this more apparent than in studies on AI and copyright. If machines can approach human levels of creativity, what happens to the rights to the poems or paintings they create? Should there be any copyright in AI-generated artworks? And, if so, who benefits? [3]. Furthermore, in the context of copyright, failure by researchers to accurately consider the technical functionality of AI has significant implications for legal analysis. Furthermore, in the context of copyright, researchers' failure to appropriately analyze AI's technological capabilities has important legal ramifications.

Taking a different approach, this essay will first describe how artificial intelligence works. Second, it explores whether copyright should be preserved in AI-generated artwork, notably in the Creative Industry. Finally, the essay offers a methodology for determining who would profit from such copyright on creative sector items in particular. To that goal, it employs an utilitarian interpretation of copyright as economic security for creative endeavor.

1.1. Definition of Artificial Intelligence

Artificial intelligence (AI) is a broad field of computer science concerned with creating intelligent computers, capable of doing activities that would normally need human intelligence. AI is a heterogeneous area with several approaches, advances in machine learning and deep learning in particular, are causing a paradigm change in nearly every sector of the IT industry. In other terms, AI refers to the emulation of human intellect by software-coded heuristics. This encompasses visual perception, speech recognition, decision-making, language translation, and creative output development. This code may now be found in anything from cloud-based business applications to consumer apps and embedded hardware.

Artificial intelligence is a subfield of computer science that focuses on improving a machine's capacity to behave intelligently. Intelligent entities can do both technical

tasks, such as, determining the optimal mathematical solution, and activities typically associated with the human brain, such as natural language processing [4].

Many concepts in computer science and technology are built on artificial intelligence. Machine learning, deep learning, robots, computer vision, the internet, recommender systems, and natural language processing are examples of these principles [5]. Because they function with computer programs, these notions are extensively applicable in science and technology. Artificial intelligence is efficient, since most of it does not require human help [6].

Artificial intelligence has several advantages, which has expanded its popularity and applicability in a variety of commercial areas. Machines driven by AI, for example, out-perform humans in terms of output quality in a brief period of time. Artificial intelligence has several daily uses. AI robots can operate quicker than humans, allowing them to multitask and provide excellent outcomes [7]. Figur 1 one below shows how AI is applied.

1.2. Copyrights, and Artificial Intelligence

Copyrights is an inseparable aspect in terms of Artificial Intelligence in today's modern world. This is due the fact that many products in modern business world are inherently attached to copyrights law. Thus, in order to establish a much faster and more effective production, the role of AI is needed in various business sector across the globe as of today.

1.3. Creative Industry and Artificial Intelligence

Creative Industry is something which we cannot ignore in terms of its relationship with Artificial Intelligence. As a product or human creativity which inherently possess economic value, the role of Artificial Intelligence receives an even more acknowledgement from the public in helping to create a fine creative industrial work. In the realm of creative industry, Artists, are getting even more acquainted these days in using AI as a tool to create and enhance their art design [8].

2. Research Methods

This research uses qualitative methodologies and a normative sociological perspective. The associated research will be further examined throughout this approach by noticing

whether there are currently rules that regulate, especially copyrights and its legality in terms of art developed specifically by Artificial Intelligence. In that regard, from a legal and economic standpoint, researchers will collect data on societal conditions and status, specifically cases of uncertainty regarding the issue of copyrights and artificial intelligence in the realm of Creative Industry and seek effective legal enforcement in that matter.

Primary data was collected mainly through literature review, observations, or archives such as books, articles, and journals. A careful analysis was carried out in order to have comprehensive understanding of the main idea that could be gained through a literature review as a reference in solving the issue of the topic written on this paper.

3. Result and Discussion

The notion of human authorship, is the most fundamental barrier to acquiring copyright control and accountability for a work created by an AI system [9]. Because AI is such a young technology, it is unknown whether the works created with its aid will be protected by copyright. In general, a work may be protected by copyright in Australia if it has a human author who adds 'independent intellectual effort'. As a result, AI-generated works with inadequate human input may not be protected by copyright. AI systems are also vulnerable to human-AI interaction problems, which might result in financial losses.

The concern that AI-generated artworks would undermine original artistry as creative industrial activity, should not be ignored lightly. Artists spend years developing their skill to create unique aesthetics and expressions that communicate their feelings and life experiences [10]. Indeed, in the creative industry, the portraits that inspired one of the first and most well-known pieces of AI-generated art, the Rembrandt Project, were created during Rembrandt's most difficult, last years [11].

The combination of creative sectors like art and technology has a long history, and the emergence of artificial intelligence has accelerated this tendency. Technology is being more interwoven into all areas of human conduct, to the point that it has become the essence of the human being [12]. According to Bernard Stiegler, only "prosthetics" can remedy the defects of human origins, and that technological prostheses will become a part of the body. Therefore, human nature [13]. When we look at the technology in this way, we can see that technological proxies are not only "extensions of human organs,"

but also "simulate the organ they extend," and that "tools are therefore 'empirical simulations" [14].

Tools that are organ extensions are not just a part of the body, but also a part of how we see the world. When individuals run computers, they have an experience of the world, which is to say, "body as an evolutionary architecture for operating an awareness in the world." Modify the biological equipment, and you change the way it perceives the world" [15]. As a result, artificial intelligence is not just part of the body's organs, but also the universe of human experience; AI art, which is viewed as creative industrial activity, is a composite of this experience. In terms of the creative sector, AI art signifies a shift in how we see the world and access aesthetic experiences.

Because of the various mechanics of art production, AI art and human art create separate aesthetic experiences in the creative industry. The difference is akin to that seen between a storyteller's narrative and a newspaper's message—a distinct style, even though the material is the same. Because, the storyteller relies on his ability to deliver the tale, he may tell the listener the same story. The event in the narrative is personal, yet it is not entirely private; rather, the experience is about tradition [16].

As a result, if producers used an AI tool and contributed 'independent creative effort' to creating the work, the work would very certainly be protected by copyright. What is a sufficient contribution? While no definite rationale has been presented, certain contributions are more likely to be protected than others. For example, if a creator creates a picture and then edits it with an AI tool, the human involvement is likely to be sufficient to preserve the copyright. Other activities, such as designing, refining, and training the algorithm, or pre-selecting and modifying the result, are not assured to deserve copyright protection.

The use of images emphasize the problems in the article, such as the practice of abusing copyright artists used by AI. One prime example of such matter is the case of music. AI has also impacted music, from its creation to its distribution. Significant among these are music streaming services using AI for music recommendation and information retrieval, e.g., Spotify and Shazam; and in product suggestions for online retailers, such as Amazon. The application of AI to music creation has appeared in academic halls during the past 60 years, e.g., Hiller and Isaacson (1959); Biles (1999); Cope (1991); Dannenberg et al. (1997); Ebcio ̆glu (1988);Fernández and Vico (2013); Lewis (2000); Pachet (2003); Sánchez-Quintana et al. (2013); Sturm et al. (2016), but AI is now being used visibly in popular forms of music. Recent examples include: Taryn Southern's 2017

album, "I AM AI", which features music generated by a commercially developed music AI system; the 2018 album "Hello World", billed as "the first music album composed by AI + artists"; Holly Herndon's 2019 album, "Proto" and dozens of albums created by the "first-ever algorithm to sign [a] major label deal" Several companies have also been founded recently to capitalize on advancements of AI applied to music content creation, particularly for production music, i.e., music to accompany film, radio and other media. Examples of these companies include Aiva and Amper for creating soundtracks for advertisements; and Melodrive10 for automatically creating music in video games. Some companies are also devoting resources to creating software for artists exploiting AI technology. Examples include LANDR for mastering music, IBM and Sony for music composition, and Google's Project Magenta for sound and music synthesis. The combination of enormous quantities of recorded music and accompanying data, effective algorithms, and high-power computational hardware is now producing progress audibly moving so fast that alarms are sounding. [17].

Image or photo is also part of creative industry, which is also vulnerable about violation of copyright law involving AI. As such, the case inflicting *Getty Images* is worth analyzing. On Jan. 17, Getty revealed that it had initiated legal proceedings in London against Stable Diffusion for allegedly infringing on "intellectual property rights including copyright in content owned or represented by Getty Images." Getty accused Stability AI of unlawfully copying and processing millions of images protected by copyright and their associated *metadata* owned by Getty Images. The inclusion of metadata in the suit could mean that Getty believes Stability AI accessed Getty's images and the information associated with them without permission. The artists who are suing generative AI vendors are also trying to deprive the vendors of the protective shield of fair use. The artists claim that the resulting images derived from their original work compete with them and could lead those who previously had to commission them to use Stable Diffusion instead to acquire the same kind of artwork they produce [18]. Figure 2 below shows how Copyright is intertwined with AI.

AI tools presently lack legal standing and cannot be granted copyright. If a work is protected, it is the human contributor who owns the copyright. Under copyright law, only humans are recognized as writers (or performers), and only humans are awarded moral rights. The right to be recognised as the author of a work is one of these rights. When artificial intelligence is utilized to generate a work, human writers who contributed 'independent intellectual effort' to the work should be credited as authors. A person who did not make a major contribution to the work's creation is not entitled to be recognized

as an author. Because AI has no copyright rights, there is no legal obligation to disclose that AI was used to generate the work. To be truthful with your audience, you may still want to specify that AI was used to assist in the creation of a piece. These principles are not legally obligatory, but they provide useful information on best practices when dealing with artificial intelligence.

4. Conclusion

Things are projected to get more difficult as artists increasingly employ artificial intelligence, and as machines improve at making creative works, blurring the distinction between artwork generated by people and artwork created by computers. The distinction may be rendered meaningless by colossal advances in computer technology and the sheer amount of available computing power; when a machine can learn styles from massive libraries of information, it will become increasingly adept at imitating individuals. And, with enough processing power, it may soon be impossible to discern between data created by humans and data generated by machines. We're not there yet, but if and when we are, we will need to figure out what kind of protection, if any, to provide to emerging works made by clever algorithms with little or no human involvement. Although, copyright restrictions have shifted away from originality requirements that reward talent, labor, and effort, possibly an exception might be made for outstanding artificial intelligence discoveries. The alternative appears to contradict the rationale for the protection of creative works in the first place. The most natural approach appears to be roviding copyright to the person who invented artificial intelligence. A plan like this will ensure that businesses continue to invest in technology. They may rest assured that they will receive a return on their investment.

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