

## Legal analysis of copyright protection for paintings using Artificial Intelligence

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### Abstract

The advancement of Artificial Intelligence (AI) technology has significantly altered the process of creating art, resulting in numerous legal challenges, especially in copyright law. Article 1, paragraph 2 of Law No. 28 of 2014 on Copyright Act acknowledges that the creator is a human entity. The law stipulates that a creator is an individual or a group of individuals who generate original works through their intellectual capabilities. The copyright law framework in Indonesia is anchored in an antiquated paradigm that emphasises the author as a human entity, encountering difficulties in adapting to contemporary artworks generated with the assistance of AI technology. The presence of AI as a non-human entity complicates the understanding of the creation process, the notion of originality, and the role of human intellect, resulting in legal ambiguity concerning the copyright protection of AI-generated works under the relevant legal framework in Indonesia. This research employs a normative juridical method utilising legislative, conceptual, and comparative legal perspectives. This research is prescriptive, analysing core legal materials, such as the Copyright Act, and secondary materials, including legal literature on copyright and AI-generated art. The study seeks to conduct a legal analysis of copyright protection for paintings generated by artificial intelligence. The findings suggest that individuals involved in the creative process can be acknowledged as the creators of AI-generated artworks, provided they fulfil the criteria of originality and contribute intellectually to the creation process. This necessitates normative clarity in the Copyright Act to prevent bias or ambiguous interpretations. The Act has not expressly established the criteria for copyright protection of contemporary AI-generated artworks, notably concerning new standards for originality and human intellectuality, resulting in legal ambiguity for producers and practitioners of modern art. A normative claim in the Act must establish that the utilisation of AI in the creation of artworks, including paintings, is seen as an auxiliary tool or technological instrument, rather than the primary creator. This explanation is essential to prevent ambiguous interpretations concerning the status of AI and to enhance the coherence of the Act with Hegel's theory of personality and Locke's theory of property, both of which prioritise individuals in the context of legal rights and obligations.

**Keywords:** Copyright protection, painting art, Artificial Intelligence

### Introduction

Artificial Intelligence is a technology in the form of machines that can mimic human actions and is developed based on human knowledge, with the same thinking as humans<sup>[1]</sup>. The processes that occur in AI include learning, reasoning, and self-correction. These processes are similar to those of humans who analyze before making a decision<sup>[2]</sup>.

Artificial Intelligence has been used in various sectors, such as industry and healthcare, and is even starting to enter the creative realm, such as painting. In terms of terminology, painting is the creation of images using pencils, pens, brushes, and so on<sup>[3]</sup>. Conventionally, painting is a human creative practice realized in tangible media such as canvas, boards, and paper, with an emotional impact achieved through a combination of lines and colors using common painting tools. Painting differs from drawing; generally, painting is an extension of drawing. Technically, painting is an activity of expressing ideas and imagination thru the element of color. At the same time, drawing is the activity of creating images by scratching with sharp objects such as pencils, pens, and other tools, emphasizing the element of line<sup>[4]</sup>.

Artificial Intelligence can produce works that appear original by using algorithms that learn from large datasets. This can be seen in the project "The Next Rembrandt," which examines the ability of AI to analyze and produce the artistic style of Rembrandt van Rijn<sup>[5]</sup>. This project resulted

in an AI-generated painting that mimics Rembrandt's style with high precision. The painting produced using AI not only reflects the distinctive techniques and esthetics of Rembrandt but also introduces new elements generated by AI. The use of AI technology is transforming creations that were once only physical or conventional, allowing them to be transformed into digital forms<sup>[6]</sup>.

The use of AI in this modern era not only facilitates human performance but also presents a new challenge in the fields of art and law in Indonesia to adapt to the development of the times and the growth of society. Based on Article 40 paragraph (1) letter f of Law No. 28 of 2014 concerning the Copyright Act, it is stated that works of fine art in all forms, including paintings, are creations protected by the Act. Protection of copyright for paintings is necessary to recognize the rights of the creator, which is part of intellectual property rights (IPR), and to grant the creator the right to exploit, commercialize, or enjoy the results of their work for a certain period.

AI-generated paintings may be categorized as legal objects; however, the determination of ownership or legal responsibility for works produced by AI remains a debate, whether it is the AI developer, the user, or even the AI model itself that should be held accountable for the generated content. The existing regulations are considered insufficient to provide legal certainty regarding copyright for paintings created using AI. There are no definitive rules concerning AI-generated works in terms of protection,

limitations on AI usage, or penalties. The ambiguity and lack of legal clarity in this context can create significant risks because AI continues to develop very rapidly and has even replaced human positions in certain fields.

That risk can harm the creator who should be able to obtain their moral rights and enjoy their economic rights. The potential for plagiarism, distortion, mutilation, and modification of creations poses a risk of digital copyright infringement that current regulations cannot yet definitively address. The irrelevance of regulations to current developments can harm copyright holders without legal consequences and make it difficult to determine legal accountability for AI-generated paintings.

### Research Method

This research uses the normative juridical method, a legal study that examines library materials or secondary data<sup>[7]</sup>. Normative legal research is a scientific activity grounded in specific methods, systematics, and modes of thinking aimed at studying one or several legal phenomena<sup>[8]</sup>. The approaches used are legislative, conceptual, and comparative legal approaches. The data used in this research are secondary, consisting of primary legal materials, secondary legal materials, and tertiary legal materials. Data were collected thru library research, in addition to field data obtained thru information and perspectives from informants. The analysis method used is prescriptive, which assesses whether the object being studied is right or wrong and what is appropriate under the law<sup>[9]</sup>.

### Results and Discussions

Copyright protects works born of human creativity as the main legal subject, but when AI systems produce artworks, a major debate arises over ownership and protection, and its implications for current copyright law. The creative process involving machines challenges the legal paradigm that has long been based on the notion that the creator is human. This creative process has technical and philosophical aspects that are interconnected and reflect the evolution from mere tools to semi-autonomous entities capable of "producing" art.

The current global legal system lacks consensus on how to place works involving AI within the traditional copyright framework. AI is positioned as a tool that expands human creative capabilities, not as an entity with legal intent or creative expression. Therefore, the recognition of copyright still depends on the extent to which humans are creatively involved in the creation process. China, thru its court rulings, has established that works created by humans using AI can be protected, provided they meet four specific criteria determined by the judge at that time, and the copyright status is granted to the AI user. The United States, thru the USCO, has also issued guidelines for copyright registration, where a work created using AI can be protected on the condition that it possesses a creative aspect from humans, and the status of the creator is given to the human who operates the AI or acts as the AI operator<sup>[10]</sup>. The United Kingdom has a specific copyright law that has been in effect for decades, namely the Copyright, Designs and Patents Act (CDPA) of 1988. The creator of works using AI is regulated under Section 9, Verse 3 of the CPDA, which states that the manager responsible for the creation is the manager responsible for the creation<sup>[11]</sup>. Based on this, according to the CPDA rules, AI cannot be the copyright

holder because AI is non-physical and cannot be the plaintiff or defendant responsible for the work. The protection of works created using AI is regulated in Section 12 Verse 7 of the CPDA, which states that if a work is created with a computer, it still receives copyright and the protection lasts until the end of a 50 (fifty) year period from the end of the calendar year in which the work was created.

Canada also has specific laws regarding copyright, namely the Copyright Act C-42 1985 and the Copyright Modernization Act 2012. Regarding the creator, Canadian law does not explicitly state that it must be a human, thus allowing for broader interpretation. Article 13, Paragraph 1 and Paragraph 4 of the Canada Copyright Act C-42 1985 explain that the creator of a work is the first owner of the copyright and can transfer and utilize the work thru licensing with the approval of the copyright owner<sup>[12]</sup>. Indonesia has specific regulations regarding Copyright, namely Law Number 28 of 2014 on Copyright, which clearly states in Article 1, paragraph 2, that the creator is a human being. The law emphasizes that the creator is an individual or several individuals who produce works thru their intellectual abilities. Furthermore, the Civil Code provides that legal subjects are bearers of rights and obligations, including individuals and legal entities<sup>[13]</sup>. This provision indicates that copyright protection can be granted only if the work is the result of a distinctive creative expression by humans. That protection is given to humans as the creators. Therefore, machines or artificial intelligence cannot be considered as creators because AI is not a legal subject with measurable intellectual ability, feelings, or definite creativity like humans.

The legal status of the creator of AI-based paintings depends on the level of human involvement in the creation process. The copyright of a painting can still be recognized, provided that AI is used only as an auxiliary tool, while humans remain actively involved in determining the ideas, concepts, or main artistic elements. In this situation, AI users can be considered legitimate creators because their creative contributions are significant. Article 1, paragraph 3 of the Copyright Law also explains that a creation must be produced thru a creative process, namely thru inspiration, ability, thought, imagination, dexterity, skill, or expertise expressed in a tangible form, so that a work can be considered a creation if it meets one or several of these elements. In works produced using AI, the elements that are fulfilled are Ability and Expertise, where the arrangement of Prompts given by humans to AI to set and adjust various technical parameters until achieving results that match their preferences can be considered a manifestation of human ability or expertise, thus fulfilling the element of intellectual contribution.

Based on this, the status of creator can be granted to humans who use AI to produce works of art. The work is also part of a legitimate legal object and constitutes part of human intellectual property, thereby entitling the creator to both moral and economic rights over the creation. This aligns with John Locke's view that humans have the right to own what is produced by their labor, and when they mix their work with nature, the result becomes theirs. Humans, as users of AI, have endeavored to create work using AI as a technical tool by issuing positive commands to the AI, which then processes them to produce results that meet their

expectations. According to Locke's view, the resulting work can become the personal property of the creator, thereby creating rights and responsibilities over it.

Normatively, the status of the creator of paintings using AI has not been clearly defined in the Copyright Law, making it weak when facing legal issues. This can harm the creators both morally and economically, thus requiring normative clarification in the Copyright Law that explains the status of the creator as a human who conducts the creative process using AI, while AI is merely a tool or medium used to realize the creation. The AI creator or AI Company is only a service provider of the tool and is not directly involved in the creation process.

So far, Indonesia has not faced any cases related to the use of AI within the scope of painting art. However, since the presence of AI cannot be denied, the existing laws must be adapted to the developments of time and technology to achieve legal certainty that can protect society. Based on data obtained from an interview with the First Expert Intellectual Property Analyst at the Aceh Provincial Office, Abdi Dharma stated that "until the end of 2025, there have been no registrations or complaints either at the Aceh Provincial Office or at the Directorate General of Intellectual Property Rights of the Indonesian Ministry of Law related to copyright of paintings using AI." This indicates that Indonesia has not yet faced the challenge of using AI in the field of painting in a tangible way.

Abdi Dharma also added that "nevertheless, Indonesia must not be left behind, the law must remain balanced with the developments of the era." Therefore, existing laws, especially the Copyright Law, must be adapted to current developments, including the use of AI in creating paintings. Based on the above, there are several elements that must be fulfilled to obtain copyright protection in Indonesia. These elements have been recognized under the Copyright Law. Still, they require an expansion of meaning or broader interpretation, namely, the element of originality, the element of human intellectuality, and the element of embodiment in a tangible form.

Abdi Dharma also stated that, to date, there are indeed no regulations that accommodate the requirements or specific limitations for the recognition of creations using AI, and there are also no derivatives in the form of Government Regulations under Article 53 of the Copyright Law regarding licensing rules and production requirements for creations using high technology. This is a legal vacuum that can have fatal consequences. The legal vacuum in the protection and establishment of copyright requirements for paintings creates significant legal, sociological, and economic implications. Legally, the absence of clear legal norms results in a lack of legal certainty for creators of paintings in defending their rights. Moral rights and economic rights that are fundamentally inherent to the creator become difficult to enforce due to the lack of adequate legal instruments. As a result, artists are in a weak position when facing violations, such as duplication, imitation, or unauthorized use of their works.

Sociologically, this legal vacuum has the potential to encourage an increase in copyright infringement practices. Without clear normative boundaries regarding the criteria for protection and the requirements for a painting to obtain copyright, certain parties can easily exploit the works of others for commercial purposes without providing fair compensation to the creators. This condition not only harms

individual artists but also weakens the function of law as a means of social control.

Economically, the legal vacuum in the protection of copyright for paintings has implications for the disruption of the creative industry ecosystem. The absence of effective protection causes financial losses for artists and art entrepreneurs, and creates an unhealthy business climate due to rampant counterfeiting and unfair competition. Moreover, weak legal protection can also reduce investment interest in the arts and creative economy.

The protection of copyright (economic and moral) is granted to three elements as follows:

**1. Distortion (twisting facts or the identity of a creation)<sup>[14]</sup>**

Creation distortion can occur when there is a discrepancy between the attribution of the creator's name and the artist's original identity. Creation distortion in the context of art can be manifested through acts of plagiarism, which involve completely copying someone else's work and claiming it as one's own idea and creativity.

**2. Modification (change to a creation)**

Modification in legal practice is the use of a creation as a basis for producing a new work. In the context of painting, modification is an action taken by another party to create a new painting by utilizing someone else's painting as a basis, but without obtaining permission and without making significant changes to the original work.

**3. Mutilation (changing or removing part of a creation)**

Creation mutilation occurs due to the act of cutting a creation that does not result in a new work. In other words, creation mutilation still originates from the same work, but some of its components are cut without any changes to the elements or features within it.

So far, AI cannot be recognized as a creator because it lacks legal capacity, rights, and obligations. Therefore, the protection of the creator's moral and economic rights can be directed toward the individuals responsible for the use of that technology. The Copyright Law is still built on a conventional paradigm that views creations as a direct result of human intellectual activity. The Copyright Law does not explicitly regulate AI-based paintings, whether produced through collaboration between humans and AI or automatically generated by AI. The Copyright Law also does not address new benchmarks for the principles of originality and the intellectuality of creators in works using AI, which could serve as parameters for whether a work is protected. Moreover, there are no strong regulations regarding the limitations on the use of AI in producing paintings; these regulations are only outlined in the Circular Letter of the Minister of Communication and Informatics Number 9 of 2023 on Artificial Intelligence Ethics, which is still too broad and can be categorized as weak because it does not include provisions for sanctions and penalties, making the regulations merely a reminder and not executable. Furthermore, the characteristics of AI that can be used as a medium for creativity are also not explained.

The Copyright Law does not provide a clear definition or normative standard regarding originality, so its assessment heavily relies on the doctrine and practice of "work made

for hire" (WMFH). Lionel Bently and Brad Sherman state that originality in copyright requires the presence of the "author's own intellectual creation"<sup>[15]</sup>. In the context of AI, works are generated through the processing of training data derived from previous works, blurring the line between creation and imitation. This ambiguity has the potential to harm the creators of original works and contradicts the principle of justice, particularly distributive justice in the protection of intellectual property rights. That ambiguity can also stifle the creations of modern artists who use AI in their creative processes.

The Copyright Law also does not regulate the legal status of paintings created entirely by AI without human creative intervention. This ambiguity raises the question of whether the work is protected by copyright, falls into the public domain, or has no legal status at all. According to Sudikno Mertokusumo, good law must provide clear behavioral guidelines for society<sup>[16]</sup>. The absence of such guidelines indicates that the Act has not fully met the principle of utility, as it is unable to provide clear direction in the utilization of AI-based artworks.

The absence of such regulations creates a legal vacuum that impacts the uncertainty of the protection status of AI-based painting artworks. This contradicts the principle of legal certainty, which, according to Gustav Radbruch, is one of the fundamental values of law alongside justice and utility<sup>[17]</sup>. Based on the perspective of development law theory proposed by Mochtar Kusumaatmadja, this condition indicates that the Act has not yet fully performed its function as a means of societal renewal, as it fails to respond to new social realities arising from technological advancements. Kusumaatmadja emphasizes that "law not only functions as a tool to maintain order, but also as a means of societal renewal" (law as a tool of social engineering)<sup>[18]</sup>. The law must be able to follow and direct social changes that arise as a result of development, including technological development. If the law lags behind the dynamics of society, then the law becomes ineffective and loses its utility as an instrument of development. Therefore, a renewal of copyright law based on the principles of legal certainty, justice, and utility is necessary, so that the law can truly function as a means of societal renewal in the era of art and digital technology.

The advancement of the times has brought humanity into an era of automation and speed. In response to this, the Copyright Act is still far behind the existing reality, as evidenced by the lack of a balance of interests approach between creators, users, and public interests. The development of the times demands regulations that not only protect creators but also promote access to knowledge, innovation, and more progressive fair use. However, the provisions regarding limitations and exceptions in the Copyright Law are still relatively narrow and not fully aligned with global practices in the digital era.

## Conclusion

In conclusion, the use of artificial intelligence can be considered a technical device that assists humans in the creative process, just like other technologies such as voice recorders, microphones, or conventional equipment. This means that AI only serves as a means to accelerate and facilitate the production of works without diminishing the fundamental role of humans in it. Humans as legal subjects who carry out the creative process can be recognized as the

copyright holders of artworks produced using AI, provided they meet the elements of originality and have human creative intervention; however, this still needs to be emphasized to avoid multiple interpretations in its application.

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