

Study on Limitations of Economic Copyright in the Age of Generative AI under South Korea's Copyright Act

JaeHoon Lee

*Professor, Dept. of Law, SungShin Women's Univ., Korea, Attorney at Law
E-mail jaehoonlee@sungshin.ac.kr*

Abstract

With the rapid advancement of generative AI technologies, issues concerning copyright and the fair use of copyrighted works have grown increasingly complex. Despite the heightened attention to these challenges, clear legal frameworks to effectively address them remain lacking. In response to this gap, this paper is designed to serve as a starting point for research on balancing copyright law and the fair use of generative AI. This study examines the limitations of economic rights under South Korea's Copyright Act and explores ways to align AI-generated outputs with the existing legal system. In particular, the relevance between the limitations on economic rights and generative AI is quantified using a Ricardian-type scale. Additionally, it highlights the importance of addressing access to copyrighted works during the training of generative AI, particularly in data mining, where reproduction and transmission may occur without authorization from rightsholders. By investigating these issues, the study seeks to contribute to developing a more coherent and adaptable legal framework suited to the era of artificial intelligence.

Keywords: *Generative AI, Artificial Intelligence, Data Learning, Copyright Law, Intellectual Property Restrictions, Text and Data Mining (TDM)*

1. INTRODUCTION

Generative AI is a form of artificial intelligence that utilizes deep learning techniques trained on large-scale datasets to generate new content in response to user input. Since the release of ChatGPT in November 2022, a range of generative AI models such as Gemini and Stable Diffusion have been producing outputs comparable in quality to human-created works. For instance, ChatGPT can write film scripts and, like a director, suggest camera angles, actor placements, expressions, and even lighting techniques. RadioGPT automatically gathers information from the internet to generate broadcast scripts and even produces its voice for narration. Among various industries, the broadcasting sector has been particularly proactive in adopting generative AI to create images, music, and video content [1]. For example, aging actors can be digitally rejuvenated in dramas and films, and even deceased actors can reappear on screen. While such feats are impossible in real life, they have become entirely feasible in video production through generative AI. AI-powered video production captivates audiences by delivering highly realistic and emotionally engaging scenes featuring astonishingly lifelike visuals and creative directions distinct from traditional methods [2]. However, concerns about such uses of generative AI are increasingly being raised. In the 2024 film *Alien: Romulus*, the late British actor Ian Holm, who passed away in 2020, appears on screen through generative AI technology. Holm's face and voice were digitally recreated to portray a new character named Luke. In reality, the role was performed by actor Daniel

Manuscript received: April 24, 2025 / revised: May 14, 2024 / accepted: May 14, 2025

Corresponding Author: jaehoonlee@sungshin.ac.kr

Tel:+82-2-920-7462

Professor, Dept. of Law, SungShin Women's Univ., Attorney at Law

Betts, whose facial expressions and voice were captured and transformed through generative AI to resemble Ian Holm. While media coverage has mainly focused on ethical issues, copyright is one of the most pressing concerns surrounding generative AI, particularly when considering the whole process of output generation. In this case, several key legal questions emerge: Who owns the economic rights to Holm's likeness and voice? Should compensation be given for the past copyrighted works used in AI training? Does Daniel Betts deserve copyright protection for his performance? And what is the copyright status of the newly created AI-generated character, Luke?

As generative AI continues to evolve, copyright disputes are becoming increasingly complex. In some cases, legal gaps that current frameworks are ill-equipped to address have appeared, resulting in confusion and potentially hindering the broader adoption of generative AI technologies [3-6]. Given the growing importance of generative AI, engaging in a comprehensive discussion on the economic rights defined under the Copyright Act is essential, particularly under the assumption that AI-generated outputs qualify as "works" protected by copyright [7-10]. This study investigates the limitations of economic rights stipulated in the Copyright Act and examines how AI-generated outputs can be reconciled with the current legal framework. Ultimately, the study aims to contribute to a more balanced approach between protecting the rights of copyright holders and fostering the development of the generative AI industry in South Korea.

2. Limitations on Economic Rights under the Copyright Act

2.1 Purpose and Significance of the Copyright Act

"Authorship" refers to the Act of creating books, works, or other forms of artistic or scholarly expression. According to standard dictionary definitions, it fundamentally means the Act of creation. Accordingly, "copyright" refers to the legal rights held by an author over their creative works. The Copyright Act defines a "work" as a "creative expression of human thought or emotion" (Article 2, Paragraph 1). Additionally, Article 1 outlines the purpose of the Act as follows: "to contribute to the development of culture and related industries by protecting the rights of authors and neighboring rights, and by promoting the fair use of works." This statement encapsulates the foundational principles of copyright law.

First, the Act prioritizes the protection of authors' and neighboring rights, emphasizing the importance of safeguarding the interests of creators. Second, it promotes the fair use of works to facilitate broader public access, underscoring a clear intent to encourage the widespread dissemination and utilization of creative content. Notably, the Copyright Act does not regard copyright solely as a private right but recognizes its broader social role in supporting and advancing cultural and creative industries. Under the Copyright Act, authors are granted two primary rights categories: moral and economic rights. Moral rights are intrinsically personal and non-transferable, expiring upon the author's death. In contrast, economic rights may be transferred to third parties (Article 45) and remain in effect throughout the author's lifetime and for 70 years after death (Article 39).

2.2 Justification for the Limitation of Economic Rights

In light of historical experiences of social transformation and cultural evolution, copyright protection is essential for encouraging the creation of new works and, in turn, fostering the growth of cultural and related industries. At the same time, limiting economic rights under copyright law to allow broader access to creative content can increase cultural output, promote cumulative creativity, and ultimately contribute to the development of cultural industries. Therefore, copyright limitations aimed at facilitating the active use of works may be justified, provided they do not unduly infringe upon the rights of copyright holders. Such limitations are legitimate insofar as they reduce substantial transaction costs, such as those incurred when seeking prior authorization from rights holders for uses like quotation, thereby maximizing the collective benefit to the cultural sector.

The Constitutional Court has affirmed the legal basis for such limitations. Article 29, Paragraph 2 of the

Copyright Act allows the public performance or playback of commercial sound recordings and audiovisual works without the copyright holder's authorization, as long as the performance is not for a fee or other form of compensation from the audience. However, exceptions such as performances in entertainment venues are subject to additional regulations stipulated in subordinate laws. The Court held that this provision serves a legitimate legislative purpose by enabling the public to enjoy cultural benefits through copyrighted works. It further ruled that allowing anyone to perform commercial sound recordings under specific conditions publicly enhances public access and represents a reasonable means of achieving the intended legislative goals. Although copyright holders may not exercise their rights over such performances regardless of whether profit is involved, Article 29, Paragraph 2, and its implementing decree provide mechanisms for balancing this limitation. Specifically, the Enforcement Decree considers various factors, including the venue's location and purpose, the nature of the establishment, the impact of the performance on business operations, and the size and composition of the audience, in determining whether copyright protection should be reinstated.

Furthermore, public exposure to performances of commercial sound recordings under this provision does not necessarily reduce demand for those recordings. On the contrary, greater public access may enhance visibility and popularity, thereby generating indirect economic benefits for copyright holders. These considerations may also apply to outputs generated by generative AI.

2.3 Types of Limitations on Economic Rights

Limitations on copyright can be categorized as either narrow or broad, depending on whether the use of a work requires specific legal procedures. A narrow limitation refers to instances in which a third party may use a copyrighted work without obtaining permission from the rights holder or fulfilling any procedural obligations, and such use is not considered an infringement. In contrast, a broad limitation permits the use of a work under certain legal conditions, such as the payment of a statutory fee or compensation, even without the explicit consent of the rights holder. The various types of limitations on economic rights under the Copyright Act are summarized in Table 1. While the order of the statutory provisions is not particularly significant, Article 35-5 (Fair Use of Works) stands out. This provision allows for the use of a work as long as the use does not interfere with the normal exploitation of the work and does not unreasonably prejudice the author's legitimate interests. As such, it functions as a general or "catch-all" limitation clause that applies in addition to the specifically enumerated exceptions to economic rights.

Table 1. Provisions on the Limitation of Economic Rights under the Copyright Act

Provision	Title	Main Content
Article 23	Use for Judicial or Administrative Purposes	Permits use in court trials, legislation, administrative processes
Article 24	Use of Political Addresses and Related Works	Allows publicly delivered political speeches or statements made in courts or the National Assembly
Article 24-2	Use of Works in Government Publications	Allows reproduction in official government publications
Article 25	Use for School Education	Allows reproduction/use in educational settings within a necessary scope
Article 26	Use for News Reporting Current Events	Permits news reporting through broadcasting, newspapers, or other means
Article 27	Reproduction of News Articles and Editorials on Current Affairs	Allows reproduction of works in news articles or editorials
Article 28	Quotation of Published Works	Permits educational or research purposes in accordance with fair practice
Article 29	Public Performance & Broadcasting	Permits nonprofit public performance or broadcasting without rightsholder's consent

Article 30	Reproduction for Private Use	Allows individuals to reproduce works for personal use
Article 31	Use in Libraries, Archives, Museums	Enables certain uses by libraries and public institutions
Article 32	Use for Reproduction for Examination Purpose	Permits published works used within a reasonable scope for school entrance examinations
Article 33	Use by Disabled Persons(Persons with visual impairments)	Allows adaptation of works for accessibility by persons with disabilities
Article 33-2	Use by Disabled Persons(Persons with hearing impairments)	Allows adaptation of works for accessibility by persons with disabilities
Article 34	Temporary Reproduction by Information Service Providers	Allows temporary reproduction during digital transmission
Article 35	Use in Public Display	Allows public display of works in certain public or nonprofit settings
Article 35-2	Temporary Reproduction in the Course of Using a Work	Permits a work is used on a computer, temporary reproduction is permitted to the extent deemed necessary
Article 35-3	Incidental Reproduction, etc.	Permits incidentally included in the main subject of filming or similar activities
Article 35-4	Reproduction by Cultural Institutions	Allows publicly operated cultural institutions to use orphan works under non-commercial conditions, with later compensation to the rightsholder if identified.
Article 35-5	Fair Use Clause	Allows fair use if it does not conflict with normal exploitation or harm author's interests
Article 36	Use by Means of Translation and Other Adaptations	Allows limited use of a work through translation, arrangement, or adaptation

3. Copyright Issues Related to Generative AI

The entire process by which generative AI collects data for training and ultimately generates outputs can be divided into five stages, as outlined in Table 2. Among these stages, copyright-related concerns primarily emerge at two critical points: the generative AI model's training phase and its outputs' generation phase. The following sections will examine the legal issues associated with each of these stages, with particular emphasis on their relevance to the provisions of the Copyright Act.

Table 2. Procedure for generative AI deliverables

Stage	Contents
1 st -level	Data Collection
2 nd -level	Data Preprocessing
3 rd -level	Model Training
4 th -level	Model Evaluation & Optimization
5 th -level	AI Output Generation

3.1 Generative AI Training Phase

The Copyright Act of Korea is designed to protect authors' rights and promote the fair use of copyrighted works to foster the growth of cultural industries. Under Article 10, authors are granted economic rights over their works, while Article 46 permits rights holders to authorize the use of their works by others, within clearly defined boundaries.

To encourage broader cultural participation and public access, the law provides certain exceptions to the exercise of economic rights. For example, the incidental use of copyrighted works in news reporting (Article 26) or entrance examinations (Article 32) is permitted without the rights holder's authorization, provided such use falls within a justified scope.

When generative AI systems use copyrighted materials for training purposes, legal questions arise. Training large-scale AI models requires vast data, often including protected content such as literary, musical, or artistic works. The unauthorized use of such data may constitute copyright infringement, unless it falls within a statutory limitation or is authorized by the rights holder. In practice, however, obtaining individual permissions from every rights holder involved is often infeasible.

Therefore, the central legal issue is whether the use of copyrighted works for AI training qualifies as a permissible limitation on economic rights, particularly given that current Korean copyright law does not explicitly recognize AI training. A proposed amendment during the 21st National Assembly sought to introduce a Text and Data Mining (TDM) exception, which would have allowed certain AI learning activities without prior authorization. However, the bill was ultimately discarded, and no new version has yet been introduced in the 22nd National Assembly. One potential legal ground may be in Article 35-5 (Fair Use), which provides a flexible framework for responding to emerging technologies. While fair use provisions offer the advantage of adaptability in the face of rapid technological change, they also carry inherent legal uncertainty and the potential for misuse. There remains an ongoing academic debate regarding whether AI training activities fall within the scope of fair use. Currently, no Korean court has ruled on this issue, underscoring the need for more explicit statutory provisions and judicial interpretation.

3.2 Generative AI Output Phase

Under current Korean copyright law, outputs generated solely by generative AI are not recognized as copyrighted works. However, if a human contributes original creativity by modifying, enhancing, or arranging AI-generated content, those contributions may qualify for protection. Furthermore, the creative selection or arrangement of multiple AI-generated outputs may be considered a compilation work under the law. Although copyright registration is not required for protection, distinguishing between AI-generated content and human-added creative elements may become crucial, particularly in legal disputes over authorship or infringement.

If an AI-generated output is found to be identical or substantially similar to an existing copyrighted work, issues of copyright infringement may arise. Because the Copyright Act does not explicitly address infringement in the context of AI-generated content, Korean courts rely on established case law. In such cases, the plaintiff must demonstrate the following:

- (a) That the allegedly infringed material qualifies as a copyrighted work;
- (b) That they are the rightful copyright holder; and
- (c) That the defendant created a substantially similar work through unauthorized access to the original.

However, not all similarities constitute infringement. The central legal question lies in whether there is substantial similarity between the two works and whether the AI output was derived from a specific protected expression. Korean courts have consistently emphasized that only original and protectable expressions are subject to comparison. For instance, in *Love is Not for Everyone* (2004Da18736) and *Dream High* (2013Da14828), the Supreme Court ruled that common musical elements or general structures do not satisfy the originality requirement. Accordingly, even when a generative AI system produces an output that resembles an existing work, copyright infringement cannot be established unless the copied elements are both protectable and substantially similar. Determining substantial similarity is inherently context-specific and varies based on the type of work, method of use, and other legal considerations. As generative AI technologies continue to evolve, legal interpretations and frameworks must also adapt, requiring ongoing legislative and judicial refinement.

3.3 Analysis of the Degree of Restriction on Economic Rights under Copyright Law about Generative AI

Based on the preceding discussion, the relevance of each provision restricting economic rights under the current Copyright Act to generative AI was analyzed. A five-point Likert scale was employed to assess the degree of relevance between the limitations on economic rights and the applicability of generative AI. A score of 5 indicates the highest level of relevance, while a score of 1 indicates the lowest. The results of this analysis are summarized in Table 3 below. The acts of public display in judicial proceedings, speeches, or exhibitions in publicly accessible places show a low degree of relevance to generative AI (scored as 1). In contrast, activities such as free public works, library use, reproduction for examination purposes, and accessibility adaptations for the hearing and visually impaired are moderately relevant to generative AI (scored as 3). Meanwhile, publishing works, private use, temporary reproduction for AI training purposes, fair use, and translation processes are highly relevant to generative AI (scored as 5).

Table 3. Relevance of Generative AI to Economic Rights Limitations

Provision	Relevance of Generative AI	Provision	Relevance of Generative AI
Article 23	1	Article 32	3
Article 24	1	Article 33	3
Article 24-2	3	Article 33-2	3
Article 25	2	Article 34	4
Article 26	4	Article 35	1
Article 27	4	Article 35-2	5
Article 28	5	Article 35-3	4
Article 29	4	Article 35-4	1
Article 30	5	Article 35-5	5
Article 31	3	Article 36	5

4. Balancing Generative AI and Copyright Protection

Effectively addressing copyright issues related to generative AI requires establishing a forward-looking balance among AI developers, existing copyright holders, and users of generative AI. Requiring developers to obtain legal authorization for all training data may burden this nascent industry excessively. Conversely, overly restricting the economic rights of copyright holders could result in unfair deprivation of compensation for their works. This imbalance could also limit users' access to high-quality AI-generated content in the long term.

As generative AI transitions from being a mere option to becoming a technological necessity, there is a growing need for a new paradigm that reconciles copyright protection with the advancement of generative AI to maintain global competitiveness in the AI sector. In recent years, the commercial success of films and dramas based on webtoons and comics has increased the market value of such content, intensifying cross-media interactions. The integration of generative AI into these creative industries introduces new legal challenges—not only in the form of traditional intra-genre plagiarism disputes but also in the emergence of novel cross-genre copyright conflicts. These developments call for nuanced legal consideration of the distinctive characteristics of AI-generated outputs.

To ensure a sustainable balance between copyright protection and AI-driven innovation, the following measures are proposed:

- (a) Establish a fair management and compensation system for work used in AI training.
- (b) Promote ongoing and responsive communication between generative AI developers and copyright holders, especially in the broadcasting and media sectors;

(c) Support access to training data for startups and SMEs facing financial barriers;

(d) Expand the legal concept of fair use to accommodate the realities of the AI era and revise the Copyright Act accordingly, including introducing transitional fair use guidelines.

For users of generative AI, there exists a risk of copyright infringement if AI-generated outputs are identical or substantially similar to existing works. Accordingly, users should:

(a) Exercise caution when publishing, performing, transmitting, or otherwise disseminating outputs that resemble existing works;

(b) Comply with applicable policies and guidelines when using AI-generated content in media and broadcasting contexts;

(c) Properly credit original sources when incorporating or referencing pre-existing copyrighted works in AI-generated content.

5. Discussion

The Copyright Act of Korea is designed to protect authors' rights while promoting the fair use of copyrighted works, thereby contributing to the development of culture and related industries. To achieve this dual objective, the Act establishes both specific statutory limitations—such as the free use of public works and the quotation of published works (Articles 23 to 36)—and a general limitation clause (Article 35-5 on Fair Use). These mechanisms aim to prevent excessive restrictions on using copyrighted materials resulting from rigid enforcement.

Based on the preceding analysis using the Likert scale, it was found that generative AI is highly relevant to the citation of published works and the temporary reproduction of works during their use under the Copyright Act. Therefore, there is a need for more detailed policy directions regarding the limitation of economic rights on published works. Additionally, it is necessary to revise regulations concerning the limitation of economic rights in private use cases, such as reproduction for personal purposes and translation. Overall, the analysis highlights the importance of establishing clear criteria for determining the fair use of copyrighted works to address these issues comprehensively.

6. Conclusion

This study emphasizes the need for legal discussions concerning the application of text and data mining (TDM) during the training phase of generative AI, particularly regarding whether reproduction and transmission of copyrighted works can occur without prior authorization from rights holders. Furthermore, it addresses potential copyright disputes arising when AI-generated outputs are treated as "works" under copyright law, highlighting both traditional plagiarism concerns and the emergence of novel, unprecedented legal conflicts. Based on these discussions, the study argues that recognizing appropriate limitations on economic rights when copyrighted materials are incorporated into AI training datasets can help minimize legal risks. Such recognition would reduce legal uncertainty and prevent the deterrence of data use within related industries. The rapid development of generative AI technologies has introduced increasingly complex challenges to the existing copyright framework. Issues related to text and data mining and the legal status of AI-generated outputs call for new interpretations and adaptations of copyright law. This study has highlighted the significance of reassessing the limitations on economic rights within the context of generative AI. Moving forward, copyright systems must evolve to protect creators' rights while simultaneously supporting technological innovation reasonably. Such a balanced approach will enable data's stable and expansive use, contributing to the sustainable development of culture, industries, and the broader AI ecosystem.

REFERENCES

- [1] P. H. Kim, J. W. Yoon, and J. H. Yoo, "College Students' Perspectives on ChatGPT Integration in Higher Education and Relevant Ethical Considerations", *International Journal of Advanced Culture Technology*, Vol. 12, No. 1, pp. 234-241, 2024. <https://doi.org/10.17703/IJACT.2024.12.1.234>
- [2] Y. H. Son, "A Study on Creation by Generative AI and Copyright", *Journal of Law and Politics Research*, Vol. 23, No. 3, pp.357-389, Sep 2023. <http://dx.doi.org/10.17926/kaolp.2023.23.3.357>
- [3] C. N. Lee, "The Controversies Surrounding Data Training for Generative AI and Directions for Copyright Law Amendments Related to TDM", *Hannam Journal of Law & Technology*, Vol. 29, No. 3, pp.33-69, Oct 2023. <https://doi.org/10.32430/ilst.2023.29.3.33>
- [4] H. S. Park, "Case Study on Fashion Collections Utilizing Generative AI", *International Journal of Advanced Culture Technology*, Vol. 13, No. 1, pp. 167-173, 2025. <https://doi.org/10.17703/IJACT.2025.13.1.167>
- [5] H. R. Choi, H. S. Lee, "Image Similarity Analysis in Generative AI", *International Journal of Advanced Culture Technology*, Vol. 12, No. 4, pp. 208-214, 2024. <https://doi.org/10.17703/IJACT.2024.12.4.208>
- [6] J. Y. Seo, S. A. Kim, "Generative AI as a Virtual Conversation Partner in Language Learning", *International Journal of Advanced Culture Technology*, Vol. 12, No. 2, pp. 7-15, 2024. <https://doi.org/10.17703/IJACT.2024.12.1.234>
- [7] S. J. Lee and J. B. Kim, "A Study on the Role of Local Governments in the Era of Generative Artificial Intelligence: Based on Case Studies in Gyeonggi-do Province, Seoul City, and New York City", *The Journal of the Convergence on Culture Technology*, Vol. 10, No. 3, pp. 809-818, 2024. <http://dx.doi.org/10.17703/JCCT.2024.10.3.809>
- [8] H. Q. Xie, S. K. Song, "A Foundation for Legal Judgment on Copyright of Generative AI Content: Focusing on Copyright Disputes in South Korea, the United States, and China", *International Journal of Advanced Culture Technology*, Vol.12, No.4, pp. 247-253, 2024, <http://dx.doi.org/10.17703/JCCT.2024.10.4.607>
- [9] J. Y. Lee, "An Exploratory Study on Issues Related to ChatGPT and Generative AI through News Big Data Analysis", *International Journal of Advanced Culture Technology*, Vol.11, No.4, pp. 378-384, 2023, <https://doi.org/10.17703/IJACT.2023.11.4.378>
- [10] H. M. Gwak, "A Study on the Reorganization of the Legal System According to the Development of Generative AI Technology - Focusing on AI's use of data -", *Legal Research Institute of Ajou University*, Vol. 15, No. 1, pp. 43-66, 2024.