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Analysis of Liability When AI Inputs and Outputs Hinge on Copyright Violations: A Case Study of the Studio Ghibli Trend

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Artificial Intelligence is now in direct competition with human creativity. Artistic expression is one of the defining elements of what makes us human. When OpenAI's GPT-4o model began converting images into Studio Ghibli-style characters, many ethical and legal questions arose. In this analytical essay, this problem has been analysed using copyright infringement standards from the United States and India, as well as the recent amendments to the Japanese Copyright Act, 1970. The analysis follows a qualitative study of the Studio Ghibli controversy to understand whether current legal systems are prioritising artificial intelligence over the copyright-protected work of artists. Japan, a country famous for its anime and manga comics, films and books, has shown an AI-friendly approach by allowing text and data mining (TDM) for Gen AI training. Along with that, the Berne Convention is very clear about reproduction or modification in any form of copyright-protected works. What this tells us is that policymakers have a long way to go when it comes to protecting artistic integrity. Since artistic style cannot be protected under current copyright laws around the world, the burden of taking extra care to maintain control over creative work is put on artists themselves even after obtaining copyright.

Keywords: *studio ghibli-style, copyright, data mining.*

INTRODUCTION

The Studio Ghibli trend began in March 2025 when OpenAI's GPT4o model brought an

addition to the rapidly growing advancements in generative AI- an AI image generator. Soon enough, online spaces were flooded with users sharing AI-generated images of themselves in the Studio Ghibli art style. The Studio Ghibli controversy has now posed yet another legal and ethical conundrum to generative artificial intelligence.

This essay seeks to analyse the various ways in which the training process (input) and the image/video generation process (output) come into conflict with various copyright laws. A model is not a magical portal that pulls fresh information from some parallel universe into our own.¹ It heavily needs data to be fed for the identification of patterns. The legalities of Studio Ghibli, a studio that originated in Japan, are heavily influenced by the country's copyright legislation. Japan, in recent times, has also been identified as one of the few countries with direct references to artificial intelligence in its codified copyright laws that allow artificial intelligence companies to carry out text and data mining.

OBJECTIVES

1. To evaluate the legal boundaries of Article 30-4 of the Japanese Copyright Act regarding "non-enjoyment" data mining, specifically the Studio Ghibli controversy.
2. To apply domestic copyright standards from the USA (fair use) and India (R.G. Anand v Delux Films) to determine liability when AI outputs closely substitute or evoke proprietary visual aesthetics.
3. To relate the replication of artistic style by Gen AI to the provisions of the Berne Convention.

INPUT PROCESS IN AI IMAGE GENERATION

A diffusion model is a generative algorithm that works by gradually destroying data with noise and then learning to reconstruct the original data by reversing that noising process.² What this means is that artificial neural networks that copy a human brain's ability to spot patterns are trained on billions of images and videos already available online. Then, the diffusion models add random static to these samples. The denoising process is where the

¹ A Feder Cooper and James Grimmelmann, 'THE FILES ARE IN THE COMPUTER: ON COPYRIGHT, MEMORIZATION AND GENERATIVE AI' (2025) 100(1) Chicago-Kent Law Review
<<https://james.grimmelmann.net/files/articles/the-files-are-in-the-computer.pdf>> accessed 08 June 2026

² Jonathan Ho et al., 'Denoising Diffusion Probabilistic Models' (In Proceedings of the 34th International Conference on Neural Information Processing Systems Curran Associates Inc., Red Hook, NY, USA, 2020)

machine “learns” to recognise patterns (like a human brain). When an AI chatbot user puts a prompt asking it to generate an image (such as, ‘turn this picture of me and my cat into a Ghibli-style picture’), the machine starts subtracting certain noise from the random static to form coherent images according to the prompt.

OpenAI’s GPT4o uses something called an autoregressive model.³ This model also uses massively available data online that often includes copyrighted works – paintings, sketches, films, series, literature, and music. Companies like OpenAI rely on these works for their training data. This in turn leads to questions about the ethical implications of using intellectual property.

A neural network's weights are initially allocated randomly, and at this stage, it is unable to transform these inputs into meaningful outputs. The network learns how to convert inputs into expected outputs by repeatedly exposing it to training data, evaluating its performance on those examples, and making minor adjustments to the weights in a direction that improves performance; sometimes compared to adjusting and turning “knobs and dials.” As a result, whereas code establishes a neural network's fundamental structure, the weights that represent patterns discovered through training data are more likely to be regarded as proprietary by developers or to come under the scrutiny of copyright holders. Some developers employ weights directly in their products after training, while others make them available to the public for use or additional training.

The need for ‘artificial intelligence regulation’ across the world has never been stronger. In fact, post-2011, there has been a significant rise in the number of countries working towards regulation of artificial intelligence, which is a result of the developments in visual storytelling, computers and deep learning.⁴

COPYRIGHT TEST FOR STUDIO GHIBLI UNDER JAPANESE AND AMERICAN LAW

Studio Ghibli, a Japanese animation studio started by Hayao Miyazaki and Isao Takahata, began its operations in 1985. It is known for its completely hand-drawn animations used to

³ ‘Addendum to GPT-4o System Card: Native Image Generation’ (*OpenAI*, 25 March 2025)

<[https://cdn.openai.com/11998be9-5319-4302-bfbf-](https://cdn.openai.com/11998be9-5319-4302-bfbf-1167e093f1fb/Native_Image_Generation_System_Card.pdf)

[1167e093f1fb/Native_Image_Generation_System_Card.pdf](https://cdn.openai.com/11998be9-5319-4302-bfbf-1167e093f1fb/Native_Image_Generation_System_Card.pdf)> accessed 08 June 2026

⁴ Xinyuan Fan & Yuqi Liang, ‘The Research on the Characteristics of AI Application in Art Field and Its Value’ (Proceedings of the 4th International Conference on Language, Art and Cultural Exchange (ICLACE), Hangzhou, China, 2023)

depict carefully crafted scenery and emotionally immersive characters. Meticulously hand-drawn dances of light and shadow, and attention to detail shown through the rustling of leaves and the glistening of water, add a layer of realism, invoking feelings of nostalgia and comfort in viewers. Studio Ghibli films depict the mundane nature of domestic activities, human connection, anti-war themes, and environmentalism. Hayao Miyazaki was once famously quoted as being “utterly disgusted” by AI-generated animations. Naturally, Studio Ghibli has copyright protection for all of their animated content. The new model of OpenAI’s GPT-4o has been trained on Studio Ghibli animations and hence can convert users’ own images to strikingly resembling “Ghibli-style” animations. A keyword here is “style”.

Japan is one of the few countries that have explicit regulations regarding AI. The country has highly permissive copyright laws regarding AI training. This is called text and data mining, which is next to impossible to do manually. Direct regulations relating to unprecedented developments in artificial intelligence help in reducing prolonged litigation.

Studio Ghibli has not sued OpenAI or any other Gen AI platform for producing Ghibli-style images upon user prompts. This amplifies the whole debate around why artistic style is not protected under copyright law. According to Article 30-4 of the Japanese Copyright Act, it is permissible to exploit a work, in any way and to the extent considered necessary, in any of the following cases, or in any other case in which it is not a person's purpose to personally enjoy or cause another person to enjoy the thoughts or sentiments expressed in that work; provided, however, that this does not apply if the action would unreasonably prejudice the interests of the copyright owner in light of the nature or purpose of the work or the circumstances of its exploitation:

(ii) if it is done for use in data analysis (meaning the extraction, comparison, classification, or other statistical analysis of the constituent language, sounds, images, or other elemental data from a large number of works or a large volume.⁵

Unlike the United States, where the ‘fair use doctrine’ is employed, Japan permits the use of copyrighted materials for AI machine learning without authorisation, provided the purpose is not to “enjoy” the original work. This allowed companies like OpenAI to train their Gen AI models on works of Studio Ghibli despite them being protected under copyright laws. Here,

⁵ Copyright Act 1970

we need to deal with one question: Why has reproducing copyright-protected artistic work for machine learning so far been deemed non-infringing if the user/viewer isn't directly "enjoying" the expressive essence of the work during data mining?

Firstly, through text and data mining, OpenAI was given access to the already available frames of Studio Ghibli films and their abstract, mathematical colour palettes, geometric styles and peculiar character styles such as round faces, larger-than-normal eyes and fluid body movement that almost melt one frame into the next. This is the artistic style of Studio Ghibli. The studio holds copyright over the actual characters and storylines, not the above-mentioned features. Therefore, it is not the person entering the prompt that directly "enjoys" the content which has copyright protection.

Secondly, several artificial intelligence companies such as OpenAI follow something called the "opt-out model". opt-out model works on the assumption that by making their content publicly available online, creators are indirectly giving their consent to OpenAI to use their licensed work for text and data mining to train their models. The major problem with this model is that it runs on assumptions and puts the burden to take extra precautions on creators than necessary to protect their work from being used.

Content Overseas Distribution Association is a private trade association based in Japan, founded to reduce piracy around the world and to actively promote the international distribution of Japanese content, such as music, films, animation, TV programs and video games. The organisation also represents Bandai Namco and Square Enix along with Studio Ghibli. After the Ghibli-style image trend blew up on social media, in October 2025 it issued a formal letter explicitly targeting the release of Sora 2 (OpenAI's video generator) because it was producing outputs heavily mimicking Japanese animation. The letter also criticised the copyright infringements that the Opt-out models cause during their scraping process.

Thirdly, a lot of these AI companies rely on the fair use doctrine. It is argued that their use of copyright-protected work for training their artificial intelligence models is not different from a real person "learning" and taking inspiration from artists. However, the four principles established in the case of *Folsom v Marsh* in the United States are somewhat in conflict with

the use of Studio Ghibli films by OpenAI for data mining.⁶ These principles include, namely:

- Purpose and character of the use,
- Nature of the copyrighted work,
- Amount and substantiality of the portion used, and
- Effect of the use on the potential market for the original work.

According to OpenAI, the purpose of text and data mining is to gain new knowledge and uncover new patterns for the development of GenAI.⁷ A consensus among the creative and academic community is that text and data mining activities of GenAI discourage human innovation.⁸ Digital replication of artwork makes it lose its original worth and ability to pique human interest. The biggest critique that GenAI faces is that it can never make its supposed “artwork” represent genuine human emotions. Replication of Studio Ghibli-style artwork separates it from the real world. According to a report published by the U.S. Copyright Office in May 2025, the training process, in a way, implies the violation of the right of reproduction.⁹

While Article 30-4 of the Japanese Copyright Act explicitly permits scraping of copyright-protected works for machine learning without prior authorisation, it also has a limiting proviso: such data mining must not 'unreasonably prejudice the interests of the copyright owner.' For there to be a violation of the fair use doctrine in the US, the effect of the use on the potential market for the original work must be proven. To date, there is no substantial data on Studio Ghibli facing losses or its interests being prejudiced due to OpenAI's image generation capabilities.

However, there does exist a grey area here. If a user generates a Studio Ghibli-style image and merely uses it for personal enjoyment, such as sharing it with a friend, it can be classified as non-commercial use. But when OpenAI begins to charge users for generating such replications, it moves into questionable territory. Upon charging users for generating images,

⁶ Copyright Act 1976

⁷ Kristina Christensen, 'A European Solution for Text and Data Mining in the Development of Creative Artificial Intelligence' (2021) 4(2) Stockholm Intellectual Property Law Review <<https://publicera.kb.se/siplr/article/view/14089>> accessed 08 June 2026

⁸ Artha Dermawan, 'Text and data mining exceptions in the development of generative AI models: What the EU member states could learn from the Japanese “nonenjoyment” purposes?' (2024) 27(1) The Journal of World Intellectual Property <<https://doi.org/10.1111/jwip.12285>> accessed 08 June 2026

⁹ 'Copyright and Artificial Intelligence' (US Copyright Office) <<https://www.copyright.gov/ai/>> accessed 08 June 2026

a process that completely relies on copyright-protected works, commercial use would come into the picture. In this scenario, the AI company indirectly profits from a paid subscriber using its facilities for generating an image that very closely resembles the artistic style of Studio Ghibli. On top of that, during the text and data mining process, the content is not really stored or saved in image files. Rather, it is converted into embeddings (vector representations) during processing, which the model uses to adjust its neural network weights during training.

At this point, there exists no defining case law in any country that could guide AI regulation when it comes to Gen AI imitating the artistic style of an established studio. The case *New York Times v OpenAI* is an ongoing case on similar lines, except it is mainly about Large Language Learning Models exploiting copyright-protected works. There are two questions that policymakers around the world now have to address. First, whether to favour development of artificial intelligence companies or protect artistic integrity. Secondly, should copyright protection in the future include some sort of safeguard for protecting registered and licenced work from data scraping that does not seem to have any plans to stop.

TEST IN INDIAN COPYRIGHT LAW

In *R.G. Anand v Delux Films*, the Supreme Court of India laid down a test to determine whether there has been a copyright violation. The court observed that “One of the surest and the safest tests to determine whether or not there has been a violation of copyright is to see if the reader, spectator or the viewer after having read or seen both the works is clearly of the opinion and gets an unmistakable impression that the subsequent work appears to be a copy of the original.”¹⁰ A big drawback here is that judgments made by a Supreme Court of any country have only persuasive binding in places outside its jurisdiction.

By applying this test to the Studio Ghibli problem, we can conclude that when a user of ordinary prudence prompts the AI to generate a photo of himself in the Studio Ghibli style, he won't think it's a copy of *Spirited Away* or *My Neighbour Totoro* (popular Studio Ghibli films) because the character is clearly the person himself. However, the background texture or layout might be substantially similar to an existing frame from the Studio Ghibli movie. However, when such replicated AI images are shared with millions of people online, it is

¹⁰ *R G Anand v M/S Delux Films & Ors* (1978) 4 SCC 118

certainly possible that one might confuse it with the original version. In case of poor-quality replications, this further has possibilities of tainting the value and creative integrity of Studio Ghibli through no fault of the studio. While an individual style replication may not copy a specific plot, the visual output has a possibility of evoking such an unmistakable impression of Studio Ghibli's proprietary frames.

WHAT DOES THE BERNE CONVENTION SAY?

According to the World Intellectual Property Organisation, copyright laws protect and give recognition to creative artwork such as poetry, literature, art, cinema, music, drama, and scripts. This list is not exhaustive, as technological developments have broadened the scope of what can be given the status of copyright. Under the Indian Copyright Act, 1957, "literary work" includes computer programmes, tables and compilations including computer databases.

According to Article 9 of the Berne Convention, authors of literary and artistic works protected by this Convention shall have the exclusive right of authorising the reproduction of these works, in any manner or form. Under the Berne Convention, creators retain "moral rights" to protect their work from distortions that could damage their reputation.¹¹ Article 6bis states that the author shall have the right to claim authorship of the work and to object to any distortion, mutilation or other modification.¹² This brings us back to whether the data scraped and turned into various other formats for the training process counts as distortion, mutilation or other modification. There are lots of developments to be made when it comes to regulation of artificial intelligence around the world.

CONCLUSION

Studio Ghibli does hold copyrights over its characters and stories but not its artistic style. Globally, it is possible to obtain a copyright over the expression of an idea, not the idea itself. In the Studio Ghibli Gen AI controversy, we can name it as the 'art style' vs 'expression' conflict.

¹¹ Anoushka Mathur & Vagisha Gupta, 'Animating the Line: Studio Ghibli, AI-Generated Art and the Crosscurrents of Copyright and AI Law' (2025) 7(2) Indian Journal of Law and Legal Research <<https://www.ijllr.com/post/animating-the-line-studio-ghibli-ai-generated-art-and-the-crosscurrents-of-copyright-and-ai-law>> accessed 08 June 2026

¹² Berne Convention for the Protection of Literary and Artistic Works 1886, art 6bis

The question of CODA's assertion that when tools generate outputs that closely resemble licensed characters, the initial input mechanism of unauthorised replication during the “learning” process of the machine constitutes a copyright violation is yet to be answered by legislation or judgement. Ethically and morally, it remains a questionable move on the part of Gen AI companies to make billions of copies of works by downloading them, transferring them across storage mediums, and changing their different formats to create modified mathematical versions. Given the rate at which Generative Artificial Intelligence seems to be “progressing”, it is not rational or possible for artists to monitor and issue takedowns of billions of replications of their works; neither during the text and data mining process nor when users publicly share their Gen AI images.

Instead of allowing artificial intelligence companies to continue using the opt-out model, there needs to be serious moves made by policymakers everywhere to protect the interests of the public that they represent, not machines. A shift towards AI-friendly legislation that refuses to prioritise the rights of artists indicates only one thing: human creativity is taking a backseat to give way to artificial intelligence.