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# Analyzing Fair Use and Fair Dealing as Valid Defense in the Context of Generative Models

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#### **ARTICLE DETAILS**

# AILS ABSTRACT

## **Research Paper**

#### **Keywords:**

Artificial Intelligence, copyright, infringement.

The rapid growth of Artificial Intelligence (AI), particularly Large Language Models (LLMs), has sparked significant legal debates around copyright law. These models rely on extensive datasets, often sourced from the internet or shadow libraries, which may include copyrighted materials. This paper examines whether the doctrines of fair use (U.S.) and fair dealing (common law jurisdictions like India) can serve as valid defenses for the unauthorized use of copyrighted content in AI training datasets. The discussion begins by exploring the technicalities of AI training, emphasizing its reliance on diverse data and the challenges posed by algorithmic bias. It highlights the need for incorporating copyrighted materials to reduce these biases and improve inclusivity, especially in diverse societies like India. The paper then delves into the comparative analysis of fair use and fair dealing, outlining their legal frameworks and differences. While fair use allows a flexible four-factor test, fair dealing is more rigid but predictable. The paper applies these frameworks to AI, emphasizing transformative and non-expressive uses that could support defenses under both doctrines. Notable cases like Authors Guild v. HathiTrust and Civic Chandran v. Ammini Amma are discussed to contextualize judicial approaches. Lastly, the paper advocates for Standardized Data Licensing Agreements (SDLAs) to enable lawful use of copyrighted materials while ensuring fair compensation for creators.



It argues that inclusive AI development, which mitigates biases, is crucial for equitable governance, particularly in culturally diverse nations. The methodology integrates doctrinal research, case analysis, and policy recommendations to offer a holistic perspective on balancing innovation and intellectual property rights. This ensures that AI systems are both legally compliant and socially beneficial.

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#### 1. Introduction.

From seeking advice from voice assistants on mobile devices to receiving custom content on social media apps, Artificial Intelligence (AI) has become all pervasive in modern life. Its rapid growth and widespread application have sparked interesting legal debates, particularly regarding the training data used in programming Large Language Models (LLMs), a subset of AI, which needs vast amounts of data to produce outputs to produce personalized responses and mimic human learning. AI researchers and companies scrape data off the internet and even shadow libraries to train LLMs<sup>1</sup> which might include copyrighted works and materials. At the outset, one of the key legal challenges faced by AI developers is whether the unauthorized use of copyrighted material in AI training datasets constitutes copyright infringement or not. Can the doctrines of fair use or fair dealing be invoked as valid defenses in such cases?

This paper aims to address these questions in the following sections. Part I will discuss AI and the use of training data to model these systems, highlighting how this process differs from human learning but remains susceptible to biases present in the training data. Part II will examine the differences between fair use and fair deal doctrines and whether they can be applied as valid defenses considering the transformative and non-expressive arguments. Part III concludes by emphasizing the need to make copyrighted material available for training LLM datasets to mitigate the biases and exploring possible alternative arrangements that could be established between copyright holders and AI developers.

#### 2. AI and Training Data Sets.

Artificial Intelligence (AI) systems rely heavily on vast swathes of data, commonly referred to as training data, to learn and make predictions. This is essential for developing AI models, which can range



from natural language processing to image recognition. AI-LLMs are trained by giving randomized weight to data tokens in training data sets, until a desired outcome is achieved. These weights are rearranged so as to make the outputs or responses remain closer to acceptable social and legal standards. This is in a way distinct from human learning experience<sup>2</sup> which is not statistical but motivated by social interactions, habits and education systems. The more comprehensive and diverse the training data, the better the AI's ability to generalize and perform accurately. For example, Meta's Llama 3 was trained on 15 trillion tokens (equivalent to over ten times the collection of the British Library) and the demand for pristine data is now greater than ever. This has led to predictions that by 2030, we might reach "peak data," where AI's learning outpaces the generation of new data. Consequently, developers are increasingly turning to unverified and unauthorized troves of pirated databases, such as book3<sup>4</sup>, to train LLMs. This leads us to the central issue, whether unauthorized use of copyrighted material constitutes copyright infringement? To avoid such legal liabilities sometimes, AI companies often do not directly scrape data from the internet. Instead, they may fund researchers or use third-party sources, making it harder to trace the origins of the data used. This practice, sometimes referred to as "AI data laundering," can further complicate legal claims by copyright holders. <sup>5</sup> IP scholars argue that copyright law pressures AI developers of all sizes (big companies to small startups) to use biased training data from public domains. Public domains themselves contain unverified sources and biases which are reflected in mainstream society. This bias gets encoded in the machine learning process and results in "algorithmic bias"6 which can lead to absurd outcomes such as, facial recognition systems which are trained on public database dominated by white majority in USA failing to recognize colored people and hiring AI algorithm at Amazon gave preference to male in hiring process than females.<sup>7</sup> These instances necessitate the use of copyrighted materials in training datasets which can negate these biases. But whether such use, engages fair use or fair dealing as exceptions to infringement and serve as valid defense or not is to be explored.

#### 3. Fair Use v Fair Dealing.

Fair use and fair dealings are legal exceptions available to copyright infringement in US and common law countries. These doctrines allow limited use of copyrighted material without obtaining permission or license from copyright holder. Fair use which originated in US in *Falsom v Marsh* (1841)<sup>8</sup>, later codified in Section 107 of the US Copyright Act, 1976<sup>9</sup> balances copyright protection with new creations via four factor test viz, a. Purpose and Character of the Use: Whether the use is for commercial purposes or for nonprofit educational purposes, and whether it is transformative (i.e., adds



new meaning or value) b. Nature of the Copyrighted Work: Whether the work is more factual or creative and factual works are more likely to be fair use, c. Amount and Substantiality: The quantity of the copyrighted material used, and the significance of the portion used in relation to the entire work and lastly d. Effect on the Market: Whether the use negatively impacts the market value or potential market for the original work.

Fair dealing on the other hand in the copyright laws of common law countries including U.K, Canada, India and Australia provides an exhaustive list of exceptions. For instance, Section 52 of the Indian Copyright Act, 1957<sup>10</sup>, provides specific exceptions where the use of copyrighted material is not considered infringement. These exceptions include reproduction for private use, including research and study, and use of work for criticism, review, or news reporting, if the source and author are acknowledged. Additionally, it allows the use of copyrighted material for educational purposes by teachers and students, as well as in judicial proceedings or for legal advice. This section essentially outlines that with an exhaustive list certain beneficial use of copyrighted material, particularly those related to education, research, and public interest, are not restricted by copyright protection.

It is observed that the fundamental difference between these two doctrines lies in their scope and flexibility. While fair dealing approach is highly specific and gives us carefully worded list of exceptions it leaves very little room for judicial discretion<sup>11</sup> but fair use is more open ended with its language and four-factor test, it provides contextual tailoring of case to case based application of the doctrine. It is often argued fair dealing provides better guidance with its certainty and exhaustive list of exceptions, but fair use though has an added advantage of flexibility it comes with the cost of vagueness. Copyright scholars who argue for 'Technological fair use' cases point to this notorious uncertainty and vagueness embedded in fair use doctrine.

#### 4. Applicability of Four Factor Test in Fair Use Exception.

**A. Purpose and character of use** – AI training data sets may contain or may train on copyrighted material to arrive at a better output. If the purpose of using such protected works is to add something new or to add a different character and not as a mere substitute for original use of the work, then it may be termed as 'transformative use'. Today successful defense in the first prong of fair use test depends on applicability of transformativeness character. Originally formulated by Judge Pierre Leval who stated it as something which should not be mere repacking and republishing of the quoted copyrighted material. <sup>13</sup> LLMs use training datasets again and again as raw feed to provide new insights or



understanding about the original work or in a way it adds new expression<sup>14</sup>, which is transformative in character.

Another way AI developers could defend is by arguing that it is for 'non-expressive' use i.e., unauthorized reproduction of copyrighted material by AI algorithms to track copyright's idea-expression distinction and not for broader notion of free expression. Hence thereby being a non-expressive purpose, it can be argued it is a non-infringing fair use as in the case of *Sega v Accolade*<sup>15</sup>. The copying that took place in gathering and preprocessing training data for Generative AI is just as much non-expressive use as the reverse engineering case in *Sega*, where verbatim reproduction of the Sega's source code was done multiple times to extract the non-copyrighted functional code which facilitated Accolade's cross-platform use technology. By being transformative and non-expressive use case LLMs can very well pass the first prong in fair use test.

- **B. Nature of the copyrighted work** In Harper & Row<sup>16</sup>, US Supreme Court hinted that factual works have a greater need of dissemination than fiction. Using more imaginative or creative work is thus less likely to support a claim of fair use than factual work. In LLMs, it depends on the outcomes, prompts and user commands to extract information from the work nonetheless it can be argued that it is a mere factual reproduction of the work with some degree of creative expression. However, the second factor has not played significant role determination of the fair use<sup>17</sup>.
- C. Amount of copyrighted work used Courts have generally held that if the use includes large portion of copyrighted material, fair use defense is less likely to be available and if the use employs a only a small amount of copyrighted material fair use defense is largely applicable. However, this is a general rule and may not always be the case and it depends on the heart of the content if the copied amount or use the case has heart of the content then it is considered as non-fair use. LLMs may produce an output that can mimic the pattern in its database but may not be the verbatim reproduction of the same, as long as its transformative in character<sup>18</sup> it is immaterial how much of copyrighted work is ingested.
- **D.** Effect of the use upon the potential market or value of the copyrighted work being a novel technology, LLMs may not directly challenge the niche or established markets of the copyrighted work which are being used in its datasets. But courts have increasingly favored transformative use cases in upholding fair use exceptions facilitated shifting away from a market-centered approach.<sup>19</sup>



All four prongs stated discussed above are not to be treated in isolation but rather weighed together in analyzing fair use as a valid defense for LLMs use case. In the cases of *Authors Guild v. HathiTrust* <sup>20</sup> and *Authors Guild v. Google* <sup>21</sup>, the U.S. Court of Appeals for the Second Circuit ruled that the mass digitization of a large volume of in-copyright books to extract and reveal new information constituted fair use. While these cases did not directly involve generative AI, they did pertain to machine learning. The principles established by these rulings could be applied by courts currently considering challenges related to the use of copyrighted material for training generative AI models, supporting a fair use defense.

#### 5. Applicability of Fair deal exception.

The fair deal doctrine may not give that much latitude for a judge to decide the cases but its exhaustive list provides certainty in its application for LLMs training and development. Section 52 (1) (a) (i) of the Indian Copyright Act provides exception for private or research use which directly covers AI prompt-based use cases and personal use based on a subscription model. Though such provisions are not as broad in scope compared to the four-factor test of fair use, court in OUP v Narendra Publishing House<sup>22</sup> has held that Section 52 must be given a liberal construction and exhaustive list in it only serve as broad heads, it resorted to the principles enunciated by foreign courts in fair use. If the goal of copyright law is to protect and promote innovation, then fair dealing should be interpreted liberally in a manner consistent with this objective. This approach aligns with the three-factor test outlined by Lord Denning in *Hubbard v Vosper*, which closely resembles the four-factor test under Section 107 of the U.S. Copyright Act. This interpretation was recognized by the Kerala High Court in *Civic Chandran v Ammini Amma*<sup>23</sup>. Consequently, the analysis provided in the previous section would be applicable to Indian jurisprudence surrounding fair dealing and must present it as a valid defense in the development of AI language models.

#### 6. Conclusion

Fair use has historically played a pivotal role in enabling the development of new technologies and advancing technological evolution. By providing a flexible framework that balances the rights of creators with the public interest, fair use has allowed innovations to thrive without being stifled by excessive restrictions. In the context of Artificial Intelligence (AI), particularly Large Language Models (LLMs), this doctrine assumes even greater importance. These models rely on vast datasets for training, and the inclusion of copyrighted material, though contentious, can be a critical component in ensuring



the efficacy and inclusivity of AI outputs. However, to address the legal and ethical challenges associated with such use, Standardized Data Licensing Agreements (SDLAs) should be encouraged. These agreements would provide a structured mechanism for negotiations between AI developers and copyright owners, ensuring that the use of copyrighted material in training datasets is both lawful and mutually beneficial.

SDLAs can promote transparency and accountability by defining clear terms for the inclusion of copyrighted works in AI datasets. They can also establish frameworks for fair compensation to creators, fostering a collaborative environment where innovation and intellectual property rights coexist. By making copyrighted materials available for lawful use, SDLAs could mitigate biases in AI models. For example, original scholarly articles or culturally significant works offer unique perspectives that are often absent in open-access or public-domain datasets. Including such materials in training data would not only enhance the accuracy of AI systems but also ensure that they reflect the diverse realities of society.

This approach is particularly relevant for developing countries like India, which is characterized by vast racial, linguistic, and geographical diversity. Algorithmic biases, often arising from incomplete or skewed datasets, pose significant challenges to inclusive governance. For instance, initiatives like the National Automated Facial Recognition System (NAFRS) could benefit from datasets enriched with cultural studies and surveys. Such additions would make the system more equitable, avoiding discriminatory outcomes like misidentification of individuals from minority communities. In this context, fair use can serve as a valid defense when the unauthorized use of copyrighted works provides substantial public benefits, such as promoting social justice, reducing biases, or improving governance mechanisms.

Nonetheless, striking the right balance between public interest and the rights of original creators remains a critical challenge. While fair use can justify the inclusion of copyrighted materials in training datasets under specific conditions, over-reliance on this defense without proper mechanisms for compensating creators could lead to exploitation and discourage content creation. The legal frameworks surrounding fair use and fair dealing need to evolve to address these concerns. Courts and policymakers must carefully evaluate the transformative nature of AI's use of copyrighted works, the impact on the market for the original work, and the broader societal benefits derived from such use.

In conclusion, the inclusion of copyrighted materials in AI training datasets, when governed by SDLAs, can pave the way for both lawful innovation and equitable social progress. As AI continues to shape the future, fostering collaboration between developers and copyright owners is imperative to ensure that



technological advancements are inclusive, sustainable, and respectful of intellectual property rights. Such measures will not only uphold the principles of fairness but also ensure that AI systems contribute meaningfully to the diverse.

#### 7. References

<sup>&</sup>lt;sup>1</sup> Mathew Ingram, 'An AI engine scans a book. Is that copyright infringement or fair use?' (Columbia Journalism Review, 26 October 2023) <a href="https://www.cjr.org/the\_media\_today/an\_ai\_engine\_scans\_a\_book\_is\_that\_copyright\_infringement\_or\_fair\_use.php">https://www.cjr.org/the\_media\_today/an\_ai\_engine\_scans\_a\_book\_is\_that\_copyright\_infringement\_or\_fair\_use.php</a> accessed 06 August 2024.

<sup>&</sup>lt;sup>2</sup> Matthew Sag, 'Fairness and Fair Use in Generative AI' (2024) 92 Fordham Law Review 1887, 1908.

<sup>&</sup>lt;sup>3</sup> Clément Godbarge, 'AI needs cultural policies, not just regulation' (The Hindu, 01 August 2024) <a href="https://www.thehindu.com/opinion/op-ed/ai-needs-cultural-policies-not-just-regulation/article68469548.ece">https://www.thehindu.com/opinion/op-ed/ai-needs-cultural-policies-not-just-regulation/article68469548.ece</a> accessed 01 August 2024.

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> James Vincent, 'The scary truth about AI copyright is nobody knows what will happen next' (The Verge, 15 November 2022) < <a href="https://www.theverge.com/23444685/generative-ai-copyright-infringement-legal-fair-use-training-data">https://www.theverge.com/23444685/generative-ai-copyright-infringement-legal-fair-use-training-data</a> accessed 27 July 2024.

<sup>&</sup>lt;sup>6</sup> Benjamin L. W. Sobel, 'Artificial Intelligence's Fair Use Crisis' (2017) 41 Colum JL & Arts 45, 95.

<sup>&</sup>lt;sup>7</sup> Patrick K. Lin, 'Fair's Fair: How Public Benefit Considerations in the Fair Use Doctrine Can Patch Bias in Artificial Intelligence Systems' (2023) 11 Ind JL & Soc Equal 229.

<sup>&</sup>lt;sup>8</sup> Falsom v Marsh (1841), 9. F.Cas. 342.

<sup>&</sup>lt;sup>9</sup> Section 107, The US Copyright Act, 1976.

<sup>&</sup>lt;sup>10</sup> Section 52, Indian Copyright Act, 1957.

Nikhil Viswam Menon, Karun Roy & Gowri R. Parvathy, 'Unravelling the Differences between Fair Use and Fair Dealing: Limitations to Copyright' (2023) 3 Indian Journal of Integrated Research in Law 1, 5.

<sup>&</sup>lt;sup>12</sup> Edward Lee, 'Technological Fair Use' (2010) 83 S Cal L Rev 797, 802.

<sup>&</sup>lt;sup>13</sup> Pierre N. Leval, 'Toward a Fair Use Standard' (1990) 103 Harv. L. Rev. 1105, 4.

<sup>&</sup>lt;sup>14</sup> Lin (n7) 239.

<sup>&</sup>lt;sup>15</sup> Sega v Accolade (1992), 977 F.2d 1510.



Daniel Rodriguez Maffioli, 'Copyright in Generative AI Training: Balancing Fair Use through Standardization and Transparency' (21 August 2023) <a href="https://papers.ssrn.com/sol3/Delivery.cfm/SSRN\_ID4579322\_code4200139.pdf?abstractid=4579322&mirid=1≥ accessed 02 August 2024.">https://papers.ssrn.com/sol3/Delivery.cfm/SSRN\_ID4579322\_code4200139.pdf?abstractid=4579322&mirid=1≥ accessed 02 August 2024.</a>

<sup>&</sup>lt;sup>17</sup> Ibid.

<sup>&</sup>lt;sup>18</sup> Authors Guild v. Google (2015), 804 F.3d 202.

<sup>&</sup>lt;sup>19</sup> Neil Weinstock Netanel, 'Making Sense of Fair Use' (2011) 15 Lewis & Clark L Rev 715, 725.

<sup>&</sup>lt;sup>20</sup> Authors Guild v. HathiTrust (2014), 755 F.3d 87 (2d Cir. 2014).

<sup>&</sup>lt;sup>21</sup> Authors Guild (n17).

<sup>&</sup>lt;sup>22</sup> The Chancellor Masters and Scholars of The University of Oxford v. Narendra Publishing House and Ors. [IA 9823/2005, 51/2006 and 647/2006 in CS(OS) 1656/2005].

<sup>&</sup>lt;sup>23</sup> Civic Chandran v. Ammini Amma, 16 PTC 329 (Kerala).