

# Artificial Intelligence and Legal Personhood: Exploring Its Role in Copyright Law

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**Abstract-**The swift advancement of Artificial Intelligence (AI) has profoundly impacted the creative sectors, allowing AI systems to independently produce original works across literature, music, visual arts, and beyond. This progress poses significant challenges to established copyright laws, which are fundamentally based on human authorship and the concept of legal personhood. This paper investigates the intricacies of AI-generated works in the context of copyright legislation, questioning whether AI should be recognized as a legal entity or if alternative copyright ownership models should be explored. The research examines the historical notion of legal personhood, its relevance to non-human entities, and the possibility of extending it to AI. By conducting a comparative analysis of legal frameworks in various jurisdictions—including the United States, United Kingdom, and China. This study highlights critical legal challenges and emerging trends in the regulation of AI copyright. Different legal models are evaluated, such as exclusive human ownership, collaborative authorship between AI and humans, and independent copyright rights for AI. The results indicate that while AI-generated works offer new avenues for innovation, they also introduce ethical, economic, and legal dilemmas, particularly concerning accountability, originality, and the risk of market monopolization. The research promotes a balanced legal framework that encourages AI-driven creativity while adhering to current copyright regulations. Ultimately, the study emphasizes the need for international collaboration in policy formulation to address the increasing influence of AI in copyright law, aiming for a legal structure that aligns technological progress with intellectual property rights.

**Keywords:** artificial intelligence, copyright, authorship, ownership.

## 1. INTRODUCTION

In the contemporary landscape of artificial intelligence (AI), the lines separating human-created content from that produced by machines are increasingly indistinct. AI's capacity to learn from extensive datasets and replicate human styles raises significant concerns regarding the adequacy of copyright protections for works that involve minimal human input. Copyright legislation has evolved beyond merely recognizing human creativity and labor, now necessitating exceptions for sophisticated AI-generated outputs. The question of copyright ownership for these AI-generated creations has become more intricate, impacting artists, businesses, and consumers alike. It is essential to revise existing copyright laws to reflect the distinctive nature of AI-

generated content. In this rapidly evolving environment, it is vital to find a balance that fosters innovation while safeguarding the rights of creators. This research aims to explore and address the complex challenges associated with AI-generated works and the legal frameworks that govern them, all while upholding the fundamental role of copyright in protecting original creations.

The emergence of AI in the realm of content creation calls for legal reforms to establish clear guidelines regarding authorship and ownership, ensuring that copyright protections are adaptable and equitable for both creators and users. It is imperative to analyze the impact of AI on copyright protections, particularly the challenges introduced by AI-generated content. Additionally, assessing the current copyright law frameworks' effectiveness in accommodating the unique aspects of AI in content creation is essential. To navigate this evolving landscape and safeguard intellectual property rights, it is necessary to proactively address issues such as ownership determination and copyright eligibility concerning AI-generated works.

The notion of authorship is fundamental to copyright law, which aims to safeguard the intellectual works of individuals or organizations. The emergence of artificial intelligence systems, such as ChatGPT, Gemini, perplexity and GPT-4 (OpenAI) which generate creative content autonomously, poses significant challenges to the conventional interpretation of authorship. This study explores the potential for an AI system to be recognized as a legal entity in the context of copyright and examines the wider consequences of such a designation.

Artificial Intelligence (AI) has become a pivotal element in numerous sectors, particularly within the creative domains of art, music, literature, and design. The integration of AI into these areas has significantly changed the processes of creation, distribution, and consumption of creative works, prompting important legal, ethical, and cultural considerations.<sup>1</sup>

## 1.1 HISTORICAL CONTEXT AND DEVELOPMENT

The integration of artificial intelligence into creative sectors can be traced back to the mid-20th century, marked by pioneering experiments in computer-generated art and music. The Emergence of Artificial Intelligence in the 1950s is recognized as the foundational period for artificial intelligence (AI), marked by several key developments, Alan Turing published his influential paper, "Computing Machinery and Intelligence," which introduced the Turing Test as a criterion for assessing machine intelligence. A pivotal moment in AI research occurred in 1956 when John McCarthy coined the term "Artificial Intelligence" during the Dartmouth Workshop. The primary objective of early AI research was to translate human knowledge into computer programs utilizing symbolic reasoning and logic-based frameworks.

Rapid advancements were constrained by inadequate resources and computing power. Initial efforts to encode human knowledge relied on logic and symbolic reasoning. However, the development of these early AI

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<sup>1</sup> Craig S. Smith, A.I. Here, There, Everywhere, THE NEW YORK TIMES.

systems faced significant challenges due to insufficient resources and processing capabilities, resulting in a gradual progression in the field during its inception. In these early stages, the systems were basic, relying on pre-defined algorithms and requiring significant human intervention. As technology progressed, particularly with the advent of machine learning and deep learning techniques, AI systems began to process extensive datasets, identify patterns, and produce outputs that closely resemble human creativity. AI's Initial Progress and Challenges This period experienced significant advancements alongside notable challenges, The 1970s marked the emergence of expert systems designed to encapsulate the knowledge of specialists across various fields. Data scientists developed rule-based systems capable of utilizing predefined rules to solve specific problems. These systems faced constraints due to their inability to manage ambiguity and complex scenarios, resulting in a restricted scope of application.<sup>2</sup>

The Artificial Intelligence Winter, This era was characterized by stagnation in progress, primarily due to insufficient funding and unmet expectations. Machine Learning and Data-Driven Strategies the 1990s heralded a pivotal shift in the field of AI 1990s, a paradigm shift towards machine learning methodologies occurred. Emergence of Machine Learning, Algorithms began to learn from data using techniques such as neural networks, decision trees, and support vector machines. Neural Network Revolution, Inspired by the human brain, neural networks gained traction for tasks such as speech recognition, stock market forecasting, and movie recommendations. Enhanced processing power and increased data availability propelled the advancement of data-driven AI. New Domains Emerge, Recommendation systems, image recognition, and natural language processing (NLP) began to take shape. AI systems excelled in speech recognition, stock prediction, and recommendation systems, Enhanced Performance, Improvements in processing power and data accessibility drove significant advancements.

The AI Revolution, Deep Learning and Neural Networks evolved in 2000s to 2010, the 21st century has marked the emergence of deep learning and neural networks. Deep learning, a branch of machine learning that emulates the architecture and functioning of the human brain, reached the forefront of technological advancement. Deep Neural Networks, Multi-layered neural networks surpassed expectations in various domains, including image recognition, natural language processing, and gaming. Innovative Developments, Deep learning facilitated significant advancements in speech recognition, natural language processing, and computer vision. Corporate Investment, Major technology companies such as Facebook, Google, and OpenAI made substantial contributions to AI research. Artificial Neural Networks, Sophisticated algorithms, based on interconnected neurons, drove progress in deep learning.

<sup>2</sup> Andrzej Grzybowski, Katarzyna Pawlikowska-Łagód, W. Clark Lambert, A History of Artificial Intelligence

In the 21st century, there has been a remarkable expansion in the capabilities of AI. This progression has established AI not only as a supportive tool but also as a capable entity for the autonomous creation of original works.<sup>3</sup>

## 2. THE INDIAN COPYRIGHT ACT AND AI

The Indian Copyright Act of 1957 establishes the fundamental legal framework for copyright protection within India. This legislation safeguards various forms of intellectual creations, including literary, artistic, dramatic, and musical works, cinematograph works and sound recordings. A significant issue arises regarding artificial intelligence: can works generated by AI be classified as “literary works” and thus receive copyright protection under this statute.

The definition of Literary Work under the Act, Original literary works is protected under copyright as stipulated in Section 13(1) (a) of the Copyright Act. Section 2(o) provides a comprehensive definition, describing literary work as the output of human creativity manifested through verbal or numerical expressions that can be documented in writing. This expression must result from significant skill, mental effort, labor, or judgment. The definition encompasses computer programs, databases, and compilations. Consequently, literary works do not need to possess aesthetic value; rather, they simply need to be written expressions. While originality is a consideration, the primary emphasis should be on the articulation of ideas within literary creations.<sup>4</sup> A conclusion has also been reached in the case of *London Press Ltd. v. University Tutorial Press*, wherein the Court was considering whether copyright protection can be granted to the examination papers in University.<sup>5</sup> If placed in the law as it stands, various AI generated works fall under the scope of Section 13 of the Act such as for art, see NFTs, and Google's Art Generator.

In the Copyright Act, Section 2(d) specifies the definition of 'author' concerning copyright protection. Additionally, Section 17 states that for literary or dramatic works, the author is recognized as the initial owner, while for musical compositions, the composer holds that status.<sup>6</sup> In the case of *Amarnath Sehgal v. Union of India*, the Court acknowledged the moral rights of an "author" as defined by the Act. It stated that "a creative individual possesses a unique power and aura of original genius, establishing a special bond between the creative author and their work." The focus is on the term "individual," which signifies the person entitled to the rights granted to an author.<sup>7</sup>

<sup>3</sup> Haenlein, Michael & Kaplan, Andreas. (2019). a Brief History of Artificial Intelligence: On the Past, Present, and Future of Artificial Intelligence. *California Management Review*.

<sup>4</sup> Avishek Chakraborty, Authorship of AI Generated Works Under the Copyright Act, 1957 : An Analytical Study, [2019] 8.2 NULJ 37

<sup>5</sup> *London Press Ltd. v. University Tutorial Press* [1916] 2 Ch. 601

<sup>6</sup> Sec.2(d) of Copyright Act , 1957

<sup>7</sup> *Amarnath Sehgal v. Union of India* 2005 (30) PTC 253 Del

### 3. LEGAL PERSONHOOD

Legal personhood serves as a cornerstone in legal frameworks globally, identifying entities that are capable of holding rights and responsibilities within the legal system. Initially, this concept was limited to human individuals; however, the evolution of law has expanded to include non-human entities as legal persons in certain contexts. AI-generated creations pose significant challenges to conventional concepts of authorship and originality within the framework of the Indian Copyright Act. Given that AI functions either autonomously or semi-autonomously through algorithms and data inputs, pinpointing a human author becomes increasingly complicated. The Act does not acknowledge non-human entities, such as AI, as potential authors. As a result, works produced by AI exist in a legal gray area, as the Act does not contain specific provisions to address these situations.

Moreover, originality is a fundamental requirement for copyright protection under Indian law. Historically, courts have interpreted originality to necessitate a certain level of creativity and intellectual effort from the author. Although AI systems can produce creative outputs, they do so by utilizing existing data and algorithms, which raises concerns about whether these outputs fulfill the originality criteria.

The acknowledgment of non-human entities as legal persons illustrates the law's capacity to adapt to changing societal and technological demands. However, extending this notion to artificial intelligence presents distinct challenges. Unlike corporations or entities, AI systems do not possess physical form, intent, or the ability for moral reasoning, which complicates issues of accountability and rights. Investigating these aspects requires a careful balance between innovation and ethical as well as legal considerations, a central theme in the discourse surrounding AI personhood.<sup>8</sup>

### 4. ARTIFICIAL INTELLIGENCE IN THE CREATIVE DOMAIN

Artificial Intelligence (AI) has significantly impacted the creative landscape by producing works that rival human creativity in fields such as art, music, literature, and design. Advanced machine learning techniques have enabled AI systems to demonstrate remarkable capabilities in generating original content, challenging traditional notions of creativity and authorship. AI systems can outperform human capabilities when it comes to analyzing large data sets, discovering patterns, and producing outputs that mimic human creativity. Such systems employ technologies such as Generative Adversarial Networks (GANs), Natural Language Processing (NLP), and deep learning to create products in almost every possible artistic and creative sphere.

#### 4.1 VISUAL ART

Artificial intelligence (AI) is transforming the realm of visual arts by merging the boundaries between reality and creativity. AI-generated art encompasses any artistic expression that has been produced or refined using AI technologies. This development questions the conventional perception of art as an exclusively human

<sup>8</sup> B. Solum, Legal Personhood for Artificial Intelligences, 70 N.C.L. REV. 1231 (1992)

pursuit, fostering a collaborative relationship between humans and machines. The artist establishes the framework, while the AI contributes the intricate details, leading to the creation of artworks that may not have been achievable through traditional methods. Furthermore, the integration of AI with augmented reality (AR) is revolutionizing the visual arts landscape, unveiling new avenues for creativity and engagement.

AI's Role in Art Creation, Data as the Foundation AI systems are developed using vast datasets that encompass a wide array of artistic styles, genres, and influences. This extensive training enables the AI to identify patterns, styles, and subtle details inherent in the data. Generative Adversarial Networks (GANs) are pivotal in various projects. The dynamic interaction between the generator and discriminator within GANs drives the creative process. The generator produces new content by interpreting the patterns it has learned during training, while the discriminator serves as a critic, encouraging the generator to improve and refine its outputs.<sup>9</sup>

Variational Auto encoders (VAEs) VAEs add a probabilistic aspect to the creative process. The encoder transforms input data into a distribution within the latent space, promoting variability and allowing for a range of outputs during the decoding phase. By sampling from this distribution, an element of randomness is introduced, resulting in the creation of distinctive and unexpected artistic works. Collaboration between Artists and AI Human artists play an active role in interacting with the algorithms, influencing the generative process to shape the final piece of art. This collaborative effort challenges conventional ideas of authorship, creating a shared space where human creativity and AI technology coexist. The training process establishes an ongoing feedback loop. As the AI generates new content, the discriminator assesses its authenticity, guiding the generator to enhance its methods. This iterative process persists until a balance is achieved - a stage where the generated content aligns seamlessly with the complexities of the training data. Few of the examples are Art breeder, RunwayML, DALL-E by Open AI, NVIDIA GauGAN, etc.

## 4.2 MUSIC COMPOSITION

AI is transforming the landscape of music composition by processing extensive musical datasets and producing original works. It utilizes machine learning and neural networks to discern the components that contribute to a song's success, including melodies, rhythms, and harmonies.

The process of AI music composition involves several key steps, AI systems are exposed to a diverse range of music across various genres and styles, encompassing melodies, harmonies, rhythms, and structural elements. AI detects recurring themes, chord progressions, and rhythmic patterns within the collected data. Deep learning models, particularly neural networks, are trained on substantial music datasets, enabling them to identify complex patterns and structures. Drawing from its acquired knowledge, AI generates new music that creatively blends familiar elements. Generative Adversarial Networks (GANs) consist of a generator and a

<sup>9</sup> Khan, Hanif. (2021). Types of AI | Different Types of Artificial Intelligence Systems | fossguru.com/types-of-ai-different-types-of-artificial-intelligence-systems. 9. 50.

discriminator that collaborate; the generator composes music, while the discriminator assesses it, facilitating the production of music that increasingly mirrors human compositions.

AI algorithms can swiftly create rhythmic and melodic frameworks, providing composers with immediate inspiration and expediting the music creation process. Additionally, AI can amalgamate information to craft unique musical pieces by integrating elements from various genres, potentially leading to innovative and novel sounds. Notable AI music tools include OpenAI's MuseNet and Google's Magenta, which leverage neural networks to generate compositions ranging from classical symphonies to contemporary pop music. AIVA serves as an AI music generation assistant, enabling users to produce new songs in over 250 styles within seconds.

### **4.3 LITERATURE AND TEXT GENERATION**

Text generation refers to the application of artificial intelligence to autonomously create coherent and meaningful text, which can range from sentences and paragraphs to complete documents. This process employs methodologies from natural language processing (NLP), machine learning, and deep learning algorithms to evaluate input data and produce text that resembles human writing. The primary objective is to generate text that is grammatically sound, contextually relevant, and appealing to the target audience.

Key aspects of text generation include, Mechanism of Action- AI models are trained on extensive text datasets to identify patterns, grammatical structures, and contextual nuances. Utilizing this acquired knowledge, these models can generate new text based on specific prompts or conditions. Language models such as GPT (Generative Pre-trained Transformer) and Google's PaLM leverage deep learning techniques and neural networks to grasp sentence structures and produce coherent, contextually appropriate text.

Natural Language Processing (NLP) - Natural language generation (NLG) and natural language understanding (NLU) are critical elements of an effective NLP system. NLU enables machines to understand and interpret human language, while NLG allows them to generate text or speech that mimics human communication. Deep Learning Techniques- Conventional deep learning methods, including RNN, LSTM, and CNN, are utilized for text generation. Furthermore, advanced models such as transformers, BERT, GPT-2, and GPT-3 have emerged, enhancing the capabilities of text generation. AI-driven systems are capable of producing articles, blog entries, and product descriptions. Text generation is also employed in chatbots, virtual assistants, language translation, and summarization tasks.

### **4.4 GAMING AND INTERACTIVE MEDIA**

AI plays a crucial role in enhancing gaming and interactive media by delivering experiences that are more realistic, adaptive, and immersive. Non-Player Characters (NPCs) powered by AI exhibit intelligent behaviors that mimic human actions and decision-making, resulting in more authentic and dynamic interactions. For instance, titles like Red Dead Redemption 2 leverage sophisticated AI to construct vast, lifelike

environments where NPCs respond in real-time to player actions. In the game *Alien: Isolation*, the AI-driven Xenomorph adapts to player behavior, creating a uniquely frightening experience. Additionally, AI enhances visual quality through methods such as NVIDIA's DLSS, which elevates low-resolution images to higher resolutions. AI also plays a significant role in procedural content generation and improves gameplay by adjusting to player strategies, as demonstrated in *XCOM*. Moreover, AI's capabilities are utilized in the recreation of classic games, including *Mine craft*.<sup>10</sup>

## 5. COPYRIGHT LAW AND THE QUESTION OF AUTHORSHIP

The advent of Artificial Intelligence (AI) has thrown significant challenges to the traditional frameworks of copyright law, especially with regard to the concept of authorship. In India, the Copyright Act, 1957 provides the legal basis for protecting creative works, but its provisions are rooted in the assumption of human authorship. This section explores traditional notions of authorship under Indian copyright law and the difficulties in applying these principles to AI-generated works.

Under the Indian Copyright Act, 1957, authorship is central to the grant of copyright protection. The Act defines an “author” in Section 2(d) as the individual responsible for creating the work, depending on the type of work. For instance: For literary, dramatic, musical, or artistic works, the author is the person who creates the work. In cinematograph films and sound recordings, the author is the producer. For computer programs, the author is the person who causes the work to be created. The law, therefore accords much importance to the requirement of originality in the work under copyright. This has been interpreted by courts in India as requiring some degree of independent skill, labor, and judgment of the author.<sup>11</sup>

The particular challenges that arise from AI works come from their characteristic of working in most cases on autonomous or semi-autonomous modes with little to no human interference involved, thereby failing in associating authorship with a human author as Indian copyright law expects. Since AI works have no legal personhood, it can never be acknowledged as an author; thereby creating a legal gap for AI-generating works. More questions have also emerged on whether the AI output satisfies the novelty requirement under the Act since the creations are normally derived from existing data and algorithms. Detractors claim that AI, not being conscious or having intent, cannot produce works that have real creativity.

Ownership of AI-generated works is also a new dimension of complexity. The programmer who created the AI, the user who provides inputs or the funding entity that developed the AI could be some of the contenders for ownership. None of the above entities will come under the classical definition of an author, as defined in Indian law. This vagueness leaves an opening for doubt, especially among industries that heavily rely on AI for creative content. The allowance of copyright rights to AI-created works also comes with economic

<sup>10</sup> *ibid*

<sup>11</sup> Gyandeep Chaudhary, *Artificial Intelligence: Copyright and authorship /ownership Dilemma* (2022) 13(2) *Indian Journal of Law and Justice*



and ethical implications. When automated systems achieve the same acknowledgment as human writers, human creativity would be demoted.

The Indian Copyright Act does not have any provisions for AI-generated works, and this is a significant legal gap. On the other hand, some jurisdictions, such as the United Kingdom, have adopted specific provisions that recognize computer-generated works, attributing authorship to the individual arranging their creation. India has not considered such measures yet, and it is high time to revisit and adapt its copyright laws to address the complexities of AI-generated works. Legislative reform is necessary to achieve a balance between innovation in AI-related industries and the rights and interests of human creators.

## 6. ATTRIBUTING LEGAL STATUS TO ARTIFICIAL INTELLIGENCE

Currently, artificial intelligence does not have recognition as an independent legal entity. While one could argue that a corporation possesses legal status, it is important to recognize that this status is derived from the individuals who constitute the foundation of the organization. Thus, granting legal status to a corporation is justifiable. However, using this as a precedent for conferring legal personhood on artificial intelligence is contingent upon AI demonstrating a broad range of cognitive abilities that parallel human-like cognitive and perceptual functions.<sup>12</sup>

Artificial intelligence lacks the comprehensive human-like intellectual capabilities required for legal personality. A specialized understanding of a single domain, such as playing chess or composing music, is insufficient to grant such recognition. Additionally, AI's absence of self-awareness further complicates this possibility. A more practical approach would be to assign ownership rights to the individuals most closely connected to the AI—namely, its software developer or user. However, while these individuals might seem like suitable candidates, challenges arise because they do not meet the copyright law's definition of an 'author.'

In 2017, the European Parliament took a bold step by exploring the possibility of granting legal personality to machines, aiming to provide them with rights. In October 2020, the Parliament released a report on intellectual property rights (IPRs) related to advancing AI technologies. The report stated that under current EU legislation, AI-generated works may not qualify for copyright protection because the requirement of 'originality' is intrinsically tied to the intellectual creation of a natural person. However, the European Parliament recognized the importance of protecting AI-created works and proposed that such works be deemed copyrightable based on their creative output rather than the process behind their creation. To address this, the Parliament suggested granting copyright to the natural person involved in the development of these works. The report also emphasized that granting legal personhood to AI devices might not be an ideal solution, as it could undermine the contributions of human inventors.

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<sup>12</sup> *ibid*

## 7. THE DEBATE AROUND AI LEGAL PERSONHOOD

A significant and highly debated philosophical and practical issue has been raised about whether AI should be accorded legal personhood. The traditional definition of legal personhood grants rights and obligations to humans as well as a few non-human entities, like corporations. It becomes very difficult to apply the concept of legal personhood to AI because the ethical justification behind it and the practical implications raise a lot of questions, particularly concerning copyright ownership.

### 7.1 Philosophical and Ethical Foundations of Legal Personhood

If one philosophically views legal personhood, it has been historically asserted on qualities such as self-consciousness, moral agency, and the ability to make independent choices and decisions. Given its sophistication, AI lacks consciousness, intent, and moral reasoning, the entities forming the very bedrock of ethical personhood; this could weigh against granting legal personhood on a principle basis to AI, due to dilution at play, equating a machine with a living being.

However, proponents of AI legal personhood argue that it need not be tied to human-like consciousness. Instead, they argue that the recognition of AI as a legal person could be a functional necessity to address practical concerns, such as accountability and rights over AI-generated works. Drawing parallels to corporate personhood, they suggest that AI could be assigned legal status for specific purposes without granting it broader moral or ethical recognition.

### 7.2 Practical Implications for Copyright Ownership

In this respect, the implications on practice, such as the distribution of rights concerning copyright ownership for AI-generated works, are relevant and practical. Indeed, the advantage of personifying AI would lie in simplifying the assignment of rights regarding works produced by AI systems, possibly thereby settling issues on authorship and ownership. This would create issues with accountability because AI cannot be held liable for the misuse or infringement of works.

The other side argues that if copyright ownership is given to AI, then the traditional creative industries will be disturbed and human authorship will be devalued. Copyright law has always protected human creativity; hence, acknowledging AI as an author may damage this principle. Instead, many suggest ownership be allocated to human stakeholders, such as developers or users, as a more practical solution. This is consistent with the current copyright frameworks, which focus on human effort and creativity while providing a practical basis for ownership rights over AI-generated works.

It would also add economic and legal complications if AI were granted legal personhood. For example, it is not clear how the rights of AI systems would be exercised or how ownership would be enforced. There is

also a potential for monopolies, as corporations controlling AI systems may have an overbearing influence over creative outputs, stifling innovation and competition.

The debate over AI legal personhood reflects deeper tensions between ethical principles and practical realities. While its proponents argue that it will help in resolving legal ambiguities, the opponents caution that it will undermine the philosophical and ethical foundations of personhood. In the case of copyright ownership, granting AI legal personhood could simplify some aspects of ownership but may create unintended consequences for human creators and industries. As AI continues to advance, this debate underlines the need for careful policy decisions that balance innovation, accountability, and respect for human creativity.<sup>13</sup>

## 8. THE ISSUE OF INFRINGEMENT

Even if Artificial Intelligence is recognized as an 'author' of a work it generates, the issue of infringement remains regarding who will be accountable for violations when the AI replicates original and protected works to produce a new creation.

Section 51 of the Indian Copyright Act explicitly mentions infringement as Infringement actions are currently recognized only when carried out by a human. The existing legislation does not address actions taken by computers or artificial intelligence, nor does it outline the remedies available in such cases. As legal personhood cannot be assigned to artificial intelligence, any infringement actions initiated by AI present significant challenges. Determining accountability for infringements caused by AI is particularly complex, given that AI lacks its own legal status. This raises concerns about the adequacy of granting authorship rights to AI unless a clear framework for liability regarding AI activities is established. Additionally, due to the absence of legal personhood, AI is unable to initiate lawsuits against third parties that infringe upon works it has created.

Under the Indian Copyright Act of 1957, the right to sue for copyright infringement is granted to the copyright owner and those who have received rights through written assignment or grant. Since artificial intelligence cannot be classified as an "owner" of its creations, it is not entitled to pursue legal action for copyright infringement against others. Infringement actions are currently recognized only when carried out by a human. The existing legislation does not address actions taken by computers or artificial intelligence, nor does it outline the remedies available in such cases.

As legal personhood cannot be assigned to artificial intelligence, any infringement actions initiated by AI present significant challenges. Determining accountability for infringements caused by AI is particularly complex, given that AI lacks its own legal status. This raises concerns about the adequacy of granting authorship rights to AI unless a clear framework for liability regarding AI activities is established. Additionally, due to the absence of legal personhood, AI is unable to initiate lawsuits against third parties that infringe upon works it has created. Under the Indian Copyright Act of 1957, the right to sue for copyright infringement is

<sup>13</sup> Artificial intelligence (AI) and Copyright (Arts and law)

granted to the copyright owner and those who have received rights through written assignment or grant. Since artificial intelligence cannot be classified as an "owner" of its creations, it is not entitled to pursue legal action for copyright infringement against others.<sup>14</sup>

## 9. COMPARATIVE LEGAL ANALYSIS

While AI is increasingly involved in creative industries, jurisdictions have addressed copyright issues variably depending on their conceptual priorities regarding legislative movements and creativity.

### 9.1 United States

In the United States, the Copyright Act of 1976 demands human authorship in the form of an act of Congress, which has resulted in numerous instances of copyright, being denied to works generated by AI. As an example, the U.S. Copyright Office rejected the registration of an AI-created work in *Thaler v. U.S. Copyright Office*. This is the same approach of Australian copyright law, which emphasizes human authorship. The Federal Court held in *Thaler v. Commissioner of Patents* that AI could not be regarded as an inventor in 2021.

### 9.2 United Kingdom

The United Kingdom takes a more liberal position and explicitly provides protection for works produced by computers within Section 9(3) of the Copyright, Designs, and Patents Act 1988. Within this system, authorship is attributed to the person who has made the arrangements necessary for the creation of the work, which is the programmer. This would create a balance of AI contribution without losing human attachment. The European Union has recognized the necessity of reform in requiring "originality" according to the intellectual creation of an author. According to a report by the European Parliament in 2020, AI-created works could be entitled to copyright for their creative output rather than for the process used in their making, and this ownership would belong to the human who participated in their creation.<sup>15</sup>

### 9.3 China

China has taken a more flexible route by providing partial copyright protection for AI-generated works that are considered original and incorporate substantial human contributions. This middle ground recognizes the role of AI but emphasizes the human element involved. Such a move is in the direction of accepting AI's increasing influence over creative fields without compromising the fundamentals of copyright law.

Globally, there are demands to have legislation evolved and updated concerning the AI-based issues. More and more countries modify the ancient forms of protection to keep up the human-authorship requirement with human developers or human users by having special provision like in UK computer-generated work. On

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<sup>14</sup> Supra 4

<sup>15</sup> Stuti Puri, Dr. Seema Gupta, AI and Copyright: Navigating Legal Frontiers In The Age of Artificial Intelligence

the other hand, international organizations like the World Intellectual Property Organization (WIPO) are working to standardize international levels of norms regarding AI-generated works. Current emerging proposals, for example, within the EU, tend to divert copyright protection focus from the creative process to the output, on the condition that a human nexus exists.

The legal treatment of AI and copyright exemplifies the challenges in the balancing of technological advance with the need to protect human creativity. Countries would experiment, the general international discussion would set a greater emphasis on ethical and economic implications for AI-generated works, and policymakers had to contend with fostering innovation while protecting equitable recognition and benefits for human creators to assure that AI would complement rather than undermine the traditional creative ecosystem.<sup>16</sup>

## 10. PROPOSED LEGAL MODELS FOR AI IN COPYRIGHT

The growing role of Artificial Intelligence in creative industries requires legal models to answer the question of copyright ownership. Traditional frameworks, which center on human authorship, are unable to accommodate AI-generated works. Different legal models have been proposed to address these complexities, including human-only ownership, shared authorship between humans and AI, and independent copyright ownership for AI. Each model has different implications for law, innovation, and ethics.

### 10.1 Human-Only Ownership Models

The human-only ownership model aligns with traditional copyright principles, emphasizing human creativity and intellectual effort. In this approach, the rights to AI-generated works would be attributed solely to human stakeholders, such as the software developer, user, or entity commissioning the work. This model maintains the human-centric foundation of copyright law and ensures accountability, as humans can be held responsible for the use and commercialization of AI-generated works.

However, this approach can be challenging in cases where AI operates autonomously, with minimal human input in the creative process. Critics argue that limiting ownership to humans may overlook the significant role of AI systems in generating creative outputs, particularly in highly automated scenarios. Despite these challenges, the human-only model remains the most straightforward solution under current copyright laws, particularly in jurisdictions like the United States and India, where human authorship is a statutory requirement.

### 10.2 Shared Authorship between Humans and AI

The shared authorship model suggests that the authorship of a work should be divided between humans and AI systems, recognizing their collaborative roles in the creative process. Under this framework, ownership rights may be divided between the human stakeholders (such as developers or users) and the AI system. While

<sup>16</sup> Akshat Trivedi and Siddharth Soni ,Artificial Intelligence And Copyright Law In India : The Predicament Concerning Computer Generated Works And Their Ownership

AI can never be a legal person, it can grant parts of the rights to the human representatives of AI, such as its developers or operators.

This model reflects reality in many creative processes, which are guided by human inputs toward AI systems that enhance or complete a creative task. It gives more nuances to the question of ownership, at least in considering both human and machine contributions toward authorship. Such a framework would, however, necessitate legislative amendments aimed at redefining authorship and establishing mechanisms to determine proportional ownership, which can be quite difficult in terms of copyright enforcement and licensing.

### 10.3 Independent Copyright Ownership for AI

The most extreme suggestion is that AI systems be granted independent copyright ownership. In this model, AI would be treated as a legal entity capable of holding rights over its creations. The argument for this approach is that it recognizes the autonomous role of AI in the creation of creative works and simplifies the attribution of ownership, especially when no human involvement is evident.

However, granting independent ownership to AI raises significant legal, philosophical, and ethical concerns. AI lacks consciousness, moral responsibility, and accountability, which are central to the concept of legal personhood. Furthermore, the recognition of AI as an independent owner could disrupt traditional creative industries and lead to monopolization by corporations controlling advanced AI systems. Policymakers and experts widely consider this model impractical and incompatible with existing legal frameworks.<sup>17</sup>

## 11. EMERGING SOLUTIONS AND POLICY RECOMMENDATIONS

Numerous jurisdictions have consistently denied copyright protection for works that are not produced by human creators. A notable example is the case of *Feist Publications v. Rural Telephone Service Company*, where the United States Copyright Office ruled that only works created by individuals are eligible for registration. Similarly, in the case of *Bleistein v. Donaldson Lithographing Co.*, the U.S. court affirmed that human ideas and expressions are considered original, while categorizing other forms as artificial and inauthentic. The court elaborated further on this distinction.

**US Copyright Office Policy On AI-Generated Works:** The United States Copyright Office issued its first explicit advice on copyright eligibility for AI-generated works in March 2023. Only works with adequate human authorship are copyrightable, according to the guidance. The requirement of Human Authorship, Copyright registration of AI-created works is dependent upon human authorship. AI-generated works that lack human input or interference cannot be registered as they do not meet the required criteria and, therefore, cannot be copyrighted. This is the case when AI independently creates complex works.

<sup>17</sup> Supra 11

**Copyright Eligibility:** Works using a mix of AI-generated and human-authored content may be eligible for copyright protection. If the humans decide to select, rearrange, or modify AI-generated information in a creative manner, copyright protection may be available.

**Disclosure Requirement:** Applicants for copyrights must disclose whether AI-generated content has been used in their work. Applications currently on file which do not contain such disclosure must be amended.

**Future guidance:** The Copyright Office may update additional guidance in the future on issues of AI-creations or copyright issues relevant to AI. Feedback from the public will be requested regarding AI and its legal policy implications. These accomplishable feats outline the Copyright Office's commitment toward steering through emerging impact of AI on copyright laws.

*Burrow Gilles Lithographic Co. v. Sarony* - The emphasis of this case was on whether an image/photograph could obtain copyright protection. It was an interesting case because it addressed the separation of mechanical and artistic work. The court addressed whether or not a product that is machine-generated should be given copyright protection. By maintaining that solely mechanical labour is not artistic per se, the court has limited the extent of its protection. Consequently, copyrights for their works cannot be granted if the AI systems are subject to a rigid approach like this. The court specifically discriminated against the work of a human and anything abstract or artificial. Speaking for the majority, Justice Holmes established the human personality's singularity and held out the same as a requirement for copyright. In using this phrase, the court made its position clear something irreducible which is one man's alone' implying that not anything that is not a result of human imagination was eligible for any protection.<sup>18</sup>

*Alfred Bell & Co. v. Catalda Fine Arts, Inc.* - The view adopted by the court towards copyright saw a softer approach. The court lowered the criteria of originality and decided that, in order for the work to be original, it must not be copied from any other similar artistic work. It also held that an author could claim unintended or incidental variations as his own. This decision was also a relief to people who asserted copyrights of the work created by AIs, although some programming and algorithms did not replicate it. To a certain degree, these three decisions resolve the uncertainty surrounding the protection granted to AI systems. However, the prospective right holders still have an impact due to the lack of a definitive position.<sup>19</sup>

## 12. CONCLUSION

The convergence of artificial intelligence and copyright law creates a multifaceted and dynamic environment. As AI showcases extraordinary abilities in generating art, literature, and music, conventional ideas of authorship and copyright face significant scrutiny. This paper examined the potential for granting legal personhood to AI, a notion that poses challenges to current legal structures and provokes deep ethical,

<sup>18</sup> *Burrow Gilles Lithographic Co. v. Sarony*, 111 US 53 (1884)

<sup>19</sup> *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, 191 F.2d 99

philosophical, and practical inquiries. An exploration of the historical evolution of legal personhood and its application to non-human entities indicates that recognizing AI as a distinct legal entity would necessitate a fundamental transformation in legal principles.

The role of AI in creative fields emphasizes its capacity to disrupt various industries while simultaneously exposing critical deficiencies in copyright frameworks that are tailored solely for human creators. The comparative legal analysis revealed that different jurisdictions are tackling the intersection of AI and copyright in varied ways, with some adopting forward-thinking legislative changes while others proceed with caution. These international trends highlight the necessity for cohesive strategies that can adapt to a range of cultural, economic, and technological environments. The suggested legal frameworks—spanning from exclusive human ownership to collaborative or independent ownership for AI—present possible avenues for reform.

Nevertheless, each framework entails distinct challenges and consequences, including ethical dilemmas regarding moral responsibility and economic threats such as market monopolization or inhibited innovation. To tackle these challenges, future policies and legislation need to strike a balance between ensuring legal certainty and fostering innovation. It is crucial for policymakers to prioritize ethical considerations, including fairness, inclusivity, and accountability, in their discussions. Collaboration among stakeholders—such as governments, legal professionals, AI developers, and the creative sector—is essential to devise proactive solutions that can keep pace with rapid technological changes. In the end, acknowledging the role of AI in copyright law should involve a sophisticated understanding of its societal implications. Although the idea of granting legal personhood to AI may still be far off, it is vital to create clear, fair, and flexible copyright frameworks to navigate this emerging landscape. By cultivating an environment that encourages innovation while protecting human creativity and societal values, the future of AI in copyright law can achieve a harmonious balance of progress and collective benefit.

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