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Article

Ethical and Philosophical Perspectives on Artificial Intelligence-Generated Art

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Abstract: As artificial intelligence (AI) advances, its role in the creative arts has expanded, bringing unprecedented opportunities and complex ethical and philosophical questions. This study aims to examine the ethical and philosophical perspectives on AI-generated art, focusing on issues such as authorship, authenticity, and the nature of creativity. By analyzing the intersection of AI and traditional art practices, how AI challenges long-standing views on originality, intention, and artistic value was explored. Key ethical concerns, including intellectual property rights, accountability, and moral responsibility, were also discussed, as AI-generated works raise questions about ownership and the role of human agency in creative processes. Using comparative analyses, case studies, and empirical data analysis, the results of this study highlight the shifting paradigms of the art as AI emerges as both a tool and a creative force. The results also underscore a need for clear ethical frameworks and policies that balance the contributions of human artists and machine-driven creativity, which become a guide for artists, developers, and policymakers navigating the transformative landscape in art with AI.

Keywords: AI-generated art, Ethics, Creativity, Ownership, Copyright, Philosophical perspectives

1. Introduction

The integration of artificial intelligence (AI) into art has sparked a complex discussion about creativity, ownership, and the ethical boundaries of machine-generated works (Cohen, 1979). AI-generated art leverages algorithms and vast datasets to produce pieces that range from abstract visuals to lifelike portraits and even music compositions. Such rapid evolution challenges traditional understandings of art and creativity, raising questions about the role of human intention and originality in the creative process. While artists still rely on intuition, experience, and emotional depth, AI-driven systems produce art through data-driven algorithms, often resulting in works that mimic, reinterpret, or even rival human-created pieces (Elgammal et al., 2017). Figure 1 shows a collection of AI-generated art pieces, each presenting a unique combination of colors, patterns, and styles. These artworks blend geometric and organic elements, with a variety of moods and visual effects that showcase the diversity and creative potential of AI-generated art.

Fig. 1. AI-Generated Arts.

The philosophical underpinnings of art, which have historically framed creativity as a uniquely human endeavor, are being reconsidered in light of these technological advancements (Leong, 2025). Key concepts, such as the authenticity of artistic expression, the artist's role as the originator, and the nature of creativity itself, are questioned. Therefore, it is necessary to delve into these philosophical aspects and explore how AI disrupts conventional paradigms by operating without the personal, emotional, or experiential qualities typically associated with art-making (French et al., 2023).

Ethical issues arise for AI-generated art, particularly regarding intellectual property, ownership, and accountability (McCormack et al., 2017). Traditional copyright frameworks are ill-equipped to address scenarios in which an AI system independently generates creative works. Questions about who owns the rights to AI-generated art—the programmer, the owner of the training data, or the AI model—create a legal gray area that existing intellectual property laws struggle to define. Additionally, AI-generated art risks perpetuating biases embedded in its training data, resulting in art that might unintentionally convey stereotypes or reinforce cultural biases. These ethical dilemmas necessitate the development of new guidelines and policies to responsibly govern the creation and dissemination of AI-driven artworks.

This study was carried out to examine the implications of AI in art by employing qualitative and quantitative methods, including comparative analyses, case studies, audience perception surveys, and empirical data visualizations. Table 1 presents major milestones in the evolution of AI-generated art, and Fig. 2 illustrates conceptual models of ownership, this paper builds a comprehensive view of the current landscape. The results of this study provide an understanding of the ethical and philosophical landscape surrounding AI-generated art. Supported by data visualizations and comparative models, the results also enable an informed dialogue on how society might regulate, interpret, and value art since machines are actively participating in creative endeavors. Recommendations were also proposed for establishing ethical frameworks that respect both human artistry and machine-generated contributions to guide artists, developers, and policymakers through the complex intersection of AI and creativity.

Table 1. Milestones in AI-generated Art.

Year	Development	Key Features
1965	AARON by Harold Cohen	Early rule-based art generation
2015	DeepDream by Google	Neural networks in art
2020	DALL-E by OpenAI	Text-to-image synthesis capabilities

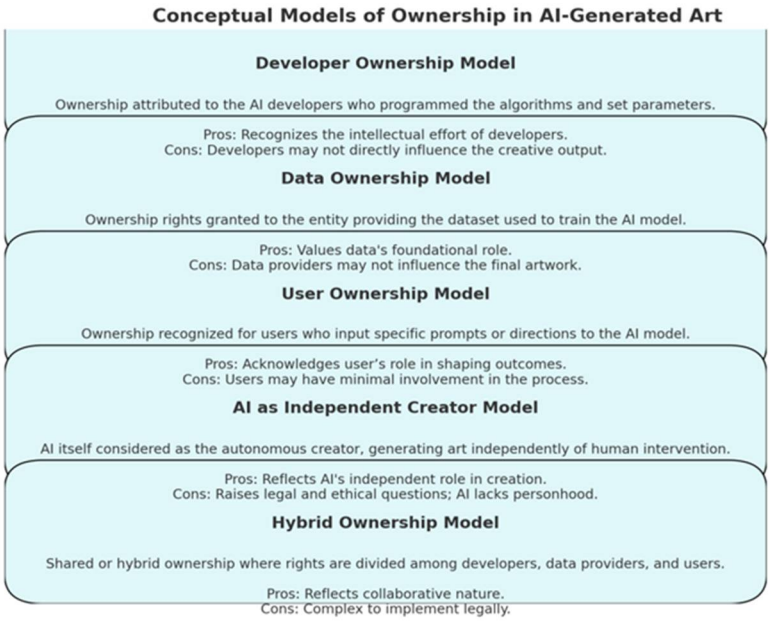

Fig. 2. Conceptual models of ownership in AI-generated art.

2. Literature Review

AI-generated art began in the 1960s, with pioneering artists and computer scientists exploring how algorithms could create visually compelling patterns (Cohen, 1979). Harold Cohen's AARON system, developed in the 1970s, was one of the first AI models

capable of creating autonomous artwork, producing line drawings that imitated human creativity. Cohen's work challenged the boundaries of creativity by demonstrating that machines could autonomously generate complex art forms, sparking debates on whether machines could possess artistic agency. In the 2010s, advancements in neural networks transformed AI's capabilities in art, enabling it to produce sophisticated works. Models such as DeepDream by Google in 2015 and OpenAI's DALL-E in 2021 showcased AI's ability to generate diverse, intricate images from text prompts. These models relied on massive datasets, learning patterns from art history, contemporary works, and visual data, leading to questions about originality, creativity, and the role of the training data.

Creativity has traditionally been viewed as a distinctly human attribute, characterized by intent, originality, and the ability to imbue meaning (Miller, 2019). Philosophers, such as Kant, described creativity as a product of "genius," a human quality linked to emotion, individuality, and purpose. In contrast, AI-generated art challenges this definition, as AI lacks personal experience, emotional intention, and subjective interpretation. Scholars view AI as a mere tool, an extension of the artist's vision, while others argue that AI systems themselves exhibit creative agency. Table 2 compares these perspectives.

Ownership rights in AI-generated art remain a legal gray area. Traditional copyright laws typically recognize only human authors, which complicates scenarios where AI is the primary creator. Several models, including developer ownership and user ownership, are proposed to address this. Fig. 1 shows the conceptual models of ownership in AI-generated art with ownership structures in which the advantages and challenges of each approach can be explored. AI-generated art often imitates existing artistic styles and patterns, leading to concerns over originality. Philosophers argue that without human intention and interpretation, AI lacks the authenticity inherent in traditional art.

Table 2. Perspectives on AI in art creation.

Perspective	Description	Examples
AI as Tool	AI is a tool that assists human artists	Photoshop, Style Transfer
AI as Co-Creator	AI is an active participant, collaborating with the artist	DeepDream, GAN-based models
AI as Independent	AI is capable of generating independent, original works	AARON, DALL-E
AI as a Collaborator	AI serves as a tool to enhance human creativity by Automating repetitive tasks. Offering innovative ideas and outputs. Enabling creators to focus on conceptual and high-level aspects.	Adobe Firefly and DALL, AIVA (Artificial Intelligence Virtual Artist)
AI as a Semi-Autonomous Creator	AI operates independently within predefined parameters. Generating new concepts without direct human intervention. Exploring creative possibilities that transcend human imagination.	OpenAI's GPT-3, GANs,AI develops storyboards, animates sequences

2.1. DeepDream and Artistic Interpretation

DeepDream is one of the first widely recognized AI art tools that challenged traditional norms of creativity. By enhancing patterns and creating surreal visuals, DeepDream has raised questions about human interpretation and the role of randomness in creativity. An analysis of DeepDream creations suggests that while the visuals were striking, the lack of intentional narrative limited their artistic depth (Leong et al., 2024b).

2.2. Case Study: Generative Adversarial Network (GAN)-Based AI Art and Bias

GANs are used to create notable artworks, yet they rely on training data that may contain biases. An analysis of GAN-based artworks reveals that AI models sometimes replicate stereotypes present in the data, raising ethical concerns about reinforcing societal biases. This case highlights the need for careful dataset selection and ethical considerations in AI training (Zhao et al., 2024) and the evolution and ethical challenges posed by AI-generated art, from algorithmic to GAN-based models. Philosophical views on creativity and comparing public perceptions present that AI art provokes both admiration and skepticism. The findings underscore the need for ethical frameworks and revised intellectual property laws to clarify the ownership of AI-generated artworks. Therefore, it is required to develop ethical guidelines that respect both human contributions and AI's creative potential, providing a balanced approach for artists, developers, and policymakers.

3. Methodology and Results

In this study, a mixed-methods approach was used to analyze the ethical and philosophical perspectives on AI-generated art. Qualitative analysis was integrated with quantitative data, including case studies, audience surveys, and empirical comparisons, to assess public perceptions, examine the underlying ethical challenges, and provide a structured overview of ownership models,

authenticity, and creative agency in AI-generated art. A literature review of prior research was also conducted to delve into the philosophical theories of creativity, ethical discussions on authorship, and intellectual property issues in AI-generated art. Audience surveys were conducted to gather public perceptions on the originality, authenticity, and emotional impact of AI versus human-generated art. The respondents rated factors, such as technical skill, emotional resonance, and innovation, with results presented in Fig. 3 on "Public Perceptions of Originality in AI vs. Human Art".

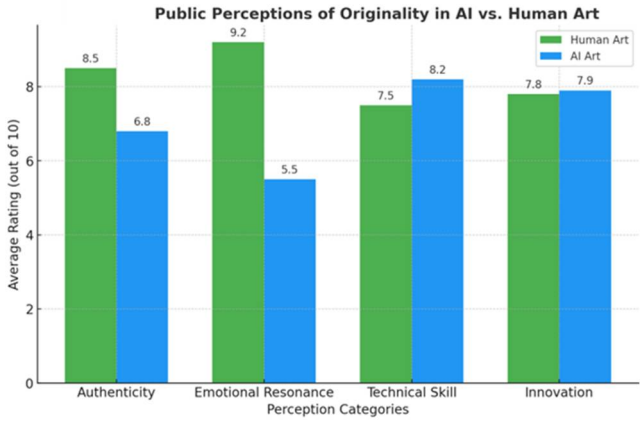

Fig. 3. Public perceptions of originality in AI vs. human art.

Two case studies were performed to examine AI-generated artworks and the models that created them, to identify ethical issues in practice. These case studies are detailed below. The methodology of this study was used for the assessment of different ownership models (Fig. 2) on conceptual models of ownership in ai-generated art, including developer ownership, data ownership, user ownership, AI as an independent creator, and hybrid ownership. The level of creativity and agency attributed to AI was examined on the spectrum of creativity in AI art, illustrating the gradual shift from human to AI dominance across various creative stages (Fig. 4).

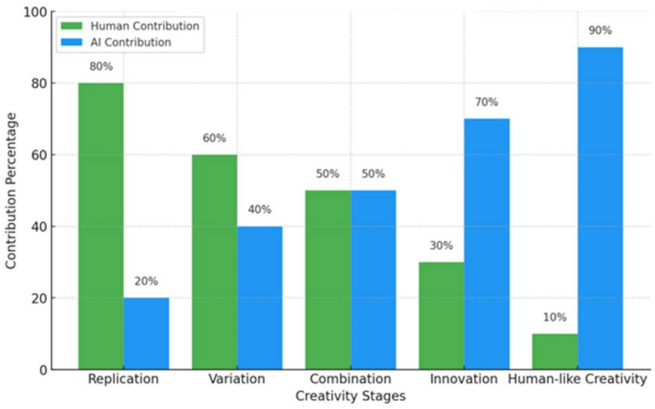

Fig. 4. Spectrum of creativity in AI art.

Audience survey results are presented in Table 3. The result enables an understanding of public perceptions and biases towards AI-generated art. The analysis results of historical milestones, philosophical perspectives, and case studies, indicated that AI-generated art introduces opportunities and ethical dilemmas. AI-generated artworks challenge traditional views on creativity, especially in terms of human intent or emotion. Additionally, the public perception of AI art is mixed as shown in Table 3, which presents audience survey data comparing human- and AI-generated artworks. These results suggest that while AI is recognized for technical innovation, it is often perceived as lacking the emotional depth and originality associated with human art. The results highlight the evolution and ethical challenges posed by AI-generated art, from algorithmic to GAN-based models. By examining philosophical views on creativity and comparing public perceptions, a need for ethical frameworks and revised intellectual property laws is identified to address the unique challenges of AI in art.

Table 3. Audience survey results on AI vs. human art.

Factor	Human Art (Avg. Rating)	AI Art (Avg. Rating)
Originality	8.7	6.5
Emotional Resonance	9.2	5.8
Technical Innovation	7.5	8.3

3.1. Case Study 1: DeepDream and Artistic Interpretation

Google's DeepDream algorithm, initially designed for visualizing neural networks, quickly generates surreal, dream-like images. By amplifying patterns in existing images, DeepDream creates visuals that are artistic and unique, yet the process is driven entirely by algorithmic feedback loops without human intervention. DeepDream produces distinctive imagery and raises questions about whether creativity is inherent in the algorithm or in the human who selects and curates the images. As observed in the spectrum of creativity in AI-generated art (Fig. 4), DeepDream occupies a middle ground between replication and combination, as it mimics familiar patterns while generating novel visuals. The ownership of DeepDream-generated images is initially ambiguous, with questions of whether the rights belong to Google, the users, or the creators of the original images. The conceptual model of ownership in AI-generated art needs to be constructed to establish the user ownership model, as users direct the outcome but have limited control over the underlying algorithm.

Survey responses showed that while the respondents found DeepDream's visuals innovative, they rated its emotional resonance lower than human-generated art. This finding aligns with the results presented in Fig. 3, which indicates that audiences perceive AI-generated works as technically skilled but less authentic. DeepDream exemplifies how AI augments human creativity without entirely replacing it. However, its reliance on existing data and algorithmic patterns places it closer to a creative tool than an independent artist.

3.2. Case Study 2: GAN-Based Art and Bias in Training Data

GANs are used widely in AI-generated art creation. GANs consist of two neural networks (a generator and a discriminator) that collectively produce images. One example is the AI-created portrait Edmond de Belamy (Fig. 5), which was created through training on historical artworks. The artwork was sold at an auction for over USD 400,000. GAN models can be unbiased according to their training data. Edmond de Belamy was created based on European portraits, resulting in outputs that inadvertently reinforced specific cultural aesthetics. This bias highlights an ethical issue when AI models trained on biased datasets produce art that lacks diversity and representation. The Edmond de Belamy case caused legal and philosophical debates. The developers of the GAN model claimed authorship, though the artwork was technically generated by AI. However, the developer ownership model attributes ownership to those who created the algorithm.

Fig. 5. AI-generated portrait inspired by Edmond de Belamy.

In audience surveys, Edmond de Belamy was perceived as technically impressive but was rated lower on originality. As shown in Table 3, despite its auction success, the public perceived its authenticity and emotional impact to be limited. GAN-based art reflects the ethical and philosophical complexities of AI-generated creativity. While it demonstrates impressive technical skill, the limitations of its training data raise questions about cultural representation and the biases embedded within AI-generated art.

3.3. Case Study 3: AI-Enhanced Chinese Calligraphy

Chinese artists have used AI tools to modernize traditional calligraphy (Oksanen et al., 2023; Lin et al., 2025). AI assists in generating unique calligraphic styles by analyzing ancient scripts and combining them with contemporary aesthetics (Harry et al., 2023). The process begins with artists' initial strokes or concepts. AI suggests enhancements or variations based on historical datasets. The artist finalizes the design, integrating AI-generated elements with personal touches. Cultural heritage can be preserved while appealing to younger, tech-savvy audiences, and a new appreciation for traditional art forms is facilitated in a modern context. Fig. 6 shows an artistic representation of AI-enhanced calligraphy in China, combining traditional Chinese calligraphy elements with advanced AI technology.

Fig. 6. AI-eenhanced calligraphy.

For the fusion of heritage and technology, AI is used to revive ancient Asian art forms including Chinese ink painting or Japanese Ukiyo-e. AI tools tailor them to preserve and innovate under these traditions. Based on education and accessibility, scientists use AI tools to transmit traditional techniques to a broader audience. Then, autonomous AI-generated art serves as a gateway for younger generations to explore their cultural roots.

Through the analysis of audience surveys, case studies, and literature review, the following is found. AI-generated art is valued for its technical skill but often lacks the emotional depth and perceived authenticity of human art (Fig. 3). However, the ownership of AI-generated art remains unresolved, with legal and ethical implications for developers, data providers, and users (Fig. 2). AI-generated art inadvertently reinforces cultural and aesthetic biases embedded in training data, highlighting the importance of diverse datasets.

4. Hybrid Ownership Models: Potential Solution to Copyright and Intellectual Property

As AI-generated art becomes prevalent, traditional copyright and intellectual property face significant challenges. Questions surrounding ownership—whether it belongs to the developer, user, data provider, or AI—remain unsettled in legal systems. The hybrid ownership model is a potential solution as it proposes shared rights among the stakeholders involved in the creative process. Therefore, it is necessary to explore the structure, benefits, and limitations of the hybrid ownership model in AI-generated artworks and understand how the model addresses complex ownership challenges. The hybrid ownership model for AI-generated art allocates intellectual property rights across multiple stakeholders based on their contributions to the creative process. This model reflects the collaborative nature of AI-driven creativity, where developers, data providers, and end-users each play essential roles in shaping the final artwork. Stakeholders in hybrid ownership include developers (creators of the AI model and algorithms), data providers (entities providing datasets to train AI), users (individuals who input prompts or guide the AI's creative direction), and AI. Here, AI can be viewed as an "independent" creative entity, although it lacks legal personhood.

Fig. 7 illustrates the hybrid ownership model by showing the overlapping roles of developers, data providers, and users. Each segment represents the contribution each party makes toward the final creative output. This figure presents the interconnected nature of hybrid ownership, highlighting shared responsibilities and rights. The hybrid ownership model presents different configurations depending on the art form, the level of human involvement, and the type of AI models. Table 4 summarizes the potential rights and responsibilities assigned to each stakeholder.

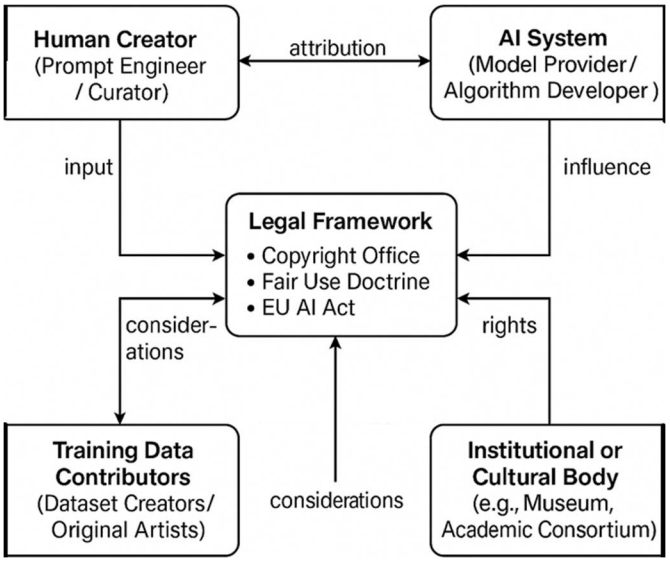

Fig. 7. Structure of hybrid ownership model.

Table 4. Rights and responsibilities in hybrid ownership models.

Stakeholder	Rights Granted	Responsibilities	Limitations
Developers	Rights to underlying algorithms and models	Ensuring ethical standards in AI programming	Limited control over final output
Data providers	Rights to use of datasets	Ensuring unbiased, diverse data	Data limitations may affect output
Users	Rights to the specific artwork created	Input guidance and creative prompts	Minimal involvement in technical design
AI System	Intellectual credit (non-legal)	Generates art based on provided inputs	Lacks legal personhood and agency

A layered bar chart shows the proportion of rights attributed to each stakeholder in various scenarios. Fig. 8 displays the rights of developers, data providers, and users in two cases: one where the user's input is highly specific, and the other where the AI operates with more autonomy. This visualization highlights where rights belong to depending on the level of each stakeholder's involvement.

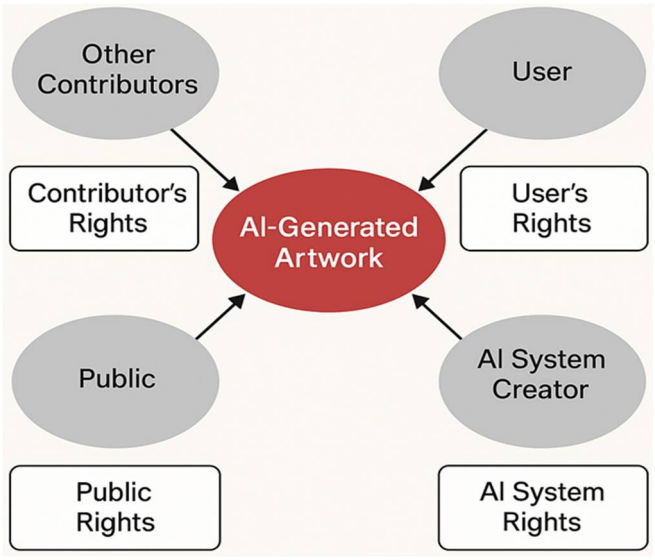

Fig. 8. Rights in hybrid ownership models.

Traditional ownership models, such as sole developer ownership or user ownership, fail to capture the collaborative and multi-faceted nature of AI-generated art. A comparative analysis between traditional models and hybrid models reveals distinct advantages of the latter (Table 5).

Table 5. Comparison of hybrid ownership and traditional models.

Attribute	Traditional Models	Hybrid Ownership Models
Ownership flexibility	Low – one or two stakeholders	High – adaptable to different stakeholder roles
Legal complexity	Simpler but often insufficient	Higher complexity but fairer rights allocation
Innovation encouragement	Limited due to rigid rights	High – encourages collaborative AI creativity
Ethical considerations	Limited by traditional views	Addresses bias, diversity, and shared ethics

Hybrid models are favored by stakeholders. For example, users and developers express greater willingness to engage in creative collaborations when their contributions are formally recognized. The hybrid ownership model incentivizes collaboration, as all parties know their contributions will be recognized. By acknowledging the roles of multiple stakeholders, hybrid models prevent legal disputes over ownership. Hybrid models can be tailored to different art forms and levels of human-AI interaction. Allocating rights among multiple parties is legally challenging, especially across jurisdictions with differing intellectual property laws. Managing shared ownership rights and enforcing them are complex, particularly in cases of unauthorized distribution or reproduction. Assigning credit or ownership to the AI itself is ethically and legally ambiguous, as AI lacks personhood and intentionality. The hybrid ownership model provides a nuanced solution to the copyright and intellectual property challenges posed by AI-generated art. By recognizing the contributions of developers, data providers, and users, hybrid models reflect the collaborative nature of AI creativity more accurately than traditional models. However, the model has limitations. Legal complexities and ethical concerns must be addressed before the hybrid ownership model is implemented. As AI continues to transform art, the hybrid ownership model provides an essential step toward fair and responsible management of intellectual property in this emerging field.

5. AI to Democratize Art Creation

AI's integration into art has sparked discussions about its potential to democratize art creation, enabling people without traditional artistic skills to express themselves. AI-generated content, neural style transfer, and generative adversarial networks (GANs) allow users to create visually appealing art with minimal training, providing new perspectives in the art world (Benitez-Garcia et al., 2022; Hu et al., 2020). AI in art creation enables accessibility to art creation tools. AI tools are available for creativity on DALL·E, MidJourney, and Adobe Firefly, which enable users to create art by simply describing their vision in text. While lowering barriers to art creation, AI-powered drawing tools simplify the creative process, requiring no expertise in painting or illustration. The comparison of traditional art creation methods with AI-assisted art creation is shown in Table 6. Fig. 9 presents the increasing use of AI tools for art creation over the years by amateur and professional creators.

Table 6. Comparison of traditional and AI-generated art creation.

Aspect	Traditional art creation	AI-assisted art ceation
Skill requirement	High	Low
Time investment	Weeks to months	Minutes to hours
Cost	High (materials, training)	Low (subscription or free tools)
Ease of learning	Steep learning curve	Intuitive and beginner-friendly
Diversity of output	Limited by artist's skill	Virtually limitless

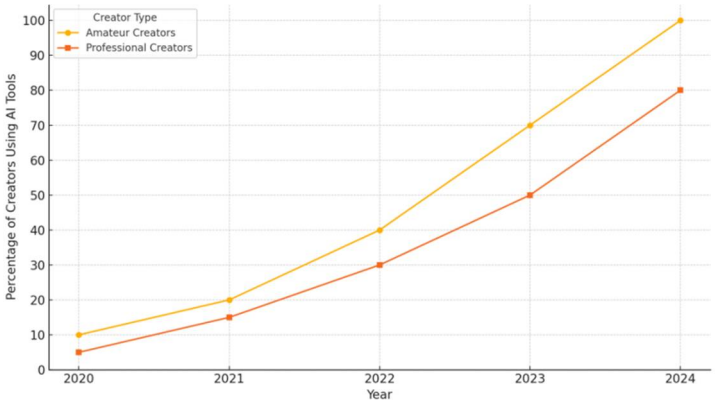

Fig. 9. Adoption of AI tools in art eation (2020–2024).

6. Challenges and Limitations

The integration of AI into art has introduced ethical, philosophical, and practical challenges. As AI-generated art evolves, these challenges raise questions about creativity, authorship, and the responsible use of technology in creative fields (Floridi & Sanders, 2004). The challenges and limitations in AI-generated art were examined by using empirical data, visual aids, and references.

6.1. Ownership and Intellectual Property

One of the most pressing challenges in AI-generated art is ownership. Existing copyright laws recognize only human creators, leading to ambiguities when AI is involved in the creative process. The conceptual models of ownership in ai-generated art (Fig. 2) present various ownership models, such as developer, data, user, and hybrid ownership models. However, each model has its limitations. Current intellectual property laws do not adequately consider AI as the primary creator. For example, in GAN-generated art, the developers, data providers, or users who prompt AI can claim ownership, creating legal conflicts. Since DeepDream and GANs operate autonomously, human involvement in data curation and algorithm development plays a critical role, raising questions about authorship responsibility and acknowledgment.

6.2. Authenticity and Originality

AI-generated art can be perceived as “authentic” or “original.” Audiences often perceive AI-generated art as technically skilled but lacking emotional depth and authenticity (Fig. 3). Such complexity affects AI’s ability to create original works as AI models rely heavily on pre-existing data, making it challenging to produce artwork that is genuinely unique. In GAN-generated art, training data can introduce cultural biases and aesthetic limitations, which compromise originality and diversity in AI-generated art. AI generates artwork based on patterns it learns, which can lead to imitation rather than creation. AI-generated art spans from basic replication to limited forms of innovation, but it struggles to achieve “human-like creativity” due to its dependence on prior data (Fig. 4).

6.3. Ethical Bias and Data Integrity

Biases in AI-generated art pose ethical challenges. Since AI systems are trained on datasets that reflect social, cultural, or historical biases, they can inadvertently perpetuate biases in art creation. Many AI models use datasets that lack diversity, leading to artwork with unintentional stereotypes or cultural biases (Leong et al., 2024a). For instance, GAN-based art models trained in Western art lack the representation of other cultures, limiting the inclusivity of AI-generated art. Determining accountability to minimize the biases in AI-generated art is challenging. Developers, data providers, and users influence the outcome, but accountability is often unclear, as shown in Table 2. Ethical frameworks for addressing these biases are still under development, complicating efforts to construct fair and inclusive AI models. Addressing these biases is critical for fostering fairness and authenticity in AI-generated art. Table 7 presents proposed solutions to mitigate data bias in AI-generated art creation.

More diverse and inclusive training data needs to be used to incorporate various art from different cultures, styles, and historical contexts to ensure balanced training data. Crowdsourced data collection enables artists to contribute to constructing training datasets. Human curators need to review datasets for data biases to ensure diverse perspectives. Bias in datasets becomes more difficult to detect after the AI model generates biased outputs. Without algorithmic audits and model assessments, biases in generated art by specific tools keep exising.

Table 7. Solutions to solve potential issues of data bias in AI-generated art.

Diverse and inclusive training data	
Expand dataset diversity	Incorporate art from various cultures, styles, and historical contexts to ensure balanced training data.
Crowdsourced data collection	Invite artists and communities worldwide to contribute their works to training datasets.
Curation and auditing	Use human curators to review datasets for bias and ensure representation of diverse perspectives.
Bias detection tools	
Algorithmic audits	Regularly assess models for biases in generated art using specialized tools that flag disproportionate patterns.
Synthetic data generation	Create balanced synthetic datasets that simulate underrepresented art forms or styles.
Visual diversity metrics	Develop tools to measure diversity in outputs, ensuring a variety of styles and subjects.
Interactive user input	
User-centric design	Enable users to adjust model parameters to emphasize underrepresented styles or themes.
Feedback loops	Implement systems where users can report biased outputs, which feed back into improving the model.
Customization options	Provide filters that allow users to explore outputs from specific cultural or stylistic origins.
Regular model updates	
Frequent retraining	Update models with new datasets that reflect current art trends and societal changes.
Collaborative updates	Partner with artists and cultural institutions to integrate emerging styles and diverse contributions into training datasets.
Dynamic learning systems	Develop AI models that continuously learn and adapt from real-time data without perpetuating existing biases.
Transparent AI development	
Explainable AI	Use algorithms that provide insights into how outputs are generated, highlighting any biases in the process.
Open datasets	Make datasets and training processes accessible to artists and researchers for review.
Community governance	Involve artists, critics, and cultural organizations in monitoring and guiding AI-generated art development.

6.4. Philosophical Challenges of Creativity and Intent

AI-generated art raises philosophical questions about the nature of creativity and artistic intent. Traditionally, creativity has been regarded as a human endeavor, involving conscious intent, emotion, and personal expression. However, AI's role changes this perspective in several ways. Unlike human artists, AI lacks self-awareness and intent. This questions whether AI can genuinely be "creative" or it is simply producing outputs based on pre-programmed parameters. AI mimics creative processes, but it lacks the intention behind artistic expression (Fig. 3). In AI-generated art, the viewer's interpretation is more emphasized than the artist's intent, suggesting that artistic value is subjective rather than objective with the creator's intent (Peng & Leong, 2024). There is a divide in perspectives of creativity and intent between traditional views of art as self-expression and AI-generated art as algorithm-driven production.

6.5. Public Perception and Acceptance

Public perception remains a barrier to the wider acceptance of AI-generated art. While audiences acknowledge the technical aspects of AI-generated art, they rate it lower on emotional resonance and authenticity than human-created art (Gao & Leong, 2024). This perception creates challenges for AI-generated art's market value and legitimacy. Since AI lacks personal experience and emotion, audiences view AI-generated artwork to be superficial or disconnected from human experience, limiting its emotional impact and cultural significance. The debate over authenticity and authorship impacts the commercial value of AI-generated artwork. Artwork such as Edmond de Belamy raises awareness of AI-generated art's potential, but questions remain about whether such art maintains long-term cultural and market value comparable with human-created art.

6.6. AI Changing Traditional Artistic Hierarchy

AI is transforming art by democratizing creation and distribution, directly challenging traditional gatekeepers, including galleries, museums, and critics. AI is disrupting existing structures by redefining the value and concept of art. Platforms, such as DALL·E and MidJourney, are more accessible, lessening the reliance on galleries or formal training. AI enables artists to bypass traditional galleries by showcasing their work directly on social media and non-fungible token (NFT) platforms. As algorithms curate personalized art experiences for audiences, the traditional role of critics and galleries in curation diminishes (Table 8). Furthermore, AI tools, such as ArtBinder, are already assisting collectors in discovering AI-generated art.

Table 8. Comparison of hierarchies of traditional and AI-generated art.

Aspect	Traditional Art	AI-generated Art
Gatekeepers	Galleries, museums, critics	Algorithms, social media, NTF
Artistic accessibility	Limited by formal training and funding	Open to anyone with access to AI
Curation process	Subjective and centralized	Algorithmic and decentralized
Audience reach	Local or niche markets	Global and democratized

Traditionally, art is defined based on a uniquely human expression. AI blurs the boundaries between human creativity and algorithmic output. AI-generated portraits by GANs, such as "Edmond de Belamy," are reshaping the understanding of the artistic value and influencing creativity, expression, skill, and automation.

AI is fundamentally changing traditional notions of creativity by expanding what is possible in art creation. AI algorithms generate combinations of styles and ideas, leading to works that might not be created by human artists. For instance, GANs produce entirely new artistic styles (Elgammal et al., 2017). AI systems mimic the techniques of historical artists, recreating or adopting famous styles (Leong, 2025). While this raises questions about originality, it simultaneously broadens access to iconic styles. AI is also redefining emotions and concepts conveyed through art (Fig. 10). Although AI lacks subjective feelings, it analyzes patterns in human emotional responses to produce artwork that evokes specific reactions (Stork, 2009). For example, AI music composers, such as OpenAI's MuseNet, create emotional compositions. A focus is shifted from execution to concept, as the artist's role increasingly becomes guiding AI to explore ideas and conceptual boundaries rather than focusing on technical skill. AI also democratizes art creation by reducing the importance of traditional technical mastery (Table 9). Skills such as drawing or painting are no longer barriers to entry. AI tools, such as Adobe Firefly, allow anyone to generate professional-quality visuals with minimal input, without artistic training, to produce high-quality art. This effectively lowers the threshold for participation in art and diversifies creative activities. Finally, AI automates repetitive and technical art creation, freeing artists to concentrate on higher-level creation. Neural networks, for example, enable users to instantly apply artistic styles to photographs or other images, without a need for manual reproduction. DALL·E and MidJourney produce complex and visually stunning art from simple text prompts, offering unprecedented flexibility in creation.

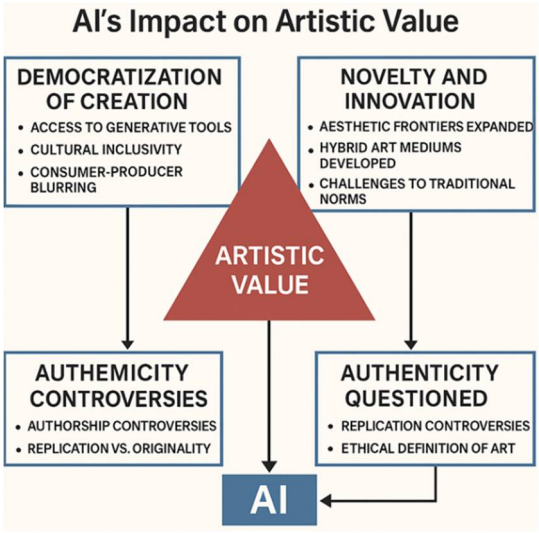

Fig. 10. AI's impact on artistic value.

Table 9. Perceived value of AI-generated art and human-created art.

Aspect	Human-Created Art	AI-Generated Art
Creativity	High, rooted in human emotion	Algorithmic, but adaptive
Market value	Established with historical context	Rapidly growing but volatile
Authenticity	Perceived as authentic	Questioned due to lack of "soul"
Accessibility	Limited by exclusivity	Widely accessible

Fig. 11 shows the proportion of audiences who value creativity, accessibility, and authenticity in AI-generated art compared with human-created art. AI impacts artistic value by making art creation more accessible, changing traditional definitions, and automating technical tasks. While it democratizes art, it also raises debates about originality, authenticity, and the evolving role of artists.

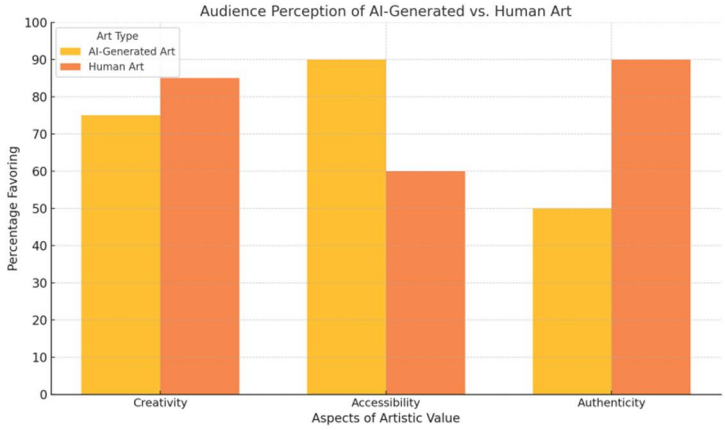

Fig. 11. Perception of AI-generated and human-created art.

6.7. Limitations of Research and Empirical Data

The study on AI-generated art is still in an early stage, with limitations in methodology, data, and ethical frameworks (Leong et al., 2024c). Few studies have presented public perceptions or the evolution of AI-generated art over time, limiting the understanding of how perceptions have changed as technology advances. Longitudinal studies are required to assess changing attitudes towards AI-generated art. In case studies conducted in this research, ethical frameworks for using AI in art are still nascent, especially regarding authorship, ownership, and bias mitigation. Robust ethical guidelines need to be formulated through collaboration between experts in computer science, law, and art history.

Table 10. Key Challenges and Limitations in AI-Generated Art.

Challenge	Description	Example
Ownership Ambiguities	Lack of legal clarity on authorship and ownership	GAN art, DeepDream
Authenticity & Originality	AI's reliance on prior data limits originality	GAN-based art, Edmond de Belamy
Ethical Bias	Dataset biases affect inclusivity and representation	Western-dominated training sets
Philosophical Questions	AI lacks intentionality, raising debates on creativity	AI's role as a tool vs. an independent artist
Public Perception	Audiences often see AI-generated art as lacking emotional depth and authenticity	Audience survey results
Research Limitations	Limited longitudinal and ethical studies in the field	Need for robust ethical guidelines

The challenges and limitations of AI-generated art highlight the complexities of integrating advanced technology into art. From ownership and bias to philosophical debates on creativity, AI-generated art raises questions on ethics, law, and human identity. The scarcity of related research suggests a need for interdisciplinary collaboration to develop a framework for responsible AI use in art. Addressing these challenges is essential for realizing AI's potential while preserving the cultural, ethical, and artistic values that have shaped human creativity.

7. Conclusions

The advancement of AI-generated art transforms art, and related concepts of authorship, originality, and creativity. As AI increasingly assumes roles traditionally held by human artists, questions emerge regarding the nature of creativity, the meaning of artistic intention, and the boundaries of intellectual property. These ethical and philosophical challenges were investigated in this study to propose solutions for the issues inherent in the algorithmic and data-driven contributions to creative processes. While AI demonstrates impressive technical capabilities, it lacks the intentionality and emotional depth associated with human artistry. Public perceptions, as evidenced by surveys and case studies, suggest that audiences are intrigued by AI's capabilities yet remain skeptical of its capacity to create artwork with authentic emotional resonance. Furthermore, the ambiguity surrounding ownership and intellectual property highlights an urgent necessity for robust legal frameworks to address the conditions of AI-generated art. Current models of ownership—whether attributed to developers, data providers, or users—present limitations, suggesting a need for robust approaches, such as the hybrid ownership model to equitably balance stakeholder contributions.

The ethical implications of AI-generated art are compounded by bias and inclusivity. Given that AI models are trained on existing datasets, there might be a substantial risk of perpetuating cultural biases and inadvertently excluding diverse perspectives in the art created. Consequently, the development of ethical guidelines and the utilization of more inclusive datasets are essential for fostering a representative and culturally sensitive approach to AI-generated art.

In conclusion, while AI-generated art holds transformative potential, its integration into the art must be approached with careful consideration of the ethical, legal, and philosophical issues. Developing robust frameworks to address these challenges is critical for ensuring that AI contributes meaningfully to the arts without undermining the values that define human creativity. Future research is necessary to prioritize refining ethical standards, enhancing transparency in AI models, and interdisciplinary collaboration to responsibly navigate the evolving landscape of AI-generated art. Then, innovation with ethical responsibility can be achieved to shape an inclusive and sustainable future of art.

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