AI as a Commercial Artist: How Intention and Context Shape Human Perception of Machine Creativity

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Abstract

With the rapid development of generative artificial intelligence (AI) technology and its growing use in the commercial art sector, it has become even more crucial to understand the characteristics of human and machine-generated creativity. This study examined how the presence of an artist statement, detailing the intent and context of the artwork, influenced perceptions of the artist (human vs. AI) and assessments of artistic value and enjoyment. The survey included a total of 300 participants. The results revealed that the inclusion of an artist statement significantly influenced perceptions of the artist in addition to assessments of artistic value and enjoyment. Notably, in the AI artist condition, higher perceived intention corresponded to increased evaluations of artistic value and enjoyment. Additional analyses showed that audience perception and evaluation did indeed vary as a function of the subject matter of AI-generated works. This study offers empirical evidence that machine-generated works could achieve a level of acceptance comparable to human-created works in the commercial art domain when they effectively convey intent and context. Our findings offer valuable insights into the integration of AI technology in the creative industries, addressing issues of artistic value, societal acceptance, and ethical implications for the creative ecosystem.

Keyword

Generative AI, AI-generated art, machine creativity, anthropomorphic AI, mind perception, human-AI interaction, artist statement, commercial art

1. Introduction

The generative AI technologies have seen a growth in the creative use over recent years. The technology can be characterized as well by generating an artificial image according to the prompt given by a user; that means individuals without formal artistic training can produce relatively high-quality visual content in no time and at a pretty low cost. The efficiency and economy of generative AI in generating specific creative results have, therefore, been cause for its increasingly widespread adoption, especially in commercial artistic fields such as advertising, television, product design, and illustration. While the technological advancements of generative AI hold immense potential, they have also sparked various social and ethical debates. Tasks traditionally performed by human creators are now being replaced by machines, raising concerns about job displacement for industry professionals [1, 2], and the ethical implications of creative processes [3]. Relatedly, these technological advancements in AI have led to societal unrest, including increased job insecurity, shifts in cultural values, and challenges in regulating AI-driven creativity [4]. Generative AI has already demonstrated its ability to surpass human-created works under blind conditions [5] and is being widely adopted in mass media. This phenomenon blurs the boundaries between human and machine-generated works, underscoring the importance of exploring where generative AI is accepted and its limitations from technological, artistic, and ethical perspectives. However, research and discourse on these phenomena remain in their early stages.

Traditionally, human-created art has been rooted in the creator's intent, while generative AI outputs are shaped by user-defined prompts, fundamentally distinguishing machine-generated works from human ones. The absence of creative intent and contextual understanding in machine-generated art limits its ability to convey meaning or emotional depth. This study focuses on this lack of intent and context in machine-generated works and investigates the effects of providing an artist statement—a textual explanation accompanying creative works—on the perceived mind of the artist and how these perceptions influence evaluations of artistic value and enjoyment.

2. Literature Review

2.1 Machine Creativity

In 1950, Turing posed the question, "Can machines think?" and proposed a method to measure machine intelligence through what is now known as the "Turing Test."[6] This test posits that if a machine can converse indistinguishably from a human, it can be considered capable of "thinking." By challenging the boundary between humans and machines, the Turing Test raised profound philosophical questions about the nature of humanity. A similar approach in the arts, termed the "Visual Turing Test," examines whether human-created and AI-generated artworks can be distinguished. For instance, a recent blinded experiment found that participants were unable to

differentiate between artworks created by humans and those generated by AI [7]. This result highlighted the technological advancements in AI-generated art, making it increasingly indistinguishable from human art. The Visual Turing Test provides a contemporary interpretation of Turing's original concept, raising critical discussions about whether machines can achieve human-like levels of creativity and artistic expression. However, this field remains in its nascent stages, with several limitations. First, most comparative studies between AI-generated and human-created art focus on abstract styles within fine art, neglecting other visual art styles. Second, generative AI produces images based on user demands rather than intrinsic intent. From the perspective of Rembrandt's view that "art is only complete when it achieves its inner intent."[8], the work process of AI art fundamentally differs from that of human artists.

2.2 Human Perception of Machine Creativity

Humans can perceive machines as social actors subject to social rules [9] and attribute mental capacities such as intent, will, and emotion to them [10]. Research indicates that people tend to perceive robots as having significantly lower levels of experience and agency compared to humans, including adults, children, and even infants. Another perceptual aspect, as revealed in studies on AI art, concerns bias and stereotypes. Kirk et al. found that images labeled as "Photoshop-generated" were evaluated as less artistic than those labeled as "museum artworks," indicating a bias against computer-generated art [11]. Similarly, in comparative studies between human and AI art, participants rated AI-generated artworks lower in terms of expression, composition, and aesthetics after being informed about the source of work [12]. Even in blind evaluation scenarios where participants failed to distinguish between AI and human art, participants still exhibited negative biases toward AI-generated artworks [7, 13].

Anthropomorphism, the unconscious attribution of human-like traits or characteristics to non-human entities such as objects, animals, or computers—has also been studied extensively [14]. Epley et al. theorized that this tendency stems from human-centric thinking which focused on human experiences and appearances. Non-human entities that resemble humans are more likely to be anthropomorphized. Studies by Riek et al. and Darling reported that anthropomorphized robots elicited more empathy from users compared to standard robots [15, 16]. Moreover, interactions with anthropomorphized robots were associated with greater affinity and enjoyment, an effect also observed in artistic contexts. Artworks created by anthropomorphized robots were perceived as more valuable and enjoyable [17], and this could help mitigate negative biases toward AI art [13].

RQ1. How does the perceived identity of an artist influence perceptions of intention, emotion, and cognition as well as subsequent evaluations of artistic value?

RQ2. Do people evaluate the artistic value of works created by anthropomorphized AI more favorably than those created by non-anthropomorphized AI?

2.3 Intention and Context in Creativity

Leder et al. [18] proposed a model of aesthetic appreciation, emphasizing that intention and context are pivotal in how audiences interpret the meaning of artworks and evaluate their artistic value and aesthetic emotion. Particularly in abstract and conceptual art, higher levels of cognitive engagement are required to understand the artwork's meaning, and positive aesthetic emotions and evaluations are more likely to form when intention and context are successfully perceived. Artist statements, which communicate the creator's intention and context, have been discussed as effective tools for enhancing aesthetic experiences and increasing evaluations of artistic value and enjoyment [18, 19]. These statements, which are typically delivered through exhibition materials as wall texts, brochures, press releases, and interviews, play a critical role in facilitating communication between artists and audiences. Previous studies have shown that concise artist statements (approximately 100 words) significantly improve aesthetic appreciation and enjoyment [19], particularly in representational visual art where form and content are more easily inferred [20].

The use of generative AI in commercial art is expanding rapidly. While generative AI efficiently produces images and text tailored to user demands, it lacks inherent artistic intent and context, which may contribute to lower evaluations of artistic value compared to human art. However, if intention and context are provided through artist statements, audiences may perceive the artistic value of AI-generated works similarly to that of human-created works.

RQ3. Can the inclusion of an Artist Statement conveying intent and context for AI-generated artworks lead audiences to perceive higher artistic value and enjoyment in such works?

3. Methods

3.1 Participants

Participants were recruited through Embrain, a professional online survey platform in South Korea. The survey was conducted over five days, from March 8 to March 12, 2024. Among 634 respondents who

accessed the survey, 300 participants who passed the screening questions (familiarity with or experience using generative AI) were selected as the final sample. Gender was evenly distributed (150 male, 150 female), with ages ranging from 20 to 69 years (M = 41.02, SD = 10.43). All participants resided in South Korea, with the majority living in metropolitan areas such as Seoul and Gyeonggi Province (N = 179, 59.66%).

Following prior research suggesting that evaluations of visual artwork can vary by education, income, and professional training in art [21, 18], participants' educational background, income level, and involvement in professional art training were collected. Most participants held a university degree (N = 171, 57.00%), with a monthly income ranging from 2 million to 5 million KRW (N = 176, 58.66%). Additionally, 14% (N = 43) reported prior experience with or training in the arts.

For participants familiar with generative AI (N = 300), those with usage experience (N = 211, 70.33%) were asked about their familiarity with generative AI and their attitudes toward it. Among users, the majority reported daily use (N = 127, 60.19%) and familiarity with 1–2 generative AI applications (1 app: N = 127, 60.19%; 2 apps: N = 58, 27.49%). To measure attitudes toward generative AI, two items were adapted from prior research [22, 23]: one assessing its utilitarian value ("Generative AI makes me more productive") and the other assessing its hedonic value ("I enjoy using generative AI"). A majority of participants agreed with both statements (utilitarian value: N = 158, 74.88%; hedonic value: N = 167, 79.15%).

3.2 Design and Procedure

The experiment used a 2 (perceived artist identity: human artist vs. AI artist) × 2 (artist statement presence: present vs. absent) × 2 (illustration theme order: social issues vs. daily life) factorial design, resulting in eight groups. Participants were randomly assigned to the eight experimental conditions. After passing the screening questions, participants answered demographic questions and proceeded to the main experiment. They were shown illustrations on two themes (social issues vs. daily life) with or without an accompanying artist statement. Participants then completed self-report surveys assessing their perceptions of the artist (mind perception) and evaluations of the artwork's artistic value and enjoyment. To prevent careless responses, prompts were included to encourage reflection during each exposure, and a forced delay of 5–10 seconds was applied on each page displaying the illustrations.

3.3 Stimuli

The stimuli consisted of two illustrations covering different themes (social issues vs. daily life) paired with two artist statements of approximately 100 characters each [18]. All stimuli were generated using OpenAI's generative AI models, GPT-4 and DALL-E.

3.4 Measures

Mind perception of the perceived artist (human vs. AI) was assessed using three subscales: (1) Emotion Perception (agreement with statements about the artist's ability to experience complex emotions), (2) Intention Perception (agreement with statements about the artist's ability to act with intentional goals), and (3) Cognition Perception (agreement with statements about the artist's level of awareness).

To measure perceptions of the artwork, *artistic value* was assessed using three items adapted from Robert's scale for evaluating artwork in professional studios[23]: the successful communication of ideas, aesthetic value, and degree of expression [12]. *Enjoyment* was measured using three items adapted from Temme's study on the impact of artist statements on museum visitors: "beautiful," "absorbing," and "interesting" [18].

4. Results

Following Tao and Bucy's [24] proposal that media stimuli effects can be mediated by user perceptions and moderated by individual differences, this study analyzed three independent variables: artist identity (artist type: AI vs. Human), intent and context (artist statement: absent vs. present), and illustration theme order. The mediating variables were mind perception (perceived emotion, intention, and cognition) of the artist, while the dependent variables were the artistic value and enjoyment of the artwork.

4.1 The Impact of Perceived Artist Identity and Artist Statement Presence on Mind Perception

A two-way analysis of variance (ANOVA) was conducted to examine the effects of artist type (human vs. AI) and the presence of an artist statement on mind perception (emotion, intention, and cognition). The results revealed significant main effects of both artist type and artist statement presence on emotion and cognition perception, but not on intention perception.

For emotion perception, human artists elicited significantly higher scores than AI artists ($F(1, 296) = 12.052$, $p < 0.001$). Post-hoc analysis confirmed this, with human artists ($M = 3.23$, $SE = 0.0665$) scoring higher than AI artists ($M = 2.90$, $SE = 0.0665$), $t(296) = 3.472$, $p < 0.001$. Similarly, the presence of an artist statement significantly increased emotion perception scores ($F(1, 296) = 5.803$, $p < 0.05$), with artworks accompanied by a statement ($M = 3.18$, $SE = 0.0665$) receiving higher scores than those without ($M = 2.95$, $SE = 0.0665$), $t(296) = -2.409$, $p < 0.05$.

For cognition perception, human artists again outperformed AI artists ($F(1, 296) = 9.162$, $p < 0.01$). Post-hoc comparisons showed that human artists ($M = 3.43$, $SE = 0.0693$) scored higher than AI artists ($M = 3.13$, $SE = 0.0693$), $t(296) = 3.027$, $p < 0.01$. The presence of an artist statement also significantly enhanced cognition perception ($F(1, 296) = 9.162$, $p < 0.01$), with artworks accompanied by a statement ($M = 3.39$, $SE = 0.0693$) receiving higher scores than those without ($M = 3.17$, $SE = 0.0693$), $t(296) = -2.211$, $p < 0.05$. No significant effects were found for intention perception ($F(1, 296) = 0.928$, $p = 0.336$ for artist type; $F(1, 296) = 1.819$, $p = 0.178$ for statement presence). Additionally, no interaction effects between artist type and artist statement presence were observed across any dimension of mind perception.

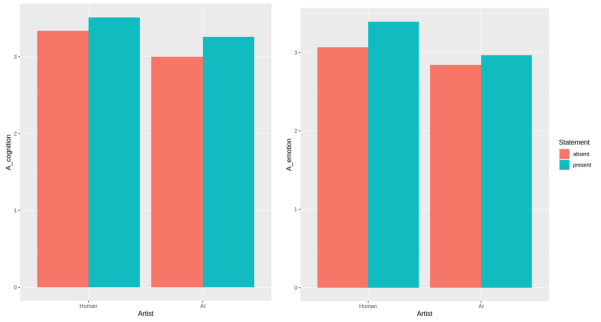

Figure 1. Artist type and the presence of an artist statement influence perceptions of emotion and cognition

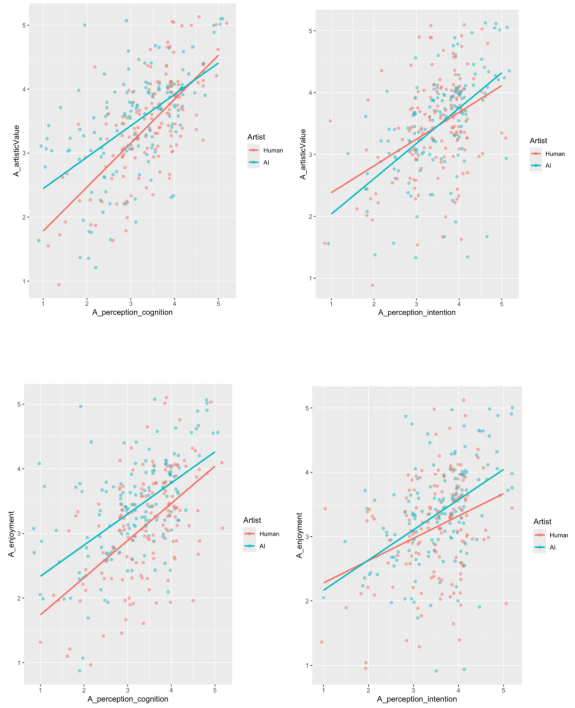

Figure 2. Perceptions of intention and cognition in the artist (human vs. AI) influence artistic value and enjoyment of artworks

4.2 The Impact of Mind Perception and Perceived Artist Identity on Evaluations of Artistic Value and Enjoyment

The reliability of the measures for artistic value and enjoyment, each assessed using three items, was verified using Cronbach's alpha. Both variables demonstrated high reliability (artistic value: $\alpha = 0.80$; enjoyment: $\alpha = 0.81$). Linear regression analysis and interaction effects were conducted to examine the influence of perceived mind and artist identity on these dependent variables.

Perceived mind had a positive and significant effect on artistic value (emotion: Estimate = 0.13213, $p < 0.05$; intention: Estimate = 0.17972, $p < 0.01$; cognition: Estimate = 0.44429, $p < 0.001$). Similarly, perceived mind positively influenced enjoyment or was marginally significant (emotion: Estimate = 0.133477, $p < 0.05$; intention: Estimate = 0.109609, $p = 0.0724$; cognition: Estimate = 0.413061, $p < 0.001$).

Artist identity (human vs. AI) did not directly affect either artistic value or enjoyment. However, interaction effects between artist identity and perceived mind (intention and cognition) were significant, suggesting that evaluations of artistic value and enjoyment differ between human and AI-generated works (intention: Estimate = -0.20274, $p < 0.001$; cognition: Estimate = 0.15514, $p < 0.01$). Specifically, higher perceived intention in AI-generated works (e.g., perceived purpose) led to greater artistic value and enjoyment compared to human-created works. Conversely, higher perceived cognition in human-created works (e.g., perceived consciousness) resulted in greater artistic value and enjoyment relative to AI-generated works.

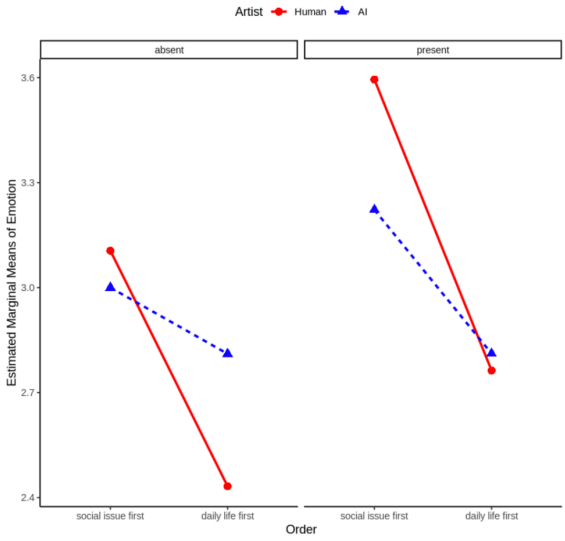

Figure 3. Artist type, the presence of an artist statement, and the artwork's theme influence the perception of emotion in the artist

4.3 The Impact of Artwork Themes on the Perception of the Artist's Mind

A 2x2x2 factorial analysis, incorporating the theme factor through the sequential evaluation of two artwork themes, was conducted to examine its effects on the perception of emotion. The results revealed a significant main effect of theme on emotional perception. ($p < 0.001$). Additionally, a significant interaction was observed between subject matter and artist type (human vs. AI) on emotional perception ($F(1, 290.7362) = 4.8973$, $p < 0.05$).

When the "social issues" theme was evaluated first, the mean emotional perception for both human and AI artists was higher compared to when the "daily life" theme was evaluated first. Furthermore, the presence of an artist statement resulted in overall higher emotional perception scores for both themes compared to the absence of a statement, with a notably larger effect observed for human artists.

These findings suggest that audience perception and evaluation may vary depending on the subject matter of AI-generated artworks. This highlights the potential influence of artwork themes on the reception and evaluation of both human and AI-generated creations.

5. Discussion

This study explored the integration of generative AI into the commercial art sector and its impact on audience perceptions. Specifically, we investigated how providing artist statements, including textual explanations of creative intent and context, similar to the conventions of human artists, affects perception of intention, emotion, and cognition, artistic value, and enjoyment of AI-generated works. The findings indicate that generative AI can move beyond functioning solely as a technological tool to actively contributing to arts-based industries. Based on these results, several key discussion points emerge.

5.1 Artistic Value in Machine Creativity

The artistic value of works generated by generative AI reignites the philosophical question of "What is art?" Traditionally, central to the discussion of human creativity, this question now expands in scope with the advent of machine-generated art.

The findings of this study indicate that when AI-generated works are perceived as having greater intention, audiences evaluate them as possessing higher artistic value in terms of successful message delivery, aesthetic quality, and expressiveness. This aligns with the theoretical framework proposed by Leder et al., which suggests that positive evaluations form when audiences can clearly interpret and understand the intent behind an artwork [18]. The findings also confirm previous research, such as that by Temme, that titles or other explicatory remarks enhance aesthetic experiences by placing the artwork in context and understanding the intentions of the work of art [19].

This study empirically confirms that the effects of artist statements observed in traditional art appreciation can extend to AI-generated art. More specifically, it points out that generative AI works are able to be perceived as proper art if accompanied by contextual and intentional explanations. These findings provide foundational evidence that machine-generated art can, with appropriate framing, be accepted as art, at least to motivate essential discourses about the artistic possibilities of generative AI.

5.2 AI as a Commercial Artist

AI-generated images have already been adopted across a range of commercial art applications, with their scope of use continually expanding. Commercial art, encompassing illustration, drawing, photography, and design, typically serves to communicate specific meanings or messages through visual mediums. While the evaluation of commercial art is inherently subjective and may vary depending on its context and purpose, well-executed works must not only be visually appealing but also effectively convey their intended message to the audience.

The findings of this study help explain the rapid acceptance of AI-generated images in the commercial art sector. By demonstrating that AI-generated works can achieve artistic value and message delivery akin to human-created works when accompanied by appropriate contextual framing, this study highlights AI's growing potential as a commercial artist.

However, the widespread integration of AI technology in creative industries necessitates critical discussions on its broader implications, particularly regarding the legal and ethical challenges it may pose to the creative ecosystem. These issues, including intellectual property, attribution, and the displacement of human creators, must be addressed as AI continues to redefine the boundaries of commercial art.

5.3 Limitations and Future Work

All participants in this study were either South Korean residents, and the majority ($N = 211$, 70.33%) had prior experience using generative AI and expressed positive attitudes toward the technology. Therefore, the findings cannot be generalized to reflect the broader public's perception and attitudes toward generative AI. Future studies should aim to validate the effects observed in this sample with more diverse participant groups, encompassing a wider range of attitudes, nationalities, and ethnicities.

Additionally, further exploration is needed to investigate how generative AI might influence audience interaction when it autonomously provides intent and context for its artworks. Future studies

could examine whether audience acceptance and the effects of art appreciation differ depending on the subject matter of the artwork. Investigating the applicability of these findings across various artistic domains could also provide deeper insights into the role of AI in the creative industries.

6. Conclusion

This study provides empirical evidence that machine-generated works, when accompanied by intent and contextual explanations similar to those used by human artists, can be perceived and accepted as having a level of artistic value comparable to human-created works. Additionally, the findings offer major insight regarding the rapid adoption and acceptance of AI-generated works in the creative industries. The study highlights important implications for the artistic value, societal acceptance, and ethical challenges of generative AI in the creative ecosystem, paving the way for further exploration and discussion in this evolving field.

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