

Analysing Young Adults' Preferences for AI-Generated and Human-Created Art in India: A Comparative Study Using the Mixed Method Approach

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Abstract

Artificial intelligence (AI) has emerged as a transformative tool in creating art, blending computational precision with creative processes. This study explores the appeal of AI-generated art compared to human-created physical and digital art among young adults in India, particularly focusing on visual art students. Additionally, the research addresses critical questions regarding the aesthetic appreciation and criticism of AI-generated art, its impact on human creativity, and its challenges to traditional art and its future. The research employed a mixed-method approach to understand preferences, motivations, and perceptions regarding these two art forms. The Art Reception Survey (ARS) was utilised to measure individual's engagement with visual aesthetics and their preferences. The qualitative approach using Multimodal Critical Discourse Analysis (MCDA) enabled deeper analysis, which helped examine how meaning, perceptions, and visual cues must have shaped their responses. The findings indicate a strong preference for original works involving creative thought processes and artistic skills - factors that lean towards a preference for traditional artwork. The findings suggest that despite rapid advancements in AI, people still significantly value human effort and creativity. The participants also acknowledged that blending both art forms can open new avenues of opportunity for the artists. The study suggests that traditional art will likely remain highly valued and argues that AI should not be seen in opposition to conventional art but as complementary tools for artistic innovation. While human-created art remains strongly appreciated, embracing AI would be the way forward, as outright rejection may not always be feasible or beneficial.

Keywords: AI-Generated Art, AI Technology, Artistic Innovation, Human-Created Physical Art.

Introduction

Artificial intelligence refers to machines or mechanical systems that imitate human thinking and behavioural patterns. The development of Artificial intelligence began as early as 1936 when Alan Turing, an English mathematician, computer scientist, and philosopher, developed the first computer known as the "Turing Machine" (1). His discoveries laid the foundations for complex concepts such as computability. Dartmouth College was the first to start the modern study of Artificial intelligence in 1956 (2). In recent years, experimental Artificial intelligence systems such as DALL-E, Midjourney, and Craiyon emerged that could generate artificially generated digital artwork based on the user's inputs. DALL-E 2, developed by OpenAI, can create original, realistic images and art from a text description, combining concepts, attributes, and styles (3). Midjourney operates through Discord, allowing users to generate images using descriptive prompts (4).

Craiyon, formerly DALL-E mini, is a free AI image generator that creates images from text prompts (5). Artificial intelligence is a system's ability to correctly interpret external data, learn from such data, and use that learning to achieve specific goals and tasks through flexible adaptation (6). Artificial Intelligence, hereafter referred to as AI in today's world, has many applications that aim to make our lives easier. AI is a programmed system integrated into electronic devices such as smartphones, televisions and other AI-enabled smart devices that perform tasks autonomously. The early discussion on AI has been discussed in the literature for more than half a century, since the seminal work of computer scientist Alan Turing. Today's world uses artificial narrow intelligence (ANI) to understand the digital world and sort massive amounts of data using machine learning principles and algorithms to sort and tag data into an enormous database. Facebook for example uses

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machine learning and artificial intelligence to sort and tag faces and accurately recognise faces (7). Tesla has developed self-driving cars through the power of AI (8). This is in keeping with Marx's standpoint, according to which machines replacing humans for physical work will develop into human intelligence replacing humans for mental work (9). AI is used in a variety of ways in today's world. One everyday use is in automated customer service, where AI-powered chatbots can handle simple customer queries without human intervention. AI is also used in marketing, for example, to personalise ads and content based on a user's individual preferences and behaviour. In addition, AI is increasingly used in healthcare to diagnose diseases and identify potential drug treatments across other domains ranging from education, law, media, and films to the environment, to name a few. However, for the real harmonisation of art and technology, people should use aesthetic reasons to guide AI technology (10).

AI has significantly intervened in and has transformed the functioning, processes, and outcome of the tasks performed using the technology, impacting industries and individuals in varying ways. The world of art and creativity is no exception to AI's influence. A single prompt given to an AI platform can generate artwork ranging from paintings and images to videos. The more specific and clear the prompt, the more refined the result. The present study emerges from a premise that if AI can generate splendid art within seconds, what are the implications for human-created physical or digital art? Will the artists and art enthusiasts continue to prefer traditional art forms, or is there a significant shift on the horizon? In addition, regardless of the speed at which AI operates, which artwork is more appealing of the two? How will this impact the several art movements that have shaped history over the past centuries, and how will legendary artists like Picasso and Rembrandt be perceived in the future?

This raises a critical question about the future of artistic expression. What lies ahead for artists, creators, art lovers, and educationists and who decides which artwork holds greater value - the AI-generated or the human-created? These questions form the foundation of this research, exploring the evolving relationship between artificial intelligence and artistic creativity.

Art has always been a reflection of human imagination and intelligence, but the limitations of artistic expression are growing with the arrival of technology. Stable Diffusion, a cutting-edge technique in generative AI, is one of the technological developments that has captivated the imagination of artists and fans alike. Stable Diffusion, a machine learning research and development product, has significantly impacted art and art appreciation (11).

At its core, Stable Diffusion is a machine learning model that operates in the domain of generative adversarial networks (GANs). These networks comprise two main parts: a generator and a discriminator. The generator generates data, in this case, photographs, and the discriminator determines the integrity of these generated images. The generator seeks to make indistinguishable images from genuine ones through iterative improvement, while the discriminator strives to become more discerning. Stable Diffusion is distinguished from its predecessors by its capacity to generate high-resolution images from text inputs. These prompts act as creative guidelines, directing the generator to create visuals corresponding to the verbal description. For example, by supplying a prompt such as "a serene sunset over a tranquil lake," one might change the content and atmosphere of the created image. This fusion of words and imagery gives artists new power and inspiration.

Another outstanding feature of Stable Diffusion is its ease of use. With tools like "Diffusion Explainer," Stable Diffusion has become more accessible to a broader audience. Diffusion Explainer is a web-based tool that allows users to engage with the Stable Diffusion model without needing specialised gear or coding knowledge. This democratisation of AI-driven art production allows people from all walks of life to interact with generative AI technology, enabling a democratisation of creativity. Stable Diffusion has transformed the creative process, blurring the distinction between human and AI artists. Designers and innovators can now work with AI models to realise their inventive ideas. They aid the AI in learning their artistic vision by offering textual cues, resulting in the creation of artworks that would have been impossible to create otherwise. Human-AI collaboration challenges traditional concepts of authorship and opens up

new options for artistic expression. The potential of Stable Diffusion to transcend established artistic styles is one of its most profound effects on art. Artists can experiment with different styles while manipulating text prompts and controlling the creation. This increased adaptability has resulted in innovative and hybrid artistic genres that defy categorisation (12). For example, an artist can combine elements of Impressionism and Cubism by programming the AI to create "an abstract landscape with a touch of Monet's water lilies." This confluence of styles pushes the frontiers of artistic expression and promotes innovation in the art world. Stable Diffusion has also improved the experience of enjoyment in art. This technique's AI-generated artworks frequently provoke a sense of wonder and intrigue. Viewers are presented with familiar and bizarre visuals, inviting them to investigate the interaction between human imagination and machine interpretation. Furthermore, Stable Diffusion has increased the accessibility of art by allowing more people to participate in the creative process. As a result, it has broadened the art landscape by introducing fresh voices and viewpoints.

Integrating intelligent technology into art has resulted in AI art, which seeks to eliminate contingency, dialectics, and negativity from art (10). Art appreciation refers to the intrinsic skill of viewing and understanding art and its various forms across different historical periods, cultures, and people. AI can be applied to art appreciation by generating art using machine learning algorithms. For example, a study conducted in 2021 explored how people respond to music created by artificial intelligence (AI) compared to human music (13). The study found that AI-generated music was often rated lower in likability and emotional appeal than music created by human composers. This finding suggests that there may be something unique about human creativity that AI algorithms cannot replicate. Another way that AI can be applied to art appreciation is by using AI to analyse and categorise art. For instance, AI algorithms could analyse and categorise artworks based on various factors, such as style, colour, and composition. This could help art historians and curators better understand different artworks' contexts and historical significance.

The study conducted by Hong, Peng, and Williams also found that people's expectations played a

significant role in their appreciation of AI-created music. Specifically, when the music violated their expectations, participants rated it as more interesting and creative than music that followed more conventional patterns (14). This is consistent with the expectancy violation theory, which suggests that people find unexpected stimuli more interesting and attention-grabbing than expected stimuli (14). This finding has important implications for creating digital art with artificial intelligence, as it suggests that breaking conventional patterns and creating unexpected stimuli can lead to more positive responses from viewers. Additionally, the concept of processing fluency discussed in the papers can also be applied to digital art created by artificial intelligence. Research has shown that people rate stimuli as aesthetically pleasing when they are easy to process (15). This is true for static and dynamic stimuli, indicating that processing fluency can influence aesthetic evaluation across different types of art (15). This suggests that digital art created by artificial intelligence may be more aesthetically pleasing when presented in a way that is easy to process.

The Lovelace effect is named after English mathematician Ada Lovelace, who was often considered the first computer programmer. Lady Lovelace's objection is a concept explained by Alan Turing significantly in his 1950 paper: "The Analytical Engine has no pretensions to originate anything. It can do whatever we know how to order it to perform" (16). In the early 1800s, Lovelace wrote instructions for an Analytical Engine, a machine that could perform calculations. However, Lovelace saw the machine as a simple calculator and a tool that could be used for more complex applications such as creating music. The effect describes situations where people think a computer is doing something original and creative while following instructions. The Lovelace effect is the idea that people will only see computers as being creative if they are. In other words, creativity is only a result of humans projecting their ideas and definitions of creativity onto computers, not an absolute quality of the machine. Today, the Lovelace effect is often used to explain why people are more likely to see computers as creative tools if they are creative individuals. It is also used to show how humans can impose their own biases and preconceptions onto machines.

Theoretical Framework

Art has a distinctive characteristic of getting perceived; drawing from the theoretical reference of Cognitive Bias theory, individuals associate information to align with their pre-existing beliefs. Regarding AI-generated and human-created art forms, cognitive biases play a significant role in shaping preferences. Authenticity bias is one such kind, where people consider that human-created art is inherently more valued due to the perception of intentionality and emotional depth (17). Individuals believe that creativity is primarily linked with emotions, human experiences, and expressions; due to this preconceived belief system, they often 'undervalue AI-generated art' even when its quality matches or exceeds that of human crafts.

Confirmation bias, where individuals who already believe that AI-generated art lacks originality and emotional depth are more likely to interpret AI-created works as inferior (18). This issue gets elevated by the framing effect, which implies that merely labelling an artwork as "AI-generated" maligns its aesthetic evaluation. Studies have shown that when participants are unaware of the creator's identity, they rate AI-generated art similarly to human-created art, but once informed, their grades decline (19).

Narrowing into the Indian context, traditional art forms reside in a highly culturally signified spot. Young adults have a core association with technological nuances and still follow cultural narratives that vouch for human artistic expression compared to machine-generated works. It becomes highly tangled to comprehend these biases in evaluating AI-generated art and finding ways to lessen preconceptions about technological creativity. In the Indian context, people tend to have an open and emotionally connected way of looking at art. Studies have shown that Indian viewers often appreciate both traditional and international artworks, without a strong preference for one over the other (20). This openness may be influenced by the Indian aesthetic concept of *rasa*, which values the emotional experience art creates, rather than just who made it (21). At the same time, Indian culture places importance on the human effort and intention behind a creation (22). Scholars have observed that Indian audiences often connect with art through cultural stories, spiritual ideas, and

symbolic meanings (23). The way people in India understand and interpret images is also shaped by long-standing traditions like mythological storytelling and classical art theories, which still influence how modern artworks are viewed today (24). However, AI-generated art is increasingly being exhibited and discussed in Indian art spaces now, reflecting growing interest and engagement with technology-driven creativity (25). With AI technology reshaping how art is produced, consumed and appreciated, it has become imperative to understand and critically examine this transformation.

Scope and Relevance of Study

This research examines the appeal of AI-generated art compared to human-created physical and digital art among visual art students in India. The study will include a survey to explore their preferences and motivations for choosing AI-generated digital art over human-created art or vice versa. This research aims to shed light on current trends in art preferences among young adults in India, particularly Visual Art students and their perceptions of AI-generated art.

The appeal of artificial intelligence (AI)-generated art versus human-created physical and digital art among young adults in India has not been adequately explored, particularly in the Indian context. Addressing this research gap is crucial for understanding the proliferation of AI-generated art and the appeal of human-created physical and digital art.

This study will provide insights into the future of existing art forms and how evolving technologies are transforming and influencing them. In addition, it will help determine whether emerging technologies can serve as a saviour for centuries-old art forms or if they have the potential to render them obsolete. The study will provide artists, educators, and art enthusiasts with a sense of direction regarding future artworks and how relevant conventional artworks and movements like impressionism, cubism, surrealism, or art nouveau currently are. It will also offer insights for the art markets, galleries, and creative industries to adapt to the evolving trends and transforming landscape in AI-driven and human-created art.

To explore the appeal of AI-generated art compared to human-created physical and digital art by analysing cognitive stimulation, emotional

appeal, artistic quality and authenticity using the Art Reception Survey.

To determine the factors influencing the younger generation's choices and preferences for AI-generated or human-created physical and digital art. To examine the potential implications of the preferences for AI-generated art and human-created physical and digital art to determine the future of the centuries-old art forms.

Hypothesis 1

H₀ (Null Hypothesis): There is no significant difference between AI-generated and human-created art regarding cognitive stimulation and emotional impact.

H₁ (Alternative Hypothesis): There is a significant difference between AI-generated and human-created art regarding cognitive stimulation and emotional impact.

Hypothesis 2

H₀ (Null Hypothesis): There is no significant difference between AI-generated and human-created art regarding artistic quality and authenticity.

H₁ (Alternative Hypothesis): There is a significant difference between AI-generated and human-created art regarding artistic quality and authenticity.

Hypothesis 3

H₀ (Null Hypothesis): The factors influencing art appreciation and ownership decisions do not significantly differ between AI-generated and human-created art.

H₁ (Alternative Hypothesis): The factors influencing art appreciation and ownership decisions significantly differ between AI-generated and human-created art.

Methodology

The study employed a mixed-method approach following both a positivist and interpretative paradigm. The aim was to identify art preferences among young adults and determine the reasons behind their choices. Therefore, the study adopted quantitative and qualitative approaches to discover and analyse young adults' preferences for AI-generated or human-created physical and digital artworks. The three broad research objectives and hypotheses were formulated in alignment with the study's aim and research problem. To seek answers to the research questions and test the hypothesis, the study

employed the Art Reception Survey (ARS) introduced by Hager, Housen, and Leder in 2012. ARS is a tool designed to measure how individuals experience art, engage with visual aesthetics, and know their choices to allow the researcher to dive deeper and identify the reasons behind their preferences (26). With the ARS, several key factors listed below were assessed regarding preferences for AI-generated or Human-created art.

- Cognitive Stimulation
- Emotional Response
- Artistic Quality and Aesthetic Appeal
- Authenticity and Originality
- Preferences and Consumption Patterns
- Future of Art and Technology Influence

Both AI-generated and human-created artworks were presented to respondents, and ARS was followed to record their responses. Each category listed above was inquired into by showing the selected artwork to the respondents and recording their preferences. While ARS helped quantify the aesthetic experiences and preferences of the people, the qualitative approach enabled deeper analysis, examining the visuals and design patterns, and helped identify potential reasons behind their choices.

For qualitative analysis, the study used the Multimodal Critical Discourse Analysis (MCDA) introduced by Gunther Kress and Theo Van Leeuwen to study communication beyond the written text (27). The visual elements in these artworks were examined using the MCDA. This approach enables the correlation of findings from the quantitative ARS results with qualitative insights, helping to identify patterns in art reception or examine how meaning, perceptions, and visual cues must have played a role in shaping their responses.

The population for this study consists of young adults aged 18 to 24 who are both creators and consumers of art. The Art Reception Survey was administered to these individuals, and conclusions were drawn based on the collected responses and analysed data.

A simple random sampling technique was used to ensure an unbiased representation of young adults in India. This method provides an equal probability of selection for all participants, reducing selection bias and ensuring diverse responses. The target population includes visual art students from several educational institutions. The sample size

determined for the study was 385 participants. Informed consent was obtained from all participants, and ethical research guidelines were followed throughout the study.

Participants were shown six types of AI-generated and human-created physical and digital artworks and asked to respond based on the survey criteria. Additionally, these artworks were analysed through MCDA to correlate findings with quantitative data.

Participant Selection

Participants were selected based on age, education level with an emphasis on diverse socio-economic and regional background ensuring diversity in regional representation. At the same time, all participants were the students of visual arts, ensuring they possessed the relevant knowledge about the area of inquiry.

Data Collection

The Art Reception Survey (ARS) was administered digitally. It consisted of standardised items measuring cognitive stimulation, emotional response, artistic quality and aesthetic appeal, authenticity and originality, preferences and consumption patterns, and influence of the future of art and technology.

Participants viewed AI-generated and human-created artworks and rated their preferences using a Likert scale.

Data Analysis

Quantitative data was analysed using the paired T-test method to determine trends and correlations. When the P-value reflected the significant difference, then the Mean, Standard Deviation, and Confidence Interval were tested to validate the accuracy of the conclusion.

The artworks used for the survey were selected purposefully, and the respondents were not made aware of whether they were AI-generated or human-created to ensure bias-free data collection.

Results and Discussion

The participants were shown AI-generated and human-created physical or digital artworks to determine which ones they found cognitively stimulating, emotionally evocative, aesthetically appealing, authentic, and original. In addition, their preferences, consumption patterns, and opinions on the future of art and technology. To avoid participant bias, they were not informed about whether the artwork was AI-generated or Human-created.

Six questions were designed to measure the above mentioned factors, each presenting AI-generated and human-created artwork to the participants. In addition, four objective questions were included to understand their preferences for AI-generated and human-created artwork. The questionnaire was administered online to 385 respondents, and the paired T-test was conducted to determine if their choices significantly differed. The p-value of 0.05 was set as the threshold to measure statistical significance.

In cases where a significant difference was found, the mean, standard deviation, and confidence interval were calculated to determine whether respondents preferred the AI-generated or Human-created physical or digital artworks. As respondents were unaware of whether the artworks were AI or Human-created, the Multimodal Critical Discourse Analysis was conducted to examine how meaning, perceptions, and visual cues must have shaped their responses.



Figure 1: (A) AI-generated Starry Night, Produced with DALL-E (28), and (B) The Starry Night by Vincent Van Gogh, Reproduced from the Museum of Modern Art (29)



Figure 2: (A) Girl with a Pearl Earring by Johannes Vermeer, Reproduced from the Mauritshuis Museum (30), and (B) AI-generated Girl with a Pearl Earring, Produced with DALL-E (31)

The *Starry Night* painting (original painting in Figure 1B) by Vincent van Gogh and the *Girl with a Pearl Earring* painting (original painting in Figure 2A) by Dutch Golden Age painter Johannes Vermeer were presented to the participants to determine which of the two pictures are cognitively stimulating and emotionally evocative to them. The *Starry Night* is known for its swirling night sky and emotional intensity, often interpreted as a reflection of the artist's inner turmoil. *Girl with a Pearl Earring* is celebrated for its realism and subtle expression, often called the "Mona Lisa of the North." The paired t-test showed no significant difference in how respondents perceived AI-generated and human-created art regarding cognitive stimulation and emotional appeal ($p = 0.37$, $p = 0.27$, respectively). The

analysis was conducted using 95% confidence interval, and the effect size found was negligible. The effect size Cohen's d was 0.11 with 95% CI (0.01, 0.21) for Figure 1 and it was -0.13 with 95% CI (-0.23 , -0.03) for Figure 2, indicated minimal practical difference. The practical and statistical evidence indicates that the respondents did not prefer one art form over the other, thus supporting the Null Hypothesis 1. This suggests that AI-generated and human-created art can be equally cognitively stimulating and emotionally evocative. However, the visual analysis of paintings (MCDA) suggests that while AI images may have unique stylisation, the ability to blend multiple genres and vibrancy, they may not necessarily be more appealing or preferred over human-created art.

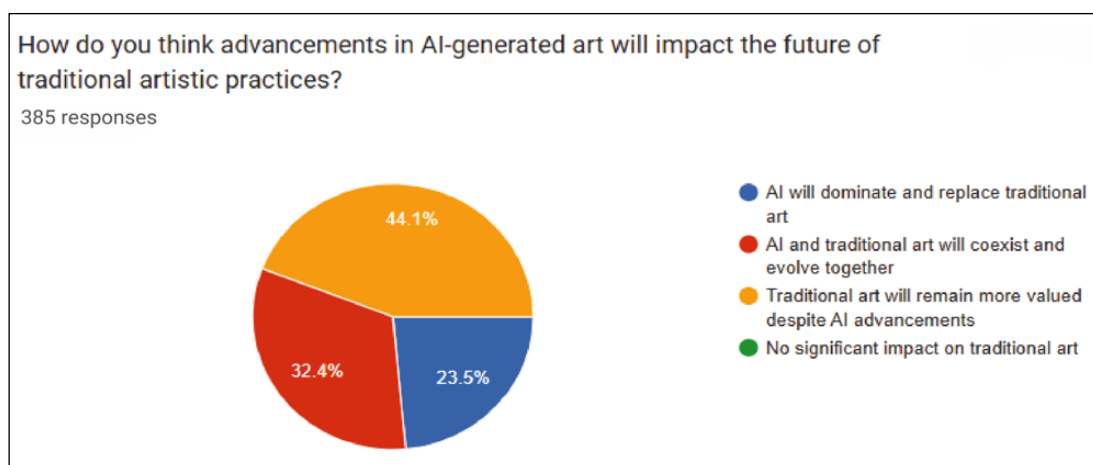


Figure 3: AI Art's Potential Impact on the Future of Traditional Artistic Practices

As represented in Figure 3, the responses to the first objective-type question indicate that participants did not prefer AI-generated art over human-created art, with 44 percent believing that traditional art will remain more valued despite AI advancements and 32 percent believing that AI and Traditional art will evolve together. This

indicates that while AI art offers novel possibilities, human-created art continues to hold significance. Individuals may feel a deeper connection to paintings by artists like Vincent van Gogh and Johannes Vermeer because of their visual style, emotional depth, and personal connection if they can recognise the artist.

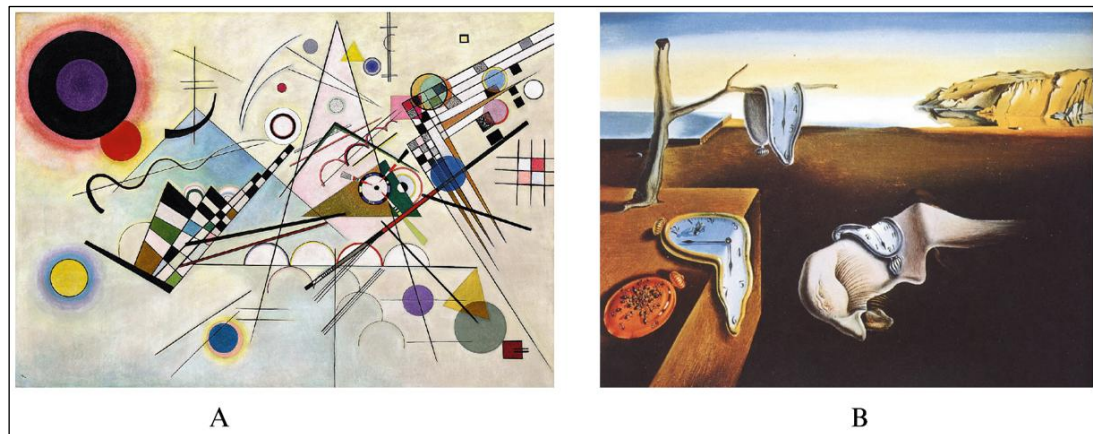


Figure 4: (A) AI-generated The Persistence of Memory, Produced with DALL-E (32), and (B) The Persistence of Memory by Salvador Dalí, Reproduced from the Dalí Theatre-Museum (33)

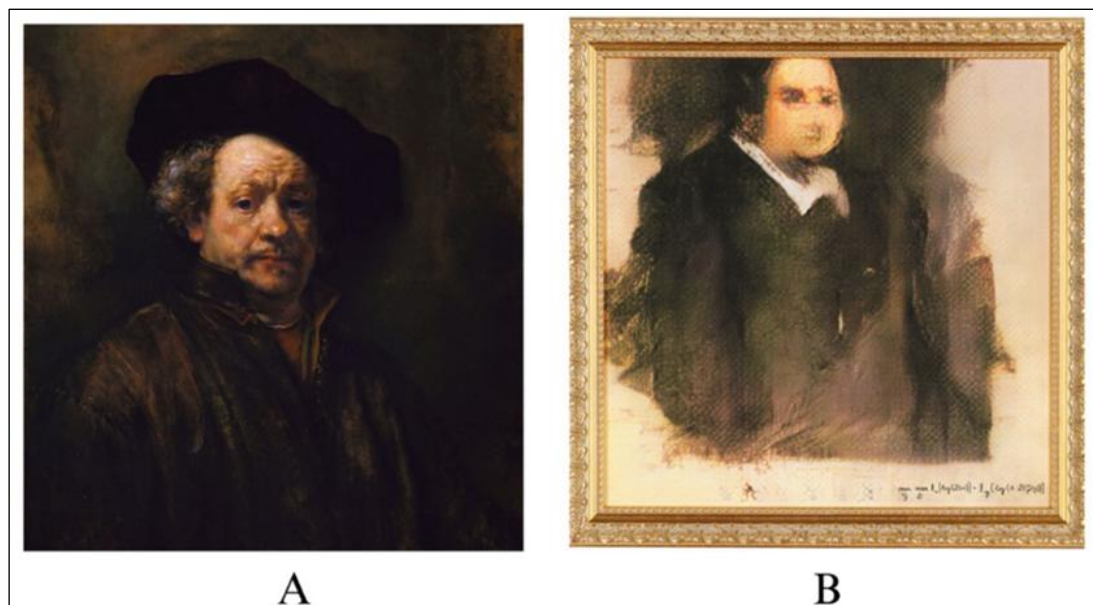


Figure 5: (A) Self-Portrait by Rembrandt van Rijn, Reproduced from the Metropolitan Museum of Art (34), and (B) Portrait of Edmond de Belamy, Produced by the Art Collective Obvious Using AI (35)

The paintings in Figures 4 and 5 were tested to determine the artistic and aesthetic appeal and authenticity of AI-generated and human-created artwork. The Persistence of Memory by Salvador Dalí shows melting clocks in a dream-like scene, often seen as a symbol of how time can feel unreal. Rembrandt's Self-Portrait captures the artist's own face reflecting his life, emotions, and experiences. Portrait of Edmond de Belamy is a digital artwork

created by an AI algorithm developed by the art collective Obvious, and it became famous as one of the first AI-generated artworks sold at a major auction. Based on the responses received and statistical tests conducted using the paired T-tests, the respondents found the human-created art more aesthetically appealing and authentic than AI-generated art.

Human-created art was rated significantly more artistically and aesthetically appealing than AI-generated art ($p = 0.03$, $M = 3.42$ vs. $M = 2.76$), suggesting that respondents found traditional artworks more visually pleasing. Also, human-created art was perceived as significantly more authentic and original ($p = 0.00067$, $M = 3.91$ vs. $M = 2.85$), indicating a strong preference for art with a sense of artistic passion and human intent. The analysis used a confidence interval of 95% and the effect size measured (Cohen's $d = 0.7$, 95% CI (0.59, 0.81); and $d = 0.8$, 95% CI (0.69, 0.91) for Figure 4 and Figure 5 respectively showing a strong and practical preference of human-created art. These findings suggest that while AI-generated art can be engaging, it may still struggle to match human-created art in terms of perceived quality and authenticity, thus supporting Alternative

Hypotheses 2. The AI-generated version of *The Persistence of Memory* appears impersonal, lacking human intervention. The AI interpreted the prompt as if memory had to be represented with abstract forms of lines, graphs, and shapes rather than visuals that evoke an emotional connection. Rembrandt's self-portrait is a clear and refined painting, while *Portrait of Edmond de Belamy*, being one of the first images created using Generative AI in 2018, lacks clarity due to technological limitations. This shows that clarity and refinement can influence people's preferences for the artwork even if they are unaware of their origin. However, as technology has advanced since then, AI models can now create visually stunning images which may also shape people's perceptions about art in future.

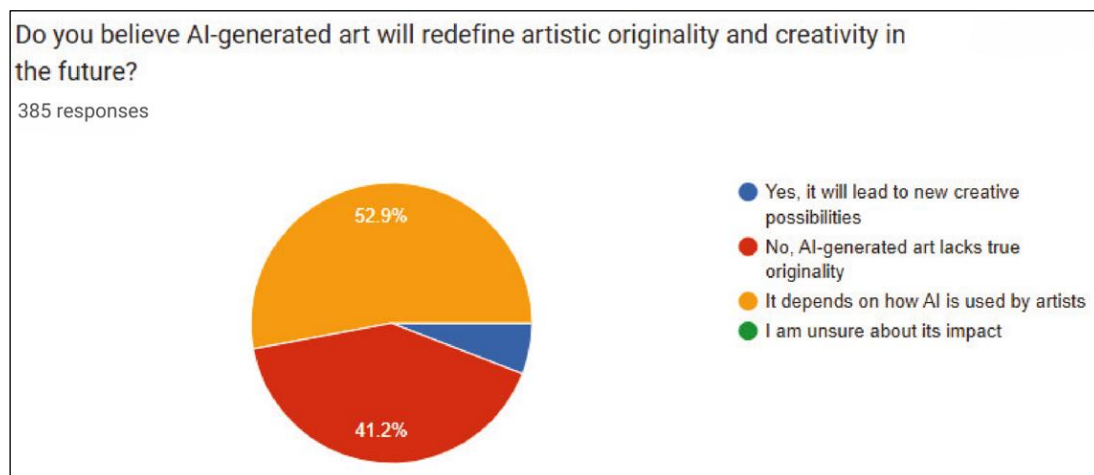


Figure 6: AI Art's Potential to Redefine Artistic Originality and Creativity in Future

As shown in Figure 6, the second objective-type question exploring AI Art's potential to redefine artistic originality and creativity in future added two more dimensions to the analysis. First, 50 percent of the participants believed that whether AI will redefine originality and creativity depends upon how artists use it. In other words, the

respondents did not outright deny that AI cannot redefine it. Second, more than 41 percent stated that AI-generated art lacks true originality, which is understandable as the new technology can only regenerate the artwork based on the given prompts and the data it has been trained on.

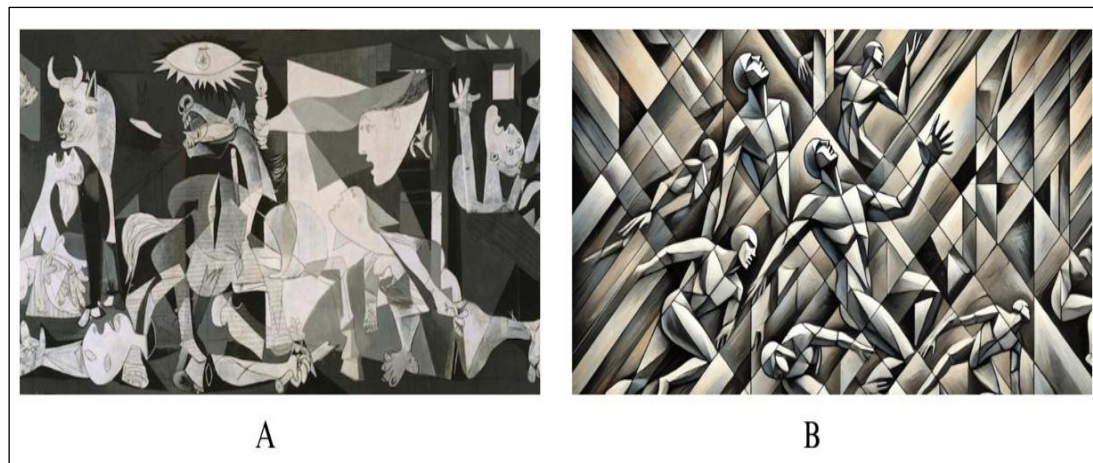


Figure 7: (A) Guernica by Pablo Picasso, Reproduced from Pablocicasso.Org (36), and (B) AI Artwork Created by DALL-E Using the Prompt “Re-Creat Guernica” (37)

Even if it does so, the effect of the oil painting cannot be replicated precisely in the Generative AI image. These findings suggest a strong preference

for human-created art despite rapid advancements in AI and its ability to re-create any artwork within seconds.

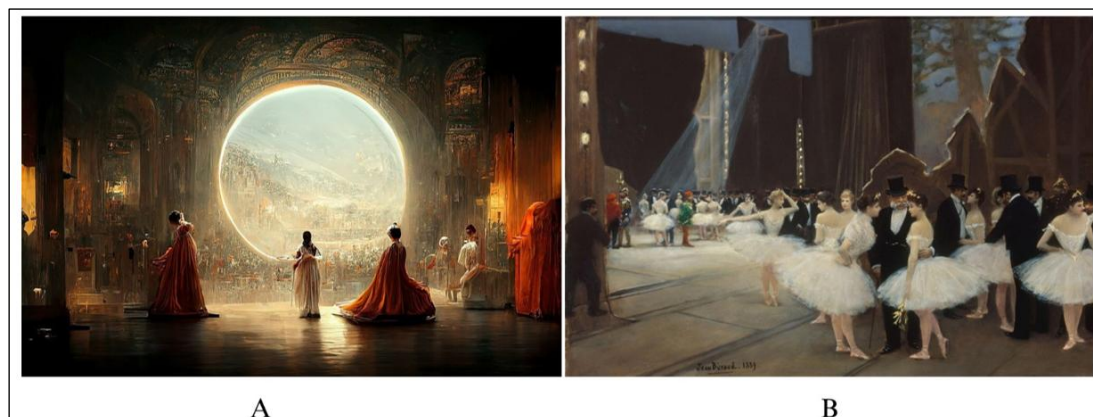


Figure 8: (A) Space Opera Theater, Produced Using Midjourney by Jason M. Allen (38), and (B) Backstage at the Paris Opera by Jean Béraud, Reproduced from Art.Com (39)

Guernica by Pablo Picasso and its AI-generated version was presented to the respondents to determine which paintings they would prefer to own if given a choice, whether they had no strong preference or would not like to keep either. Guernica, one of the most influential works and an anti-war painting by Pablo Picasso, is based on war atrocities by Nazi Germany in the village of Guernica in Northern Spain. Fascist forces in Spain joined hands with Hitler, resulting in the Nazi Army bombing the town, killing hundreds of innocent civilians.

Acknowledging that Gen AI could not regenerate Guernica as expected, more than 70 percent of participants favoured the original painting if they chose to own any of the two. The p-value of 0.02 indicated a significant difference between their choices for the paintings they wanted to own. The

original ‘Guernica’ was rated significantly more preferable and appealing than the AI-generated version ($p = 0.02$, $M = 3.56$ vs. $M = 1.77$), suggesting that respondents found the original artwork more visually pleasing. For Figure 7, with a confidence interval of 95% (0.56, 0.91), Cohen's d value recorded was 0.9 indicating a strong preference for the human-created original work. The visual analysis also confirms that the emotions presented in the original artwork are far more potent than those in the AI-generated image. Picasso left no stone unturned in pouring his emotions into the painting, representing the state of chaos and helplessness in Guernica. The analysis maintains that traditional artworks' emotional appeal and originality distinguish them from impersonal, technologically created art. Despite advancements

in AI, human expression and artistic intent remain irreplaceable in the art world.

The paintings in Figure 8 were shown to participants to help them understand which of the two they believe represents the future of art. Space Opera Theater was created by Jason M. Allen using the AI tool Midjourney and gained attention for winning an art competition, igniting debate about AI in art. Backstage at the Paris Opera by Jean Béraud is a painting showing performers behind the scenes, capturing the atmosphere of 19th-century Paris. Unlike Guernica, where the majority (more than three-fourths) of the participants favoured Picasso's original painting, in the case of Space Opera Theater (2022) and Backstage at the Paris Opera (1889), respondents expressed interest in a combination of both artistic approaches. The p-value of 0.09 means there is not enough statistical evidence to reject the null hypothesis. With regard to Figure 8, the effect size (Cohen's $d = 0.2$) with confidence interval of 95% (0.03, 0.25) showed a small practical difference for the preference for any one art form over the other. This shows that there is no significant difference between people's preferences when asked about the future of art as they did not strongly prefer any

one form of art over the other. However, findings suggest that AI art, when combined with traditional techniques, has the potential to create something innovative and engaging.

Space Opera Theater (2022) presents a futuristic, vibrant, and dreamlike scene with surreal elements, while Backstage at the Paris Opera (1889) captures the realism of a historical opera setting. The AI-generated artwork appears visually striking, with perfectly framed performers, no distractions or visual noise, and vibrant colours instantly grabbing attention. However, this visual appeal alone did not lead respondents to select one over the other; instead, they indicated a preference for blending both styles to achieve a more enriched artistic expression.

The analysis suggests that rather than replacing traditional art, AI could serve as a tool to enhance human creativity and introduce new artistic possibilities. Traditional art forms should not be opposed to AI-generated art; instead, their fusion could open up new opportunities for artists, allowing them to experiment, innovate, and redefine artistic boundaries in the evolving landscape of visual expression.

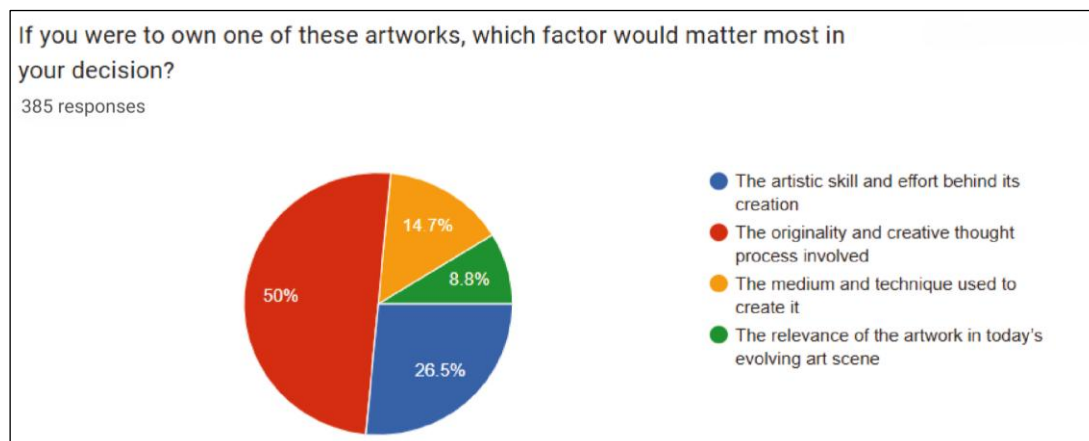


Figure 9: Factors Influencing Respondents' Decision to Own the Discussed Artworks

As represented in Figure 9, the third objective-type question inquired into the factors influencing respondent's decisions to own the discussed artworks. The responses revealed that fifty percent of the participants stated that the originality and creative thought process involved would influence their decision if they were to own any of these artworks. Twenty-six and a half percent stated that artistic skill and the effort behind it would affect their choice. Originality, creativity, creative skill, and effort are the primary

indicators of giving recognition and respect to conventional artworks. Despite advancements in technology, traditional artistic dedication continues to be highly valued. The transforming technological landscape does not deter people from recognising the significance of original work and creative commitment.

While AI-generated art is gaining attention, it has yet to replace the deep emotional and cultural connections that human-created art develops.

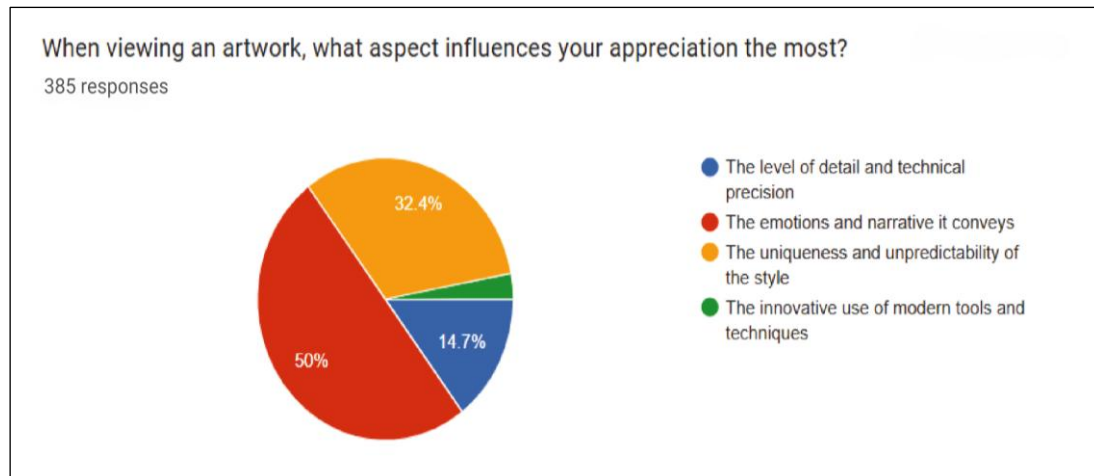


Figure 10: Aspects that Influence Respondents' Appreciation of the Art the Most

Similarly, as represented in Figure 10, the answer to the fourth objective-type question revealed that fifty percent of the participants cited that emotions and narrative artwork conveyed would play a significant role in their appreciation of it. More than thirty-two percent stated that the uniqueness and unpredictability of the style would influence their decision if they were to praise an artwork. However, only about three percent of the respondents stated that the innovative use of modern tools and techniques was the reason. While most responses show a strong current preference for human-created art, it also opens up broader questions about creativity and authorship in the age of artificial intelligence. Theories from posthumanism and digital aesthetics suggest that

as machines become capable of producing art, we are forced to rethink the traditional idea of the artist as an individual. Barthes proposed the concept of the "death of the author," shifting focus from the creator to the viewer's interpretation (34). In the context of AI, this raises questions about whether AI-generated images—produced through vast datasets and algorithms—can truly carry emotional or cultural intent. Scholars in digital art also argue that while AI can imitate style, it may still fall short in conveying human depth and authenticity, which respondents also reflected in the current study (35). These ideas open up new avenues for exploring fundamental questions such as what art is, who is an artist and what the future holds for them.

Table 1: Triangulation Matrix: Human vs. AI-Generated Art – Indian Context

Factor	Method 1 - ARS using Paired t-tests (Perceptual ratings)	Method 2 -MCDA (Interpretative)
Cognitive Stimulation	No significant difference between preferences for original and AI-generated 'Starry Night'.	Starry Night by Vincent Van Gogh with its impactful brush strokes and colour palette, stands out for its clarity and ability to convey the intended meaning. The AI-created version had unique style and vibrancy but lacked artistic depth.
Emotional Response	No clear preference for either form (Girl with a Pearl Earring).	Girl with a Pearl Earring by Johannes Vermeer looked realistic and emotionally deeper, and often called the "Mona Lisa of the North. The AI-version appeared clean, vibrant and eye-catching but lacked the

Artistic Quality and Aesthetic Appeal	Original Persistence of Memory by Salvador Dali preferred over its AI version.	emotional texture of the original. The original Persistence of Memory artistically shows melting clocks, a dream-like scene to symbolise how time can feel unreal. The AI-generated version appeared impersonal and geometrical.
Authenticity and Originality	Rembrandt's self-portrait was perceived as more authentic and original in comparison to AI-created The Portrait of Belamy.	Rembrandt's self-portrait is a clear and refined painting, while Portrait of Edmond de Belamy, being one of the first images created using Generative AI lacked clarity due to technological capabilities of 2018.
Preference and Consumption	Guernica rated much higher than its AI version (AI failed to evoke emotion or narrative depth)	The emotions presented in the original artwork are far more potent than those in the AI-generated image. AI created an image which appeared robotic and lacked human emotions.
Future of Art and Technology	Mixed response for Backstage at the Paris Opera vs. Space Opera Theater (no significant preference)	Backstage at the Paris Opera captures the realism of a historical opera setting. The AI-generated Space Opera Theater artwork appears visually striking, with perfectly framed performers, no distractions, and vibrant colours instantly grabbing attention. However, this did not result in AI-created version being preferred over the human-created artwork.

The triangulation matrix in Table 1 summarises the quantitative and qualitative findings from the Art Reception Survey and Multimodal Critical Discourse Analysis. The matrix highlights how the perceptions measured through the ARS align or differ from interpretation done through critical visual analysis. The matrix synthesises the findings from both the survey and the MCDA, demonstrating a preference for human-created art over the AI-generated art.

Conclusion

The data indicates a strong preference for original works involving creative thought processes and artistic skills - factors that lean towards a preference for traditional artwork. This suggests that while technological advancements reshape the art world, audiences still significantly value human effort and creative intent. However, the evolution of AI technology cannot be undermined, as the blend of both can open new avenues of opportunity for artists. Though respondents emphasise factors like originality and authenticity, claiming that something created using technology is not original or authentic would be unjustified. The study proposes that traditional art will likely remain highly valued in future, and AI should not be seen in contrast with conventional art. Just as a paintbrush is a physical tool to paint the canvas, AI is a more advanced digital tool with the potential to create new artwork or reinterpret existing ones. Furthermore, the evolution of technology has always influenced the processes and practices across all domains, and mankind has gradually embraced these changes. Likewise, AI is the next phase in technological advancement, which will expand and enhance human intelligence and creativity. Rather than resisting these innovations, integrating them into the artistic practice may lead to new forms of creative expression and unexplored possibilities. Therefore, embracing AI would be the way forward, as outright rejection may not always be feasible or beneficial.

The notion of AI as a tool to aid the creative process provides a nuanced perspective on the symbiotic relationship between human creativity and technological augmentation. AI is a dynamic instrument capable of redefining creativity, generating unique inspiration and encouraging inquiry into undiscovered realms of art and invention. The delicate interplay between human

creativity and AI's generative capacities is summarised in the awareness that "as artists create or integrate AI into their creative processes, they can harness its generative capabilities, innovating novel ideas and enhancing their existing workflows." This perspective presents AI as a collaborative ally, complementing the creative process rather than usurping it. However, artists must use AI cautiously, keeping their distinctive vision and emotional depth in conjunction with AI's data processing capabilities. The idea that AI doesn't replace but alters the creative process emerges as a guiding principle in the broader conversation. This nuanced perspective opposes dystopian notions of AI supplanting human creativity, emphasising that humans play a critical role in directing and curating the outputs generated by AI. The interdependence between humans and AI in the creative world is embodied in the notion that "tools change humans, and humans change tools." The symbiotic relationship underlines the coevolution of creativity and technology, wherein the artist plays the position of a director, influencing the course of AI-generated outputs. This paradigm envisions a future where the prosperity of the artist resides in their capacity to be skilled curators, navigating the ever-expanding range of possibilities given by AI while preserving a base anchored in human artistic practice.

Abbreviations

AI: Artificial Intelligence, ANI: Artificial Narrow Intelligence, ARS: Art Reception Survey, GAN: Generative Adversarial Networks, MCDA: Multimodal Critical Discourse Analysis.

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Author Contributions

Both authors contributed equally to the conceptual framework, methodology, data analysis, and the overall refinement and finalisation of the paper.

Conflict of Interest

The authors declare that there are no conflicts of interest, either real or perceived, related to this research.

Ethics Approval

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References

1. Dawson, Jr JW. The Essential Turing: Seminal Writings in Computing, Logic, Philosophy, Artificial Intelligence, and Artificial Life plus The Secrets of Enigma, by Alan M. Turing (author) and B. Jack Copeland (editor).2007:179-181.
<https://projecteuclid.org/journals/review-of-modern-logic/volume-10/issue-3-4/Review--The-Essential-Turing--Seminal-Writings-in-Computing/rml/1312203781.pdf>
2. McCarthy J, Minsky ML, Rochester N, Shannon CE. A proposal for the dartmouth summer research project on artificial intelligence, august 31, 1955. *AI magazine*. 2006 Dec 15;27(4):12-12.
3. OpenAI. DALL-E 2. <https://openai.com/index/dall-e-2/>
4. Lifewire. Tech news, reviews, help & how-tos. Lifewire. <https://www.lifewire.com/>
5. Craiyon. Your FREE AI image generator tool: Create AI art! Craiyon, AI Image Generator. <https://www.craiyon.com/>
6. Kaplan A, Haenlein M. Siri, Siri, in my hand: Who's the fairest in the land? On the interpretations, illustrations, and implications of artificial intelligence. *Bus Horiz*. 2018;62(1):15-25.
7. Taigman Y, Yang M, Ranzato MA, Wolf L. DeepFace: Closing the gap to human-level performance in face verification. In: *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition*. 2014:1701-8.
http://openaccess.thecvf.com/content_cvpr_2014/html/Taigman_DeepFace_Closing_the_2014_CVPR_paper.html
8. Caradas. Tesla Vision: A closer look at Tesla's new ADAS features. 2023 May 26.
<https://caradas.com/tesla-vision-adas-features/>
9. Marx K, Engels F. Karl Marx, Frederick Engels: Collected Works. 1975.
<https://www.scrip.org/reference/referencespapers?referenceid=2727200>
10. Tao F. A new harmonisation of art and technology: Philosophic interpretations of artificial intelligence art. *Critical Arts*. 2022 Mar 4;36(1-2):110-25.
11. Dehouche N, Dehouche K. What's in a text-to-image prompt? The potential of stable diffusion in visual arts education. *Heliyon*. 2023;9(6):e16757.
12. Rettberg S, Rettberg JW. Algorithmic narrativity: Literary experiments that drive technology. *Dialogues on Digital Society*. 2025 Apr;1(1):37-40.
13. Hong JW, Peng Q, Williams D. Are you ready for artificial Mozart and Skrillex? An experiment testing expectancy violation theory and AI music. *New Media Soc*. 2021;23(7):1920-35.
14. Hong J, Liu Y, Liu Y, Zhao L. High school students' online learning ineffectiveness in experimental courses during the COVID-19 pandemic. *Front Psychol*. 2021;12:738695.
15. Reber R, Schwarz N, Winkielman P. Processing fluency and aesthetic pleasure: Is beauty in the perceiver's processing experience? *Pers Soc Psychol Rev*. 2004;8(4):364-82.
16. Abramson D. Turing's responses to two objections. *Minds Mach*. 2008;18(2):147-67.
17. Chamberlain R, Mullin C, Wagemans J. The artistic Turing test: An exploration of perceptions of computer-generated and man-made art. *J Vis*. 2015;15(12):112.
18. Nam S, Song J, Kim C. The influence of creator information on preference for artificial intelligence- and human-generated artworks. *Korean Soc Emot Sensib*. 2022;25(3):107.
19. Messingschlager TV, Appel M. Mind ascribed to AI and the appreciation of AI-generated art. *new media & society*. 2025 Mar;27(3):1673-92.
20. Chatterjee A, Widick P, Sternschein R, Smith WB, Bromberger B. The Assessment of Art Attributes. *Empirical Studies of the Arts*. 2010;28(2):207-22.
21. Vatsyayan K. The Square and the Circle of the Indian Arts. New Delhi: Abhinav Publications. 1997.
<https://books.google.com/books?hl=en&lr=&id=vwLjc3pBzzUC&oi=fnd&pg=PR8&dq=21.%09Vatsyayan+K.+The+Square+and+the+Circle+of+the+Indian+Arts.+New+Delhi:+Abhinav+Publications%3B+1997.&ots=r57mTERxBB&sig=pvVRNDAlMB03bU1BkvNWXU8HoSM>
22. Dissanayake E. *Art and Intimacy: How the Arts Began*. Seattle: University of Washington Press. 2000.
<https://www.degruyterbrill.com/document/doi/10.1515/9780295997469/html>
23. Mitter P. *Indian Art*. Oxford: Oxford University Press. 2001.
<https://www.scribd.com/document/522621836/Oxford-History-of-Art-Partha-Mitter-Indian-Art-Oxford-University-Press-USA-2001-1>
24. Dehejia V. *Indian Art*. London: Phaidon Press. 1997.
<https://www.scribd.com/document/855227881/Vidya-Dehejia-Indian-Art-Phaidon-Press-1997-1-250205-225920>
25. Agrawal H. Panel discussion: New Realities of Art: Creative Collaboration with Generative AI. *Art Mumbai*. 2023 Dec 1.
<https://www.artmumbai.com/program/new-realities-of-art-a-panel-on-the-creative-collaboration-with-generative-ai>
26. Hager M, Hagemann D, Danner D, Schankin A. Assessing aesthetic appreciation of visual artworks—The construction of the Art Reception Survey (ARS). *Psychol Aesthet Create Arts*. 2012;6(4):320-33.
27. Kress G, van Leeuwen T. *Multimodal discourse: the modes and media of contemporary communication*.

- London: Arnold. 2001.
<https://cir.nii.ac.jp/crid/1130000798172506880>
28. Chauhan V. AI version of The Starry Night [digital image]. 2025 Feb 25. <https://chatgpt.com/g/g-2fkFE8rbu-dall-e>
 29. Van Gogh V. The Starry Night [digital image]. 1889. <https://www.moma.org/collection/works/79802>
 30. Vermeer J. Girl with a Pearl Earring [digital image]. c.1665. <https://www.mauritshuis.nl/en/our-collection/artworks/670-girl-with-a-pearl-earring>
 31. Chauhan V. AI version of Girl with a Pearl Earring [digital image]. 2025 Feb 25. <https://chatgpt.com/g/g-2fkFE8rbu-dall-e>
 32. Chauhan V. AI version of The Persistence of Memory [digital image]. 2025 Feb 25. <https://chatgpt.com/g/g-2fkFE8rbu-dall-e>
 33. Dipi. The Persistence of Memory. Medium. 2020 Jul 2. <https://dipi0.medium.com/the-persistence-of-memory-ce1bdcfb3a5e>
 34. Rembrandt vR. Self-Portrait [digital image]. 1660. <https://www.metmuseum.org/art/collection/search/437397>
 35. Obvious. Portrait of Edmond de Belamy [digital image]. 2018. <https://www.christies.com/en/stories/a-collaboration-between-two-artists-one-human-one-a-machine-0cd01f4e232f4279a525a446d60d4cd1>
 36. Picasso PG. [digital image]. 1937. <https://www.pablopicasso.org/guernica.jsp>
 37. Chauhan V. AI artwork generated from the prompt 're-create Guernica' [digital image]. 2025 Feb 25. <https://chatgpt.com/g/g-2fkFE8rbu-dall-e>
 38. Allen JM. Théâtre D'opéra Spatial [digital image]. 2022. <https://www.jasonmallen.com/space-opera-theater>
 39. Béraud J. Backstage at the Paris Opera [digital image]. 1889. <https://www.art.com/products/p61919349238-sa-i13019040/jean-beraud-backstage-at-the-paris-opera-1889-oil-on-wood.htm>