AI UPRISING- ANALYZING THE DISRUPTIVE TRANSFORMATION OF DESIGN EDUCATION, HEREAFTER

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ABSTRACT

The education sector is beginning to see the potential of artificial intelligence (AI) to create smarter classrooms that improve the teaching and learning experience for students as well as teachers. Nevertheless, an excessive dependence on AI might result in a reduction in the diversity of thinking, which in turn can lead to suboptimal group performance as well as the risk of possible indoctrination. This out-of-control race to develop powerful digital minds may prompt reasonable fear and disruption among educators. The human race, as in the past, has generally overestimated the short-term impact of new technologies while grossly underestimating their long-term implications. Before the conventional position of an educator is reduced to that of a playground monitor, education boards around the world should reconsider a monitored control on the use of AI. Platforms such as "Midjourney" and "Stable Diffusion", which have developed their businesses by scouring the internet for the data sets utilised by their generators, are now breeding alternative mock-ups that feature the work of conventional artists and illustrators, a majority of whom have not been contacted for consent, credited, or compensated in any way. The purpose of the study is to analyse the work of two groups of 50 design students who are enrolled in higher education at Pearl Academy, India, and who develop mock-up ideas using two distinct methods. A sketch-based strategy for hand-drawn sketches and a semantic-based approach for AI images scraped from the internet that will be assessed and contrasted to gauge the relative efficacy of both approaches. Empirical conclusions are derived from a comparative analysis of hand-drawn and AI-generated art scenarios. This analysis is conducted through an online survey in the form of a questionnaire, which is created using Google Forms and guided interviews administered by a sample size of 20 design tutors from Pearl Academy's five Pan-India campuses. These tutors evaluate the final artworks of students, thereby facilitating discussions on each scenario and critically examining methodological assumptions.

1. INTRODUCTION

Artificial intelligence (AI) has transitioned from a theoretical concept to a pervasive technology that permeates our everyday existence, manifesting itself in various forms such as personal virtual assistants like Siri, algorithm-driven search suggestions on Google, and autonomous vehicles (Tulshan and Dhage, 2019). Given the growing significance of artificial intelligence (AI), there has been a surge in discussions surrounding this subject matter. These discussions have generated divergent viewpoints, with certain individuals perceiving recent advances in AI as favorable, while others hold a contrasting perspective, perceiving them as unfavorable. There exists a divergence of opinions on the potential impact of artificial intelligence (AI) on human existence. Proponents assert that AI has the capacity to enhance safety and prosperity, whereas detractors contend that AI may reach a state of uncontrollability, posing a future threat to human societies. Additional issues regarding artificial intelligence (AI) are grounded on common-

place apprehensions, specifically pertaining to the potential impact of AI on the labor market. Numerous individuals express apprehension that AI would render a significant number of human occupations obsolete (Cox, 2023).This concern is evidently well-founded, given its existing manifestation as a prevailing pattern in contact centers, assembly lines, and the fast food business.

Creative activities are an additional domain in which artificial intelligence appears to be on the verge of surpassing human capabilities. In 2016, Google Deepmind's AlphaGo, a computer program designed to play the game of Go, achieved significant proficiency in this very intricate game. Its remarkable performance garnered widespread recognition, with particular emphasis on its perceived "creative" capabilities. The field of traditional art has witnessed notable advancements in artificial intelligence, showcasing swift progress (Shen and Yu, 2021). The significance of this matter lies in the fact that art, particularly painting, has been widely recognized for thousands of years as the epitome of human ingenuity across various cultures. In Western culture, painting has always been regarded as possessing religious connotations and has commonly been interpreted as a manifestation of humanity's furthest refined and aesthetic form of communication. The progress made in AI-generated artwork inherently introduces complexities to current conceptions of originality and aesthetic attractiveness within the realm of art (Cetinic and She, 2022).

1.1 Research Objectives

The fundamental objectives of the study are twofold.

Firstly, the objective of this study is to ascertain the criteria individuals may utilize while making aesthetic evaluations that necessitate advanced cognitive processing to assess communication attributes. These criteria encompass four separate factors, namely emotionality, aesthetic beauty, worth, and perception.

Objective 1: To determine the standards that academicians employ when making aesthetic judgments which evaluating art in higher education.

Secondly, several research have investigated the variation in individuals' evaluations of hand-drawn versus AI-generated artworks. However, the findings have been inconclusive, therefore failing to provide a definitive solution to this inquiry. Therefore, the author aimed to enhance the comprehensibility of the response to this inquiry by utilizing a sample size of 20. The present study posits a hypothesis suggesting that individuals will exhibit a discernible inclination towards hand-drawn artwork in comparison to art generated by artificial intelligence.

Objective 2: To posit that individuals tend to exhibit a predilection for hand-drawn artwork in comparison to art generated by artificial intelligence.
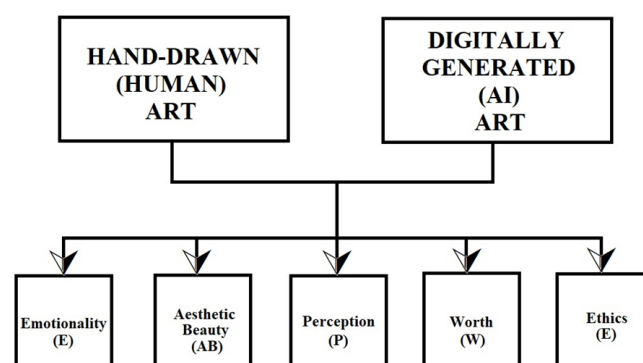

Fig. 1. Research Model

2. LITERATURE REVIEW

2.1 Relationship between Art & AI

Coeckelbergh (2016), posits that AI-generated items possess the potential to align with the notion of "art," thereby satisfying both objective and subjective requirements. If a set of objective criteria exists for determining what constitutes art, it logically follows that artificial intelligence (AI) can be developed to generate goods that align with these criteria. If the determination of whether a product may be considered "art" is contingent upon a subjective assessment, then it follows that any entity, even things made by artificial intelligence, possesses the potential to be classified as art (qFiasco, 2018). Hence, it is imperative to distinguish between the inquiry of whether artificial intelligence (AI) can generate art and the inquiry of whether AI can produce art that possesses quality and merit. Hence, rather than inquiring about the inclusion of AI-generated products within the conventional definition of art, this study examines the potential for AI-generated products to be regarded and accepted on par with artworks produced by human artists. Furthermore, the study investigates how participants' evaluation of the artwork is influenced by their awareness of the artist's identity, whether AI or human.

The significance of non-human entities in artistic endeavors is gaining recognition within the area of art, as their involvement in creative processes becomes progressively indispensable (Nicoleta ACOMI et al., 2023). Currently, there is an increasing effort to quantify the subjective evaluation of artistic works. The utilization of heuristic and empirical methodologies in the development of AI systems for art creation has the potential to yield unforeseen insights. This research study aims to contribute to the existing body of scholarly work in this field. This investigation of art generated by artificial intelligence is anticipated to have broader consequences for future research on AI's creative abilities, thereby influencing the overall perception of human creativity. Bostrom and Yudkowsky (2018) argue that when machines surpass humans in a particular domain, the qualities previously associated with human intelligence are no longer considered indicative of genuine "intelligence." Given that "creativity" is commonly regarded as an inherent human ability, we must contemplate how our perception of artwork might need to be reevaluated if AI generates artwork that is more aesthetically appealing (Arielli and Manovich, 2021).

The exploration of art by artificial intelligence extends beyond the realm of visual arts. Presently, there exists a body of research focused on the development of artificial intelligence systems for the purpose of generating musical compositions and poetic works. There is a perspective held by certain individuals that the creative outputs generated by artificial intelligence are simply replicas of human artistic endeavors (Cremer, Bianzino and Falk, 2023).

2.2 Emotionality

Prior studies have demonstrated that AI-generated art exhibits a deficiency in capturing and conveying profound emotions and subjective experiences (Chatterjee, 2022). For instance, certain music compositions generated by artificial intelligence may exhibit qualities such as robotic tonality, a lack of warmth, or an absence of vitality. Certain AI-generated photographs may exhibit a deficiency in capturing the photographer's own comprehension and artistic interpretation of the subject matter (all-about-photo.com, 2023). The artworks in question exhibit a deficiency in effectively conveying human feelings and experiences, hence falling short in establishing a genuine emotional connection and fostering empathy with the audience. Although AI art has the capability to produce diverse forms of artwork, it is unable to supplant human artists. In contrast, artificial intelligence (AI) is limited to generating works through predetermined algorithms and data, rendering it challenging to accommodate diverse scenarios and requirements, navigate the intricate and dynamic real world, and engender truly innovative and imaginative outputs (Duan et al., 2019). In the domain of design, it is observed that AI generators may have challenges in meeting client requirements and delivering distinctive and compatible design solutions. Moreover, existing AI technology exhibits some limits, including its ability to handle intricate scenarios and accurately identify concealed elements inside photographs, necessitating future enhancements (Ali et al., 2023). The implementation of AI in the art sector can be influenced by several technical limitations.

Artificial intelligence (AI) is currently at the forefront of technological advancements. However, the integration of

human emotions into AI systems poses a significant challenge. The creation of art, in particular, relies heavily on the artist's personal experiences and emotions (Hospers, 2019). These elements are crucial in imbuing a stroke of the brush or a narrative with a distinct personality, evoking a sense of warmth and capturing the essence of a particular era. This ability to resonate with audiences extends beyond mere technological prowess, highlighting the multifaceted nature of artistic expression. Currently, artificial intelligence (AI) technology remains imperfect in its ability to perceive beauty through personal emotions and lacks the capacity to develop autonomous judgments on artistic matters (AIContentfy, 2023). The deficiency observed in AI art extends beyond the absence of emotion; it also encompasses the absence of the embodied perception of the environment, which is crucial for generating emotion and the associated sense of vitality (Demmer et al., 2023).

2.3 Aesthetic Value

The current state of research may have a more nuanced view of the aesthetic comparison between human and AI art. Humans have the ability to attain aesthetic innovation throughout all aspects of cognition and production, whereas AI can only make surface-level reflections of aesthetics thinking (Bellaiche et al., 2023). Works of art that were produced by people rather than by AI may reflect a profound human experience and, as a result, be considered more economically worthwhile. AI is unable to make such works of art. In point of fact, artificial intelligence can only make pieces of visual art that are sensorily comparable to one another, yet remaining relatively beautiful and liked. This offers an interesting new angle from which to view the aesthetics and creativity studies of the future: one that does not see either quality as an all-or-nothing characteristic, but rather as a spectrum of talents that AI may one day be able to comprehend. However, the use of artificial intelligence (AI) in the creative process of art continues to raise doubts about the authenticity and integrity of artistic expression (Egon et al., 2023).

Some people believe that artificially generated art does not have the same emotional depth, originality, or one-of-a-kind quality as art that was made by humans. On the other hand, there are many who feel that artificial intelligence can still make art that is original and aesthetically beautiful, thereby challenging traditional concepts of artistic expression and pushing the frontiers of creative potential. There is little doubt that the art sector has been revolutionized by artificial intelligence, which has opened the door to brand new opportunities for aesthetic experimentation and interactive encounters (www.ironhack.com, n.d.). In addition, art that is created by AI has the ability to push the limits of human creativity and offer up new doors for artistic innovation and expression (Zhou & Nabus, 2023). In conclusion, the application of AI in the creative process presents the industry with both exciting prospects and challenging problems to solve.

2.4 Perception

Perception in art refers to the intricate connection between visual stimuli and an individual's personal interpretation of them. This postulate is a theoretical proposition that seeks to elucidate the connection between artworks and individual opinions and assessments. Perception of art is not universally set, but rather influenced by the context in which observation and appraisal take place (Pepperell, 2012). Instead than relying on broad models of comprehension, understanding is influenced by several circumstances, such as political, social, cultural, gender, and racial aspects. It has an impact on our perception of art and the interpretations we assign to it, while also playing a significant role in the process of artistic production. Without the preexisting concepts of value derived from complex perceptual conditionings, it would be challenging to make definitive statements about the meaning of art. Both the perspectives of an artist and an observer are equally significant in comprehending art, with no distinction made regarding their relevance.

Perception plays a significant role in shaping the interpretation of art, as evidenced by various historical instances. Moreover, these interpretations frequently undergo transformations as time progresses (Pepperell, 2012). While many universal postulates may endure, the majority of them are contingent upon the specific social norms of a given era. Perception and our opinions are intricately interconnected. Regarding art, it is evident that the assessment of artistic styles has evolved over time, supporting the idea that our ideas and perception of art are interconnected. Within the realm of art, the meanings derived from our observation are focused and conveyed through visual rep-

resentation. Style, on the other hand, serves as an individualized approach to depicting the world, offering various interpretations.

2.5 Worth

The factors and components that ascertain the worth of art have undeniably evolved over time. While there is ample literature examining the performance of art as an investment, there is currently limited research exploring the impact of the recent COVID-19 outbreak on the art market. Consequently, the inquiry "Should art possess value?" is already being substituted by "To what extent does art possess value"? In order to address this inquiry, it is necessary to assess the prices of various artworks in order to identify a universally applicable index. Nevertheless, this endeavor is challenging due to the unique nature of each picture, making it impossible to categorize them into broad and uniform categories (Collins, Scorcu, & Zanola, 2009). Consequently, since paintings are diverse goods, the price of each one is influenced to some degree by its own distinct features (Chanel & Ginsburgh, 1992).

An effective classification of the various components involved in determining the worth of art encompasses:

•The intrinsic value of art lies in its symbolic quality, which is a deeply subjective emotional value. It is tied to the viewer's emotional response, the sensations it evokes, and cannot be physically demonstrated or possessed (Estes, Brotto and Busacca, 2018).

•The societal significance of art lies in its ability to provide a communal space for us to congregate as a collective. Multiple empirical investigations have conclusively shown that art in rural communities has the potential to significantly enhance economic development. Moreover, it enhances the connections among individuals residing in these locations. Furthermore, it is crucial to acknowledge the significance of art in society, particularly in relation to tourism.

•The commercial worth, also known as market value, is determined by a combination of criteria that are assessed in relation to one other. These factors include tangible aspects such as size, as well as intangible aspects like an artist's reputation and the demand from collectors.

2.6 Ethics

The artistic accomplishments of human beings might serve as a manifestation of their social complexity (Sherman and Morrissey, 2017). Ethical considerations exhibit a strong interconnection with factors such as race, temporal dynamics, societal structures, political systems, cultural contexts, and other relevant elements. Artificial intelligence, as a technology, currently lacks the social and political complexity, as well as the awareness and ability to comprehend and differentiate ethical concerns (UNESCO, 2023).

The utilization of artificial intelligence algorithms and information in the creation of art can potentially exhibit biases and discriminating tendencies (Carroll, 2000). The presence of limited diversity or inequality within the dataset can result in the manifestation of biases and discriminatory tendencies inside AI systems. As an illustration, a facial recognition algorithm that has been trained exclusively on a dataset comprising white faces may have limitations in reliably identifying faces of non-white individuals (Najibi, 2020). The utilization of artificial intelligence in art creation can potentially serve as a means to propagate racial or other types of discrimination. The utilization of an AI algorithm by an artist to create artwork with racial undertones would likely engender adverse consequences within society, including inciting controversy and prompting public demonstrations. Sexism or gender stereotypes may also manifest in the realm of AI-generated artwork. In the context of GAN-generated images, it is frequently observed that female representations tend to embody characteristics such as curvaceousness, delicacy, and adherence to established gender role expectations (Elasri et al., 2022). Hence, it is imperative to consider these ethical and moral concerns during the development and utilization of AI art creation approaches, and proactive measures must be implemented to mitigate or minimize their impact. For instance, it is imperative to develop data sets with a deliberate emphasis on diversity and equality. Additionally, algorithms should undergo regular revisions to ensure fairness and

mitigate biases. Moreover, the utilization of AI algorithms can be instrumental in generating creative works that are devoid of discriminatory connotations (Belenguer, 2022).

2.7 Academic evaluation of AI generated artwork

Two decades ago, there was existing scholarly research that investigated the concept of artificial intelligence (AI) creativity specifically within the realm of painting (Francisco Tigre Moura, Castrucci and Hindley, 2023). The discipline of digital art has recently shown increased interest in exploring the implications of artificial intelligence (AI) in the creation of art. Numerous endeavors have been made to generate artistic works through the utilization of artificial intelligence (AI). Notably, Google's DeepDream project and the Creative Adversarial Networks (CAN) have successfully achieved certain artistic aspirations in this domain. The DeepDream program utilizes a convolutional neural network to conduct an analysis of patterns and forms inside a provided image, subsequently generating a novel image with hallucinogenic properties. Elgammal et al. (2017) propose Creative Adversarial Networks (CAN) as an artificial intelligence (AI) system designed to generate art. The primary objective of CAN is to maximize divergence from established styles while simultaneously limiting variation from the distribution of art (Mehta et al., 2019). One intriguing discovery from the development of Creative Adversarial Networks (CAN) was the inability of individuals to differentiate between artwork generated by CAN and artwork created by humans. Furthermore, evaluators consistently assigned higher ratings to CAN-generated artworks, considering them to be more innovative, aesthetically pleasing, purposeful, visually organized, communicative, and inspiring.

Chamberlain et al. (2018), conducted a significant study that explored individuals' opinions towards art generated by non-human entities, specifically computers and robots. The researchers' study revealed that individuals were unable to differentiate between artwork produced by humans and artwork made by computers. However, participants exhibited a bias towards computer-generated art, which was then reversed when they were presented with anthropomorphized agents involved in the art creation process. Significantly, their research posited that a predisposition towards the notion that AI has the capacity for creativity plays a pivotal role in distinguishing evaluations of AI-generated artwork from those produced by humans. In contrast to the current study, which employed a multifaceted approach to assess artwork by incorporating many criteria, Chamberlain's (2018) study solely focused on soliciting respondents' evaluations of the aesthetic appeal of specific art pieces. The study did not provide sufficient information to determine the particular criteria that influenced participants' aesthetic judgment of the artwork, given the subjective nature of attractiveness in art evaluation.

Based on the existing body of scholarly literature, this research will center its attention on external variables that influence the evaluation of both hand-drawn and AI-generated artwork. The underlying premise is that divergent perceptions of AI artwork may not be exclusively attributed to its inherent qualities, but rather are intertwined with the evaluator's broader attitudes towards AI. This research employs a standardized guided interview format to evaluate the key aspects involved in the evaluation of artwork, specifically when the identity of the producers (whether they are artificial intelligence or human) is not disclosed prior to assessment.

3. RESEARCH METHODOLOGY

3.1 Student Artists

This study recruited a total of fifty students who were enrolled in the Postgraduate Fashion Design program at Pearl Academy's five campuses across India. The selection of participants was based on their preference for either digital graphics or hand drawings. Nevertheless, there was an uneven distribution of ethnicity among the participants, with a significant majority identifying as Indian. The age range seen in the sample was between 21 and 25 years. Out of the total sample size of 50 participants, 37 were identified as female while the remaining 13 were identified as male. Table 1 presents a concise overview of the demographic characteristics of the participants.

1	Pearl Academy Pan India Campus	West Delhi Campus= 8 South Delhi Campus = 7 Jaipur Campus = 14 Mumbai Campus = 6 Bengaluru Campus = 5
2	Gender	Female = 37 ; Male = 13
3	Age Group	21-25 yrs
4	Religion	Hindu = 33 Christian = 2 Muslim = 4 Others = 1
5	Qualification	Post Graduate

Table 1 Artists Profile

3.2 Design Evaluators\

Multiple criteria were used to select the evaluators. Firstly, they are affiliated with a distinguished and globally re-nowned institution that focuses on the art and design. Furthermore, they are esteemed for their expertise and skill in various artistic domains, including fashion, textiles, product, interiors, communication and jewelry. Additionally, having evaluators from diverse departments within the same organization would provide opposing viewpoints and stances, allowing the author(s) to compare and contrast multiple perspectives. A total of 20 design academicians from 5 campuses of Pearl Academy, were selected to evaluate the art works produced by the 50 students. Their re-sponses were analysed using firstly an online survey created by Google Forms with items from a Likert scale that had five points and were pre-coded so that 1 represented "Strongly Disagree" and 5 represented "Agree", and secondly by interviewing the student artists on their artworks.

The interviews were structured with an introductory section, a series of questions, and a concluding segment. Fol-lowing the standard protocols, the interviewer recorded observations and posed relevant inquiries pertaining to different facets of the artists' work. The objective was to delve further into a diverse elements that the interviewee had employed in the creation of their art with special references to the artwork's emotions, beauty, perception, worth and lastly ethics.

1	Pearl Academy Pan India Campuses (5)	West Delhi Campus South Delhi Campus Jaipur Campus Mumbai Campus Bengaluru Campus
2	Gender	Female = 11 ; Male = 9
3	Age Group	29-63 yrs
4	Qualification	Post Graduate = 14 Doctorate = 6

Table 2 Evaluators Profile

Initially, two groups were established, each consisting of 25 students who were assigned a theme based project to create art based on their skill level. The selection of human-created artworks was based on their stylistic or thematic resemblance to each AI-generated artwork, resulting in the formation of pairs of comparable artworks. The selection of human-created artworks was based on their apparent resemblance in terms of composition and style to the images generated by AI.

4. FINDINGS AND ANALYSIS

A total of 20 reports prepared by contributing evaluators have provided extensive study data. Table 3 represents the statistical data of the reports.

Evaluator Code	Total words in File	Total paragraphs in File	Number of nodes coding File	Number of Text References
PAJPR-001	2330	28	180	103
PAJPR-002	1305	18	60	64
PAJPR-003	1120	14	168	38
PAJPR-004	1413	21	58	110
PAJPR-005	1615	20	94	84
PAPR-006	1326	21	110	60
PADW-007	1437	26	102	54
PADW-008	1551	18	82	70
PADW-009	1875	17	78	40
PADW-010	2028	17	84	33
PADS-011	2061	24	82	86
PADS-012	1696	23	106	123
PADS-013	1983	18	94	20
PAMUM-014	1685	18	72	32
PAMUM-015	2785	31	62	46
PAMUM-016	1161	17	58	54
PAMUM-017	1251	18	62	14
PAMUM-018	1552	16	52	20
PABNG-019	1830	25	94	38
PABNG-020	2028	21	42	50
Total	**34,032**	**411**	**1740**	**1139**

Table 3 Statistical data of the reports

The empirical data obtained allowed for the identification of 1740 conceptual categories (nodes) linked with the responses received from the questionnaire. There were 1139 fragments (references) pertaining to the study's subject in the statements of the respondents. Table 4 illustrates the most frequently used terms that survey evaluators included in their reports.

Word	Length	Count	Weighted Percentage (%)
Beautiful	10	110	2.3
Novel	10	103	1.71
Surprising	5	101	1.22
Complex	11	98	1.21
Bold	6	98	1.45
Creative	3	90	0.42
Provocative	8	84	0.81
Relatable	4	83	0.49
Insightful	15	83	0.39
Emotional	7	71	1.23
Lifeless	8	67	0.99
Mediocre	2	67	0.20
Collative	4	67	1.11
Classic	13	50	0.86
Delicate	15	41	0.39
Refreshing	5	41	0.49
Boring	6	35	0.11
Confusing	7	30	0.16
Flat	8	29	0.43
Unfinished	14	27	0.54
Amazing	18	21	0.4
Distorted	11	21	0.38
Unimaginative	4	19	0.75
Copied	17	19	0.59
Awful	15	14	0.40

Table 4 Word frequency Results

Emotionality	What was your initial response to this artwork?
'Colour-Emotion Associations' *(Lechner et al. 2011)*	What are the emotions evoked by this artwork?
	To what degree does this artwork provoke an emotional reaction within you?
	How significant do you consider this artwork to be on a personal level?
	Does the duration of your observation of the artwork influence your perception of it?
Aesthetic Beauty	What are your impressions on the composition of this artwork?
'Determinants of Beauty' *(Reber, Schwartz, & Winkielman, 2004)*	Do you perceive this artwork as aesthetically beautiful?
	How does this artwork depict or question conventional concepts of beauty?
	Which components do you believe the artist has utilized in their artwork to evoke a feeling of beauty?
	Would you like to own this art for display at your home?
Perception	Do you believe that the depicted image(s) have been produced by human artists?
'Visual Indeterminacy' *(Pepperell, 2012)*	Considering the thematic content of this image, do you believe it was generated by a human or an artificial intelligence algorithm?
	After viewing the artworks, have you had an enhanced perception of AI Art?
	Have the artist(s) effectively conveyed their ideas through this visual?
	What is the depth or significance of this artwork?
Worth	To what extent do you perceive the level of exertion that went into creating this artwork?
'Model of art infusion' *(Estes, Brotto and Busacca, 2018)*	What distinctive techniques do you believe the artist employed in the creation of this artwork?
	What is your estimation of the duration required to make this artwork?
	Which specific elements of this artwork will you take into account when assessing its worth in relation to other comparable pieces on the market?
	Do you believe that external influences, such as shifts in art trends or fluctuations in market demand, could potentially affect the value of this artwork?
Ethics	Have you seen this artwork before?
'Theory of Autonomism' *(Carroll, 2000)*	Can you see any indications of plagiarism in this artwork?
	Do you believe that censorship is necessary for this artwork?
	Do you detect any instances of cultural appropriation in this artwork?

Table 5. Randomly selected questions in the interviews by evaluators experience

Most academicians in the study consistently devalued AI generated artwork relative to its hand-drawn counterparts on grounds of complexity or emotional depth of the work. Evaluators found the AI generated art was largely indistinguishable from the art of human student artists. These differences were also evidenced regardless of tutor's overall feelings towards AI or their professional expertise in art or technology.

This aspect is important because many of the responses observed by the evaluators can be explained by easy confounds, like differences in the content of the stimuli, or by unmeasured, personal differences, based on how people feel about new technologies. The research findings echoes many past examples of automation in other fields, with devaluating responses being most noticeable in how people judge skill based on their own personal perception or propensity towards either of the two forms of artwork. Table 6. shows the amount of references from evaluators suggesting a favorable or negative attitude toward the artworks.

Evaluator Code	Very Positive (5)	Moderately Positive (4)	Moderately Negative (2)	Very Negative (1)
PAJPR-001	41	12	2	8
PAJPR-002	37	4	6	8
PAJPR-003	39	18	2	12
PAJPR-004	29	6	2	14
PAJPR-005	33	26	26	17
PAPR-006	28	4	4	6
PADW-007	28	10	2	8
PADW-008	32	12	6	10
PADW-009	28	8	34	20
PADW-010	34	8	4	9
PADS-011	34	6	8	9
PADS-012	30	14	6	8
PADS-013	32	4	10	7
PAMUM-014	32	18	4	8
PAMUM-015	34	4	6	9
PAMUM-016	31	4	12	6
PAMUM-017	38	14	6	7
PAMUM-018	30	18	2	6
PABNG-019	33	16	8	9
PABNG-020	28	6	4	9
Total	651	212	154	190

Table 6 Cross tabulation of sentiments toward Artworks

The provided cross-sectional sentiment analysis considers the varying intensity of the statement's tone (highly and moderately), but it does not account for a neutral relationship with the art works. The text contains 863 instances of positive connotations, whereas there are 344 occurrences of negative sentiments towards the AI-generated visuals. It is noteworthy that extremely positive or negative sentiments towards the artworks are less frequent than moderately marked ones.

5. DISCUSSION AND CONCLUSION

The undeniable significance of artificial intelligence (AI) in the realm of human art within the future era of "human-machine coownership" necessitates examination. The advancement of AI serves to compensate for, and potentially exceed, human limitations. Consequently, individuals ought not to dismiss or refute this development, nor should they unquestioningly conform to prevailing trends or idolize technology. However, it remains uncertain as to the ultimate trajectory of AI's influence in the field of art. In the future, it is anticipated that the field of art will undergo a refinement process, wherein the assistance of artificial intelligence (AI) can be employed to discern and separate genuine artists from others. According to Zhai Zhenming (2008), the incorporation of technology elements in innovation will elevate artistic creativity to a more prominent position. Artificial intelligence (AI) has the potential to enhance artists' creative inspiration by leveraging big data analysis and machine learning techniques. This transformative technology has the capacity to influence artists' cognitive processes, encouraging them to reconsider existing paradigms, approach problem-solving from novel perspectives, and delve into unexplored realms of artistic expression. However, AI does offer a novel platform and mode of thought for the expression of contemporary art. The utilization of growing information technology enables artists to transcend the constraints of traditional two-dimensional mediums such as paper and paint, hence facilitating the exploration of additional dimensions.

The progression of technology has not only failed to impede the evolution of art history, but has also served as a catalyst for human creativity, enabling the emergence of novel artistic expressions. The utilization of artificial intelligence and digital technology, along with the rise of digital network platforms, has significantly transformed the paradigm of artistic creation. The utilization of artificial intelligence technology boosts the level of engagement between individuals and art, thereby challenging conventional notions of painting and fostering a more profound appreciation for the visual aspects of this artistic medium. With the rapid advancement of AI technology, it is quite probable that human society will enter the era of strong artificial intelligence. Consequently, the field of AI art will inevitably grow towards a state of extensive amalgamation between human creativity and technological development.

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