



AI-Assisted Artistic Creation: Emotional Expression and Ethical Considerations

Amic G. Ho* 

Department of Creative Arts, School of Arts and Social Sciences,
Hong Kong Metropolitan University, Hong Kong, China

*amicgh@gmail.com

Abstract. The study examines the application of artificial intelligence in contemporary artistic discourse, with a focus on the expressive and ethical implications of AI-assisted creation. With the rapid advancement of AI technologies like Deep Learning and Generative Adversarial Networks, intelligent systems are being used to create digital artworks that elicit complex emotional responses. The research aims to understand how AI can replicate or enhance emotions in art, as well as ethical considerations about authenticity, ownership, and the interaction between people and computers. A mixed-methods approach was used, involving visual content analysis, quantitative surveys, and qualitative interviews with 60 individuals from diverse demographic backgrounds. The findings suggest that AI-generated art may elicit a wide range of emotional responses, but is often perceived as less real and emotionally compelling than human-created art. The study advocates for a program to establish ethical standards in AI-assisted artistic practice, emphasising transparency, human agency, and equitable attribution. It also provides insights for artists, technologists, and cultural policymakers regarding the future of art in the age of intelligent machines.

Keywords: AI-generated Art, Emotional Expression, Ethical Considerations.

1 Introduction

Artificial Intelligence (AI) ^[1] has revolutionised art creation by enabling large-scale creation of visually and emotionally captivating artworks and virtual characters. This has democratized art production, allowing amateurs to participate without formal training and blurring the boundaries between human and machine creativity. AI's ability to analyse vast datasets of human-created artwork has resulted in works that evoke wonder, nostalgia, sorrow, and curiosity ^[2]. This raises questions about the emotional engagement of art, the authenticity of AI-generated creations, and the artist's relationship with intelligent systems. This talk aims to examine how AI systems can capture emotional subtleties in artwork and the ethical implications associated with AI-generated art ^{[3][4]}. The research aims to assess viewers' emotional reactions to AI-generated art, investigate cognitive, psychological, and environmental factors, and explore the expressive boundaries and ethical challenges of AI-generated art.

2 Theoretical Foundation

The study explores the role of AI in creating art, focusing on its role as a dynamic intermediary between programming logic and visual representations. AI art is a synthesis of algorithmic accuracy and human aesthetic guidance ^[5], challenging traditional notions of creative agency. AI can replicate emotional responses through algorithmic visual alterations, but it lacks emotional depth and culturally specific depth ^[6]. Ethical concerns include authorship, prejudice, and transparency, as AI may result in biased training data and normalise cultural narratives ^[7]. The Centre for Media Engagement emphasises the need for transparency to maintain public confidence and creative integrity. Models of human-AI cooperation ^[8] promote the development of AI that functions symbiotically with human creativity, generating raw material for human cultivation and enhancement. AI acts as a catalytic instrument to enhance creative productivity, but requires human discernment to imbue works with cultural value and emotional resonance. The study highlights the dual function of AI as both a disruptor and a facilitator in the arts, necessitating stringent moral oversight and a theoretical redefinition of authorship, purpose, and emotional engagement.

3 Methodology

The study explores AI's role in creative processes, focusing on ethical aspects. It requires ethical approval and materials. A diverse cohort of 50 individuals is recruited through online ads, participant databases, and social media platforms. The aim is to identify similarities and differences in technique, motivation, and ethical issues regarding AI-assisted creativity. The research design is ethically integrity and analytically deep. The project involved collecting data on digital art through a survey of digital art galleries, AI art contests, and online groups. The artworks were chosen based on criteria such as relying on AI and eliciting a specific psychological effect. The data was analysed using visual art theories and data expansion theory. The second stage involved a questionnaire survey and semi-structured interviews to gather quantitative and qualitative feedback from the audience. The survey instrument included numerical ratings of emotional reactions and demographic questions. A purposive sample of ten individuals participated in sustained semi-structured interviews, allowing them to express any ethical concerns about AI-produced art. Artist interviews were conducted with AI-assisted artists, ensuring openness and trust throughout the data-gathering process. The interviews focused on the integration of AI technology into artists' work, the conceptualisation of emotions, agency, and ownership in collaborative works. Ethical concerns were addressed, including emotional manipulation of audiences, bias mitigation in AI training data, and the need for openness in disclosing AI's role in producing artwork. The comprehensive and exploratory approach produced extensive data that offered a special perspective on current practitioners' lived experiences, motivations, and ethical issues at the intersection of art and AI.

3.1 Data Analysis

A survey analysed emotional responses and authenticity perceptions of AI-generated and human-made artworks. The data were analysed using statistical techniques, taking into account participants' demographics and expertise in digital art (Figure 1). The results showed that human-generated art was perceived as more emotionally honest and consciously expressive, fostering a stronger connection with individuals than AI-generated art. The average authenticity score for AI-generated photographs was around one point lower than for human images. Younger demographics and those more familiar with digital art attributed higher authenticity and emotional expressiveness to AI-generated artworks. Prior exposure to AI-generated art moderated responses. Emotions like interest and awe significantly correlated with the sense of connection to AI and human art, while negative emotions like sadness showed no correlation (Figure 2).

The study focused on the interplay between emotionality, autonomy, and ethical aspects of creative production using AI (Figure 3). The content analysis revealed that AI-generated artwork evoked emotions through vibrant colours and surreal or abstract components, while the artist's interview transcript revealed concepts such as emotional intention, creative independence, and transparent ethics. Ethical concerns influenced discussions, with some artists expressing willingness to disclose AI's role in their creations. However, authorship became contentious, and bias in training data emerged. The investigation highlighted generational and experience disparities in perceptions of AI's societal influence. Established artists viewed AI as a disruption requiring meticulous management, while emerging artists viewed it as democratising and dismantling obstacles to artistic expression (Table 1). The emotional expression in the works is not only an outcome of algorithmic output but a dialogic process between control and submission, purpose and accident.

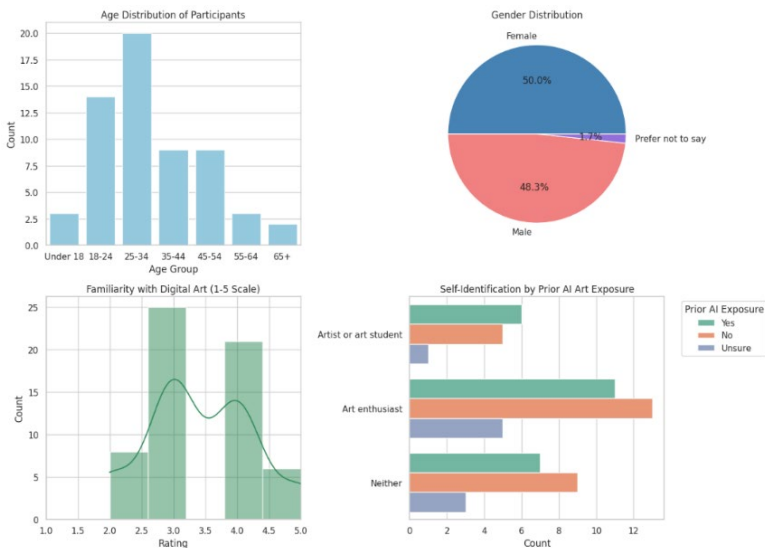


Fig. 1. Charts illustrate demographics and background.

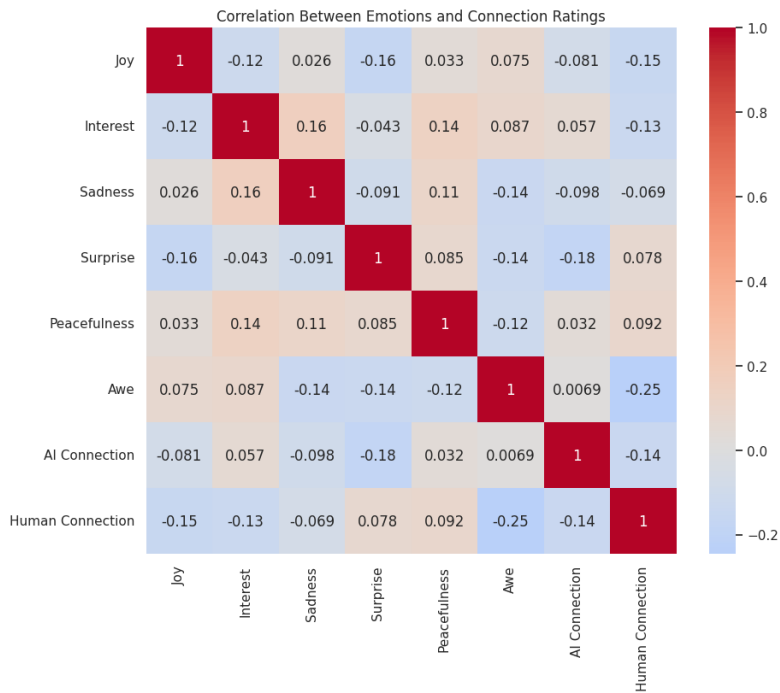


Fig. 2. Correlation between emotions and connection ratings.

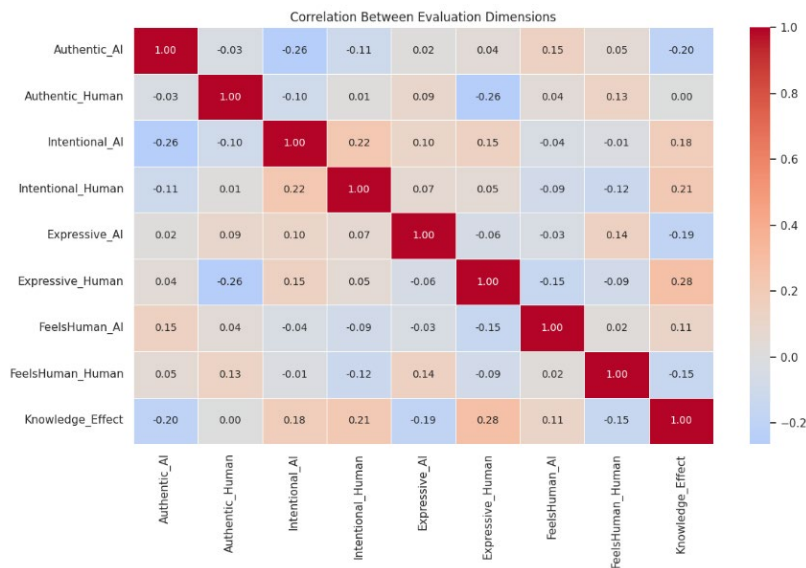


Fig. 3. Correlation between evaluation dimensions.

Table 1. Statistical comparison (Paired t-tests).

Question	AI Mean	Human Mean	Difference	t-statistic	p-value
0	Authentic	3.17	3.97	0.80	-7.77 0.0000
1	Intentional	3.37	4.18	0.81	-8.66 0.0000
2	Expressive	3.18	4.18	1.00	-8.58 0.0000
3	Feels Human	2.70	4.48	1.78	-17.51 0.0000

4 Analysis and Discussion

AI's role in artwork is complex, involving technology, emotion, and ethics. AI-generated artworks use visual elements to mimic human artistic techniques, but their ability to convey subtle emotional depth is limited by pattern recognition and a lack of personal experience. Human artistic practices are deeply rooted in personal and cultural narratives, allowing for more nuanced expression of emotion. However, individuals often assert a greater emotional connection to human art, even when compared to visually similar AI artworks. This disparity may stem from a preference bias towards anthropocentric artistic authorship. AI technologies democratise art production but also challenge human input. Artists increasingly serve as mediators and interlocutors, guiding AI outputs. Integrating AI in art will generate new cultural narratives and value systems, but it may commodify creativity and diminish human-generated art's cultural significance.

5 Conclusion

As this article illustrates, the integration of AI into creative creation reveals both revolutionary possibilities and ethical complexities. In contrast to humans, AI can emulate emotional expression by algorithmic manipulation of visual elements such as colour, composition, and shape; yet, it cannot recreate the depth and intentionality inherent in human-created art. Viewers of films presume that human-created films possess greater emotional depth and sentimental resonance than those generated by machines, a response stemming from psychological mechanisms that link their sense of emotional connection to conscious creative agency. AI's capacity to conceive novel aesthetic and emotional senses indicates its role as a facilitator in expanding the human realm of artistic potential, particularly when employed collaboratively rather than as a solitary creator. There is an ethical imperative for proactive frameworks in AI art to guarantee responsible practices. Key features encompass emphasising transparency about the use of AI in the creative process, allowing audiences to comprehend how to contextualise their encounters with such works. The agency of humans must remain central as artists guide and shape AI outputs to achieve specific emotional and conceptual goals. Equitable attribution methods should be developed to clarify authorship, acknowledging human creativity and the influence of AI, while addressing the legal ambiguities

highlighted by instances. Moreover, rectifying bias in training data and guaranteeing equal representation are crucial for producing fair, culturally relevant narratives.

In the future, it would be intriguing to examine the long-term impacts of AI on creative practices and emotional design. Research on the evolving dynamics of human-AI cooperation may elucidate the transformation of creative roles over time, particularly in contexts where AI transitions from a mere tool to a co-creator. An interdisciplinary study is essential to examine the psychological and cultural factors influencing public acceptance of AI-generated art, informing ethical principles and educational policy. Moreover, establishing emotional design principles tailored to AI-generated art might enhance its ability to engage diverse audiences. These characteristics represent opportunities for society and policymakers to navigate the challenging relationship between technological advancement and our human creative legacy, ensuring that AI enhances rather than diminishes cultural and emotional life.

References

1. Wiratno, T. A. (2024). The impact of artificial intelligence on emotional expression in art. *Proceeding of International Seminar on Arts, Artificial Intelligence & Society* (pp. 253-260). Jakarta: Institute of the Arts. <https://proceeding.ikj.ac.id/index.php/UXA/article/download/119/112/386>.
2. Verheijden, M., & Funk, M. (2023). Evaluating generative AI's impact on the artistic process: Inspiration, communication, and creative evolution. *Frontiers in Digital Humanities*, 10, 1123456. <https://doi.org/10.3389/fdigh.2023.1123456>
3. McCormack, J., Gifford, T., & Hutchings, P. (2019). Autonomy, authenticity, and computer-generated art. *Leonardo*, 52(5), 443-448. https://doi.org/10.1162/leon_a_01502
4. Ho, A. G. (2023). The Theories and Impact of Mechanical Creation in Digital Art and Design Learning. In *2023 IEEE International Conference on Development and Learning (ICDL)* (pp. 214-219). IEEE.
5. Gao, J., & Yin, J. (2024). Emotional expression of AI-generated artistic design. *Chitrolekha Journal*, 8(1), 1-13.
6. Ho, A. G. (2024, June). Cross-Cultural Differences in Emotional Response to Visual Information. In *Meeting of Research in Music, Arts and Design* (pp. 65-75). Cham: Springer Nature Switzerland.
7. Ho, A., & Chau, R. (2023). Exploring the Role of City Environment in Meeting Emotional Needs of Individuals. *Human Interaction & Emerging Technologies (IHET 2023): Artificial Intelligence & Future Applications*, 111(111).
8. Zhang, G., Chong, L., Kotovsky, K., & Cagan, J. (2023). Trust in an AI versus a Human teammate: The effects of teammate identity and performance on Human-AI cooperation. *Computers in Human Behavior*, 139, 107536.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

