

Customer Attitude Towards Artwork Combined with AI in the Chinese Art Market

Peiran Li

School of Visual Communication, University of Birmingham, Beijing, China

Abstract. The global art scene has been significantly transformed by the swift advancement of artificial intelligence (AI). This study investigates the reception of AI-integrated art among Chinese consumers. Through a qualitative approach involving interviews with twelve individuals, the research analyzes purchasing habits, general attitudes, and specific views on AI-generated traditional Chinese landscape paintings. The results indicate a generally positive outlook, with all participants expressing a willingness to purchase AI-enhanced artworks, primarily driven by novelty and trend-seeking. However, concerns regarding authenticity, emotional depth, and the preservation of cultural heritage remain prevalent. Furthermore, the study highlights an increasing shift towards individualism in Chinese consumer psychology. These findings provide critical strategic insights for stakeholders in China's expanding AI art market.

Keywords: Artificial intelligence, Chinese art market, consumer attitude, digital art, qualitative analysis.

1. Introduction

1.1 Background and motivations

Artificial intelligence technology has advanced by leaps and bounds recently, with tools like ChatGPT and Midjourney bringing AI-generated art to the public stage [1]. While proponents argue AI art is a new creative form, critics contend it lacks the emotion and vision of human artists [2]. A notable example of this controversy occurred when Jason M. Allen used Midjourney to win the 'Blue Ribbon Award' at the Colorado State Fair. While he faced accusations of cheating, Allen defended his work, stating he had clearly labeled it as 'Made via Midjourney' and had not violated any rules. In the Chinese market, which has grown to rival the UK as the second-largest art market globally [3], the adoption of new technologies is accelerating. According to Hua [4], the Chinese art market is actively adopting new technologies to accelerate its synchronisation with the Western art market. This study aims to investigate the perceptions of the Chinese art consumer audience towards this intersection of technology and art.

1.2 Research questions

This study adopts a qualitative analysis to investigate Chinese consumers' attitudes. Key questions include: How do consumers perceive AI artworks? Are they willing to purchase them? What are the implications for the Chinese art market's profit model? Understanding these attitudes is crucial for artists and exhibitions aiming to leverage AI technology. Furthermore, given the rapid spread of AI technology and the growing Chinese art market, investigating Chinese consumer attitudes reveals significant insights into problem dimensions that may differ from Western markets.

2. Literature review

2.1 The influence of AI on art design

Shen and Yu [5] found that AI assists designers in creating innovative interactive artworks. AI can now provide a personalised and natural interactive experience by understanding human behaviour and responses. Davenport and Ronanki [6] emphasize that AI technologies are essential for analyzing such complex interactions in the real world. While early interactive art prioritized form, AI now

enables a more human-centered approach. Interactive artworks are facilitated mainly by computers, making the integration of AI and computer technology inevitable. In this process, AI offers technical support and, more importantly, presents a new approach to creating and experiencing interactive art.

2.2 AI and Chinese landscape painting

China's AI R&D team has successfully developed an AI model capable of generating Chinese landscape paintings [7]. Unlike standard models limited by resolution, these systems use multi-branch networks (CNN, RNN, GAN) to generate high-definition images. Specifically, the system employs four branches: Branch 1 generates poetry and calligraphy styles; Branch 2 creates blank spaces (a key element in Chinese art); Branch 3 generates stylised large-scale paintings; and Branch 4 creates seals. This application not only represents technological innovation but also aids in cultural heritage preservation. By digitally recording intangible cultural heritage, AI technology can help preserve and inherit China's cultural heritage. Voo et al. [8] note that such digital recording is vital for national cyber power and cultural continuity.

2.3 Chinese consumer psychology

Wyer and Hong [9] describe Chinese consumer psychology as traditionally influenced by collectivism. This cultural background shapes self-concept, as discussed by Markus and Kitayama [10], who note that collectivist cultures emphasize social connection over individual autonomy. Another important core of cultural differences is power distance, a concept introduced by Hofstede [11]. The Chinese are often seen as having characteristics of vertical collectivism, paying attention to status differences within groups, as observed by Triandis [12]. This tendency impacts consumers' decision-making, where products enhancing personal prestige are favored. However, recent trends suggest a rise in individualism among younger generations, particularly those with higher education levels. This shift suggests that while herd mentality remains, personal taste is becoming a stronger driver for art consumption.

2.4 Ethical and legal issues in AI art

Studies have shown that AI art forms and their interaction with art institutions often spark controversy regarding creativity and authorship [13]. For example, in October 2018, the prestigious auction house Christie's sold an AI artwork by a French collective called Obvious, titled 'Portrait of Edmond Bellamy' [14]. Despite being sold for \$432,500, significantly higher than its valuation, the work was criticised for lacking technological innovation and being merely an imitation. Christie's [15] promoted this sale as a milestone for AI as an artistic medium, yet debates persist. Historically, pioneering computer artists like Harold Cohen and Vera Molnár faced similar challenges in market recognition as early as the 1960s [16]. Some artists, such as Frieder Nake, even stopped exhibiting because they felt computer art was being co-opted by capitalism [17]. Furthermore, the infinite reproducibility of AI art conflicts with the traditional market's value on scarcity. To counter this issue, artists like Mario Klingemann have used installation formats, such as 'Memories of Passersby I', to create unique, non-reproducible experiences [18].

3. Methodology

3.1 Research philosophy and design

This study employs a qualitative inductive approach to identify patterns in consumer attitudes. According to Saunders, Lewis and Thornhill [19], the inductive approach allows research to find and identify major patterns without presupposing theories. This study adopts a social constructivist perspective, arguing that consumer attitudes toward AI-incorporated works of art are subjective, diverse, and shaped by social and cultural circumstances. Based on an interpretive stance, this study aims to understand consumers' perspectives by developing an interview schedule with 12 Chinese art

consumers. Semi-structured interviews were conducted remotely, ensuring participant anonymity and ethical compliance.

3.2 Question design rationale

The interview questions were designed to probe not just purchasing habits, but also deeper psychological motivations related to individualism and collectivism. For instance, questions about 'purchasing frequency' and 'channels' were designed to explore vertical collectivism and power distance. Questions regarding 'personal interest' aimed to reveal the interviewee's independent self-construction. Finally, questions specifically addressing AI-generated landscape paintings aimed to reveal the tension between the pursuit of novelty and the desire to protect artistic purity. This rationale ensures that the data collected directly addresses the shift in consumer psychology identified in the literature review.

4. Results

The study collected data from 12 interviewees. Demographically, all participants held university degrees or higher. Thematic analysis revealed high overlap in responses regarding purchasing reasons and attitudes. Most respondents expressed a strong interest in the combination of AI and art, reflecting the huge potential of the market. As one respondent, Leo, stated: 'I am willing to buy artworks that incorporate artificial intelligence because I think this is a new trend in art, and I hope to understand and master this trend.'

Table 1. Overview of interviewee demographics (partial)

Name	Gender	Age	Occupation
Tom	Male	22	Student
Leo	Male	26	Artist
Henry	Male	30	Manager

4.1 Attitudes towards AI art

All 12 respondents expressed willingness to buy art incorporating AI. However, views on AI simulating traditional Chinese landscape paintings were mixed. Four participants viewed it positively as a technological breakthrough, while others expressed concerns about the loss of human spirit. For example, Ms. Sophia expressed concerns and believed that authorities should enact comprehensive laws against AI artwork to ensure that the traditional painting industry has breathing room. Meanwhile, Henry suggested that AI could attract new investors, particularly from the tech sector.

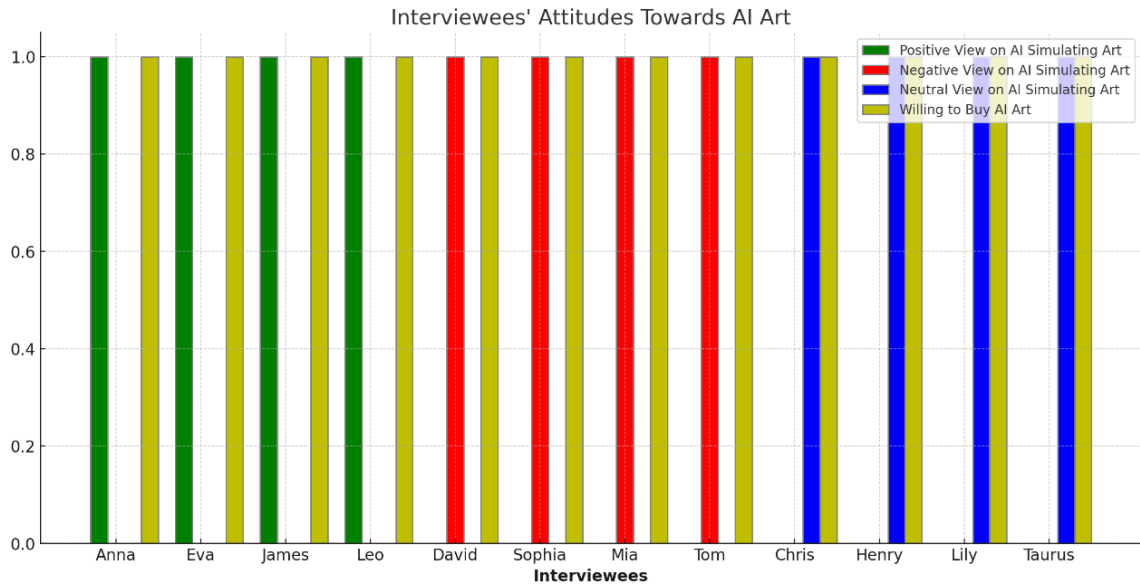


Figure 1. Comparison of attitudes towards AI simulation vs. willingness to buy

4.2 Discussion

The findings align with previous studies asserting that AI has become an essential partner in design. However, the concerns raised by participants regarding 'soul' and originality echo ethical debates found in the literature. While consumers are eager to embrace novelty, deep-seated cultural values regarding authenticity persist. The shift towards individualism noted in the results supports observations about changing Chinese consumer psychology, yet the 'herd mentality' in purchasing trends remains visible. As Bishop [20] argues, the digital divide and the nature of new media continue to challenge traditional aesthetic categories. The high overlap in willingness to buy suggests that despite ethical concerns, the commercial viability of AI art in China is strong.

5. Limitations and future study

5.1 Limitations

Sample constraints and demographic variety: The scope of this research is constrained by its relatively small sample size. While interviews were conducted with twelve individuals, this limited group may not adequately reflect the extensive and varied consumer landscape of China's art market. Given China's vast geographic expanse and cultural multiplicity, aesthetic inclinations can vary significantly across different regions, which this study may not fully capture. Linguistic challenges: Conducting research across different languages inevitably introduces potential translation issues. Since every language is deeply rooted in a specific cultural context, literal translation frequently misses the subtle nuances and underlying meanings of the source text.

5.2 Future study

Prospective research avenues include several key areas. Commercial frameworks: The fusion of artificial intelligence with creative practices has opened novel commercial pathways; thus, future studies should investigate the evolving business models and revenue generation strategies within the AI art sector. Pedagogical integration: With the growing prevalence of AI tools, it is crucial to examine effective methods for incorporating AI art instruction into academic curricula. Synthesizing AI with heritage: Given China's profound artistic legacy, further research could focus on the synergy between algorithmic generation and traditional artistic disciplines. Technological evolution: As technology progresses, subsequent studies should assess how emerging tools like virtual reality and deep learning might reshape both artistic creation and consumption patterns.

6. Conclusion

This research reveals a complex but generally optimistic attitude towards AI in the Chinese art market. While consumers are eager to embrace the novelty of AI art, cultural values regarding authenticity persist. The findings suggest that while AI has significant market potential, its long-term acceptance relies on balancing technological innovation with the preservation of artistic heritage. Future research should expand the sample size to account for regional diversity in China.

Acknowledgements

The author thanks Dr. Roger Bennett for his guidance, and the participants who contributed their time to this study.

References

- [1] S. Altman: Planning for AGI and beyond (OpenAI, USA 2023).
- [2] S. Cousins: The rapid rise of AI art, *Engineering & Technology*, Vol. 18 (2023) No. 2, p. 38-41.

- [3] B. Boucher: Seven Critical Takeaways from the 2022 Art Market Report (Artnet News, USA 2022).
- [4] S. Hua: Disruption, Digitalization and Connectivity: Asia's Art Market in Transformation, *Arts*, Vol. 11 (2022) No. 3, p. 57.
- [5] Y. Shen and F. Yu: The influence of artificial intelligence on art design in the digital age, *Scientific Programming*, Vol. 2021 (2021), Article ID 4838957.
- [6] T.H. Davenport and R. Ronanki: Artificial intelligence for the real world, *Harvard Business Review*, Vol. 96 (2018) No. 1, p. 108-116.
- [7] S. Luo, S. Liu, J. Han and T. Guo: Multimodal Fusion for Traditional Chinese Painting Generation, *Proc. Advances in Multimedia Information Processing (Hefei, China, 2018)*, Vol. 3, p. 24–34.
- [8] J. Voo et al.: National Cyber Power Index 2022 (Belfer Center, USA 2022).
- [9] R.S. Wyer and J. Hong: Chinese consumer behavior, *The Oxford Handbook of Chinese Psychology* (Oxford University Press, UK 2010), p. 619–639.
- [10] H.R. Markus and S. Kitayama: Culture and the self, *Psychological Review*, Vol. 98 (1991) No. 2, p. 224.
- [11] G. Hofstede: *Culture's Consequences* (Sage, USA 1980).
- [12] H.C. Triandis: The self and social behavior in differing cultural contexts, *Psychological Review*, Vol. 96 (1989) No. 3, p. 506.
- [13] K. Browne: Who (or What) Is an AI Artist?, *Leonardo*, Vol. 55 (2020) No. 2, p. 130–134.
- [14] J. Bailey: The AI art at Christie's is not what you think (Artnome, 2018).
- [15] Christie's: Is artificial intelligence set to become art's next medium? (Christie's, 2018).
- [16] F. Dietrich: Visual Intelligence: The First Decade of Computer Art, *Leonardo*, Vol. 19 (1986) No. 2, p. 159-169.
- [17] J. Walewska: The art of computing as Frieder Nake's response, *Leonardo*, Vol. 52 (2019) No. 1, p. 54–59.
- [18] E.L. Spratt: Creation, curation, and classification, *XRDS*, Vol. 24 (2018) No. 3, p. 34–43.
- [19] M. Saunders, P. Lewis and A. Thornhill: *Research Methods for Business Students* (Pearson Education, UK 2007).
- [20] C. Bishop: Digital Divide: Contemporary Art and New Media, *Artforum*, Vol. 51 (2012) No. 1, p. 434-441.