Tanka Heritage Revived: AI-Generated Artworks in Three Chinese Art Styles

Sibo Pan
Wadi Creative Limited, Fok Ying Tung Research Institute
Guangzhou, China
sibe9292@gmail.com

James She
Hong Kong University of Science and Technology
Guangzhou, China
jamespmshe@hkust-gz.edu.cn

ABSTRACT

This work explores the potential of generative artificial intelligence (GenAI) in creating artworks to represent Tanka culture. By employing Midjourney and ChatGPT, it aims to enhance the preservation and public engagement of Tanka heritage. The approach includes collecting data on Tanka cultural heritage, transforming textual data into prompts with ChatGPT, generating artworks via Midjourney, and filtering the AI-generated artworks to ensure cultural and artistic fidelity. Three distinct Chinese art styles — ink painting, meticulous painting, and photography — were chosen to depict different historical phases of Tanka culture, from early harmonious relationships to contemporary life. This work demonstrates the transformative potential of GenAI in cultural preservation, offering a novel approach to engaging a broader audience and promoting traditional cultural heritage.

CCS CONCEPTS

• **Applied computing** → **Fine arts**.

KEYWORDS

Tanka Cultural Heritage, Generative AI, AI-generated Artwork, Chinese Art Style, Cultural Preservation

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1 INTRODUCTION

Tanka culture, unique to the water towns of southern China, refers to the fishermen communities living on boats, also known as "Dan people". This culture emerged from the aquatic environment, characterized by a self-sufficient lifestyle closely connected to water. The Dan people live on boat houses and make a living through fishing, preserving a rich historical heritage in areas such as language, lifestyle, and music. Despite historical marginalization, the social status of the Dan people has gradually improved with societal development. Their distinctive values in the protection and utilization of the ecological environment have also become more apparent. However, a significant challenge lies in the fact that the remaining Tanka cultural records are mostly textual, making it difficult to visually comprehend and inherit the cultural characteristics and essence.

The potential of artificial intelligence (AI) in artistic creation, exemplified by tools like Midjourney [1], offers transformative possibilities for cultural preservation [3] and artistic generation [2]. Midjourney, an GenAI program that converts textual descriptions into detailed images, can play a crucial role in visualizing and interpreting cultural content [4]. For cultures like the Tanka, whose remaining records are predominantly textual, GenAI can generate visual representations that bring their cultural heritage to life. GenAI bridges the gap between textual records and visual comprehension, enhancing the ability to understand and inherit cultural characteristics and essence, thereby making cultural elements more accessible and engaging for contemporary audiences. In this paper, the work contributes to cultural heritage representation by utilizing the GenAI tool Midjourney to generate artworks that faithfully represent traditional Tanka culture. By illustrating the generative process of Midjourney and showcasing the AI-generated artworks with three different Chinese art styles (shown in Figure 1), we proposed an approach for cultural preservation efforts, demonstrating the broader implications of GenAI tools in maintaining and promoting cultural heritage.

2 AI-GENERATED ARTWORKS

Chinese ink painting, meticulous painting, and photography were selected in this work to represent Tanka culture across different historical phases. Ink painting captures the early harmonious relationship with water, meticulous painting details cultural artifacts and traditions as they evolved, and photography provides a contemporary and realistic view of Tanka life. As shown in Figure 1, the approach to generating GenAI artworks of Tanka cultural heritage involved four key aspects:

(a) Textual Tanka Heritage: The work delved into the rich textual records of Tanka culture, exploring historical documents and literature from an authoritative Tanka Museum in China to understand the cultural essence and context.

(b) Generation via Midjourney: The Midjourney as AI-generated tool was used to transform textual descriptions of Tanka into detailed and culturally accurate artworks. The focus was on generating three distinct series of artworks, each deeply rooted in traditional Chinese art styles, thereby ensuring cultural relevance and artistic integrity.

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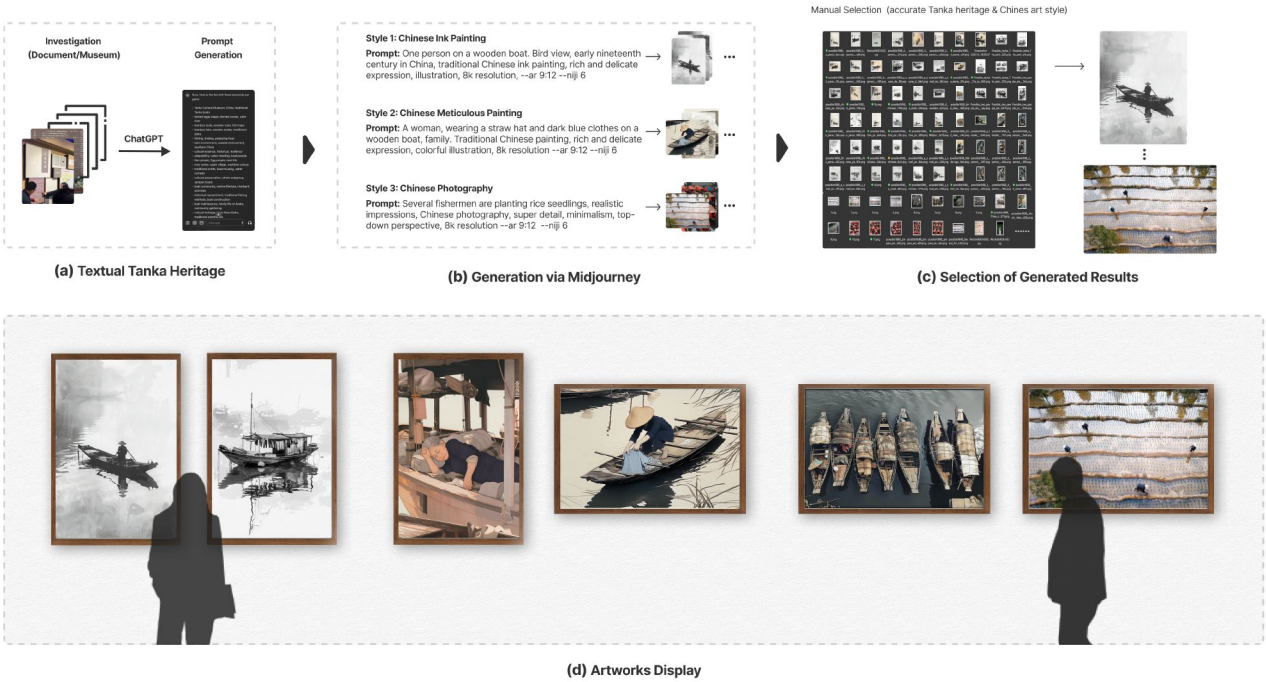

Figure 1: The workflow of GenAI artworks for Tanka Culture: (a) Investigate and generate textual prompt via ChatGPT; (b) GenAI artworks by Midjourney; (c) Manual selection of generated results; (d) Display three series of artworks.

(c) Selection of Generated Results: Two Tanka cultural researchers, two artists, and two Dan people were invited to the selection process. The process involved manually filtering the AI-generated artworks to ensure that the selected pieces authentically represented Chinese painting styles and accurately conveyed the cultural content of Tanka heritage, maintaining both artistic and cultural fidelity.

(d) Artworks Display: The resulting artworks can be showcased as high-quality prints or digital display, enabling visitors to fully appreciate their intricate details and textures. These artworks are ideally suited for display in art galleries, museums, and public spaces, significantly enhancing the accessibility and educational impact of Tanka cultural heritage.

3 DISCUSSION

This work explored AI-generated artworks to represent Tanka culture by investigating extensive cultural data, generating prompts with ChatGPT, and creating images using Midjourney. However, there is significant potential for enhancing this process to better serve cultural heritage preservation. One promising direction is the advanced training of AI models like ChatGPT to analyze extensive Tanka cultural archives, enhancing understanding and generating more accurate, culturally rich prompts for Midjourney, leading to more authentic artworks.

4 CONCLUSION

In this work, the purpose of utilizing GenAI to generate artworks is to explore and preserve the rich Tanka cultural heritage in a visually engaging manner. By employing three different Chinese art styles through Midjourney, we aim to: (1) **Enhance Cultural Preservation**: use GenAI to create accurate and authentic visual representations of Tanka culture, which is primarily documented in textual form. This helps in safeguarding and revitalizing cultural heritage. (2) **Foster Public Engagement**: presenting Tanka cultural heritage through diverse Chinese art styles makes the heritage more accessible and appealing to a broader audience, thereby fostering a deeper appreciation and understanding. (3) **Innovate Artistic Expression**: combining traditional Chinese art forms with Midjourney demonstrates how modern GenAI tools can be harnessed to innovate and expand the possibilities of artistic expression, ensuring that cultural traditions continue to evolve and remain relevant. This work not only highlights the richness of Tanka culture but also underscores the potential of GenAI technology in cultural preservation and artistic innovation.

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