

Received: February 6, 2026

Revised: March 13, 2026

Accepted: March 25, 2026

Chinese Artistic Heritage and Craft through Artificial Intelligence: Cultural Identity and Design Innovation in the Midjourney Era

Ya Zhou ^{1*}, Minghui Li ^{2*}, Chompu Nuangjamnong ³

Abstract

This study investigates how generative artificial intelligence (AI), particularly the Midjourney platform, contributes to the reinterpretation of Chinese artistic heritage and its implications for contemporary design innovation. Drawing on examples from traditional cultural forms—including Qiang embroidery, Dunhuang Feitian imagery, and classical Chinese ink-wash painting—the research explores how AI-assisted design mediates between historical cultural symbolism and contemporary creative production. A qualitative case study methodology was employed, integrating three sources of evidence: analysis of AI-generated visual outputs, documentary examination of Chinese artistic traditions, and semi-structured interviews with five Chinese digital designers who actively use generative AI tools in their creative practices. Data were analyzed using thematic analysis to identify recurring patterns in the reinterpretation of cultural motifs. The findings reveal four key mechanisms through which AI facilitates cultural reinterpretation: symbolic abstraction, aesthetic fusion, cultural storytelling, and algorithmic co-creation. These mechanisms demonstrate how generative AI systems translate traditional visual symbols into new aesthetic forms while maintaining elements of cultural meaning and emotional resonance. At the same time, the results highlight emerging debates regarding authorship, cultural authenticity, and ethical responsibility in AI-assisted creative production. The study contributes to the growing literature on AI-assisted creativity and digital heritage by conceptualizing generative AI as a cultural mediator that enables reinterpretation of traditional artistic identity within contemporary digital design environments. The findings also provide insights for design education and creative industries seeking to integrate generative technologies while preserving cultural heritage.

Keywords: Chinese artistic heritage; generative AI; Midjourney; digital heritage; design innovation; algorithmic creativity

1. Introduction

The rapid development of generative artificial intelligence (AI) has significantly transformed creative industries, particularly in the fields of digital art, cultural production, and design innovation. Tools such as Midjourney and DALL-E have introduced new possibilities for generating visual content through algorithmic interpretation of textual prompts, enabling artists and designers to explore novel aesthetic forms and creative processes. These technologies have expanded the relationship between computational systems and artistic

¹ Ph.D. in Arts, Music, Sports and Entertainment Management, Graduate school of Business and Advanced Technology Management, Assumption University of Thailand, Bangkok, 10240, Thailand. * Corresponding author. Email address: 1423779564@qq.com

² Ph.D. in Arts, Music, Sports and Entertainment Management, Graduate school of Business and Advanced Technology Management, Assumption University of Thailand, Bangkok, 10240, Thailand. * Corresponding author. Email address: 839071429@qq.com

³ Graduate school of Business and Advanced Technology Management, Assumption University of Thailand, Bangkok, 10240, Thailand. Email: chompunng@au.edu

© Copyright: The Author(s)

This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY 4.0) (<https://creativecommons.org/licenses/by/4.0/>)

This license permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

expression, creating new forms of collaboration between human creativity and algorithmic generation (Hanna, 2023; Mazur-Włodarczyk, 2025).

Within this evolving landscape, generative AI has increasingly been applied to the reinterpretation of cultural heritage. In the context of Chinese artistic traditions, AI-assisted design provides opportunities to translate historical artistic symbols into contemporary visual languages. Rather than functioning solely as a technical tool, generative AI may act as a mediating interface between cultural heritage and digital innovation, allowing traditional artistic elements to be reimagined within modern creative environments (MIT Technology Review, 2023). As artists experiment with AI-assisted workflows, the interaction between algorithms and cultural symbolism creates new forms of dialogue between historical identity and contemporary design practice.

1.1 AI and the Reinterpretation of Heritage

Chinese visual culture has long been shaped by symbolic forms that reflect philosophical, spiritual, and aesthetic traditions. Motifs such as mountains, dragons, lotus flowers, and calligraphic brushwork represent cultural concepts including harmony, transcendence, and balance within Chinese cosmology. These symbols have traditionally been expressed through artistic practices such as ink-wash painting, embroidery, ceramics, and decorative crafts.

With the emergence of generative AI technologies, these visual traditions can be digitally reinterpreted through computational pattern recognition and image synthesis. Generative models trained on large datasets are capable of reproducing stylistic elements associated with traditional Chinese art, including compositional balance, tonal gradients, and symbolic iconography (Gao & Yin, 2024; Manovich, 2019). While such systems do not possess cultural understanding in the human sense, they can simulate aesthetic structures that enable the reinterpretation of traditional visual motifs within new digital contexts.

Figure 1 illustrates an example of this reinterpretation process, where AI-generated imagery synthesizes elements of traditional Chinese landscape painting with contemporary generative visual textures. Through this process, generative AI systems can extend the visual language of traditional aesthetics while maintaining recognizable cultural references.



Figure 1. AI-Generated Reinterpretation of Traditional Chinese Landscape Painting.
(Depicts a Midjourney-style synthesis of ink-wash scenery with generative texture)

Source: Authors' visualization based on Midjourney outputs.

1.2 Algorithmic Innovation in Craft and Design

Beyond visual art, generative AI technologies are increasingly being integrated into craft and design practices. Rather than replacing traditional craftsmanship, AI systems may function as tools for creative augmentation, supporting experimentation with new visual compositions and design possibilities.

Mazur-Włodarczyk (2025) suggests that AI-assisted design can contribute to the revitalization of traditional craft by combining algorithmic data modeling with artisans' tacit knowledge. In this sense, generative technologies may enable designers to reinterpret traditional motifs while maintaining connections to cultural heritage. The relationship between heritage, algorithmic processing, and design innovation can therefore be understood as a dynamic interaction in which cultural symbols are translated into new aesthetic forms through computational processes.

This interaction is conceptually illustrated in Figure 2, which highlights the reciprocal relationships among heritage traditions, algorithmic systems, and design innovation within contemporary creative industries.

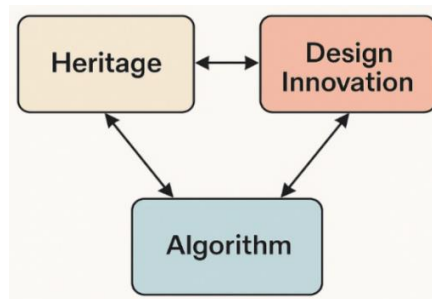


Figure 2. *Integration of Artificial Intelligence in the Development of Chinese Crafts.*
(Shows reciprocal links between heritage, algorithm, and design innovation as components of cultural development.)
Source: Authors' illustration.

1.3 AI as Emotional and Cultural Mediator

In addition to aesthetic transformation, generative AI systems may influence the emotional interpretation of visual art. Research on emotional design suggests that visual elements such as color, composition, and symbolic imagery can evoke affective responses among viewers (Norman, 2004). Recent studies indicate that generative AI models can reproduce visual patterns associated with emotional expression by learning stylistic features from artistic datasets (Gao & Yin, 2024; Manovich, 2019; McCormack et al., 2022).

Within cultural design contexts, this capability allows generative systems to reinterpret traditional cultural symbols in ways that resonate with contemporary audiences. When AI-generated images incorporate motifs such as dragons, lotus flowers, or mythological figures, they may evoke cultural narratives that connect historical traditions with modern digital aesthetics.

Figure 3 demonstrates this process by comparing traditional Chinese motifs with AI-generated reinterpretations. The figure illustrates how algorithmic design can amplify symbolic meaning while enabling new cross-cultural visual interpretations.

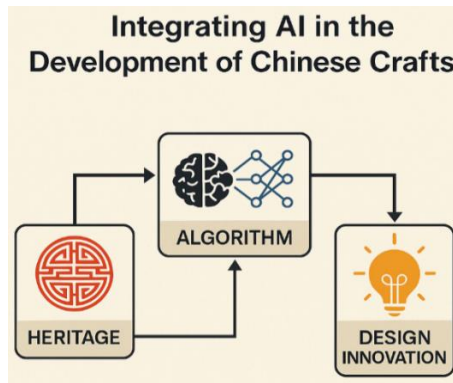


Figure 3. Comparative Visualization of Traditional Motifs and AI-Generated Reinterpretations. (Juxtaposes cultural symbols transformed into digital generative artworks.)

Source: Authors' illustration.

1.4 AI as Cultural Mediator: Conceptual Framework

From a theoretical perspective, generative AI can be conceptualized as a cultural mediator that connects heritage traditions with contemporary design innovation. Cultural mediation refers to processes through which cultural knowledge is translated, adapted, and communicated across different contexts and media environments (Choi, 2019).

Within AI-assisted design, algorithms function as interpretive mechanisms that translate textual prompts and cultural references into visual outputs. Through this process, generative systems facilitate new forms of interaction between human designers and cultural symbolism. Rather than replacing human creativity, AI systems may expand creative possibilities by enabling designers to explore alternative visual interpretations of traditional motifs (Elgammal et al., 2017; McCormack et al. 2022; Boehman, 2023).

Figure 4 presents a conceptual model illustrating the mediating role of AI between heritage traditions and design innovation. In this model, generative algorithms act as an intermediary that enables the transformation of cultural heritage into contemporary visual narratives.

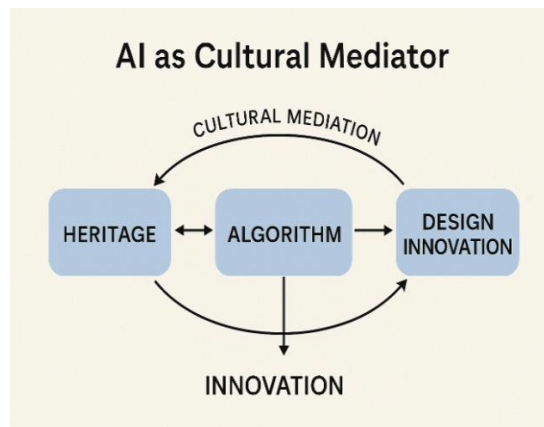


Figure 4. Conceptual Model of AI as Cultural Mediator.

(Illustrates bidirectional relationships among heritage, algorithmic creativity, and design innovation.)

Source: Authors' illustration.

Despite the growing interest in generative AI and digital creativity, much of the existing literature remains conceptual or technologically focused. Limited empirical research has examined how generative AI systems operate within specific cultural design contexts, particularly in relation to the reinterpretation of traditional artistic heritage.

In particular, there remains insufficient understanding of how platforms such as Midjourney reinterpret traditional Chinese artistic forms while balancing cultural authenticity, emotional engagement, and technological innovation. Addressing this gap, the present study investigates how AI-generated design mediates between heritage symbolism and contemporary creative production through a qualitative case study of Chinese artistic traditions.

Rather than viewing AI solely as a technical tool, this study explores how generative systems contribute to the reinterpretation of cultural heritage within digital creative environments. In doing so, the research examines the evolving relationship between traditional artistic identity and emerging algorithmic design practices.

1.5 Research Objectives

The objectives of this study are:

- (1) To analyze how AI-generated art reinterprets and represents Chinese artistic and craft heritage through computational creativity.
- (2) To evaluate how generative platforms such as Midjourney enable design innovation while maintaining cultural coherence and authenticity.
- (3) To investigate how AI-generated visualizations contribute to emotional engagement and cultural storytelling within digital design environments.
- (4) To identify ethical, aesthetic, and socio-cultural implications associated with AI-assisted reinterpretation of traditional artistic traditions.

1.6 Research Questions

To address these objectives, the study explores the following research questions:

- (1) How does Midjourney reinterpret traditional Chinese artistic heritage through AI-generated imagery?
- (2) In what ways can generative AI transform or preserve elements of Chinese cultural identity within digital design environments?
- (3) What forms of design innovation and emotional engagement emerge from AI-mediated reinterpretations of traditional Chinese crafts?
- (4) What ethical challenges related to authorship, authenticity, and cultural representation arise in AI-generated cultural artworks?

2. Literature Review

The growing intersection between artificial intelligence (AI) and cultural heritage has attracted increasing scholarly attention in the fields of design innovation, digital creativity, and cultural economics. Generative AI technologies enable new forms of visual production that reinterpret historical artistic traditions through computational processes. As a result, researchers have begun examining how algorithmic systems influence cultural representation, artistic creativity, and design innovation within contemporary digital environments.

This literature review synthesizes existing research across four thematic areas relevant to the objectives of this study: (1) the reinterpretation of cultural heritage through artificial intelligence, (2) design innovation and cultural authenticity in AI-assisted creativity, (3) emotional engagement in AI-generated artistic production, and (4) ethical and cultural implications associated with algorithmic creativity.

2.1 Heritage Reinterpretation through Artificial Intelligence

Recent scholarship has increasingly explored the role of artificial intelligence in the reinterpretation and preservation of cultural heritage. Within design and cultural studies, AI has been described as a technological platform capable of translating traditional artistic symbols into new digital forms. Rather than functioning solely

as a tool for replication, generative AI systems can facilitate reinterpretation by recombining visual patterns and stylistic features derived from large datasets of artistic works.

Choi (2019) argues that design innovation in East Asian cultural contexts requires a balance between cultural continuity and technological adaptation. From this perspective, heritage is not a static entity but a dynamic cultural resource that can be reinterpreted through emerging technologies. Similarly, Li and Zhao (2020) conceptualize intangible cultural heritage as a renewable source of creative inspiration that can support innovation in contemporary design practices.

Within the context of Chinese artistic traditions, generative AI systems have been applied to reinterpret motifs associated with historical crafts, visual symbolism, and decorative arts. Mazur-Włodarczyk (2025) suggests that algorithmic modeling and generative technologies enable new forms of dialogue between traditional craft knowledge and digital design processes. Through computational analysis of artistic patterns and visual structures, AI systems can reinterpret heritage motifs while introducing new aesthetic possibilities.

Studies examining generative platforms such as Midjourney further highlight the role of AI in hybrid artistic production. Hanna (2023) observes that text-to-image generation tools allow artists to combine linguistic prompts with historical visual references, resulting in hybrid artworks that reinterpret traditional motifs within contemporary digital environments. In this sense, generative AI does not simply reproduce historical aesthetics but contributes to the transformation of cultural symbols into new visual narratives.

Collectively, these studies indicate that AI-assisted creativity may support cultural continuity by translating traditional artistic elements into contemporary design contexts. However, empirical research examining how such reinterpretation occurs in specific cultural settings remains limited.

2.2 Design Innovation and Cultural Authenticity

Another important dimension of AI-assisted creativity concerns the relationship between technological innovation and cultural authenticity. Design innovation literature suggests that creative transformation often occurs when designers reinterpret cultural codes and symbolic meanings rather than merely introducing technological novelty.

Verganti (2017) proposes that meaningful innovation arises through reinterpretation of cultural meaning rather than technological advancement alone. Applied to AI-assisted design, this perspective suggests that generative technologies can support innovation when designers embed cultural context and interpretation into algorithmic processes.

Research on AI-generated art also highlights the concept of hybrid authorship, in which creative outcomes emerge from collaboration between human intention and algorithmic generation. Elgammal et al. (2017), McCormack et al. (2022), and Boehman, (2023) argue that AI-assisted art should be understood as a form of collaborative creativity rather than as a replacement for human artistic agency. In this framework, designers guide generative systems through prompts, iterative adjustments, and cultural interpretation.

Similarly, Gao and Yin (2024) demonstrate that generative AI systems can reproduce aesthetic characteristics associated with traditional artistic practices, such as compositional balance, symbolic rhythm, and visual harmony. Through machine learning processes, these systems learn patterns embedded in artistic datasets and apply them in the generation of new visual outputs.

From this perspective, AI-assisted creativity can support design innovation while maintaining connections to cultural authenticity. When guided by human interpretation and cultural awareness, generative technologies may extend the visual vocabulary of traditional artistic practices rather than replacing them.

2.3 Emotional Engagement in AI-Generated Art

Emotional engagement plays a significant role in the interpretation and reception of artistic works. In design theory, emotional responses are considered a key component of aesthetic experience and cultural meaning. Norman's (2004) theory of emotional design identifies three levels of emotional engagement—visceral, behavioral, and reflective—through which users interact with visual and material artifacts.

In the context of generative AI art, researchers have begun exploring how algorithmic systems simulate visual elements associated with emotional expression. The authors suggest that generative models can reproduce emotional cues through learned patterns of color, lighting, and composition that historically evoke particular affective responses (Gao & Yin, 2024; Manovich, 2019; McCormack et al., 2022).

Recent research in computational creativity further expands this discussion by examining how machine learning systems generate artistic outputs that audiences perceive as emotionally meaningful. McCormack et al. (2022) and Elgammal et al. (2023) argue that generative AI can produce images that convey narrative symbolism and aesthetic coherence, enabling viewers to interpret emotional content even when the artwork is algorithmically generated.

However, the authenticity of emotional expression in AI-generated art remains a subject of debate. Critics question whether emotional resonance can be considered genuine when artistic outputs are generated by computational processes rather than human experience. Despite these concerns, generative systems may still function as tools that enable designers to reinterpret cultural narratives in visually expressive ways.

Within cultural design contexts, emotional engagement is particularly important because artistic symbolism often conveys historical memory, mythological narratives, and collective identity. When AI-generated imagery incorporates traditional motifs, it may evoke emotional associations that connect viewers with cultural heritage while presenting those symbols through contemporary visual forms.

2.4 Ethical and Cultural Implications of Algorithmic Creativity

While generative AI provides new creative opportunities, it also raises important ethical and cultural questions regarding authorship, intellectual ownership, and cultural representation. One major debate concerns the extent to which AI-generated artworks should be considered independent creative outputs or collaborative productions involving both human designers and algorithmic systems.

Elgammal et al. (2017), McCormack et al. (2022), and Boehman (2023) argue that AI-generated art should be recognized as a legitimate artistic medium within contemporary creative practices. However, critics caution that reliance on large-scale training datasets may lead to homogenization of artistic styles or unintentional appropriation of cultural materials.

Reports from MIT Technology Review (2023) highlight that artists using generative AI tools sometimes face tensions between technological experimentation and cultural responsibility, particularly when working with historically significant cultural symbols. These concerns emphasize the importance of ethical frameworks that address issues such as cultural attribution, dataset transparency, and responsible use of heritage imagery.

Mazur-Włodarczyk (2025) further suggests that sustainable cultural innovation requires balancing algorithmic efficiency with cultural accountability. Cultural heritage should not be reduced to stylistic parameters within generative systems but should be understood as a narrative resource that reflects historical meaning and collective identity.

These ethical considerations are increasingly relevant as generative AI technologies become more widely adopted in creative industries and cultural design practices.

2.5 Synthesis

The reviewed literature suggests that AI-assisted design represents both a continuation and transformation of traditional artistic practices. Generative AI technologies introduce new possibilities for translating cultural heritage into digital visual environments while simultaneously raising questions about authorship, authenticity, and cultural responsibility.

Existing studies highlight the growing role of artificial intelligence in cultural production and computational creativity. However, much of the current scholarship remains conceptual or technologically focused, with relatively limited empirical investigation into how generative AI systems reinterpret cultural heritage within real-world design contexts.

In particular, there is insufficient understanding of how generative platforms such as Midjourney translate traditional Chinese artistic symbolism into contemporary visual narratives while maintaining cultural authenticity

and emotional engagement. Empirical studies examining the perspectives of designers who actively use these technologies remain scarce.

Addressing this gap, the present study adopts a qualitative case study approach to examine AI-generated reinterpretations of Chinese artistic heritage. By analyzing visual outputs generated through Midjourney and incorporating insights from digital designers, the research explores how generative AI mediates between traditional cultural symbolism and contemporary design innovation.

Through this approach, the study contributes to emerging discussions on AI-assisted creativity by examining how algorithmic systems participate in the reinterpretation of cultural heritage within digital design environments.

3. Methodology

This study adopts a qualitative case study approach to examine how generative artificial intelligence (AI), particularly the Midjourney platform, reinterprets Chinese artistic heritage within contemporary digital design practices. A qualitative research design was selected because it enables in-depth exploration of cultural symbolism, artistic interpretation, and creative processes that cannot be fully captured through quantitative analysis. In the context of digital cultural production, qualitative approaches are particularly useful for understanding how technological tools interact with human creativity and cultural meaning.

Case study methodology is appropriate for investigating complex phenomena situated within specific cultural and technological contexts (Creswell & Creswell, 2018; Yin, 2018). In this research, the case study focuses on the reinterpretation of traditional Chinese artistic motifs through generative AI-assisted design practices.

3.1 Research Design and Rationale

This study employs an exploratory qualitative case study design to investigate how generative AI systems reinterpret traditional Chinese artistic heritage within contemporary digital creative environments. The research design integrates visual analysis of AI-generated artworks with qualitative insights from digital designers who actively use generative AI tools.

Midjourney was selected as the primary platform for analysis due to its widespread adoption within digital art and design communities and its advanced text-to-image generation capabilities. These systems enable users to produce visual compositions based on natural-language prompts, allowing designers to experiment with reinterpretations of traditional cultural symbols and artistic styles (Hanna, 2023).

The unit of analysis in this study consists of AI-generated visual outputs inspired by traditional Chinese artistic motifs. Three representative forms of cultural heritage were selected for analysis:

- (1) Qiang embroidery motifs
- (2) Dunhuang Feitian (Flying Apsaras) imagery
- (3) Classical Chinese ink-wash landscape aesthetics

These artistic traditions were chosen because they represent historically significant forms of Chinese visual culture and are widely referenced within both academic literature and contemporary design practices.

The temporal scope of the study covers the period 2024–2025, during which generative AI platforms such as Midjourney experienced rapid adoption among digital artists and designers. The contextual boundary of the study focuses on the Chinese digital creative industry, particularly designers experimenting with AI-assisted reinterpretations of cultural heritage.

By clearly defining these research boundaries, the study examines how generative AI may function as a cultural mediator, translating heritage symbolism into contemporary visual narratives while maintaining connections to traditional artistic identity.

3.2 Data Collection Procedures

To enhance the credibility of the research, this study employed data triangulation, combining three complementary sources of qualitative evidence. Triangulation allows researchers to compare different forms of data in order to strengthen interpretive validity (Yin, 2018).

3.2.1 AI-Generated Visual Outputs

The first dataset consists of visual outputs generated using the Midjourney platform. Images were produced through structured text prompts referencing culturally significant Chinese artistic motifs, including embroidery patterns, mythological imagery, and ink-wash landscapes. Multiple iterations were generated for each prompt to observe variations in visual abstraction, compositional structure, and stylistic transformation.

These visual outputs served as primary materials for examining how generative AI systems reinterpret traditional artistic forms through algorithmic processes.

3.2.2 Documentary and Historical Analysis

The second dataset consists of documentary sources related to Chinese artistic traditions. Secondary materials were collected from museum archives, academic publications, art catalogues, and historical documentation of Chinese crafts and visual culture.

These sources provided contextual references that allowed comparison between traditional artistic characteristics and their AI-generated reinterpretations.

3.2.3 Semi-Structured Interviews with Designers

The third dataset consists of semi-structured interviews conducted with five Chinese digital designers who actively use generative AI tools in creative practice.

Participants were selected using purposive sampling, based on the following criteria:

- professional involvement in digital art or design
- experience using generative AI tools such as Midjourney
- engagement with cultural or heritage-based visual design

The participants included digital artists, design educators, concept artists, media designers, and cultural researchers working within AI-assisted creative environments.

Interviews were conducted online through video conferencing platforms and lasted approximately 45–60 minutes each. All interviews were recorded with participant consent and subsequently transcribed for analysis. To ensure confidentiality, participant identities were anonymized during transcription and reporting.

Interview questions explored topics including:

- designers' experiences using generative AI tools
- perceptions of cultural authenticity in AI-generated art
- emotional expression in AI-assisted visual production
- perspectives on authorship and creative collaboration with AI

3.3 Data Analysis

The collected data were analyzed using thematic analysis, following the six-phase framework proposed by Braun and Clarke (2006). Thematic analysis allows researchers to identify patterns and interpret meaning across qualitative datasets.

Both textual and visual materials were analyzed through the following stages:

(1) Data familiarization; interview transcripts and AI-generated visual outputs were reviewed multiple times to gain an overall understanding of recurring patterns.

(2) Initial coding; relevant segments of data were coded to identify emerging concepts related to cultural symbolism, design interpretation, and AI-assisted creativity.

(3) Theme identification; related codes were grouped into preliminary thematic categories.

(4) Theme review; themes were refined through comparison across interview responses and visual analysis.

(5) Theme definition and interpretation; final themes were defined to capture key mechanisms through which AI reinterprets cultural heritage.

(6) Reporting and synthesis; themes were integrated into a conceptual interpretation linking generative AI processes with cultural design practices.

Through this analytical process, four overarching themes were identified:

(1) Symbolic Abstraction - Transformation of traditional cultural motifs into computationally abstract visual forms.

(2) Aesthetic Fusion - Integration of traditional Chinese compositional principles with digital generative aesthetics.

(3) Cultural Storytelling - Reinterpretation of historical narratives and mythological symbolism through algorithmic imagery.

(4) Algorithmic Co-Creation - Emergence of collaborative creative processes between human designers and generative AI systems.

Figure 5 illustrates the methodological framework used in this study, demonstrating how the three sources of data contributed to thematic findings.

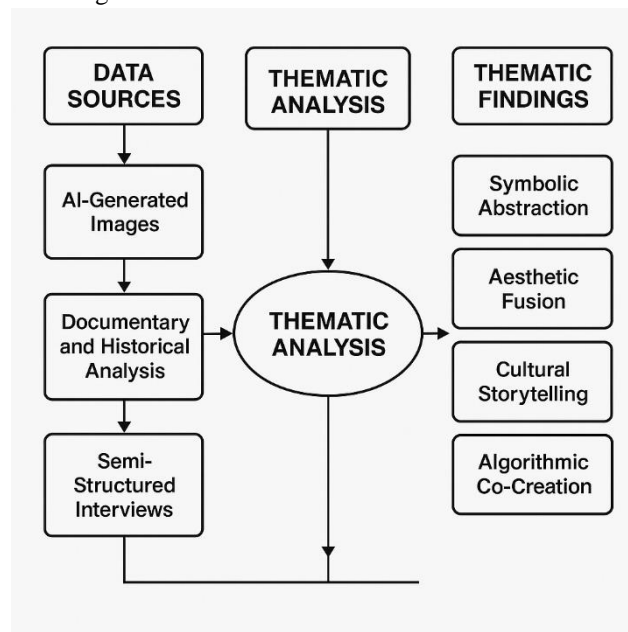


Figure 5. Visual Methodology Framework for AI Reinterpretation of Chinese Artistic Heritage.

(Depicts the integration of three data sources—AI-generated images, documentary analysis, and designer interviews—feeding into thematic analysis.)

Source: Authors' illustration.

3.4 Ethical Considerations

Ethical principles were carefully observed throughout the research process. All interview participants provided informed consent prior to participation, and their identities were anonymized to protect confidentiality. Participants were informed about the purpose of the study and their right to withdraw from the research at any time.

Interview recordings and transcripts were securely stored and used solely for research purposes. The study adhered to established ethical guidelines for qualitative research involving human participants.

The research also considered ethical issues related to the use of generative AI in cultural contexts. Particular attention was given to respecting the cultural significance of traditional Chinese artistic motifs and ensuring appropriate attribution of historical sources.

AI-generated images were treated as human–AI collaborative outputs, reflecting ongoing discussions in the literature regarding hybrid authorship in algorithmic creativity (Elgammal et al., 2017; McCormack et al., 2022; Boehman, 2023). The research approach emphasized the reinterpretation of cultural heritage rather than the appropriation or misrepresentation of cultural symbols.

3.5 Methodological Contribution

By integrating visual analysis, documentary research, and designer interviews, this study provides a triangulated methodological framework for examining AI-assisted cultural design. The approach allows researchers to investigate how generative technologies reinterpret cultural heritage through both visual outputs and creative practice perspectives.

The methodology contributes to design research by demonstrating how algorithmic systems can function as interpretive tools that translate heritage symbolism into contemporary aesthetic forms. This framework also highlights how generative AI may support culturally informed innovation within digital creative industries.

4. Findings

The findings of this study are organized according to the thematic analysis described in the methodology. Through the examination of AI-generated visual outputs, documentary sources, and designer interviews, four major themes emerged: symbolic abstraction, aesthetic fusion, cultural storytelling, and algorithmic co-creation. These themes illustrate different ways in which generative AI systems reinterpret Chinese artistic heritage within contemporary digital design environments.

4.1 Reinterpretation of Heritage through Symbolic Abstraction

Analysis of Midjourney-generated visual outputs indicates that generative AI frequently transforms traditional Chinese artistic motifs into abstracted digital forms while maintaining recognizable symbolic elements. This transformation process was particularly evident in motifs such as the Qiang embroidery spiral, lotus blossom, and Dunhuang Feitian (Flying Apsaras) imagery.

Rather than directly replicating traditional artistic forms, Midjourney-generated outputs tended to reinterpret these motifs through computational abstraction. For example, embroidery patterns were rendered as recursive digital geometries, while mythological figures were visualized through luminous silhouettes and atmospheric gradients. These visual reinterpretations preserve core symbolic characteristics while introducing new aesthetic structures produced through algorithmic generation.

This process can therefore be described as algorithmic reinterpretation rather than replication, as generative systems translate traditional visual elements into new compositional structures. One interview participant explained this transformation process:

“Midjourney doesn’t copy the embroidery pattern—it imagines it in another dimension, keeping the rhythm but changing the material language.”

The observation suggests that designers interpret AI-generated outputs as creative reinterpretations of cultural motifs rather than literal reproductions.

Table 1 summarizes representative heritage motifs, their cultural meanings, and the forms of abstraction observed in AI-generated outputs.

Table 1.

Reinterpretation of Traditional Motifs through Symbolic Abstraction

Traditional Symbol	Cultural Meaning	AI-Generated Interpretation (Midjourney)	Form of Abstraction
Qiang embroidery spiral	Protection and continuity	Rendered as recursive digital vortex	Geometric transformation
Dunhuang Feitian (Flying Apsaras)	Divine grace and transcendence	Translated into weightless digital silhouettes with light gradients	Spatial re-composition
Lotus blossom	Purity and rebirth	Created with luminous color transitions and fractal petal forms	Chromatic abstraction
Ink-wash mountain	Harmony with nature	Algorithmic layering resembling mist and fractal contours	Textural simulation

Note. Visual prompts derived from Midjourney iterations, cross-referenced with cultural documentation.

Source: Authors' compilation.

These results indicate that generative AI systems reinterpret heritage motifs through computational abstraction while retaining identifiable symbolic references.

4.2 Design Innovation through Aesthetic Fusion

The second theme emerging from the analysis concerns aesthetic fusion, referring to the integration of traditional Chinese artistic principles with digital generative aesthetics.

Visual comparison between traditional artworks and AI-generated images revealed that Midjourney outputs often combine classical compositional principles—such as balance, spatial harmony, and tonal contrast—with visual characteristics associated with contemporary digital art, including gradient lighting, surreal color transitions, and three-dimensional depth effects.

Designers interviewed in this study described this process as a form of “technological brushwork,” in which generative AI extends traditional artistic vocabulary through computational experimentation.

Figure 6 illustrates an example of this aesthetic integration, comparing traditional ink-wash landscape compositions with their AI-generated reinterpretations.



Figure 6. Aesthetic Fusion of Traditional Ink-Wash Elements and AI-Generated Digital Effects.

(Comparative display of classical landscape composition versus Midjourney reinterpretation showing balanced spatial layout with transformed color and lighting effects.)

Source: Authors' visualization based on Midjourney outputs.

One designer described this interaction between tradition and digital experimentation as:

“a living aesthetic dialogue between traditional composition and algorithmic imagination.”

These findings suggest that generative AI may support design innovation by expanding visual possibilities while maintaining references to traditional artistic structures. This observation directly relates to the second research objective of evaluating how Midjourney enables innovation while maintaining cultural coherence.

4.3 Emotional Engagement and Cultural Storytelling

The third theme emerging from the analysis concerns emotional engagement and cultural storytelling within AI-generated imagery. Interview participants frequently emphasized that generative AI images incorporating mythological or historical motifs evoke emotional associations related to cultural memory and identity.

Applying Norman’s (2004) emotional design framework, two types of emotional responses were particularly evident in participants’ interpretations: visceral responses, related to visual aesthetics such as color and composition, and reflective responses, related to cultural meaning and historical narratives.

For example, images referencing Dunhuang Feitian mythology were described by participants as visually expressive and culturally evocative. One interviewee commented:

“When Midjourney paints the Feitian, it feels like seeing our mythology reborn in light.”

Visual analysis of these images revealed recurring stylistic features such as luminous color gradients, flowing motion patterns, and symbolic geometric structures. These visual elements contributed to narrative interpretations that linked algorithmic imagery with traditional mythological symbolism.

Figure 7 illustrates examples of AI-generated images incorporating expressive visual elements associated with cultural storytelling.



Figure 7. AI-Generated Imagery Conveying Emotional Storytelling.

(Series of Midjourney compositions depicting reinterpretations of mythological Chinese figures through expressive lighting and symbolic composition.)

Source: Authors’ visualization based on Midjourney outputs.

These findings suggest that generative AI systems may contribute to the reinterpretation of cultural narratives by translating symbolic imagery into visually expressive digital forms.

4.4 Algorithmic Co-Creation and Authorship

The fourth theme emerging from the data concerns algorithmic co-creation, referring to collaborative creative processes between designers and generative AI systems.

Interview participants consistently described AI-assisted design as an iterative interaction in which human designers provide conceptual direction while generative algorithms generate alternative visual possibilities. Rather than replacing human creativity, participants perceived AI systems as tools that expand creative exploration.

However, designers also expressed ambivalence regarding issues of authorship and cultural responsibility. While generative systems were viewed as sources of creative inspiration, participants noted uncertainties concerning ownership, attribution, and ethical implications associated with AI-generated outputs.

Table 2 summarizes the perspectives expressed by participants regarding AI collaboration.

Table 2.

Perspectives on Algorithmic Co-Creation and Cultural Authorship

Participant Role	View of AI Collaboration	Perceived Benefit	Cultural Concern
Digital craft designer	"AI reveals unseen design combinations."	Expanded creative options	Risk of cultural dilution
Art educator	"Students use AI to understand form and rhythm."	Pedagogical engagement	Need for attribution clarity
Concept artist	"It's like co-painting with a silent partner."	New aesthetic discovery	Ethical boundaries unclear
Cultural researcher	"AI challenges us to redefine heritage."	Reflexive cultural dialogue	Data bias in training sets
Media designer	"Human emotion guides the algorithm."	Fusion of affect and automation	Ownership of hybrid outputs

Source: Authors' compilation.

These perspectives illustrate how designers conceptualize AI as both a creative collaborator and a technological system that introduces new ethical and cultural considerations.

4.5 Synthesis of Findings

Across all three data sources—visual analysis, documentary comparison, and designer interviews—the findings indicate that generative AI systems can reinterpret Chinese artistic heritage through multiple creative mechanisms.

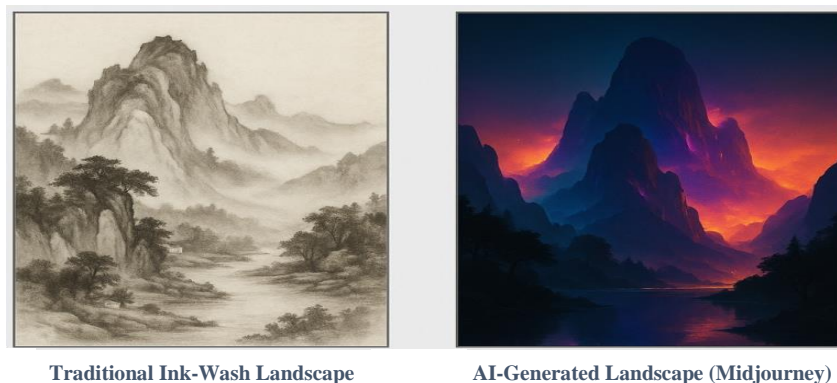
The results support the conceptual framework presented earlier in the study, in which AI functions as a cultural mediator connecting heritage traditions with contemporary design innovation.

Specifically, the findings suggest that generative AI contributes to cultural reinterpretation through four interconnected processes:

- (1) Symbolic Abstraction – transformation of traditional motifs into algorithmically generated visual forms.
- (2) Aesthetic Fusion – integration of traditional artistic principles with digital generative aesthetics.
- (3) Cultural Storytelling – reinterpretation of historical narratives and mythological symbolism through expressive digital imagery.

(4) Algorithmic Co-Creation – collaborative creative interaction between human designers and generative AI systems.

These relationships are summarized in Figure 8, which illustrates how generative AI mediates interactions between cultural heritage and contemporary design innovation.



Traditional Ink-Wash Landscape

AI-Generated Landscape (Midjourney)

Figure 8. Summary Model of Findings.

(A conceptual diagram illustrating AI reinterpretation as a mediator connecting heritage abstraction, design innovation, emotional storytelling, and algorithmic co-creation.)

Source: Authors' visualization based on Midjourney outputs.

Overall, the findings suggest that generative AI platforms such as Midjourney may contribute to new forms of cultural reinterpretation within digital design environments. When guided by culturally informed designers, these technologies can support both creative experimentation and continued engagement with traditional artistic identity.

5. Discussion

The findings of this study provide insights into how generative artificial intelligence platforms such as Midjourney contribute to the reinterpretation of Chinese artistic heritage within contemporary digital design practices. By integrating visual analysis of AI-generated images, documentary sources, and designer interviews, the study illustrates how generative AI systems participate in translating traditional cultural symbolism into new visual forms.

The four themes identified in the findings—symbolic abstraction, aesthetic fusion, cultural storytelling, and algorithmic co-creation—demonstrate different mechanisms through which AI-assisted design interacts with cultural heritage. These findings are interpreted in relation to relevant theoretical perspectives, including emotional design (Norman, 2004), meaning-driven innovation (Verganti, 2017), and cultural mediation theory (Choi, 2019; Mazur-Włodarczyk, 2025). Together, these perspectives help explain how generative technologies may influence contemporary cultural design practices.

5.1 AI as a Cultural Translator: From Symbolism to Abstraction

The theme of symbolic abstraction suggests that generative AI systems can reinterpret traditional artistic motifs by translating them into new algorithmically generated visual structures. The transformation of elements derived from Qiang embroidery and Dunhuang iconography demonstrates how AI-generated imagery retains recognizable symbolic characteristics while introducing new compositional forms.

Rather than directly reproducing historical artworks, Midjourney-generated outputs often distill visual motifs into simplified geometric or atmospheric structures. This observation supports Li and Zhao's (2020) argument that cultural heritage can function as a renewable source of creative inspiration. Through abstraction, traditional motifs may be reconfigured in ways that preserve symbolic meaning while adapting to contemporary design environments.

From a theoretical perspective, this process can be interpreted as a form of cultural translation, in which algorithmic systems mediate between historical visual languages and contemporary digital aesthetics. In this

sense, generative AI may enable designers to reinterpret cultural symbolism without necessarily replicating traditional artistic forms.

5.2 Fusion as Innovation: Blending Tradition and Modernity

The theme of aesthetic fusion highlights how design innovation emerges from the interaction between traditional artistic principles and digital generative techniques. Visual analysis revealed that Midjourney-generated images frequently combine classical Chinese compositional elements—such as spatial balance and tonal harmony—with digital features including gradient lighting, atmospheric effects, and depth simulation.

This observation aligns with Verganti's (2017) concept of meaning-driven innovation, which emphasizes reinterpretation of cultural meaning rather than purely technological novelty. In the context of AI-assisted design, generative systems may expand the visual vocabulary of traditional art forms by enabling designers to experiment with alternative visual interpretations.

The findings suggest that AI-assisted creativity does not necessarily replace traditional artistic practices. Instead, generative tools may support experimentation with hybrid aesthetic forms that integrate historical artistic structures with contemporary visual techniques. Such hybridization illustrates how technological systems can contribute to creative exploration while maintaining connections to cultural heritage.

5.3 Emotional Resonance and Cultural Storytelling in Digital Form

Another important finding concerns the emotional engagement associated with AI-generated reinterpretations of cultural imagery. Interview participants frequently described AI-generated artworks as visually expressive and emotionally evocative, particularly when images incorporated mythological or historical motifs.

This observation can be interpreted through Norman's (2004) theory of emotional design, which suggests that aesthetic features such as color, composition, and symbolism influence emotional responses to visual artifacts. Midjourney-generated imagery often employed luminous color gradients, flowing motion patterns, and symbolic motifs that participants associated with mythological narratives.

The reinterpretation of Dunhuang Feitian imagery provides an example of how generative systems can translate historical narratives into visually expressive digital compositions. Although the imagery is algorithmically generated, viewers may still interpret it as culturally meaningful due to the symbolic associations embedded in traditional motifs.

These findings suggest that generative AI systems may contribute to new forms of digital cultural storytelling, in which historical narratives are visually reinterpreted through contemporary computational aesthetics.

5.4 Authorship and Ethics in Algorithmic Co-Creation

The theme of algorithmic co-creation highlights the evolving relationship between human designers and generative AI systems. Interview participants consistently emphasized that AI-assisted design involves iterative interaction between human input and algorithmic generation.

In this collaborative process, designers guide the creative direction through prompts and contextual interpretation, while the generative system produces alternative visual possibilities. This observation supports the authors' concept of hybrid authorship, in which creative outputs emerge through collaboration between human creativity and computational processes (Elgammal et al., 2017; McCormack et al., 2022; Boehman, 2023).

Despite these opportunities, the findings also reveal ongoing concerns related to authorship and ethical responsibility. Some participants expressed uncertainty regarding intellectual ownership of AI-generated images, particularly when outputs are derived from large-scale training datasets.

These discussions highlight the need for emerging ethical frameworks addressing issues such as cultural attribution, intellectual property, and responsible use of generative technologies within artistic production.

5.5 Synthesis of Discussion

Taken together, the four themes identified in this study illustrate how generative AI platforms may function as cultural mediators within contemporary design practice. Through processes of symbolic abstraction, aesthetic fusion, cultural storytelling, and algorithmic co-creation, generative technologies enable new forms of interaction between traditional cultural heritage and digital creative environments.

Rather than replacing traditional artistic practices, generative AI appears to facilitate reinterpretation of cultural symbols through computational experimentation. This interaction between heritage and technology contributes to the emergence of hybrid creative ecosystems in which traditional artistic identities are translated into contemporary digital contexts.

Table 3 summarizes the relationship between the study's research objectives, emergent themes, and theoretical interpretations.

Table 3.

Summary of Findings and Thematic Interpretation

Research Objective	Emergent Theme	Key Findings	Theoretical Link	Implications
1. To analyze how AI-generated art reinterprets Chinese artistic and craft heritage	Symbolic Abstraction	AI transforms heritage motifs into algorithmic representations while retaining symbolic meaning	Cultural Mediation (Choi, 2019)	AI acts as a translator of cultural symbols
2. To evaluate how Midjourney enables innovation while maintaining authenticity	Aesthetic Fusion	Combines traditional design balance with digital surrealism	Meaningful Innovation (Verganti, 2017)	Promotes creative evolution without cultural loss
3. To investigate emotional engagement in AI-generated cultural design	Cultural Storytelling	AI visualizes emotional narratives that evoke nostalgia and identity	Emotional Design (Norman, 2004)	Sustains emotional connection to heritage
4. To identify ethical and cultural implications of AI-assisted art	Algorithmic Co-Creation	Designers collaborate with AI while questioning authorship and ownership	Hybrid Authorship (Boehman, 2023)	Necessitates new ethical frameworks for AI creativity

Source: Authors' compilation.

5.6 Theoretical Implications

This study contributes to existing literature on AI-assisted creativity and cultural design in several ways. First, the findings suggest that generative AI technologies can support reinterpretation of cultural heritage by translating traditional visual symbols into contemporary digital aesthetics. This observation contributes to research on computational creativity by demonstrating how algorithmic processes may interact with cultural symbolism within design practice.

Second, the study expands the conceptual understanding of AI as a cultural mediator within creative production. Rather than functioning solely as a technical tool, generative AI platforms may facilitate interactions between historical cultural knowledge and contemporary digital creativity.

These insights contribute to broader discussions on cultural innovation and computational aesthetics, suggesting that generative technologies can support both creative transformation and continued engagement with cultural heritage.

5.7 Practical Implications

The findings also provide practical implications for design education, cultural institutions, and creative industries.

For design education, the integration of generative AI tools into design curricula may enable students to explore new forms of visual experimentation while engaging with cultural heritage. AI-assisted tools can support interdisciplinary learning by combining digital creativity with cultural literacy.

For creative industries, AI-generated reinterpretations of traditional artistic motifs may contribute to the development of culturally distinctive visual identities and creative products. Such applications may support digital heritage initiatives while enabling designers to explore new aesthetic directions.

More broadly, the findings suggest that generative AI technologies can extend the visibility of cultural heritage within digital environments when applied with appropriate cultural awareness and ethical considerations. By combining algorithmic generation with human interpretation, designers may develop new approaches to preserving and reinterpreting cultural identity within contemporary creative practice.

6. Conclusion and Recommendations

6.1 Conclusion

This study examined how generative artificial intelligence (AI), particularly the Midjourney platform, contributes to the reinterpretation of Chinese artistic heritage within contemporary digital design practices. Using a qualitative case study approach that combined AI-generated visual analysis, documentary comparison, and semi-structured interviews with digital designers, the research explored how generative technologies interact with cultural symbolism and creative production.

The findings identified four key mechanisms through which generative AI participates in the reinterpretation of cultural heritage: symbolic abstraction, aesthetic fusion, cultural storytelling, and algorithmic co-creation. These mechanisms illustrate how AI-generated imagery can transform traditional artistic motifs into new visual forms while retaining recognizable cultural references. Symbolic abstraction reflects the algorithmic reinterpretation of traditional motifs, while aesthetic fusion demonstrates how generative systems integrate classical artistic principles with digital visual techniques. Cultural storytelling highlights the role of generative imagery in evoking narratives associated with mythological and historical symbolism, and algorithmic co-creation emphasizes the collaborative interaction between designers and generative AI systems.

Taken together, these findings suggest that generative AI technologies can function as cultural mediators within contemporary design environments. Rather than replicating traditional artworks, generative systems enable designers to reinterpret heritage motifs through computational experimentation and hybrid creative processes. When guided by culturally informed designers, AI-assisted design may contribute to new forms of creative exploration while maintaining connections to traditional artistic identity.

The study therefore contributes to emerging research on AI-assisted cultural design and computational creativity by demonstrating how generative platforms may support both reinterpretation of cultural heritage and innovation in digital creative industries. These findings highlight the evolving relationship between cultural tradition, human creativity, and algorithmic technologies in contemporary artistic production.

6.2 Limitations

Despite its contributions, several limitations should be acknowledged.

First, the study adopts a qualitative case study approach with a relatively small number of interview participants. While this design allows for in-depth exploration of designers' experiences, the findings are not intended to provide broad generalizations across all creative industries or cultural contexts.

Second, the internal mechanisms of generative AI platforms such as Midjourney remain largely inaccessible due to proprietary algorithms. As a result, the study focuses on the interpretation of generated outputs and user experiences rather than the technical processes underlying image generation.

Third, the analysis focuses primarily on a single generative AI platform. Different platforms may employ alternative training datasets or algorithmic architectures, which could produce different forms of cultural reinterpretation.

These limitations suggest that the findings should be interpreted as exploratory insights into the relationship between generative AI and cultural design practices.

6.3 Recommendations for Future Research

Building on the findings of this study, several directions for future research can be proposed.

Cross-platform comparative studies. Future research could compare different generative AI platforms—such as Midjourney, DALL·E, and Stable Diffusion—to examine how variations in algorithmic design and training data influence cultural representation and aesthetic outcomes.

Longitudinal studies of AI-assisted creativity. Further research may investigate how designers' relationships with generative AI tools evolve over time. Longitudinal studies could explore how iterative interaction with AI systems shapes creative decision-making, artistic learning processes, and perceptions of authorship.

Development of ethical frameworks for AI-assisted cultural design. As generative AI technologies become increasingly integrated into creative industries, there is a growing need to develop ethical guidelines addressing issues such as intellectual ownership, cultural attribution, and responsible representation of cultural heritage within generative systems.

Cross-cultural studies of AI-mediated heritage reinterpretation. Future studies may extend the analysis to other cultural traditions, including Japanese, Indian, or Islamic artistic heritage, in order to examine how generative AI platforms mediate cultural identity across diverse artistic contexts.

6.4 Closing Reflection

The rapid development of generative artificial intelligence is reshaping the relationship between cultural heritage, artistic creativity, and digital technology. Generative platforms provide new tools that allow designers to reinterpret historical artistic traditions within contemporary visual environments.

While these technologies raise important ethical and cultural questions, they also offer opportunities for expanding the ways in which cultural heritage can be represented, explored, and communicated. When applied with cultural awareness and responsible design practices, generative AI may contribute to new forms of dialogue between historical artistic traditions and contemporary creative expression.

In this sense, the integration of AI-assisted design within cultural production highlights the continuing evolution of artistic practice in the digital era.

References

- Boehman, C. (2023). *In defense of AI art: History repeats itself again*. Medium. <https://craigboehman.com/blog/in-defense-of-ai-art>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Choi, S. (2019). Cultural identity and modernization in East Asian design. *Design Issues*, 35(4), 23–34. https://doi.org/10.1162/desi_a_00555
- Elgammal, A., Liu, B., Elhoseiny, M., & Mazzone, M. (2017). CAN: Creative adversarial networks generating “art” by learning about styles and deviating from style norms. *Proceedings of the International Conference on Computational Creativity*.

- Gao, J., & Yin, J. (2024). Emotional expression of AI-generated artistic design: A case analysis approach. *Chitrolekha Journal of Art and Design*, 8(1), 45–58. <https://doi.org/10.21659/cjad.v8n1.05>
- Hanna, D. M. (2023). The use of artificial intelligence art generator “Midjourney” in artistic and advertising creativity. *Journal of Design Sciences and Applied Arts*, 4(2), 42–58. <https://doi.org/10.52939/jdsaa.4.2.42>
- Li, X., & Zhao, W. (2020). Cultural heritage as a source of product innovation in East Asian design. *Asian Design Journal*, 11(3), 44–58.
- Mazur-Włodarczyk, K. (2025). Integrating AI in the development of Chinese crafts. *Economics, Business and Administration*, 7(8), 183–198. <https://doi.org/10.35784/eba.2025.7.8.183>
- McCormack, J., Gifford, T., Hutchings, P., Llano, M., Yee-King, M., & D’Inverno, M. (2022). Designing creativity support tools for generative AI. *ACM Transactions on Computer-Human Interaction*, 29(3).
- Manovich, L. (2019). *AI aesthetics*. Strelka Press.
- MIT Technology Review. (2023, July 15). *Chinese creators use Midjourney’s AI to reimagine cultural heritage*. <https://www.technologyreview.com/2023/07/15/chinese-creators-ai-midjourney-cultural-heritage>
- Norman, D. A. (2004). *Emotional design: Why we love (or hate) everyday things*. Basic Books.
- Verganti, R. (2017). *Overcrowded: Designing meaningful products in a world awash with ideas*. MIT Press.
- Yin, R. K. (2018). *Case study research and applications (6th ed.)*. Sage.