

Research on Cultural and Creative Translation Design Based on SWOT Analysis

-- Taking the Beijing Grand Canal Culture as an Example

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Abstract: Under the backdrop of the booming global cultural industry, this study takes the Beijing Grand Canal as its research object and employs the SWOT analysis method to examine its cultural and creative design environment. The study reveals that while the Beijing Grand Canal possesses rich cultural connotations and abundant materials for cultural and creative design, there are still deficiencies in cultural exploration and product innovation. To address these issues, this paper proposes strategies such as utilizing cultural resources, developing diversified cultural and creative products in line with market demand, and leveraging digital technology to enhance product innovation. Additionally, it emphasizes the importance of brand building and storytelling marketing to increase product added value and consumer recognition. This research provides theoretical support and practical guidance for the development of the cultural and creative industry related to the Beijing Grand Canal.

Keywords: Beijing Grand Canal; Cultural and Creative Design; SWOT Analysis; Cultural Innovation.

1. Introduction

1.1. Research Background and Significance

In the era of a rapidly growing global cultural industry, the cultural and creative industry has become a significant force in driving economic growth and promoting cultural exchange and heritage. According to relevant data, the global cultural and creative industry has continuously expanded in recent years, maintaining a high annual growth rate. Traditional culture, as the treasure of national spirit and the source of cultural creativity, has drawn increasing attention from academia and industry regarding its innovative transformation through cultural and creative design.

As a World Cultural Heritage site, the Beijing Grand Canal embodies centuries of historical changes and profound cultural significance. It is not only an outstanding representative of ancient Chinese hydraulic engineering but also a crucial economic and cultural exchange channel between the north and south of China. From the Yongji Canal of the Sui and Tang Dynasties to the Tonghui River of the Yuan Dynasty, the Beijing Grand Canal has witnessed significant political, economic, and cultural developments throughout Chinese history. Its wharves, ancient towns, temples, and other historical relics, along with its canal transportation culture, folk traditions, and culinary heritage, provide an invaluable source of inspiration for cultural and creative design.

However, there are still many shortcomings in the cultural and creative design of the Beijing Grand Canal, such as insufficient exploration of cultural connotations, lack of product innovation, and weak market promotion. These issues have hindered the full realization of its cultural value and economic potential.

This study aims to utilize SWOT analysis to deeply examine the internal and external environments of cultural and creative design related to the Beijing Grand Canal, as well as consumer demand, and propose targeted strategies for cultural and creative translation design. Theoretically, this

study enriches the research methodologies and theoretical system of traditional cultural and creative design. By introducing SWOT analysis into this research field, it provides new analytical perspectives and tools, broadening the academic scope and advancing relevant theories. Practically, this study offers specific strategy suggestions for cultural and creative design related to the Beijing Grand Canal, assisting cultural and creative enterprises and designers in better understanding market demand, exploring cultural connotations, and innovating design products. It enhances the market competitiveness and cultural influence of cultural and creative products related to the Beijing Grand Canal. Furthermore, it provides insights and references for other regions in traditional cultural and creative design, contributing to the inheritance and development of traditional culture in contemporary society.

1.2. Research Design

1.2.1. Research Object

This study focuses on the traditional culture of the Beijing Grand Canal and its cultural and creative product design. Located at the northern end of the Beijing-Hangzhou Grand Canal, the Beijing Grand Canal spans 82 kilometers and flows through Tongzhou and Chaoyang districts. It dates back to the Spring and Autumn and Warring States periods and underwent expansion and development during the Sui, Tang, Yuan, Ming, and Qing dynasties. Beyond being an essential water transportation hub, it served as a vital cultural bridge linking the north and south. The prosperity of canal transportation promoted economic development along its banks, forming a unique canal civilization.

As a World Cultural Heritage site, the Beijing Grand Canal possesses significant historical and cultural value. It preserves extensive tangible and intangible cultural heritage, including water conservancy projects like the Tonghui River, ancient grain storage facilities, historical buildings, and various folk traditions such as canal boat songs, traditional crafts, and festive customs. These elements together form a complete canal cultural system.

The construction of the Beijing Grand Canal Cultural Belt has been elevated to a national strategy. Cultural and creative products serve as crucial carriers of traditional culture's innovative transformation, and research on their design is essential for promoting cultural heritage and enhancing cultural value. Therefore, exploring the cultural characteristics of the Beijing Grand Canal and its innovative translation into cultural and creative designs holds significant theoretical and practical value.

1.2.2. Research Method

SWOT analysis is a strategic analysis tool that examines the internal and external environments of an entity by identifying its strengths, weaknesses, opportunities, and threats. Strengths and weaknesses represent internal factors—strengths refer to favorable conditions such as rich resources, advanced technology, and outstanding talent, while weaknesses denote limitations such as poor management, lack of funds, and outdated technology. Opportunities and threats, on the other hand, represent external factors—opportunities refer to favorable external conditions such as growing market demand, policy support, and technological advancements, while threats include market competition, policy changes, and economic downturns.

By applying SWOT analysis, this study comprehensively analyzes the internal and external environments of cultural and creative design related to the Beijing Grand Canal, identifying its strengths, weaknesses, opportunities, and threats. This provides precise market guidance for cultural and creative design. As a multi-dimensional and systematic research method, SWOT analysis offers a novel approach to studying traditional cultural and creative design, demonstrating strong innovation and practical value.

2. Cultural Connotations of the Beijing Grand Canal and the Current Status of Cultural and Creative Design

2.1. Cultural Connotations of the Beijing Grand Canal

The Beijing Grand Canal embodies a rich variety of cultural elements. Canal transport culture is one of its core cultural aspects, as the canal has served as a vital transportation route throughout different dynasties, witnessing the evolution of the grain transport system, shipbuilding, and the taxation and distribution of grain supplies. This has contributed to the formation of a unique canal transportation culture. The wharf culture is another significant component, as the canal's ports were crucial for the loading and unloading of goods and the movement of people, leading to the development of thriving commercial, folk, and culinary cultures. For instance, Tongzhou, a key port of the Beijing Grand Canal, has preserved many ancient wharf relics and traditional commercial districts, such as Zhangjiawan Ancient Town, where the architectural styles and folk customs reflect the distinctive characteristics of wharf culture.

Additionally, the Beijing Grand Canal carries rich folk cultural traditions, such as canal boatmen's work chants and dragon lantern performances, as well as traditional festivals and rituals associated with the canal. These traditions reflect the lifestyles and spiritual beliefs of the people living along the canal. Furthermore, the numerous temples and ancient pagodas along the Grand Canal embody profound religious and architectural cultural values.

Through field visits to museums, cultural and creative stores, and tourist attractions surrounding the Beijing Grand Canal, as well as online research on major e-commerce platforms, this study conducted a comprehensive survey of the current state of cultural and creative design related to the canal. Currently, the cultural and creative products of the Beijing Grand Canal are relatively diverse, mainly including souvenirs, stationery, clothing, and food products. Souvenirs, such as Grand Canal-themed badges, keychains, and postcards, adopt a simple design that highlights iconic canal elements, making them convenient for tourists to carry and collect. Stationery items, including notebooks, bookmarks, and pens, integrate canal cultural elements into their design, ensuring both practicality and cultural appeal. Clothing products, such as T-shirts and hats featuring Grand Canal patterns, cater to consumers' demand for personalized apparel. Food products, including canal-themed pastries and specialty snacks, convey the cultural significance of the Grand Canal through culinary experiences.

In terms of design characteristics, some cultural and creative products successfully incorporate elements of the Grand Canal, abstracting features such as boat shapes, bridge structures, and water patterns into product designs. In color schemes, blue and green tones are commonly used to symbolize water and nature, enhancing the canal's dynamic and vibrant essence. However, some issues remain, as certain products feature overly simplistic designs that merely replicate cultural symbols without deeper creative exploration. The lack of thorough cultural content and innovation results in product homogeneity, making it difficult to attract consumers. Thus, increased research and attention are needed to fully explore and capitalize on the Grand Canal's cultural richness and value.

3. SWOT Analysis of Cultural and Creative Products of the Beijing Grand Canal

3.1. Strengths (S)

3.1.1. Deep Cultural Value

Over centuries of historical evolution, the Grand Canal has nurtured countless towns and communities along its route, fostering diverse cultural traditions. The rich folk culture along the canal has become a crucial carrier of China's tangible and intangible cultural heritage.[1] As a UNESCO World Cultural Heritage site, the Beijing Grand Canal boasts over 2,500 years of historical legacy, preserving a vast array of cultural relics and traditions. According to statistics, more than 100 cultural heritage sites along the main course of the Beijing Grand Canal are directly related to its historical and cultural significance. These sites hold unique memories of the canal's past and the history of grain transportation between Beijing and Hangzhou.

Additionally, as the capital of China, Beijing has distinct regional cultural characteristics. The cultural elements of the Grand Canal, combined with Beijing's iconic cultural symbols such as Peking Opera, Siheyuan (courtyard houses), imperial architecture, and literati gatherings, provide abundant inspiration for locally distinctive cultural and creative products. Whether in the form of handicrafts, decorative pieces, or books and documentaries about the canal, these products can highlight the historical and cultural depth of Beijing while fostering emotional connections with the local community.

3.1.2. Strong Creative Talent Resources

With the continuous development of the cultural and creative industry, particularly in Beijing, which serves as a hub for cultural and creative enterprises, new creative forces are emerging. Beijing is home to a large number of high-level designers and creative teams. These professionals not only possess a strong foundation in traditional cultural knowledge but also exhibit innovative design capabilities and modern aesthetic perspectives. This concentration of creative talent allows for a greater diversity of ideas in cultural and creative product design, promoting the development of personalized and high-value-added traditional cultural products.

3.1.3. Government Policy Support

In recent years, with the rapid growth of tourism and increasing attention to cultural heritage conservation, the Grand Canal National Cultural Park has become a focal point of national development initiatives.[2] The "Grand Canal Cultural Protection, Inheritance, and Development Plan," issued by the General Offices of the CPC Central Committee and the State Council, explicitly emphasizes promoting the cultural heritage of the Grand Canal. The plan aims to transform the canal into a "Brilliant Cultural Belt, Green Ecological Belt, and Colorful Tourism Belt." Furthermore, the "14th Five-Year Implementation Plan for the Protection, Inheritance, and Utilization of Grand Canal Culture," issued by the National Development and Reform Commission, sets forth goals for 2025, including comprehensive conservation of cultural and natural heritage along the Grand Canal, the establishment of green ecological corridors, and deep integration of culture and tourism. The plan also outlines 47 specific tasks across four major areas, including cultural heritage conservation, environmental restoration, waterway transformation, and public engagement.

3.2. Weaknesses (W)

3.2.1. Limited Brand Influence and Audience

Compared to well-established cultural brands such as the Forbidden City and the Great Wall, the cultural and creative products of the Grand Canal have yet to form a strong brand presence in the market. As a historical and cultural symbol, the brand development of the Grand Canal is still in its early stages, and its cultural and creative products lack market recognition. Consumers' understanding of the Grand Canal culture is often limited to a superficial awareness of its historical background, and insufficient brand construction makes it difficult for Grand Canal cultural and creative products to gain a dominant position in the market, affecting their overall market performance.

3.2.2. Underdeveloped Industrial Chain

At present, the industrial chain of cultural and creative products related to the Grand Canal remains incomplete. Although certain design and production processes have been established, and cultural and creative product design competitions have been organized, a comprehensive industrial ecosystem—from concept to market—has yet to be formed. For example, gaps exist between different stages such as product research and development, production, packaging, and sales, leading to weak coordination among upstream and downstream industries. Furthermore, businesses lack effective collaboration and resource-sharing mechanisms, resulting in prolonged product development cycles and limited feedback mechanisms for product quality and market reception. This lack of a robust industrial support system hinders continuous innovation in cultural and creative

enterprises, restricting their ability to compete effectively.

3.2.3. Challenges in Cultural Heritage Preservation and Innovation

In recent years, media efforts have focused on promoting the Grand Canal culture and protecting its intangible cultural heritage. However, the public's perception of cities along the Grand Canal often lacks distinctive identity, as spatial transformations have not been accompanied by notable cultural differentiation. [3]Consequently, the development of Grand Canal-themed cultural and creative products remains relatively slow, and design innovations face numerous challenges.

Despite the wealth of cultural resources associated with the Grand Canal, many cultural and creative products fail to deeply explore the historical narratives and cultural connotations behind them. This results in shallow design concepts that lack meaningful storytelling and cultural significance. Many existing products simply incorporate traditional symbols—such as canal illustrations, boats, and bridges—without effectively conveying the deeper spiritual and historical values of the Grand Canal heritage.[4] Modern consumers increasingly seek products with rich cultural depth and engaging narratives, yet the current offerings struggle to integrate culture with storytelling. This limitation hinders market expansion and reduces the cultural value of these products. A key challenge for designers is finding ways to seamlessly integrate traditional cultural elements with contemporary design approaches, avoiding generic, overly traditional, or excessively modernized product aesthetics.

3.3. Opportunities (O)

3.3.1. Growing Demand for Cultural Consumption

In the modern era, cultural consumption has become an important avenue for enhancing quality of life. With the rapid expansion of China's cultural tourism industry, consumer demand for regionally distinctive cultural products is rising. According to data from the National Bureau of Statistics, revenue from the cultural industry grew from 8.23 trillion yuan in 2018 to 35.72 trillion yuan in 2021, demonstrating strong growth momentum. The Grand Canal, as a key cultural and tourism resource in China, attracts large numbers of domestic and international visitors. Tourists not only appreciate the scenic beauty of the canal but also seek culturally significant souvenirs. Grand Canal cultural and creative products align with this demand and possess substantial market potential, particularly among the growing demographic of young consumers interested in cultural experiences.

3.3.2. Advancement of Digital Technology

The rapid advancement of digital technologies—particularly virtual reality (VR), big data, and artificial intelligence (AI)—has provided new opportunities for Grand Canal cultural and creative design. Digital technologies not only enhance the presentation of traditional culture but also offer immersive experiences for consumers. For instance, augmented reality (AR) applications allow tourists to use mobile devices or smart glasses to access historical stories and cultural backgrounds while exploring the Grand Canal, thereby enriching cultural tourism experiences.

Additionally, digital tools such as 3D modeling and digital manufacturing can be integrated into the design process to improve production efficiency, enhance precision, and reduce costs, thereby facilitating the innovation and commercialization of cultural and creative products.

3.3.3. Recovery of the Tourism Market

With the gradual easing of global pandemic restrictions, the tourism industry is experiencing rapid recovery. In China, domestic tourism reached 2.384 billion visits in the first half of 2023, marking a 63.9% year-on-year increase. Domestic tourism revenue also surged by 95.9%, reaching 2.3 trillion yuan. The resurgence in travel demand has driven the rapid recovery of cultural tourism, making it one of the fastest-rebounding sectors. As a historical and cultural heritage site and a significant tourism attraction, the Grand Canal is witnessing an increase in visitor numbers, creating valuable opportunities for the promotion and sale of cultural and creative products.

3.4. Threats (T)

3.4.1. Intensified Market Competition

Unlike high-tech or capital-intensive industries, cultural and creative product development requires relatively lower investment in funding and technology. This accessibility has allowed many small and micro enterprises, as well as individual creators, to enter the market, leading to intense competition. Currently, a large number of cultural and creative products themed around traditional culture have emerged, with established brands such as the Forbidden City and the Great Wall dominating the market due to their high-quality products and distinctive cultural characteristics. Grand Canal cultural and creative products face significant competitive pressure in this landscape. Additionally, the issue of product homogenization—where numerous products lack originality and fail to differentiate themselves—poses a

challenge for market recognition.

3.4.2. Challenges in Cultural Heritage Protection

As Grand Canal cultural and creative products become increasingly commercialized, concerns about the authenticity of cultural representation are growing. In response to market demand, some products prioritize visual appeal and innovative packaging over the deep exploration and presentation of cultural content. This commercial-driven approach risks diluting the historical and cultural essence of the Grand Canal, potentially diminishing the cultural value of these products. Therefore, it is crucial to uphold the principle of cultural authenticity in the development of Grand Canal cultural and creative products, ensuring that they accurately convey the canal's historical and cultural heritage.

3.4.3. Rapid Changes in Consumer Preferences

Modern consumers are placing greater emphasis on interactive and experiential products. They seek cultural and creative products that offer more than just physical objects—they desire emotional connections and immersive experiences. The overproduction and excessive commercialization of cultural and creative products can lead to “cultural fatigue” among consumers. If Grand Canal cultural and creative products fail to maintain innovation and uniqueness, they risk falling into a cycle of homogenization, where consumer interest gradually declines, negatively impacting long-term market sustainability.

Based on the above SWOT analysis, the following SWOT matrix is constructed:

Table 1. SWOT Matrix of Cultural and Creative Products of the Beijing Grand Canal's Traditional Culture

	Strengths (S) 1. Abundant cultural resources 2. Robust design talent pool 3. Favorable policy support	Weaknesses 1. Insufficient brand development 2. Underdeveloped industrial chain 3. Limited innovation capacity
Opportunities(O) 1. Growth of the cultural consumption market 2. Advancement of digital technology 3. Recovery of the tourism market	Strength-Opportunity (SO) Strategy 1. Leverage the development of diversified cultural and creative products 2. Create cultural and creative products with digital experiences 3. Expand tourism cultural and creative product channels	Weakness-Opportunity (WO) Strategy 1. Strengthen investment in brand building 2. Optimize industrial chain collaborative cooperation 3. Enhance innovative research and development capability
Threats(T) 1. Intensified market competition 2. Pressure on cultural preservation 3. Rapid changes in consumer demand	Strengths-Threats (ST) strategy 1. Create differentiated cultural and creative products 2. Strengthen collaboration with cultural preservation departments 3. Rapidly respond to market demands	Weaknesses-Threats (WT) strategy 1. Enhance brand competitiveness 2. Enhance industrial coordination capabilities 3. Strengthen market research

4. Cultural and Creative Translation Design Strategies for the Beijing Grand Canal Based on SWOT Analysis

4.1. Strengthening Brand Building and Storytelling Marketing

In the new era of consumption, even excellent cultural brands must rely on appropriate marketing methods to attract high-quality traffic and convert it into commercial value[5]. By strengthening brand building, the recognition of cultural and creative products and consumers' brand identity can be enhanced, thereby increasing market share. As a historical

and cultural symbol, the Grand Canal's unique cultural heritage and rich historical stories provide natural advantages for brand building. During the brand-building process, it is essential to clearly define the cultural values and emotional identification that the brand represents. By focusing on the history and culture of the Grand Canal, a brand image with depth and dimension can be created. At the same time, storytelling marketing can be used to integrate the history, culture, and traditional stories of the Grand Canal into product design and promotion, forming an emotional connection with consumers.

For example, Zhenmu Zhiyuan Cultural Communication Co., Ltd. launched the "Six Ancient Landscapes of Wuqing" historical series based on the Wuqing Canal stories, which

includes "Sailing Boats on Lu River," "Bridge Gate and Beautiful Waters," "Lantern Light at Kui Pavilion," "Flowers and Willows in the Western Suburbs," "Spring Dawn at Phoenix Terrace," and "Pagoda Soaring into the Clouds." Based on these themes, they designed cultural and creative

products such as table mats, notebooks, and postcards, allowing consumers to experience the unique charm of traditional Chinese culture while purchasing the products. This not only enhances the cultural value of the products but also increases consumers' purchasing desire and loyalty.



Figure 1. 'Ancient Six Views of Wuqing' Table Mat, official website of the National Development and Reform Commission of the People's Republic of China



Figure 2. Cultural and Educational Book on the Grand Canal, Beijing Grand Canal Museum

4.2. Utilizing Digital Technology to Optimize Design and Production



Figure 3. 'Boats and Vessels on the Canal' Exhibition, official website of the China Grand Canal Museum.

For canal culture, being merely observed is not the focus; what's important is its existence [6]. The application of digital technology has brought new opportunities for the design and production of cultural and creative products related to the

Grand Canal. Digital technology not only enhances product design innovation but also optimizes the production process, improves production efficiency, and reduces costs. In terms of design, technologies such as virtual reality (VR),

augmented reality (AR), and 3D modeling can provide consumers with more immersive cultural experiences.

For example, the China Grand Canal Museum in Yangzhou uses AR, full-domain projection, real-time rendering, and other digital technologies to present exhibitions such as "Love of the River," "Vessels on the Grand Canal," and "Grand Canal Maze." Using spatial structure as the framework and combining physical experiences with digital multimedia virtual experiences, these exhibitions tell the story of the Grand Canal. The "Vessels on the Grand Canal" exhibition creates an experience of time travel along the ancient canal through physical boat models and virtual multimedia intelligent interactive communication. Additionally, digital teaching screens are used, with vessels as the object of explanation, covering the entire waterway and classifying them by navigation area, dynasty, nature, and power, vividly presenting the developmental history of these vessels. Furthermore, visitors can stand on the vessels, feel the surging tides, and understand life along the canal and appreciate its beauty through the dual impact of visual and auditory experiences.

4.3. Strengthening Market Research and Rapid Response Mechanisms

Market research and rapid response mechanisms are essential strategies for ensuring that cultural and creative products related to the Grand Canal maintain competitiveness in the fiercely competitive market. By deeply understanding consumer needs, market trends, and competitive landscapes,

enterprises can promptly adjust product design, pricing strategies, and marketing methods to better meet market demands.

Market research should combine quantitative and qualitative approaches to collect information about consumer behavior, preferences, purchasing power, and other relevant data. At the same time, feedback and opinions from consumers can be gathered through social media, consumer reviews, and other channels to provide data support for product optimization and adjustment. Through this information, enterprises can better grasp market dynamics, predict future trends, and provide a basis for product design and promotion.

For example, through market research, the Beijing Grand Canal Museum designed a "Canal Vessel" passport inspired by the museum's architectural elements of "ship, sail, and water." This passport integrates eight themed routes that connect core exhibition areas, incorporating cultural relics, intangible heritage along the canal, and Beijing's regional cultural symbols. It combines visit guidance, interactive experiences, and collection value. Its features include customized stamp collection, DIY stickers, watermark inner pages, gold-stamped commemorative medals, and creative seed paper design. This allows visitors to feel the historical context and cultural charm of the Grand Canal through an immersive exploration, making it both entertaining and educational. The passport serves as an innovative carrier for conveying canal culture while enhancing consumer trust and brand loyalty.



Figure 4. Grand Canal Boat Pass Design, Beijing Grand Canal Museum

5. Conclusion

This study employs the SWOT analysis framework to thoroughly examine the internal and external environments of Beijing Grand Canal culture in cultural and creative translation design, providing comprehensive and systematic strategic guidance for its cultural and creative development. Based on the SWOT analysis results, this study proposes a series of cultural and creative translation design strategies. These strategies help enhance the influence and dissemination of Beijing Grand Canal culture, exploring a feasible path for cultural inheritance and development, and providing valuable references for cultural and creative translation design in other regions.

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