

A Research on the Design of Intangible Cultural Heritage to Develop Cultural Creative Products : A Case Study of "Ninigou" Clay Statuette in Huaiyang City

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Abstracts

In an endeavor to bridge the gap between cultural heritage and modern design, this study undertook an exploration into a methodical approach for the design of cultural and creative products, with a specific focus on the Ninigou, an element of intangible cultural heritage. The aim of this study was to propose a methodological approach for cultural and creative products design. The research established a theoretical framework based on related literature and research on intangible cultural heritage and cultural and creative product design. A variety of research methods were used, targeting different participant groups such as intangible cultural heritage inheritors, practitioners of Ninigou, villagers no longer engaged in Ninigou production, Ninigou sellers, and tourists. Data was collected through in-depth and general interviews, as well as a questionnaire survey, yielding insights on the state of Ninigou intangible cultural heritage, perspectives of practitioners, and tourist attitudes towards cultural and creative products. The research findings revealed the historical and cultural significance of Ninigou, its tangible and intangible characteristics, consumer preferences, and the importance and potential of narrative design in cultural and creative product design and development. In order to develop cultural and creative products design, it was necessary to focus on the four-step narrative design process. The steps include cultural selection, thematic establishment, narrative plot setting, and product narrative design.

Keywords: Intangible Cultural Heritage; Cultural and Creative Product Design; Ninigou; Narrative Design

Introduction

From the dawn of the 21st century, countries in East Asia such as China, Japan, and South Korea have underscored the preservation and propagation of intangible cultural heritage more emphatically than their Western counterparts (Ministry of Culture, Foreign Relations Bureau, 2006:5; Periodic reporting on the Convention for the Safeguarding of the Intangible Cultural Heritage, 2017:online). This focus stems from the global societal transformation incited by the Industrial Revolution, which necessitated a shift from traditional modes of production to modern methodologies, in turn provoking significant cultural evolution. While Western society does differ from its conventional counterpart, the emergence of an industrial society and the advent of modernity are intrinsic outcomes of Western culture. As a result, Western culture and society continue to exhibit coherence and systematic progression, maintaining an uninterrupted cultural development trajectory. Conversely, East Asian nations were involuntarily integrated into the processes of globalization and industrialization, leading to a cleavage between traditional and contemporary paradigms in their societies and severing the threads of cultural continuity. Hence, East Asian countries experience anxiety surrounding the preservation of 'intangible heritage,' which, in reality, mirrors their apprehensions about their own cultural predicaments. Consequently, in the 21st century, the notion of 'intangible heritage' carries immense significance for East Asian societies (Boggs, 2009: 1483–1498; Wu, 2007: 11-21).

When viewed longitudinally, the history of written language represents an elitist narrative flowing from the top down, while 'intangible heritage' essentially portrays a visual civilization—a genuine, generational chronicle that can vividly illustrate the evolutionary trajectory of human civilization. If only written history prevails, we stand to lose a significant dimension of cultural richness and complexity. In a lateral analysis, 'intangible heritage' also serves as 'local knowledge' juxtaposed against the mainstream culture. From a global perspective, it pertains to the interaction between globalization and ethnicity; nationally, it revolves around the discourse between mainstream culture and grassroots society. Summarily, the pivotal role of 'intangible heritage' resides in safeguarding cultural diversity and affirming the legitimacy of ethnic identities, thereby preventing regional cultures from succumbing to the whirlpool of globalization and modernity (Zou, 2005:7).

In terms of cultural and creative product design philosophy, it is vital to acknowledge the profound distinction between intangible cultural heritage and cultural heritage. 'Intangible heritage,' as the design subject, embodies non-textual, non-historical, and non-linear traits, extending beyond the confines of written, linear, elitist history. If tangible cultural heritage design orbits around 'objects,' intangible cultural heritage design prioritizes the narration of 'events.' Within the display of this 'intangible heritage' event, objects merely serve as carriers encapsulating the event's outcome, or merely as visual adjuncts or physical evidence. The event further encompasses inheritors of the 'intangible heritage,' their activities, processes, cultural backdrop, and prevailing environments—natural, economic, social, cultural, geographical, and so forth. Hence, 'intangible heritage' cultural and creative product design endeavors to recount the holistic content and developmental trajectory of these events while highlighting their evolving dynamism, temporal characteristics, and other attributes. Thus, the presentation of 'intangible heritage' necessitates an emphasis on event-oriented narratives, weaving the threads of cultural continuity from the past, through the present, and into the future (Li, 2021:9).

The 'intangible heritage' wields significant influence on individual identities amidst modernity and the recognition of the diverse-yet-unified Chinese civilization. The vitality and continuation of such heritage largely hinge on public cultural recognition. However, prevailing design strategies for 'intangible heritage' cultural products are overly simplistic, still predominantly utilizing traditional symbolic elements and focusing on object display. This conventional design modality underscores an insufficient understanding of the 'intangible heritage' essence when conceptualizing most cultural products, a shortfall echoed in corresponding 'intangible heritage' product research. This lack of understanding fails to kindle cultural identification, thereby rendering protective strategies for 'intangible heritage' superficial (Li, 2021:9).

Non-heritage traditional handicrafts are an important part of traditional Chinese culture and have high artistic, cultural and practical values. Integrating non-heritage traditional handicrafts into the design of cultural and creative products can not only promote the vigorous development of cultural and creative industries and enrich the connotation of cultural and creative products, but also promote the inheritance and development of non-heritage traditional handicrafts and make them revitalized and energetic in the new era (Huang, 2023: 80-82). The Ninigou is a unique mud sculpture handicraft in Huaiyang area, which has a rich cultural connotation and a wide variety, reflecting the cultural life and history and culture of the working people in Huaiyang area (Han & Ren, 2022: 127-130). With the booming development of Chinese cultural and creative industries, the demand for regional cultural and creative products is also increasing. In order to further promote the development of regional cultural and creative products, innovation of cultural and creative product design methods is needed (Chen, 2023:3). Narrative design is a kind of design thinking and method that takes design works as story carriers and realizes the purpose of narrative by arranging, organizing and designing the elements of the carriers in a reasonable way, which can effectively express ideas and convey feelings (Diao, 2023:1). Some Chinese researchers have explored the feasibility of incorporating narrative design thinking into cultural and creative product design for design process innovation, such as Huang and Lin (2022: 188-190) and Yang and Ouyang (2022: 86-92). However, most of the studies are limited to qualitative analysis of existing textual and pictorial materials, and lack the support of empirical data. Therefore, this paper proposes incorporating narrative design into the cultural and creative product design of 'intangible heritage,' using Ninigou (a cultural and creative product in Huaiyang City) as an example. The purpose is to summarize and investigate the underlying concepts and methodologies.

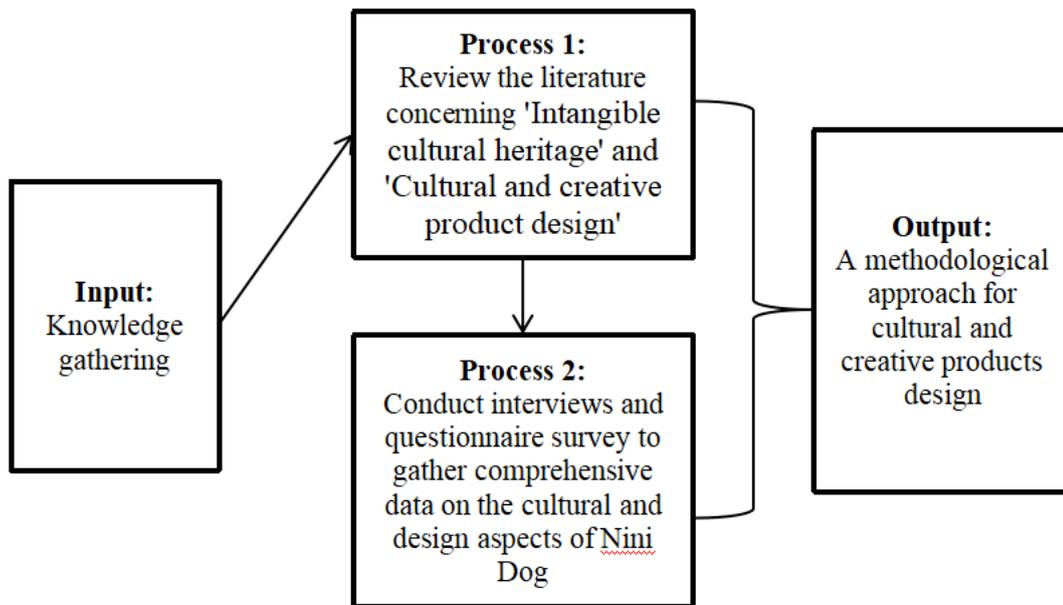
Research Objective

In this study, the objective is to propose a methodological approach for cultural and creative products design.

Research Methodology

1. Research procedures

In this study, the objective is to propose a methodological approach for cultural and creative products design. The research was conducted in several stages, as depicted in Figure 1.



Figure, /1/ Research Procedure

Stage 1: Input - Knowledge Gathering

Review the literature concerning 'Intangible cultural heritage' and 'Cultural and creative product design'.

Stage 2: Process - Data Collection

Conduct interviews and questionnaire survey to gather comprehensive data on the cultural and design aspects of Ninigou.

Stage 3: Output - Results and Conclusion

Analyzing and synthesizing the gathered data to propose a methodological approach for cultural and creative products design.

2. Research method

This study, rather than proposing an unattainable universal standard for the design of 'intangible heritage' cultural and creative products, focuses on developing a methodological paradigm for their creation by scrutinizing the existing landscape of 'intangible heritage' research and design. It necessitates an interdisciplinary approach, prompting a reevaluation of diverse dimensions of the 'intangible heritage' concept, including its definition and conservation. This reevaluation integrates methodologies from various academic disciplines such as design studies, sociology, anthropology, folklore studies, and history, seeking to innovate in the procedural discourse of this field. The research methods involved include: a. Literature review: the authors undertakes a comprehensive review and synthesis of a large body of literature on intangible cultural heritage and cultural and creative products design, which lays the groundwork for further in-depth theoretical and practical discussions; b. Field research: the authors conducts on-site interviews with intangible cultural heritage inheritors, practitioners of Ninigou, villagers no longer engaged in Ninigou production, and Ninigou

sellers, thereby formulating questions from a realistic standpoint. c. Questionnaire survey: Questionnaire survey method is used in this study. The opinions and views of tourists visiting Taihao Mausoleum Scenic Spot are collected by distributing questionnaires and collecting the completed questionnaires. The questionnaire design included the basic information of the respondents, the purchase factors of the Ninigou and the attitude towards the cultural and creative products currently available in the market.

3. Research object

The research employed various research methods, including in-depth interviews, general interviews, and questionnaire survey. The selection of research participants varied based on the different research methods employed. The details are as follows:

Intangible cultural heritage inheritors (3 individuals);

General practitioners of Ninigou in the villages (12 individuals from 8 households);

Villagers who no longer engaged in Ninigou production (10 individuals from 8 households);

Ninigou sellers near the Taihao Mausoleum Scenic Spot (15 individuals);

Tourists at the Taihao Mausoleum Scenic Spot (107 respondents).

4. Data collection

Intangible cultural heritage inheritors (3 individuals): In-depth interviews were conducted. Face-to-face interviews were carried out with Mr. Xusu Zhang, a recognized inheritor of China's national-level intangible cultural heritage, and his family members to understand their experiences, perspectives, and willingness to continue the heritage.

General practitioners of Ninigou in the villages (12 individuals from 8 households): General interviews were conducted. Visits were made to households engaged in Ninigou production, and unstructured interviews were conducted to explore their craftsmanship, the state of traditional techniques' inheritance, and their views on the development of the Ninigou industry.

Villagers who no longer engaged in Ninigou production (10 individuals from 8 households): General interviews were conducted. Visits were made to households that no longer produce Ninigou, and unstructured interviews were conducted to understand their knowledge of Ninigou, changes in traditional techniques, and attitudes towards the preservation of intangible cultural heritage.

Ninigou sellers near the Taihao Mausoleum Scenic Spot (15 individuals): General interviews were conducted. Visits were made to Ninigou sellers in the vicinity of the Taihao Mausoleum Scenic Spot to gather information on their sales situation, market competition, and their perspectives on the future development of the Ninigou industry.

Tourists at the Taihao Mausoleum Scenic Spot (107 respondents): Questionnaire survey was administered to to gather insights on the factors influencing the purchase of Ninigou and their attitudes towards existing cultural and creative products on the market. 120 questionnaires were distributed to the tourists and 107 were collected.

5. Data analysis

The data gathered from the interviews and questionnaires were analyzed by the researcher. The resulting data was used to understand the current state of Ninigou intangible cultural heritage in Huaiyang County, the perspectives of artisans and practitioners, and the attitudes of tourists towards cultural and creative products. This approach provides in-depth insights and analysis to contribute to the development and preservation of intangible cultural heritage and to propose a methodological approach to cultural and creative products design.

Research Scope

The objective of this study is to propose a methodological approach for cultural and creative products design. The researchers conduct a case study of Ninigou, which is a cultural and creative product in Huaiyang City. This study included a wide range of participants representing various aspects of the Ninigou culture and industry. The participants were selected to align with the different research methodologies used, which included in-depth interviews, general interviews, and a questionnaire survey. The participant group included three intangible cultural heritage inheritors, twelve general practitioners from eight households engaged in Ninigou production in the villages, ten individuals from eight households that no longer produced Ninigou, fifteen Ninigou sellers near the Taihao Mausoleum Scenic Spot, and 107 tourists visiting the Taihao Mausoleum Scenic Spot. The research design consisted of three key steps. First, the literature review was conducted to gather knowledge on Intangible cultural heritage and cultural and creative product design. Second, interviews and questionnaire survey were conducted to gather comprehensive data on the cultural and design aspects of Ninigou. Finally, the gathered data was analyzed and synthesized to propose a methodological approach for cultural and creative products design. Through a review of relevant literature and research, combined with interviews and questionnaires with Ninigou's stakeholders, this study finally propose a four-step process for designing the cultural and creative products related to intangible cultural heritage. It provides theoretical and practical guidance for future researchers, cultural and creative product designers, and other stakeholders, facilitating the development of cultural and creative product design and the preservation of intangible cultural heritage.

Research Results

Through the data collection and analysis of previous literature and research, as well as interviews and questionnaires, the research results are as follows:

1. Overview of Ninigou Culture

Ninigou is the general term for clay toys at the Huaiyang Taihao Mausoleum Temple Fair. The first two characters are combined, with the first Ni used as a verb meaning "to pinch" or "to knead" and the second Ni used as a noun meaning "clay." It is a term of endearment for clay sculpture toys. Although called Ninigou, its form is not limited to the shape of a "dog." It represents a variety of abstract and transformed primitive totemic creatures, a collective term for all kinds of whimsical clay sculptures (as shown in Figures 2) (Liu, 2020: 35-36).



Figure, /2/Ninigou in different shapes (Created by the authors)

The Ninigou's origins trace back to the Taihao Mausoleum of Fu Hsi in Huaiyang City, Henan Province, near Jinzhuang Village, a central hub for Ninigou production. This mausoleum, also called the "Ancestral Temple," is one of China's renowned Three Imperial Tombs and host to the Taihao Mausoleum Temple Fair, one of the oldest and largest folk temple fairs in China (as shown in Figure 3). The fair draws large crowds annually for grand ancestral worship activities.

The Ninigou, considered a guardian for Fu Hsi, is an integral part of these festivities, symbolizing the link between the Taihao Mausoleum and the local culture. Through the fair, the Ninigou serves as a carrier of the Fu Hsi culture and has been instrumental in the development of the local tourism industry (Hu & Zhao, 2020:141-147).



Figure, /3/Fu Hsi Worship Ceremony (Created by authors)

The Taihao Mausoleum Temple Fair features ancestral rituals, fertility rites, divination, recreation, and trading. Despite its position in the Central Plains, external influences have barely touched its customs, many of which remain original. The Ninigou, a hallmark of the fair, signifies Fu Hsi's cultural heritage and fertility symbolism. A local belief that purchasing more Ninigou ensures more offspring, symbolizing prosperity and growth, reinforces its preservation.

On the second day of the second month of the lunar calendar, the old generation can be seen everywhere carrying baskets of Ninigou for sale at the temple fairs (shown in Figure 4), while old Taoists from local temples also carry small mud goods to give to children returning home along the way, and tell them the legend of Nüwa, the ancestor of man. As the temple fair continues to grow bringing economic development, and because of the influence of Fu Hsi culture, promoting the increase of tourism, the mud dog then ceases to be a toy and a ritual object, and at the same time, has the function of collection and decoration, explaining and spreading the ancestor temple fair and its traditional culture in more ways (Zhang, 2022: 34-37).



Figure, /4/Ninigou at the temple fair (Created by authors)

2. Cultural Characteristics of Ninigou

Ninigou, as an intangible cultural heritage, is an accumulated entity of historical development. It represents non-renewable cultural, economic, and social resources. Merely preserving or retaining Ninigou as a historical accumulation is far from sufficient. What is more important is to explore the multiple values of Ninigou as an intangible cultural heritage. Through integration and development, it should be transformed into a resource that serves the modern society and future life of humanity. Only then can we truly achieve effective and sustainable protection of Ninigou (Shan, 2012: 39-45.).

As a traditional art form of intangible cultural heritage, Ninigou embodies both "technique" and "artistry" and possesses both tangible and intangible cultural characteristics.

Therefore, based on the cultural features of Ninigou, this study categorizes it into two aspects: tangible and intangible characteristics.

Tangible cultural characteristics:

A. Material

Ninigou sculptures are primarily made from locally-sourced yellow clay, known for its texture, purity, and flexibility. This clay, referred to as "yellow adhesive clay," is perfect for shaping various sculptures. Sometimes, straw is added to enhance the clay's strength and toughness.

B. Modelling

The artistic form of Ninigou, an essential part of folk culture, is abstract, combining square and circular shapes. They mostly depict exaggerated animals, symbolizing life beliefs, fertility, and ancestor worship. Sculptures range across many vertebrate animals, not always in their original forms but often exaggerated. They can be categorized into four types: primitive, composite, elfin, and modern.

C. Emblazonry

Ninigou exhibits a wide variety of emblazonry patterns, many of which are derived from the stone tablets depicting the sacred relics of Fu Hsi. These patterns symbolize the vision and reverence for the continuity of life (Zhang, 2022:34-37). The depiction of patterns primarily employs a combination of straight lines and dots, creating a concise and direct visual effect. The emblazonry patterns of Ninigou originate from the abstraction of reproductive organs, and they include feminine symbols, sun motifs (concentric circles), floral patterns, triangular patterns, fly-like patterns, horseshoe patterns, leaf patterns, diamond patterns, and Bagua patterns, among others. These representative patterns are categorized and summarized based on field surveys and references (Han & Ren, 2022: 127-130).

D. Color

Ninigou traditionally uses black as the dominant color, with occasional yellow sculptures. Red, blue, yellow, white, and recently pink and blue, are used for decorative patterns. The color scheme is vibrant, pure, and balanced, reflecting the traditional Chinese concept of the five primary colors, favoring black.

Intangible cultural characteristics:

A. Technical process

Ninigou is made by kneading clay and adding color, and a small portion is also made using molds. The main production process includes the following steps:

1. The selection of clay: The clay used for making Ninigou comes from the local area of Huaiyang and is typically sourced from the ground, about 2 to 3 feet below the surface. This type of clay is fine, sticky, and flexible, providing the potential for creating various Ninigou shapes.

2. Kneading the clay: The raw clay, known as "shengni" or fresh clay, is directly obtained from the ground. It undergoes a screening process and is then soaked in water for several days. After filtration, the settled clay sediment is taken out and pounded to achieve a cohesive consistency. Some artisans also add flax fibers to enhance the plasticity and flexibility of the clay.

3. Wedging the clay: "Heni" or wedging is the final process before sculpting. The prepared clay is placed on a workbench and kneaded, similar to kneading dough. This process helps remove air bubbles, smooth the surface, increase density, and improve the clay's flexibility and plasticity.

4. **Sculpting:** Building upon the previous steps, the artisan begins the sculpting process. Firstly, they shape the wedged clay into a rough form that closely resembles the desired final product. Then, they proceed with comprehensive shaping and detailed refinements to achieve a satisfactory clay model.

5. **Piercing holes:** As Ninigou is a clay whistle toy, it requires holes to be pierced at appropriate locations to allow it to produce sound. This is done using toothpicks or bamboo skewers, with one end larger than the other. Skilled artisans with years of experience perform this task.

6. **Drying:** After shaping and piercing, the clay sculptures are placed in a well-ventilated area to dry completely. This process, known as drying or airing, ensures that the clay becomes fully dry.

7. **Boiling and dyeing:** Also known as "applying black," the dried clay sculptures are cleaned to remove any residual clay particles and fingerprints, making them suitable for coloring. A mixture of black pigment, glue, and water is prepared in a large pot and allowed to cool. The dried clay sculptures are then placed in the pot for dyeing, removed, and left to dry.

8. **Painting:** Using modern pigments, the artisans paint patterns on the dried clay sculptures with a black base. To prevent color fading, a layer of varnish is often applied to the surface of many Huaiyang Ninigou works, which not only adds a glossy finish but also helps preserve their visual appeal.

B. Emotion

Ninigou sculptures act as a link to the primitive living culture, capturing the emotions and thoughts of Huaiyang folk artists. With over 500 different themes, these sculptures represent a variety of emotions and spiritual aspirations. The abstract forms carry deep symbolism, allowing profound meanings to be conveyed. For example, the spotted dove motif in Ninigou sculptures symbolizes good fortune and enlightenment, reflecting the locals' belief in the bird's divine capabilities. The themes behind Ninigou sculptures are deeply influenced by Fu Hsi culture and bear significant cultural importance. They primarily express themes of religious worship, reverence for reproduction, life admiration, ancestor veneration, and totem worship (Hu & Zhao, 2020: 141-147).

C. Aesthetic

The patterns on Ninigou sculptures are often simple yet meaningful, emphasizing the unique features of the artwork (Li, 2020: 73-74.). Many of these patterns symbolize maternal elements, such as the exaggerated female genitalia pattern on the human-faced monkey, representing reverence for reproduction and life. The depictions can be divided into three stages: direct representation, implicit expression, and metaphorical expression. These stages range from explicit depictions of the female genitalia to simplified fish scale patterns and combinations of dots and lines symbolizing a desire for offspring (Zhang, 2014).

D. Color symbolism

Ninigou sculptures, considered the origin of Chinese painting and sculpture, favor vibrant and pure colors, reflecting the local aesthetic sense developed over time. Bright colors represent joy and happiness, with red and purple being used during festive occasions to symbolize prosperity. The color palette of Ninigou is deeply rooted in the traditional Chinese concept of the five colors and the significance of black, with each color carrying auspicious meanings and evoking different emotions. Black, the dominant color, represents righteousness and the suppression of evil. The choice of colors conveys the inner emotions and psychological

implications of the artists (Han & Ren, 2022: 127-130).

In summary, Ninigou is a distinctive traditional handicraft in the Taihao Mausoleum Temple Fair. It has a history of approximately 6,000 years, representing the trajectory of human civilization. It reflects the humanistic and philosophical thoughts, regional culture, creative principles, aesthetic concepts, and emotional expressions of our agricultural society. Ninigou carries rich cultural connotations and holds significant research value.

3. Findings from the questionnaire survey

In order to understand consumer preferences and generate interest in Ninigou, a market survey was conducted using a questionnaire specifically designed for consumers of Ninigou cultural and artistic products. A total of 120 questionnaires were randomly distributed, and 107 valid responses were collected, resulting in a response rate of 89%.

Demographic analysis:

The survey revealed an nearly equal gender distribution, with the majority of respondents falling within the age range of 15-50 years, accounting for 95% of the participants. Those aged 51 and above constituted only 5% of the respondents. The majority of respondents held a bachelor's or associate's degree, while fewer had vocational or graduate education. Most participants were from the local area, with a small percentage coming from other parts of the country. Based on the analysis of demographic data, it was found that the target audience for Ninigou cultural and artistic products primarily comprised individuals between 15-40 years old, with a high school or university education level.

Consumer preferences:

The survey examined the reasons for consumers' interest in Ninigou products. Results showed that 58.8% of respondents purchased Ninigou products for commemorative and collection purposes, 20% bought them as gifts for friends and family, 3.8% valued the practical utility of the products, and 17.5% made purchases based on personal interests and hobbies. The researcher of (Zhang, 2013: 111-116).also supports this finding. Every year, the temple fairs in Huaiyang area will attract a large number of tourists from home and abroad for ancestor worship and sightseeing, and the mud dogs have been used as local tourist souvenirs or children's playthings by the fair-goers, who buy them as souvenirs or gifts to friends and relatives.

Product Preferences:

Regarding the types of Ninigou products that consumers were inclined to purchase, the survey revealed that 71.2% of respondents expressed a preference for craft items with auspicious meanings associated with Ninigou. Additionally, 65% of respondents indicated an interest in purchasing Ninigou-themed pendants and small accessories, while 46.2% were inclined towards Ninigou-themed stationery and toys. This is in line with Han and Ren's (2022:127-130) findings that local people are more keen to associate it with auspiciousness, good luck, and good fortune.

Factors influencing consumer choices:

Analyzing the factors that attracted consumers to Ninigou products, it was found that the appearance, creativity, and cultural significance of the products played a significant role. This finding was consistent with Nie (2019: 36-38.). Consumers showed a stronger preference for products that conveyed the distinctive characteristics and cultural essence of Ninigou. The brand influence factor was relatively low, indicating that consumers focused more on the intrinsic qualities of the products rather than the brand reputation.

Suggestions for improvement:

The results also highlighted areas where Ninigou products could be improved. These included incorporating distinct local characteristics, enhancing emotional engagement, expanding the range of product choices, strengthening cultural significance, and improving practical functionality. Attention should be given to further enhancing creativity and uniqueness to meet consumer expectations.

Overall, the survey results indicated a positive response from consumers towards Ninigou products, with a significant interest in craft items with auspicious meanings and accessories inspired by Ninigou. The findings provide valuable insights for further product development, marketing strategies, and enhancing the overall consumer experience with Ninigou.

4. Narrative design

Based on a comprehensive analysis of existing literature, as well as findings from interviews and questionnaire surveys, it has been observed that narrative design is an exceptionally suitable approach for both Ninigou design and cultural and creative product design. By examining the aspects of narrative design relationship structure, fundamental elements of storytelling, and story structure, a close association between the design of cultural and creative products related to intangible cultural heritage and narrative has been identified (Li, 2019:7; Xue et al., 2022: 80-82).

To begin with, product design exhibits a narrative relationship structure. By analyzing the conceptual aspects and their interrelationships at the narrative level, this framework can be extended to the realm of product design, leading to the identification of a narrative relationship structure within the design process. Designers initiate the product design process by first determining the design theme, and subsequently breaking it down into various design dimensions such as functionality, symbolism, form, material, and color. Through the construction of narrative texts, stories are infused into each design dimension, transforming the story's significance into tangible forms. During the interpretation process, product users decipher the surface meaning of the product through its tangible manifestation, employing association and analysis to ascertain the underlying narrative theme.

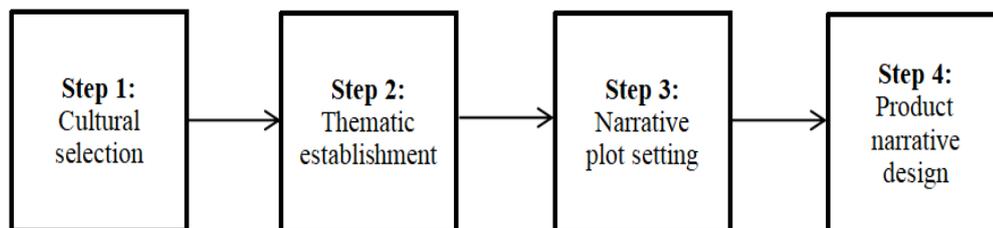
Furthermore, story structure plays a pivotal role in the design of cultural and creative products associated with intangible cultural heritage. Story structure is conveyed through the concepts of events and entities, with events representing relatively dynamic themes and entities representing static ones. By establishing the structure of a story, design clarity can be achieved. For instance, when designing an element of intangible cultural heritage, the depiction of events and entities can be employed to showcase different aspects, thereby creating a contextual framework for the story.

The design of cultural and creative products related to intangible cultural heritage can also incorporate linear and nonlinear narrative designs. Linear narratives are based on the dimension of time, utilizing techniques such as chronological order, reverse chronology, and flashback to present the development of the story. Nonlinear narratives, on the other hand, utilize the spatial dimension, employing scene transitions to propel the progression of the plot. The choice between these two narrative design approaches depends on the characteristics and design objectives of the product, each aiming to achieve distinct design effects.

Several principles should be followed when engaging in the design of cultural and creative products associated with intangible cultural heritage. Firstly, culture should serve as the core of the design, with emotional experience occupying a focal point. Intangible cultural heritage constitutes the essence of the design, and narrative design should effectively convey traditional Chinese culture while prioritizing user emotional experiences. Secondly, craftsmanship and material quality are crucial design principles. Outstanding design works should embody exquisite craftsmanship and employ high-quality materials to enhance the aesthetic appeal of the products. Additionally, designs should possess regional and ethnic characteristics, as well as contemporaneity. Product designs should reflect the distinctive attributes of regional and traditional cultures while satisfying the contemporary demands of users.

The incorporation of narrative design plays a significant role in the design of cultural and creative products associated with intangible cultural heritage. Through narrative thinking, designers can delve deeper into research and refinement, effectively convey information within products, enrich their cultural connotations, engage in interactive experiences with users, create enjoyable emotional experiences, and enhance design innovation. By integrating narrative into product design, culturally immersive experiences can be achieved within the realm of cultural and creative products related to intangible cultural heritage.

Based on the research findings, this study proposes a four-step narrative design process for cultural and creative products related to intangible cultural heritage (as shown in Figure 5). The steps include cultural selection, thematic establishment, narrative plot setting, and product narrative design. The process involves selecting culturally significant materials, determining a clear narrative theme, creating compelling story-lines, and incorporating narrative elements into the product design.



Figure, /5/ Four-step narrative design process for cultural and creative products (Created by authors)

Discussion

According to the results of the literature review, interviews and questionnaire survey, the research findings are as follows:

The research findings provide valuable insights into the cultural significance and design considerations of Ninigou, a traditional handicraft associated with the Taihao Mausoleum Temple Fair. The research reveals the feasibility and necessity of the combination of cultural and creative products and narrative design, highlighting the importance and potential of narrative design in the context of cultural and creative products related to intangible cultural heritage.

The cultural characteristics of Ninigou showcase its historical development and multifaceted nature as an intangible cultural heritage. Ninigou represents a unique entity of

non-renewable cultural, economic, and social resources. Merely preserving it as a historical accumulation is insufficient; instead, the exploration of its multiple values as an intangible cultural heritage is crucial. The tangible characteristics encompass various aspects such as material, modeling, emblazonry, and color, which collectively contribute to the distinctive aesthetics and symbolism of Ninigou. Additionally, the intangible characteristics encompass technical processes, emotions, aesthetics, and color symbolism, reflecting the deep-rooted cultural beliefs and aspirations embedded in Ninigou sculptures.

The findings from the questionnaire survey shed light on consumer preferences and provide insights into the market for Ninigou cultural and artistic products. The survey indicates a significant interest in Ninigou as a commemorative and collectible item, with a considerable preference for craft items associated with auspicious meanings. Consumers value the appearance, creativity, and cultural significance of Ninigou products, emphasizing the intrinsic qualities over brand influence. These findings can guide future product development, marketing strategies, and the overall enhancement of the consumer experience with Ninigou (Han & Ren, 2022: 127-130, Nie, 2019: 36-38.; (Zhang, 2013: 111-116).).

Furthermore, the integration of narrative design emerges as a pivotal approach in both Ninigou design and the design of cultural and creative products related to intangible cultural heritage. The narrative relationship structure within product design allows designers to infuse stories into various design dimensions, creating a cohesive narrative theme. By employing story structure, design clarity can be achieved, enabling the depiction of different aspects and establishing contextual frameworks. The choice between linear and nonlinear narrative designs provides designers with versatile options to convey the development of the story, depending on the desired design effects (Ni & Li, 2023:10).

When engaging in the design of cultural and creative products associated with intangible cultural heritage, several principles should be followed. Culture should serve as the core of the design, with a focus on emotional experiences that effectively convey traditional Chinese culture. Craftsmanship and material quality play a crucial role in enhancing the aesthetic appeal of the products. Additionally, designs should reflect regional and ethnic characteristics while meeting contemporary demands. By integrating narrative thinking into product design, designers can delve deeper into research, convey information, enrich cultural connotations, foster interactive experiences, create enjoyable emotional encounters, and enhance design innovation (Zhang, 2013: 111-116).

In conclusion, the research findings emphasize the cultural significance and design considerations of Ninigou as a traditional handicraft. The study highlights the intertwined relationship between Ninigou design and narrative design, showcasing the potential of narrative design in the creation of culturally immersive experiences within the realm of cultural and creative products related to intangible cultural heritage. Moreover, this study proposes a four-step narrative design process for cultural and creative products tied to intangible cultural heritage. The steps involve cultural selection, thematic establishment, plot development, and product narrative design. These insights and methods provide a foundation for future research, product development, the promotion of Ninigou as a valuable cultural asset, and also provide implications for the design of other cultural and creative products.

Recommendations

1. Theoretical Recommendation

This study proposes four steps of narrative design regarding the cultural and creative products design. A theoretical recommendation is to further explore what impact the four dimensions through narrative design can have on the design of other cultural and creative products. Future research should delve into each dimension of narrative design to more fully understand the specifics of each step of incorporating narrative design in cultural and creative products. This exploration could include investigating the specific strategies, methods, and best practices associated with each dimension, as well as the impact of each dimension on the design of cultural and creative products.

2. Policy Recommendation

In the future, further research and development can be carried out to enhance the value of the existence and heritage of the intangible cultural heritage, such as Ninigou. Stakeholders of cultural and creative products should cooperate with each other to build a consumer-centered product development system with regional cultural characteristics. Research and innovation in the cultural and creative products industry should also be supported. The implementation of these measures will contribute to the preservation and sustainable development of cultural and creative products related to intangible cultural heritage.

Practical Recommendation

Integrate narrative design into cultural and creative products to enhance cultural immersion. Explore the multiple values of the Ninigou as an intangible cultural heritage and consider its history and symbolism to enhance the quality of product design. Develop more innovative Ninigou products based on the four steps of narrative design. The design of the product should ensure that it incorporates narrative thinking, conveys cultural connotations, and promotes interactive experiences (Gu et al., 2022:1).

References

- Boggs, J. (2009). Cultural Industries and the Creative Economy - Vague but Useful Concepts. *Geography Compass*, 3 (4), 1483–1498.
- Chen, J.-K. (2023). *Exploration of regional cultural and creative product design methods based on narrative theory*. DAGUAN, (01), 3. [In Chinese]
- Diao, J.-Q. (2023). *Research on the design of regional cultural and creative products based on narrative thinking ---- Taking Xuzhou as an example (Master dissertation)*. China University of Mining and Technology. [In Chinese]
- Gu, M., Hidayat, I.K., & Novica, D.R. (2022). *The Inheritance and Innovation Value of Cultural and Creative Products of the Palace Museum in Beijing*. In International Conference on Art, Design, Education and Cultural Studies (ICADECS), vol 2022. Malang, Indonesia. 29 July 2021. KnE Social Sciences.
- Han, W.-B., & Ren, J. (2022). *Based on semiotics theory-development and design of Huaiyang "MUD DOG" cultural and creative products*. *Design*, 35 (14), 127-130. [In Chinese]
- Hu, Y., & Zhao, Q.-Y. (2020). Reconstructing the Context of Folk Crafts in the Spatio-temporal Field - Taking Huaiyang Ninigou as an example. *Journal of Zhoukou Normal University*, 37(6), 141-147. [In Chinese]
- Huang, C.-Q. (2023). Exploring the strategy of integrating non-traditional traditional handicrafts into cultural and creative product design. *DAGUAN*, (03), 3.

- Huang,J.-X., & Lin,H.-Y. (2022). Methodology and Practice of Narrative Design in Silk Road Cultural and Creative Products. *Chemical Fiber & Textile Technology*, 51 (11), 188-190. [In Chinese]
- Li,F. (2021). *Narrative research on intangible cultural heritage display (Doctoral dissertation)*. China Art Academy. [In Chinese]
- Li,L. (2019). *Research and practice of narrative design of cultural and creative products (Master dissertation)*. Nanjing University of Science and Technology. [In Chinese]
- Li,N.-N. (2020). The application of Huaiyang Ninigou art form in modern clothing pattern design. *Textile Report*, 39 (06), 73-74. [In Chinese]
- Liu,Y. (2020). Research on the heritage and development of the mud dog industry in Huaiyang, Henan. *Dazhong Wenyi*, (02), 35-36. [In Chinese]
- Ministry of Culture, Foreign Relations Bureau. (2006). *UNESCO Convention for the Protection of the World's Cultures*. Law Press China. [In Chinese]
- Ni,C.-H., & Li,W. (2023). *The interpretation of narrative theory in the design of non-traditional cultural creations*. *Packaging Engineering*, 44 (12), 10.
- Nie, S.-H. (2019). *Huaiyang "Ninigou" cultural art derivatives design analysis*. *Designs*, (11), 36-38. [In Chinese]
- Periodic reporting on the Convention for the Safeguarding of the Intangible Cultural Heritage. (2017). *Online*. Retrieved May 15, 2023. from <https://ich.unesco.org/en/state/china-CN?info=periodic-reporting>
- Shan,J.-X. (2012). Reflections on Urban Cultural Construction and Cultural Heritage Protection. *The People's Congress of China*, (09), 39-45. [In Chinese]
- Wu,B.-A. (2007). Some theoretical and practical problems on the identification of intangible culture heritage. *Journal of Henan Institute of Education*, 26(1), 11-21. [In Chinese]
- Xue,Y.-M., Huang, C., & Chen, J.-H. (2022). *Research on the application of narrative theory in product design*. *Design*, 35(10), 80-82.
- Yang,J., & Ouyang, W.-M. (2022). *Research on the narrative design of campus cultural and creative products*. *Design Research*, 12(5), 86-92.
- Zhang,C.-L. (2013). *Huaiyang Ninigou Tourism Culture Series Products Innovation Design Research*. *Packaging Engineering*, 34(02), 115-117. [In Chinese]
- Zhang,P.-P. (2022). Research on the Historical and Cultural Connotation Inheritance and Development of Huaiyang Clay Sculpture Dog. *Journal of Pingdingshan University*, 37(4),82-86. [In Chinese]
- Zhang,T.-K. Application of Huaiyang Ninigou Art Form in Men's Shirt Pattern Design. *Journal of Textile Research*, 37(09), 111-116. [In Chinese]
- Zhang,X.-Y., & Chen,X. (2022). Study on the decorative pattern of Huaiyang Ninigou. *Masterpieces of Nature*, (07), 34-37. [In Chinese]
- Zou,Q.-S. (2005). *UNESCO Guidelines for the Submission of Masterpieces of the Oral and Intangible Heritage of Humanity*. Culture and Art Publishing House. [In Chinese]