

IP image design on rebranding the "GuanCao" Weaving, a historical local-cultural crafting technique

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Abstract. With the progress of society, many traditional crafts are on the verge of being lost and are in urgent need of innovation, inheritance and preservation. "Guancao" weaving technique, which is a type of woven rattan craft, is a traditional handicraft in Dongguan City, Guangdong Province with a history of more than 2,000 years. However, it has gradually fallen into obscurity and is now endangered, raising concerns about its survival and development. Using woven rattan craft as its foundation, the cultural IP image character, "Guancao Fairy", has been designed and has spawned emojis and new applications in various scenarios. Through this design practice, the intangible cultural heritage is integrated into the modern trend and facilitated in new settings. The "Guancao" weaving skills will be widespread and well-known. This practice will achieve the goal of cultural inheritance and innovation. In addition, combining rattan weaving and the trendy IP character, the aim is to promote the creation of a cultural brand IP image for "GuanCao Weaving" in Dongguan through innovative design and new scenario applications. This approach is intended to tell the story of the intangible cultural heritage of "GuanCao Weaving," with the goal of achieving the dual development of commercial and cultural values.

Keywords: "Guancao" weaving technique, IP image design, Innovative Design

1 Introduction

"Guancao", as one of the three major local specialties in Dongguan, was once exported to Australia, the Americas, Europe, and Southeast Asia, making it a crucial pillar of the local economy. In 2007, the weaving technique of the art of woven rattan craft was listed as an intangible cultural heritage of Guangdong Province. Although Daojiao Town tried to develop new woven rattan products such as table lamps, handbags, tea mats, and pen holders, these efforts have not been sufficient to reverse the trend of traditional crafts facing extinction.

Today, how can we preserve traditional craftsmanship? The Blind Boxes offer an innovative approach — by designing a cultural IP character for the "traditional rattan craftsperson" and applying it to new contexts for dissemination.

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2 Development status

2.1 Current status of inheritance

Intangible culture represents the wisdom of a nation and its people, serving as a valuable global treasure. This is why countries around the world research and protect intangible culture. It not only contributes to the preservation of cultural heritage but also aids in the transmission of human wisdom. In recent years, the concept of cultural heritage has undergone a twofold change vis-à-vis adapting content. First, it has broadened the scope and nature of the tangible elements open to inclusion by reaching out beyond isolated examples thereof. Second, it has widened its range to incorporate goods that are also intangible and are able to express the idiosyncrasy of a particular group, reflect the recognition of an identity, or convey the value of a tradition.²

Dongguan's rich historical and cultural heritage, coupled with its unique geographical environment, has given rise to a distinctive and vibrant intangible cultural heritage of Lingnan. In 2007, "Guancao" weaving was officially recognized as an intangible cultural heritage of Guangdong Province.

Today, the "Guancao" weaving craft industry is gradually diminishing, and there is very little documentation or online information available about rattan craft. On one hand, the continuous emergence of new materials and techniques results in rapid changes in the materials, styles, and functions of modern products. On the other hand, the fields that were once used for cultivating rattan grass are now being used for other crops, leading to a sharp decrease in the land available for rattan cultivation. As a result, "Guancao" weaving products are gradually being replaced by modernized alternatives.³ The development of "Guancao" weaving techniques and its future survivability are indeed worrisome.

Through the online platform, we learned about the current status of the development of "Guancao" weaving products and collected 153 valid questionnaires. The survey has a wide audience, with almost half of them aged 19-30, who are the main force of consumption (Show in Figure 1 to 5).

According to the survey results, the art of woven rattan craft is becoming widely recognized, with online dissemination playing a significant role. For the majority of the audience interested in rattan craft, they are open to embracing new cultural forms and expressions of this traditional craft.

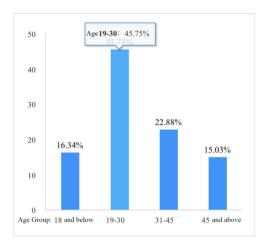


Fig. 1. Age distribution of respondents

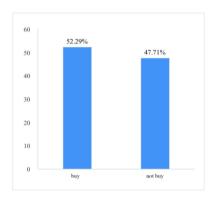


Fig. 2. Percentage on using rattan products

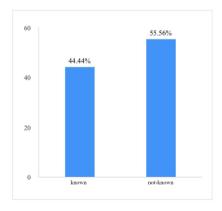


Fig. 3. Percentage on knowing "GuanCao" weaving being recognized as an intangible cultural heritage

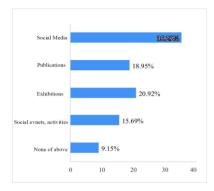


Fig. 4. Percentage of channels users knowing the "GuanCao" weaving

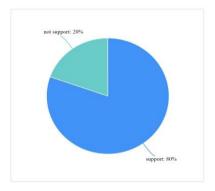


Fig. 5. Percentage of supporting new approach on the dissemination of intangible cultural heritage

2.2 The Dongguan trendy cultural IP has gone beyond its "circle zone"

In the English-speaking world, when the term "IP" is mentioned, it generally refers to "IP address." However, in this writing, the term "IP" is referred to "Intellectual Property" for short, which encompasses all forms of intellectual creations, including music, literature, and other artistic works, discoveries and inventions, as well as all knowledge, cultural products, and design works that bear the author's effort and wisdom, and are granted exclusive rights by law for a certain period. In the era of the internet, the scope of "IP" has further expanded, and its manifestations have become more diverse. It is a form of product that integrates cultural elements and modern design techniques to satisfy consumers' spiritual needs through its use.

"Caowan" also known as designer toys or art toys in English, refers to toys and collectibles created by artists and designers. They entered the Chinese market in the 1990s, and the designer toy market has experienced rapid growth since then. At present, many designer toys have become symbols of world significance, changing the definition of toy collection, and extending a large number of derivatives based on their own IP, becoming the landmark of contemporary youth culture, in the youth fashion culture and

even in the trend of thought, this turning into an indispensable voice. ⁶ "Dongguan designer toys" have frequently gained recognition beyond their local market. Notable examples include Laura, whose unique starry- eyed designs have captured the attention of young people; Lezhi Bao, whose color-changing chameleons dominate the male designer toy market; metal assembly toys that have made frequent appearances on the CCTV's television stages; and the Bafengte Little Sheep, which has led with the concept of interactive companion toys. The surge on these original IP designs has firmly established Dongguan as the "City of Designer Toys." In 2021, the designer toy market was estimated to be worth 36.6 billion yuan, with the total production value of Dongguan's designer toy manufacturing companies exceeding 10 billion yuan. Dongguan is responsible for manufacturing at least one-third of designer toys produced nationwide.

Why is Dongguan able to break out of its "circle zone" and transform from the "World's Factory" into the "City of Designer Toys"? — By utilizing the IP Image Shaping of Dongguan's Distinctive Cultural Brand. In terms of content, IP images blend cultural elements and artist emotions, allowing players to create their own derivatives, generate discussions, and content, resulting in a "breaking out of the box" effect. The inclusion of elements from Chinese pop culture and traditional Chinese aesthetics in designer toy IP images plays a significant role in meeting the buying preferences of Generation Z. From an industry perspective, the complete designer toy IP industry chain provides a nurturing environment for the growth and development of designer toy enterprises.

Combining the IP image of "Guancao" weaving with designer toy IP imagery, Dongguan, known as the "City of Designer Toys," aims to create a cultural brand IP image through innovative design and its surrounding applications. This effort seeks to tell the story of the intangible cultural heritage of woven rattan craft, achieving the dual goals of commercial value and cultural preservation and development. However, because a tourism product requires a certain infrastructure and are aimed at being communicated and consumed by a visitor that does not necessarily hold the keys to its comprehension, some creative domains are more prone to be converted into tourism product than others.⁷

3 Design analysis

3.1 Analysis of "Guancao" weaving elements

From an aesthetic perspective, each strand of rattan grass is unique, and rattan weaving boasts a distinctive texture. Craftsmen meticulously design patterns and motifs, resulting in a sense of orderly beauty. Rattan grass weaves into openings, with these openings varying in size and shape, offering a rich sense of depth and presenting a unique visual beauty.

However, traditional grass weaving patterns and designs are often complex and no longer align with modern trends. Nowadays, minimalist design styles are widely favored, emphasizing the use of minimal design elements to achieve maximum commu-

nicative impact while preserving functionality in the design process. Therefore, to create an IP image that conforms to contemporary aesthetics, it is necessary to distill the essence from rattan weaving techniques and combine them with a minimalist design approach to reorganize and deconstruct traditional patterns, making them integrate seamlessly into modern life. Hence, cultural and creative brands are becoming a solution and they are gradually turning into a leading force on the multi-cultural lifestyle. ⁸

3.2 Design style analysis

The widespread of anime, cartoons, and otaku culture has led to an increasing number of the creation on the "Cute" designed products. Currently, the IP images with high exposure in the market are mostly anthropomorphized animals with cute and distinctive characteristics. From a design perspective, these IP characters often have rounded and concise body features, along with bright and lively colors. Designing the "Guancao" weaving-themed IP around the "traditional art of woven rattan craft" involves extracting product and texture elements from rattan weaving and incorporating them into the main character. This allows the audience to intuitively experience the unique charm of the "Guancao" weaving through the IP image.

The design of the IP character aims to convey the cultural value, historical heritage, and economic significance behind Dongguan's rattan weaving, showcasing the charm of "Guancao" weaving craftsmanship to the younger audience. The IP character design is closely linked to rattan weaving:

When designing the main character, the hairstyle incorporates "braids" resembling woven rattan as a nod to the craft, and rattan grass flowers are used as hair accessories. A unique headdress is designed on top, featuring a woven grass basket as a distinctive symbol, along with a strand of rattan to complete the look.

The clothing design is inspired by the rattan weaving logo pattern, incorporating woven textures (seen in Figure 6).

The overall design leans towards a playful and cute appearance, making it easily accessible and relatable to the general public (seen in Figure 7).

In the design of the IP image of "Guancao Fairy", the elements of "Guancao" weaving logo were extracted and designed into clothing of the main image, which can better reflect the theme of "Guancao" weaving (shown in Figure 8).



Fig. 6. Design sketch

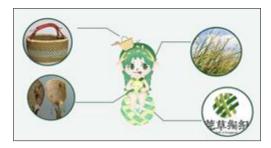


Fig. 7. Main image design drawing



Fig. 8. "Guancao" weaving logo

3.3 Auxiliary element analysis

3.3.1Text selection

The font design plays a significant role in determining the visual impact, and different fonts are used in various scene applications. In static and animated emoji design, the "Chinese Amber" font is used. This font has a smooth and delicate appearance, giving a cute feeling that aligns with the aesthetic preferences of the nowadays young people (shown in Figure 9). In the context of clothing extension design, where the theme involves changing scenes with traditional ethnic clothing, the "Fangzheng Water Black Tradition" font is chosen. This font is capable of showcasing the strength of the Chinese nation. Its structure maintains the square-shape of regular script, with straight strokes and balanced thickness. The strokes slightly deform and create broken-like brushwork, simulating the natural variation of watermarks, resulting in a more robust and rugged style (shown in Figure 10).



Fig. 9. Emoji package



Fig. 10. Various clothing extension

3.3.2Color selection

Colors hold symbolic significance. By incorporating colors that are linked to cultural and geographical elements, it's possible to evoke long-term memories in users, whether those memories stem from the activities or specific events. This, in turn, can help to achieve a sense of emotional connection. Using the specific colors associated to the users in design can provoke their emotions and rekindle vivid memories. The "Guancao Fairy" IP character taps into memories associated with the grass mats and rattan of Dongguan. The use of mat has rooted deeply in Guangdong. In the past, people in Guangdong used grass mats throughout the year as bedding, and students from Guangdong heading north for education often carried bed mats instead of mattresses.

The primary color scheme for the "Guancao Fairy" IP character uses green and yellow. Green represents fresh, vivid living rattan grass, while yellow symbolizes dried and processed rattan grass. The combination of green and yellow evokes feelings of youth, freshness, vitality, and a promising future. It exudes a relaxed and pleasant atmosphere and is visually appealing, making it particularly appealing to young people. Green is primarily used for hair and clothing, while yellow serves as an accent, blending with clothing and other elements of "Guancao" weaving products.

4 "Guancao" weaving IP image design and production

4.1 Theme image design

The entire IP character design is centered on rattan weaving and aims to promote the traditional art of woven rattan craft through the "Guancao Fairy" IP character. The overall design style leans towards a cute and playful aesthetic, aligning well with the modern aesthetic preferences of young audiences. The key elements of the main character, "Guancao Fairy" are carefully chosen to represent the "Guancao" weaving heritage. The headdress on top of the character's head is a cultural symbol, taking the form

of a woven grass basket that has been used throughout history. The twisted braids in the character's hair represent the act of weaving, symbolizing the essence of rattan weaving. The small grass and flower patterns in the character's hair are representative of rattan grass itself. The clothing design is influenced by the transformation of the rattan weaving logo, (shown in Figure 11). These design elements effectively communicate the cultural significance of rattan weaving through the "Guancao Fairy" IP character.

In the image-building model of an IP brand, the IP itself must firmly grasp the core content direction and the essential traits of its charismatic personality. This is a decisive factor for an IP brand to remain evergreen. ¹⁰roviding an IP character with a personality and background story makes the character more complete and relatable, enhancing the sense of immersion. In this design, the character is named "GuanGuan" and she is portrayed as a rattan grass fairy born over two thousand years ago. She transformed from the collective prayers of countless traditional rattan weaving artisans, hoping for the continuous growth of rattan grass. She is a guardian fairy who specifically protects rattan grass and possesses a mischievous and whimsical personality. An associating pose of the "Guancao Fairy" is depicted in a seated position, sitting on a spherical structure woven from grass, holding a grass fan in her hand (shown in Figure 12).



Fig. 11. Three views of the main image

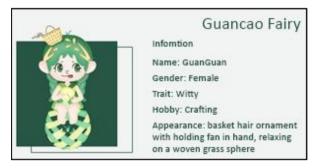


Fig. 12. "Guancao Fairy" IP image

4.2 Associating content design

The supplementary content design includes various elements such as static emoji packs, animated emoji packs, the main character's transformation and extension, scene design,

auxiliary graphic design, IP character short videos, and simulated three-dimensional drawings.

The production of emojis will also bear the deep cultural imprint of the younger generation.¹¹ he emoji pack design takes inspiration from commonly used emoji packs that are popular among the young people, incorporating elements of "Guancao" weaving culture. There are 3 animated emoji packs and 8 series of static emoji packs, suitable for everyday chatting scenarios (shown in Figure 13).



Fig. 13. Static emoticon package

Scenarios represent product logic. From a mental perspective, product logic involves occupying the minds of the users within a specific scenario and establishing a strong association with that scenario. From an experiential standpoint, an experience is only harmonious when placed within a particular scenario, making it sensory. If an experience is detached from its scenario, the concept of universally applicable experiences will disappear. 12 ompleting the extension of the main character's clothing and its associating design via ethnical element is essential. Auxiliary graphics, also known as symbolic graphics, serve as supplementary and complementary design elements. These auxiliary graphics incorporate the style of ethnic clothing, extract cultural characteristics from the clothing of various ethnic groups, simplify clothing elements, and combine them with the main character for advanced creation. This involves a unified approach in composition and drawing style, resulting in a series of clothing extensions. This approach ensures that people from different ethnic backgrounds appreciate the "Guancao Fairy" IP character and gain an understanding of its historical and cultural background and development context. It encourages an interest in "Guancao" weaving craftsmanship and spreads intangible cultural heritage in various applications (shown in Figure 14).



Fig. 14. Main image of the character in various clothing extension

Scene design and auxiliary graphic design further enhance the completeness of the design, building upon the foundation of clothing extension. These elements contribute to creating a well-rounded and comprehensive design. (Shown in Figures 15 to 17).



Fig. 15. Dai ethnic group scene design



Fig. 16. Han Chinese scene design



Fig. 17. Mongolian scene design

4.3 Derivative design and production

The IP serves as the main theme, and the various derivative creative designs of the IP character are extensions of this theme. These designs use products as a medium to transform the intangible IP into tangible physical items. As consumer preferences evolve, people increasingly value the quality of products. Designs with artistic qualities can meet the higher-level consumption demands of individuals. ¹³sing 3D printing technology to create physical representations of the 'Guancao Fairy' IP character and offering derivative products such as key chains, fridge magnets, masks, bags, phone cases, and more, which are both aesthetically pleasing and practical, can stimulate consumers' purchasing desires and effectively promote the brand:

Packaging bag: Make a shopping packaging bag made of paper material, as shown in Figure 18.

Tea cup: Make a paper tea cup with coated material, as shown in Figure 19.



Fig. 18. Packaging bag renderings



Fig. 19. Rendering of coated paper cups

5 Conclusion

Cultural IP emphasizes thematic and cultural characteristics while placing a greater emphasis on relevancy and uniqueness. Uniqueness is the foundation of the IP design, incorporating new thematic elements into the cultural content to blend culture and theme, resulting in a distinctive IP. By analyzing and extracting the historical and cultural aspects, products, and elements associated with "Guancao" weaving, the goal is to create a unique cultural IP, represented by the "Guancao Fairy" that serves as a medium for the dissemination of intangible cultural heritage through cultural and creative forms.

Fund Project

1.Phased results of the 2023 Guangdong Provincial Department of Education's Natural Science Research Project of Ordinary Colleges and Universities (Special Project on Key Areas of Science and Technology Serving Rural Revitalization) "Research on the Immersive Experience Design of Nanshe Ancient Villages in the Context of Science and Technology Serving Rural Revitalization";

2.Phased results of the 2022 Guangdong Provincial Higher Education Association's "14th Five-Year Plan" higher education research project "Research on "Four-in- One" Talent Cultivation Innovation under the Background of New Liberal Arts" (Project No. 22GYB98);

3. Phased results of the 2022 Guangdong Province Undergraduate College Teaching Quality and Teaching Reform Project Construction Experimental Teaching Demonstration Center Project "Digital Art Virtual Reality Experimental Teaching Demonstration Center":

4.Phased results of the 2022 school-level teaching achievement cultivation project "Reform and Innovation Exploration of the Teaching Model of Design Discipline Major under the Perspective of "Integration of Industry, Competition and Education".

References

- L. Cui, Z. Huang. Revitalize excellent traditional cultural IP and enhance the influence of Chinese culture [J]. Publishing Wide Angle, 2021(10):28-30.
- 2. María José del Barrio, María Devesa, Luis César Herrero, Evaluating intangible cultural heritage: The case of cultural festivals [M].. City, Culture and Society ,2012(12):235-244
- 3. Y. Li, H. Xiong. Cultural inheritance and innovation of wonton grass weaving technology in modern product design [J]. Cultural Innovation Comparison Comparative Research, 2022,6(07):134-137.
- 4. Q. Chen. "Cultural IP: Creating cultural value in intangible assets" [M]. China Film Publishing House, 2017 edition.
- Bolun Zhang , Peng Cheng , Lujie Deng , Nurul Hanim Romainoor , Jianhong Han , Guoshuai Luo , Tianbo Gao 《Can AI-generated art stimulate the sustainability of intangible cultural heritage? A quantitative research on cultural and creative products of New Year Prints generated by AI》 [J]. heliyon. Volume 9, Issue 10, October 2023, https://doi.org/10.1016/j.heliyon.2023.e20477
- 6. X. Zeng, H. Cheng. "China Disney" 's IP "going overseas": trendy brand marketing, competition barriers and reflection on internationalization, International Brand Observation, 2020 (10): 65-67.
- Jordi Arcos-Pumarola, Alexandra Georgescu Paquin, Marta Hernández Sitges, The use of intangible heritage and creative industries as a tourism asset in the UNESCO creative cities network, Business and Economics[J]. Volume 9, Issue 1, January 2023, https://doi.org/10.1016/j.heliyon.2023.e13106
- 8. Q. Shen. Research on culturally creative product design in the new consumption era based on brand IP [D]. Jiangnan University. 2021.
- 9. L. Zhang. Research on the design and communication of brand IP image from the perspective of cute culture—taking the White Rabbit brand as an example[D]. Jiangnan University. 2021.
- W Zhao, L Cui. Research on IP brand image building model in integrated cultural environment [J]. China Publishing. 2017(03):48-51.
- 11. L. Peng. Emoticons: Passwords, labels and masks[J]. Journal of Xi'an Jiaotong University (Social Science Edition), 2019(01):104-109.
- 12. C. Liu. Four keywords of new marketing: scene, IP, community, communication [J]. Sales and Marketing (Management Edition). 2018(01):28-30.
- 13. Q. Liao. Research on tourism cultural and creative product brand IP design based on Zhejiang Shilu Culture [D]. Zhejiang Gongshang University, 2022

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