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Digital Picture Book Creation: Ode to Time

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Abstract: This study takes digital picture books as the carrier, focusing on the cultural narration of ancient intangible cultural heritage sachets and Dragon Boat Festival customs. It enables readers to understand the cultural connotations, craftsmanship and practical values of sachets, feel the charm of traditional culture in stories, inspire love for traditional handicrafts, cultivate observation and imagination, and experience sincere emotions among family members. The digital picture book effectively activates the cultural memory of ancient sachets through a three-dimensional approach: story-based deconstruction of craftsmanship, emotional connection of time and space, and technological enhancement of experience. It not only transforms intangible cultural heritage skills from static display to digital art, but also endows traditional culture with emotional warmth through narration, providing a new perceptible, participatory and communicable paradigm for the digital innovation practice of intangible cultural heritage.

Keywords: Traditional Culture; Intangible Cultural Heritage; Digital Art; Dragon Boat Festival

1. Introduction

1.1 Research Background

Picture books originated in the West with a history of more than 300 years. As a modern art form that tells stories through pictures and words, picture books emerged in China in the early 20th century with the development of modern publishing industry, marked by the Picture Story column in Children's World and illustrations in textbooks from Kaiming Bookstore. In the early 21st century, the scale and quality of domestic picture book creation gradually improved, and some picture books with Chinese cultural characteristics went global. Driven by the innovation of family education concepts, the children's picture book industry has developed rapidly. In the current environment, digital picture books integrate text, images, sounds, animations and other elements, and adopt interactive technologies such as touch control and voice recognition to enhance interaction with children. In recent years, supported by national policies and market demand, China's intangible cultural heritage (ICH) industry has achieved leapfrog development. The newly revised Law of the People's Republic of China on Intangible Cultural Heritage in 2024 has promoted the protection and development of ICH. The construction of ICH workshops has been included in the key projects of rural revitalization. Regionally, the ICH industry is developed in eastern China and growing rapidly in central and western regions. In terms of ICH-themed picture book design, ICH picture books are booming under national support. For example, "The Picture Book Series of Yunnan ICH for Building a Strong Sense of Community for the Chinese Nation" selects distinctive Yunnan ICH items such as Dali Bai tie-dye and Jianchuan black pottery tile cats, presents their cultural connotations through vivid stories, and adopts media convergence technology with QR codes linking short videos and audio explanations to enrich reading experience. This study focuses on the ingenious integration of traditional ICH culture and digital picture books, responding to national policies and conveying unique artistic aesthetics.

1.2 Research Significance

Against the accelerated globalization and modernization, ICH represented by sachets faces dual challenges [1]: the fault of skill inheritance and the loss of young audiences. As a popular reading form among children, picture books can effectively present the historical origin, exquisite craftsmanship and rich culture of ICH with vivid and concise words, lower the threshold for children to approach ICH, and ignite their

enthusiasm for traditional culture [2]. In the digital era, traditional culture is challenged by single communication forms. Digital picture books modernize cultural contents such as ICH skills and traditional festival customs through interactive design, animation effects and sound simulation. This study explores the digitization of traditional culture, achieving technological breakthroughs through various digital effects and styles, and better integrating traditional culture with modern digital art. Unique ICH also provides rich materials for picture book creation, enhancing their cultural deposits and national characteristics. Amid challenges in ICH inheritance and large-scale innovation in the picture book industry, their integration is an innovative inheritance and development model, which helps ICH enter the public eye, injects new vitality into the picture book industry, and realizes the organic integration of traditional culture and modern art forms.

1.3 Domestic and Foreign Related Research

Domestic Research

ICH innovation is a current research hotspot in China, focusing on adapting ancient ICH to modern social needs. Through technological and conceptual innovation, ICH is no longer merely static display but integrated with the experience economy [3]. For instance, the "Digital Palace Museum" has greatly promoted ICH innovation and communication among young people through digital exhibitions and cultural and creative products. ICH digital picture books follow this trend, combining ICH with digital art. In the integration of digital picture book creation and ICH communication, some studies explore presenting ICH culture vividly via the dynamic and interactive features of digital picture books. For example, Chinese ICH picture book series introduces five ICH skills (paper-cutting, shadow puppetry, batik, silk weaving, sugar sculpture) through interesting stories, achieving positive effects in ICH inheritance. "Yunnan ICH Picture Book Series" enriches experience with QR codes for short videos and audio explanations. Scholar Wu Jiye points out limitations in children's digital education products (e.g., insufficient consideration of children's cognitive development) in "Research on Interactive Design of Children's Digital Picture Books Based on Cognitive Psychology", noting a lack of aesthetic education products with Chinese characteristics [4]. Thus, traditional art should be combined with digital technology to integrate Chinese traditional aesthetics into children's digital education.

Foreign Research Foreign research on culture-integrated picture books started early, emphasizing field investigations, case studies and interdisciplinary analysis of digital picture books. From the perspective of cross-cultural communication, "Picture Books in the Digital Age" discusses how the digital revolution and popularization of digital reading devices influence the design, publication and characteristics of contemporary narrative picture books, providing extra functions for digital picture book apps unsupported by paper ones. It summarizes three features of digital picture book apps (visual, transition and interaction) and their impacts on reading experience with cultural and educational value [5]. "Digital Storytelling in Electronic Picture Books" elaborates on digital narration steps, contents, forms and interaction modes in electronic picture books, summarizing the process and exploring development methods. The Sino-Australian co-created picture book "Dragon Moon" by Australian writer Graeme Base and Chinese translator Chen Ying shows Chinese culture from an international perspective, integrating Chinese elements with European literary traditions and conveying universal themes of "acceptance" and "home" via digital narration, promoting Sino-Australian cultural exchanges.

2. Creation Conception and Preliminary Design

2.1 Topic Determination

The creation is inspired by dual thinking on "the passage of time and the continuation of culture". As a traditional festival integrating natural rhythm and humanistic connotations, the Dragon Boat Festival is a folk festival combining ancestor worship, blessing, entertainment and catering. It embodies ancient people's profound understanding of time flow and life health. As a core cultural symbol of the Dragon Boat Festival, sachets carry collective memory of solar terms, phenology and skills between generations, and serve as physical carriers of herbs and fabrics. Observing the alienation of modern urban youth from traditional crafts, this creation constructs a three-dimensional narrative space of "personal growth – family memory – cultural inheritance" through the daily activity of "making sachets",

transforming traditional sachet craftsmanship into emotional symbols in the picture book [6]. The topic adopts a strategy of small incision, deep emotion, focusing on detailed steps of family sachet-making. With delicate emotional depiction and specific family interactions, it highlights the intergenerational inheritance of ICH skills and confirms the importance of connecting traditional crafts with family emotions. By deconstructing the grand ICH proposition through "family micro-scenes", it proves that ICH inheritance does not rely on grand narratives; when traditional crafts connect with individual life experience, cultural genes can naturally continue in intergenerational flow.

2.2 Data Collection and Sorting

Dragon Boat Festival Falling on the 5th day of the 5th lunar month, the Dragon Boat Festival is also called "Duan Wu". Its folk customs of praying for blessings and avoiding disasters were recorded in Southern Dynasty documents: the 5th day of the 5th lunar month is known as the Orchid Bathing Festival. Jingchu people tread all kinds of herbs and play herb-fighting games. They pick mugwort to make human shapes and hang them on doors to ward off poisonous gas. They carve or grind calamus for wine. On this day, dragon boat races are held and various herbs are collected. People tie colorful silk threads around arms, named "Bi Bing", to prevent diseases and plagues. "Da Dai Li Ji · Xia Xiao Zheng" records: "The fifth month: store orchids for bathing". Ancient people bathed and picked/hung herbs in the fifth month (with abundant yang qi) to ward off evil, cure diseases and pray for blessings [7].

Ancient Sachets Ancient sachets are based on the core philosophy of "harmony between yin and yang", integrating traditional Chinese medicine (TCM) principles and folk embroidery art. As ornaments filled with aromatic TCM herbs used since ancient times, the custom of wearing sachets has been passed down for thousands of years. In modern times, sachets are more widely used; studies and clinical tests show their good effects in preventing respiratory diseases, treating insomnia and loss of appetite [8]. Traditional sachets are mainly made of cotton and linen with natural texture, dyed with plant dyes in low saturation, presenting a warm and simple texture. Shapes include round, square, diamond, pomegranate, etc.: roundness symbolizes reunion and harmony; diamond represents uniqueness with a modern sense, implying smoothness in all directions; pomegranate shape symbolizes fertility and family prosperity with exquisite carving and high ornamental value (*e.g.*, Figure 1).



Figure 1. Display Images of Various Sachets

Embroidery Patterns Embroidery patterns are usually matched with gourds, pomegranates and other auspicious patterns, using stitches such as blanket stitch and knot stitch to form a symbol system of "warding off evil – attracting blessings". Mineral colors like cinnabar and stone blue are widely used, highlighting a simple and solemn folk temperament.

Fabric Patterns Common fabric textures include plain weave, twill weave and jacquard weave: plain weave is fine and suitable for complex embroidery; twill weave has 45° diagonal lines to enhance stiffness; jacquard weave has hidden patterns formed by warp and weft interweaving to improve decoration.

TCM Theory Sachet formulas center on "preventive medicine", integrating folk experience and TCM principles to purify air and strengthen vital energy through volatile herbs. Its cultural metaphor lies in the simple philosophy of "balancing natural poison with natural substances", e.g., using pungent-warm herbs to restrain "damp-heat poison" in the fifth month. The picture book designs a "yin-yang balance" composition: spices in sachets on the upper side and aroma carrying effects on the right, connected by airflow illustrations, implying the TCM concept of yin and yang in harmony, no evil can invade and sublimating cultural connotations.

2.3 Character Design

Characters are designed based on traditional

Chinese rural life, extracting elements such as silver bun, apron, home clothes and braids for Grandma and Xiao'ai. Xiao'ai As the core character representing curious children, Xiao'ai has a chubby face, bright big eyes and a tilted head, showing infinite curiosity about the world. Her growth in learning sachet-making symbolizes the rooting of ICH skills in the new generation. Her questions and attempts in each step reflect children's internal motivation to accept traditional culture, becoming the future hope of craft inheritance (*e.g.*, Figure 2.).



Figure 2. Xiao'ai's Design Drawing



Figure 3. Grandma's Design Drawing

Grandma As a kind white-haired elder with warm wrinkles, Grandma wears a white cloth apron and loose Chinese-style clothes, always holding a silver thimble and colorful silk threads. As the core inheritor of ICH skills in the family, she answers Xiao'ai's questions patiently and teaches traditional sewing skills hand in hand. Her words convey sachet-making craftsmanship and reverence for traditional culture, acting as a bridge connecting the past and present (*e.g.*, Figure 3).

3. Design and Implementation

3.1 Sketch Design

Sketch design ensures clear logic serving the main story [9], conveys emotions through visual elements (color, composition, dynamics) to resonate, and reserves modification space to avoid over-refinement for flexible adjustments. The picture book plot is compiled through storytelling, integrating illustrations with popular science and enriching plots via character interactions.

Cover Design: Inspired by sachet styles, it integrates round, square, zongzi-shaped and irregular elements. Centered on a large basic sachet with smaller ones around, it features proper blank space and matching tassels, beads and ropes, presenting the flexible beauty of dots, lines and planes (*e.g.*, Figure 4).

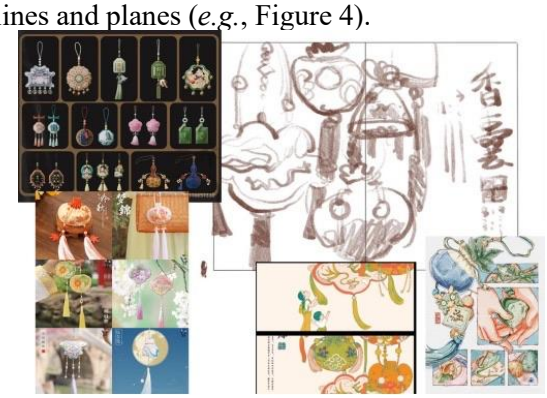


Figure 4. Cover Design

Village Scene Composition: It shows a northern Chinese village with red-brick blue-tile houses, dirt roads, stone mountains and pine trees. The background uses a row of buildings spanning left and right to display the overall village atmosphere, highlighting scenery and folk customs during the Qingming Festival and enhancing contrast and storytelling.

Sachet-Making Scene: It displays traditional hand tools (sewing kit, fabrics, tailor's scissors, silk threads) in an indoor setting with characters at the table, depicting Grandma teaching Xiao'ai to make sachets during Qingming, connecting characters, objects and environment to enrich storytelling (*e.g.*, Figure 5.)

Sachet-Making Process: It shows the complete process of ancient ICH sachet-making, with traditional fabric patterns and green plants as the background to restore the simple rural life and ICH production in northern China. Silk threads guide reading order, helping children understand skills for hands-on practice and enhancing storytelling and mystery (*e.g.*, Figure 6).



Figure 5. Sachet-Making Scene



Figure 6. Sachet-Making Process

Aroma and Chinese Herbal Medicine Scene: Adopting graphical composition, it organizes visuals via shapes, lines and colors to clarify information hierarchy [10], showing spice types and aroma forms for readers to recognize spices through patterns (*e.g.*, Figure 7).

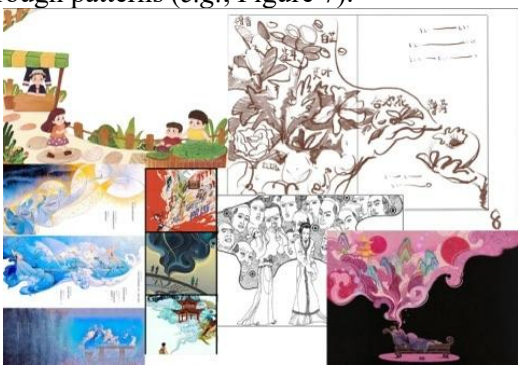


Figure 7. Aroma and Chinese Herbal Medicine Scene

Spice Formula Scene: It displays traditional sachet spice formulas [11], classified by functions (calming nerves, repelling insects, refreshing) based on TCM efficacy. Spice images are refined and summarized, with parallel composition for order and decoration (*e.g.*, Figure 8).

Back Cover Design: Inspired by graphical creativity, scattered sachets add fun, with small ones surrounding to highlight Xiao'ai in the center. Symmetrical layout emphasizes the traditional Chinese concept of balance (*e.g.*, Figure 9).



Figure 8. Spice Formula Scene



Figure 9. Back Cover Design

3.2 Color Design

The core traditional Chinese color system is five colors (cyan, red, yellow, white, black), linked to five seasons, directions, five elements, five tones, five flavors and five zang-organs, crucial for constructing traditional social order and ethics [12]. Yellow symbolized imperial power in ancient times; red represents auspiciousness and joy, widely used in festivals and weddings. Purple symbolizes nobility and luck in traditional culture (e.g., purple air coming from the east, the Forbidden City). Traditional color matching pursues harmony and artistic conception, e.g., red doors/windows and gray tiles in Chinese gardens complement green plants and cyan stones for tranquility; light color combinations in paintings convey distant artistic conception [13]. The picture book's color design integrates modern aesthetic, centering on "elegant ancient charm, inheritance and rebirth" to blend oriental aesthetics and ICH connotations. Colors are extracted from traditional fabrics [14], restoring natural texture of sachets and conveying the philosophy of "simplicity" [15], echoing the original ecological attributes of ICH crafts. Beige (warm, soft) serves as the main tone to balance strong traditional colors, simulating the warm texture of ancient sachets and strengthening cultural

accumulation. Bamboo cyan (used in fabric jacquard) implies literati sentiment; lotus pink and jujube red on tassels, beads and embroidery replicate the gentle charm of ancient dyed fabrics. Abandoning gaudy red and yellow, it reshapes advanced Chinese colors with low saturation, letting traditional colors "walk out" of cultural relics and books for cultural translation. Respecting ICH's "authenticity" and endowing it with "approachability" via contemporary visual grammar, color becomes a cultural bond connecting the past and present [15] (*e.g.*, Figure 10).



Figure 10. Traditional Chinese Color of Cover Design

3.3 Line Drawing and Coloring

Line drawing and coloring adapt to artistic effects and functionality. Lines express texture, volume, space and light through thickness, weight, speed and density. Coloring methods are determined by theme, atmosphere and emotion, creating different visual effects and atmospheres. Two cases (Chinese herbal aroma scene and back cover) illustrate the design ideas.

Chinese Herbal Aroma Scene - Scheme 1: Abandons traditional single-line outlining, using soft, blended lines with color transitions to imply shapes. Coloring features layered thick painting with soft transitions, adding light and smoke effects for dreaminess, simulating textures of leaves, flowers and wood [16] to create a hazy, romantic atmosphere [17] (*e.g.,*Figure 11).

- Scheme 2: Adopts regular outlining with variable thickness and embroidery-like hatching for clear contours. Flat coloring with simple transitions, fabric texture background and embroidery simulation for decoration, but rigid lines, fragmented objects and over-elaborate patterns weaken hierarchy. Final Choice: Scheme 1 for soft, smoky effects fitting the hazy aesthetic [18] (*e.g.,* Figure 12).

Back Cover Design Uses crayon and pastel strokes with free coloring, integrating lines into colors. Layered coloring creates volume without special effects, with traditional fabric/pattern paper texture background enhancing traditional atmosphere (*e.g.*, Figure 13.)



Figure 11. Scheme 1



Figure 12. Scheme 2



Figure 13. Back Cover Design

4. Conclusion

This digital picture book takes ICH sachets as the theme, "narrative inheritance of culture" as the core, and children's picture books as ICH enlightenment carriers. In the early stage, cultural data (sachet history, craftsmanship, regional features) were collected for accuracy; ICH inheritors were visited to record production processes; numerous style tests (color combinations, lines, painting techniques) were conducted, and a simple yet modern integrated style was finalized through discussions with tutors and peers. Challenges were encountered during production: insufficient mastery of advanced functions in professional software

(Adobe Photoshop, Procreate); difficulties in texture overlay and blending mode for embroidery effects; conflicts between traditional Chinese art and modern flat illustration styles. These were overcome through systematic learning of tutorials and documents, note-taking of skills, analysis of excellent cases, and consultations with teachers and classmates. Deeply involved in ICH culture during creation, I strengthened cultural identity and pride, resolving to inherit and promote ICH. The story of Grandma teaching Xiao'ai to make sachets combines craft knowledge and folk culture, lowering children's reading threshold while retaining traditional details. ICH digital picture books integrate tradition and modernity, preserving traditional elements with innovative vitality. As a cultural carrier carrying millennial memories, sachets' value lies not only in threads and spices but also in emotional connections of "every stitch is a story". This study uses picture books as "needles" and culture as "threads" to sew an accessible inheritance path between tradition and modernity. In the future, may more ICH crafts break the boundaries of museum showcases, enter contemporary life in diverse forms, and promote the inheritance and development of traditional and ICH culture.

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