Visual Communication and Sustainable Activation of Bai Tie-Dyeing from the Perspective of Community Participation

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DOI: 10.64649/yh.eg.issn3078-4794.20260517

Abstract: In order to investigate the relation between the visual expression of traditional crafts with their community-based transmission practices, we examine Bai tie-dyeing in Zhoucheng, Dali based on the perspective of community participation by analyzing its color, texture, motifs, composition, and communication media; examining the mechanisms of how communities participate in visual transformation from three aspects (knowledge provision, decision-making in visual expression, and benefit sharing). We argue that the visual language of Bai tie-dyeing is produced as an interaction among craft processes, local experience, and cultural interpretation. The contribution of knowledge, consultation on design, and feedback on benefits made by community members serve as crucial links connecting visual innovation and the continuity of transmission. Based on these findings, we propose four pathways towards sustainable activation including joint compilation, negotiation-based embedding, cultural connection, and feedback mechanisms aiming at preserving cultural context, strengthening the role of community members in visual expression, and sustaining investment in resources for transmission, serving as a reference for the visual communication of traditional crafts and the activation of intangible cultural heritage.

Keywords: Bai tie-dyeing; community participation; visual communication; sustainable activation; intangible cultural heritage

1. Introduction

1.1 Research Background

Activation and utilization of intangible cultural heritage requires ongoing development of accompanying knowledge, skills, and social practices. Changes in material form and user needs may directly or indirectly impact cultural expressions and continuation of practice for traditional crafts. According to Article 15 of the Convention for the Safeguarding of the Intangible Cultural Heritage: Within the framework of its safeguarding activities of the intangible cultural heritage, each State Party shall endeavour to ensure the widest possible participation of communities, groups and, where appropriate, individuals that create, maintain and transmit such heritage, and to involve them actively in its management[1] which implies that it is necessary to keep ties between local community life when activating intangible cultural heritage according to current social needs.

Bai tie-dyeing in Yunnan (Tie-dyeing) is one of the treasured Chinese textile-dyeing craft whose defining technique consists of physical bindings to achieve distinct resist dyed effects. Practised for thousands of years, tie-dyeing has been a significant chapter in the history of textile technology both in China and globally; it carries rich ethnic aesthetic meanings and historical and cultural memories [2], and was inscribed onto the first national list of intangible cultural heritage in 2006. This milestone officially included it within the national framework for cultural safeguarding going beyond being just a local folk practice (Figure 1), visually tied to its production processes through binding techniques organizing areas that resist dye, dye penetration creating tonal layers and variations along motif edges, motifs and their combination conveying local aesthetics and

lived experience. Visual communication of Bai tie-dyeing includes the presentation of color and texture, tightly linked to craft techniques, makers´ experience and forms of community participation.

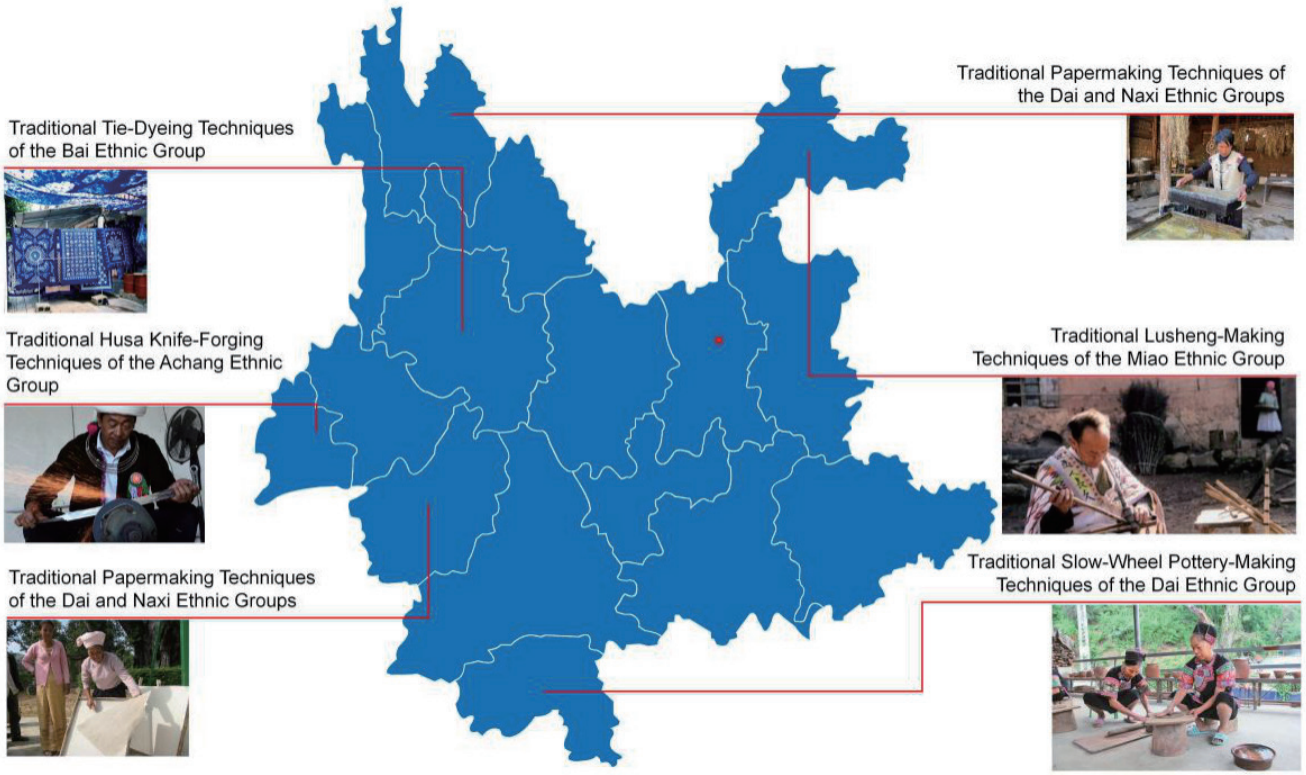


Figure 1 Traditional craftsmanship items from Yunnan included in the first national list of intangible cultural heritage

Traditional craftsmanship items from Yunnan included in the first national list of intangible cultural heritage Figure 1 From a view point of community participation, the activation of tie-dyeing can be seen mainly through the connection between visual expression and transmission. The community members are not only the maker but also narrator explaining the craft and its activation; they affect the visual presentation of the motif as well as the communicating about the underlying cultural meaning. In this study we combine the analysis on visual form together with the examination of social participation discussing the sustainable activation of Bai tie-dyeing.

1.2 Related Research

The existing discussion about Bai tie-dyeing focuses mainly on craft technique, production and cultural communication. Based on research and practice for tie-dyeing, Lin Fanglu introduced contemporary methods of transmission into product design by creating household products with a contemporary style. Lin combined tie-dyeing with daily life and promoted the sustainability of traditional craft transmission[3]. From an industrial production standpoint, Wu Huayu and Huang Yi studied the development of traditional tie-resist dyeing and problems faced during its transmission via a case study of the Puzhen Tie-Dyeing Factory in Zhoucheng, Dali[4]. To solve the problem of difficulty in cross-cultural communication of tie-dyeing, Luo Hanwen established a systematic communication framework and refined its mode of presentation so as to facilitate more closely situated cultural narratives[5]. On the basis of their work, we examine the visual transformation in tie-dyeing and the way that community members participate. We consider how the view of different stakeholders influences the final expression, thus elucidating the underlying relationship between visual design and sustainable community participation.

1.3 Research Questions and Significance

In studying Bai tie-dyeing in Zhoucheng, Dali, I have focused on: (1) How is its color, motif

and texture reflected through craft knowledge and social experience; (2) How does community members participate in craft practices and what impact will various design decisions make for cultural communication.

Placing the visual language of tie-dyeing into community practice can help understand the relationship between visual form, craft knowledge, participants´ experience and community collaboration. This provides a new way to analyze the communication of intangible cultural heritage that might inspire more people to learn, study and participate in tie-dyeing.

2. Definition of Key Concepts

2.1 Community Participation

Taking Bai tie-dyeing in Zhoucheng, Dali, as an example, we discuss the participation in community-based intangible cultural heritage activities with respect to relations between local heritage bearers, artisans, residents, and learners. It is necessary to consider differences in age, occupation, and background when considering the situation of each member within the community. According to UNESCO´s Ethical Principles for Safeguarding Intangible Cultural Heritage, it emphasizes that communities are the main actors responsible for safeguarding their own heritage. Collaboration must be transparent, dialogic, negotiated, and ensure free, prior, sustained and informed consent, protect the moral and material interests resulting from the use, study and adaptation of their heritage[6], therefore, this paper analyzes community participation by focusing on three aspects: providing knowledge (motif selection, production experience), making decisions about visual expressions (division of tasks and collaboration among community members) and benefit sharing (whether makers get remuneration and other beneficial resources). The resource distribution is a determinant factor to maintain equitable participation.

2.2 Visual Communication and Sustainable Activation

Visual communication of Bai tie-dyeing is based on a unique visual language derived from craft practice that is communicated by material objects. It includes not only the colors, motifs, and texture of these textiles but also how they are presented as products, packaged or exhibited. Techniques used for binding and dyeing serve as the basis of its visual features and offer access into linking form with production knowledge. Colors, motifs, and meaning of various tie-dyed works come from the regional culture of the Bai people.

Sustainable activation means creating favorable circumstances for continuing the development of tie-dyeing practices via contemporary uses, designs, and cultural communications. For instance, traditional techniques may be reached by wider audience through video documentation, further adaptation, visual translation, and simulated hands-on experiences.

3. The Visual Language of Bai Tie-Dyeing and the Expression of Community Culture

Visual language of Bai tie-dyeing is derived through a combination of materials, crafts process and life experiences: color and texture show the technical features in production; motifs and composition organize local experience and cultural ideas; communication media affect their view and understanding.

3.1 Color

Blue and white are the dominant colors of Bai tie-dyeing, with natural transitions between them. White motifs emerge against a blue background, and their contours, density, and coverage jointly determine the visual focus of the composition. Less common combinations include white motifs on blue-green, yellow, green, and red grounds. Stitch-binding and dyeing are the key techniques, and their visual effects are closely related to specific operations. In formal terms, the relationship between blue and white involves tonal variations across dyed areas, undyed areas, and the

transitions between them, producing an effect distinct from flat-color graphics.

Color also has a cultural dimension. The blue-and-white palette conveys a cool visual impression associated with tranquility, harmony, and detachment from worldly concerns. These qualities are understood as consistent with the kindness, peacefulness, openness, and tolerance traditionally associated with Bai culture. The Bai people revere white, regard it as auspicious, use "Bai," meaning "white," as their ethnic name, and adopt white as a predominant color in clothing. Qing, a color category encompassing blue and blue-green, carries meanings such as hope, simplicity, and sincerity. The combination of qing and white evokes the idea of being pure, upright, and honorable. The color preferences of Zhoucheng tie-dyeing thus reflect an aspiration toward inner peace and a tranquil life. These interpretations provide important insights into local color traditions.

3.2 Texture

The trace of craft processes becomes apparent through texture on a finished textile. Binding methods and tightness affect dye penetration producing halos and gradations at motif edges. These variations create a play between sharp and blurred areas providing access into the production process. Showing details of texture together with their respective making actions connects visual effects with technical knowledge. Stitch-binding represents the first critical step in tie-dyeing; missing, misplacing or adding stitches affects the final motif. Insufficiently tight binding results in indistinct motifs after dyeing. The stitch-binding process shapes how texture will appear.

3.3 Motifs

The variety of motifs far exceeds that of colors. Typical themes cover plants and flowers, birds and other animals, insects and fish, scenic views, as well as geometrical shapes. Motif examples: Bougainvillea, Chrysanthemum, Tulip – plant motifs; Butterflies, Bees, Fish, Caterpillars, Earthworms, Magpies, White Cranes, Phoenixes – animal motifs; Butterfly Spring, The Three Pagodas, Cangshan Mountains, Sun, Moon, Stars, Mountains, Rivers – scenic motifs. One of the most representative motifs is the butterfly which has always been popular[7], showing how one motif may have many different meanings such as love, wishes for children or aspirations for longevity. The meaning behind a motif cannot be captured with just one label but it needs to be investigated according to each work´s specific connotations (Figure 2).



(a) Butterfly and xi (happiness) motifs



(b) Butterfly and shou (longevity) motifs

Figure 2 Butterfly motifs in tie-dyed textiles

3.4 Composition

The Tie-dyed motifs are symmetrical, rhythmic and decorated. For example, Bai´s tie-dyed scarf

with pomegranate and embroidered-ball motifs from the Shanghai Museum collection (Figure 3), has pomegranates with branches and leaves on each corner expressing traditional wishes for many children and a flourishing family. It associates these motifs with the boundary of the square textile showing that placement, orientation and combination affect the whole composition. Cultural meaning and structural design form an expression of the textile. Besides corner arrangements there are also individual and repeating motifs.





Figure 3 Bai tie-dyed scarf with pomegranate and embroidered-ball motifs
Figure 4 Xinhua photo series "Bai Tie-Dyeing: Blue-and-White Rhythms at the Fingertips"

3.5 Communication Media

With the introduction into various communication media, the visual content of Bai tie-dyeing will be selected, rearranged, and interpreted differently. A piece of work could have different emphasis when it appears physically, on a collection webpage, or in a cultural interpretation feature. On the Shanghai Museum´s collection page of the scarf with pomegranate and embroidered-ball motifs, the name, material, size, place of origin, and subject identify this object. In addition, the museum´s cultural interpretation feature provides explanations about the shapes of these pomegranates and their auspicious meanings. Both ways of presenting enable us to identify an object and understand its meaning respectively; thus we need to organize cultural information via text, images, and their relationship.

The photos of craft process are able to convey information hard to see from the finished objects. For example, Xinhua´s photo series "Bai Tie-Dyeing: Blue-and-White Rhythms at the Fingertips" (Figure 4), recording the drawing, stitch-binding, immersion dyeing, unbinding, and drying at

the Puzhen Dyeing Workshop in Zhoucheng, identifies some of the practitioners and describes the circumstance where the pictures were taken. They provide grounds for linking finished textiles, making actions, and makers together. Regarding the aspect of communication content, by identifying practitioners and describing the processes, our focus shifts from the textiles themselves to the people who make them so that we can understand the labor and knowledge behind the motifs.

4. Mechanisms of Community Participation in the Visual Transformation of Bai Tie-Dyeing

Communities are important settings/sites of practice where intangible cultural heritage is transmitted[8]. The community's involvement in the visual transformation of Bai tie-dyeing involves the entry of craft knowledge into design; influences on expressions from members' views; as well as the outcome of collaboration that supports future practices.

4.1 Joint Interpretation in Knowledge Compilation

Visual transformation of Bai tie-dyeing needs to compile knowledge scattered in daily practices into accessible and usable materials. It is not only about knowing the name of a motif or stitch technique and having dyeing experience but also the stories behind each motif and its context of usage. Practitioners' different areas of expertise mean that there will be some process of narration, documentation, comparison and verification during this knowledge compilation.

The depth of joint interpretation relies on how much knowledge contributors stay involved when compiling and using these materials. Accuracy of motif names, completeness of oral accounts and appropriateness of content for public access need to be confirmed by people who gave them. When motifs have different interpretations, systematic recording of contextual differences due to varying life experiences should be done. Community's participation in knowledge compilation enriches the materials while allowing subsequent design to respect their interpretations and agreement on use.

4.2 Shared Decision-Making in Design Collaboration

In visual design there is choice between motifs, colors, materials, and uses. Community participation's practical role shows up in such decisions. How much does community members' view get included in design discussions and result in change in proposals? Residents at its core, community participation coordinates broad dialogue and shared decision-making involving three groups – individuals (residents and heritage bearers), organizations engaged with intangible cultural heritage practice (businesses, research institutes, universities, industry associations) and government bodies that provide overall planning and institutional support. This coordination facilitates the safeguarding, transmission, and sustainable development of intangible cultural heritage.

The translation of participation in visual transformation needs to include specific tasks and decision-making stages. Discussion on samples allows both aesthetic proposal and technical feasibility to be assessed simultaneously. Keeping design versions and revision records will show how artisans' experience manifests as a visible contribution to design.

4.3 Continuous Feedback on Communication and Benefits

Continuity of community participation has a close relationship with reward on labor and opportunity provided by collaboration. In benefit sharing in Bai tie-dyeing there are remuneration for production and recognition of different kinds of work (teaching, compiling knowledge, contributing designs or attributions) in communications material. Businesses perform core functions: research, development and design; they assign some tasks like stitch-binding and sewing to residents. This mutually beneficial production model allows local participants to link their household life with cultural transmission.

5. Pathways for the Sustainable Activation of Bai Tie-Dyeing through Community Participation

The key for community participation in the visual transformation of Bai tie-dyeing is keeping a connection between providing knowledge, making decisions about visual expressions, and benefiting from it. This paper suggests four ways including jointly compiling visual knowledge, strengthening consultations regarding design, connecting daily use with intergenerational learning, and setting up feedback mechanism regarding benefits and production environment (Figure 5).

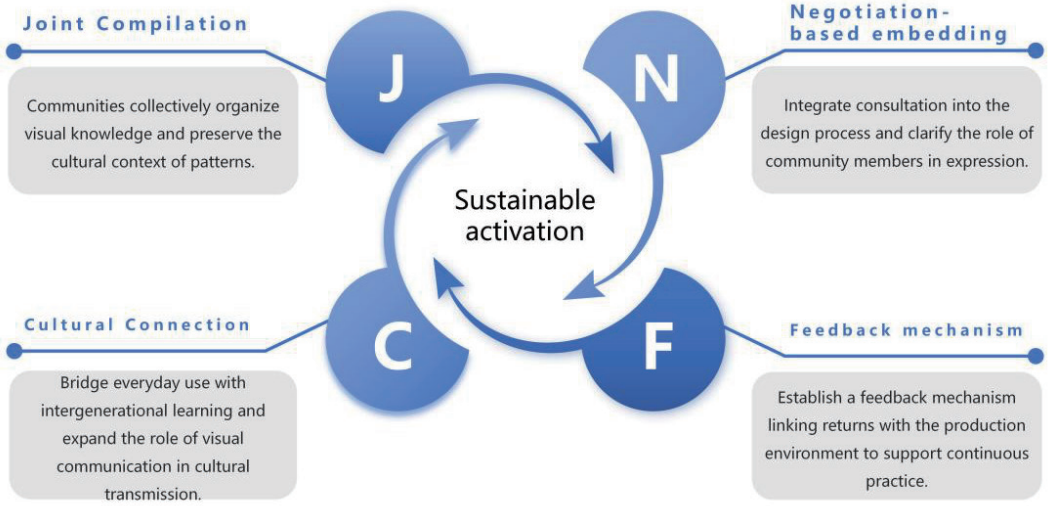


Figure 5 Pathways for the sustainable activation of Bai tie-dyeing through community participation

5.1 Joint Compilation

The joint compiling of visual knowledge within communities preserves the context of motifs. Local practitioners are the main source of knowledge; artisans, young learners and designers work together. An archive is created on textiles that have known provenance: images linked to local names, stitching techniques, occasions of use, oral interpretation, information about narrators. Maintaining this link between visual form and development processes.

Teaching or design reference may be provided by presenting the archive as motif cards. Cards could contain an image of the full motif, details of its texture, key production stages, short description. Samples of physical fabrics will show how the visuals differ when using different techniques. Young learners can take part in photography, audio recording and text compilation – those who possess craft expertise verify the content. Compiling the archive is therefore an opportunity for intergenerational exchange and learning.

5.2 Negotiation-Based Embedding

The inclusion of consultation into the design process will help understand community members´ role in visual expression. In order to bridge potential gaps between participation in production and design decision-making, community members and designers may discuss product uses, motif sources, and cultural explanations during the first planning stage; compare colors, compositions, materials, and production difficulties during the sampling stage; and check finished motifs, explanatory text, and maker information during the final approval stage. Discussion throughout each stage allows community views to shape the design´s development.

It is important that consultation includes materials which participants can view and touch. Designers may present physical samples, color swatches, and alternative compositions, whereas artisans may demonstrate stitching techniques and conduct dyeing trials to explain production requirements. Through discussion about samples, it becomes easier to link aesthetic requirements with craft judgments: e.g., whether a smaller motif still practical to stitch and bind, or how

changing the fabric affects edge effects, could be used as a starting point for joint refinement of a proposal.

5.3 Cultural Connection

Connecting everyday use with intergenerational learning strengthens the function of visual communication in its transmission. Visual communication of Bai tie-dyeing responds to particular user needs that connect product experience with cultural understanding. In developing products such as scarves and household textiles, consideration must be given to users´ need for size, comfort, durability, and care; these are refined based on use feedback. Product information identifies motifs, production stages, and makers so that users have access points to understand this craft through encountering the objects.

Community teaching may progress from introducing experiences to full production processes. Beginners learn about the craft by watching fabric samples, comparing textures, and practicing simple stitching techniques. Advanced learners can practice motif drawing, stitch-binding, dyeing, and finishing. When skilled enough, they can document oral accounts, design works, or assist with teaching. Linking course content with the visual archive turns isolated experiences into a continual learning process.

5.4 Feedback Mechanisms

Feedback about benefits and production environment supports continuous practice. Stable resources for sustainable activation. Organizers and participants can agree on rates of remuneration and payment procedures including production, sampling, teaching and knowledge compilation as part of a collaboration agreement. When remuneration is secured, negotiation of resources allocated to courses, tool maintenance or updating the visual archive based upon the operating capacity of the project may occur. Members must know where resources go. Investment levels depend on operating conditions and community preference.

Feedback about benefits should include distribution of opportunities across different members. Frequency of collaboration, payment records and learning opportunities could be recorded by task type with members´ views clarifying the needs of home-based producers, young learners and older artisans; this reveals differences in resource allocation that will guide adjustment to teaching, communication and dividing up the work. It represents the mutual supportive nature of safeguarding living heritage and community sustainable development.

6. Conclusion

In this paper we explore how Bai tie-dyeing can be visually communicated and sustainably activated through community participation. The colors, textures and motifs of Bai tie-dyeing are closely linked with production process, local experience and cultural interpretation. Community members contribute craft knowledge, recount motif stories and participate in design discussion providing content and technical knowledge for visual transformation. Four pathways have been proposed including joint compilation, negotiation-based embedding, cultural connection, and feedback mechanisms that link knowledge compilation, design application and support for transmission which provides insight and references for visual approach towards the transmission and activation of intangible cultural heritage.

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