

Sign, Structure, Labour: Layered Object Analysis of Three Design Mediations of Danzhai Miao Indigo Costume

Yixin Long*

School of Arts, Soochow University, No. 199 Ren'ai Road, Suzhou Industrial Park, Suzhou, Jiangsu 215123, China

* Corresponding author email: yixinovo88@gmail.com

Abstract

Miao batik from Danzhai County, Guizhou, belongs to China's first national inventory of intangible cultural heritage, yet ceremonial indigo costume is less often worn as everyday dress while its signs travel through fashion and tourism. This article asks a design question rather than a safeguarding one: when fashion branding, structural reconstruction, and community making intervene in this practice, which layer of design does each actually change—sign, structure, or labour—and what does each leave untouched? A layered object-analysis protocol is applied to three mediations: MsMIN's recasting of glossy indigo cloth in technical nylon; He Yang's reconstructions of rectangular, low-waste cutting; and a one-day workshop visit to the Mama Makes cooperative in Danzhai. The comparison shows a recurrent misalignment. Branding can move textile signs without the hand–mind encounter of wax-resist; structural ethics can be demonstrated at high density without paying village makers; community making can wage skill and invite visitors to draw wax, yet remains a locally bounded service. The article does not propose that the three form a collaborative ecology. It argues that treating them as interchangeable sustainable pathways conceals which layer of design has been changed.

Keywords

layered object analysis; cultural sustainability; craft; fashion mediation; Miao indigo dyeing; Danzhai

Introduction

Design interventions in living craft often announce themselves as sustainable because they keep a look, revive a cut, or generate a wage. Those three outcomes are not the same design act. A motif can travel on a knitted hoodie while no one in the locality of origin draws wax. A ceremonial jacket can be reconstructed with exemplary economy of cloth while village women are not paid to make it. A cooperative can wage skill and teach visitors to handle a wax pot while the garments that leave the workshop no longer carry the structural intelligence that once organised everyday dress. Confusing these layers produces an optimistic recipe: brand, aesthetics, and community, working together. This article treats that recipe as the assumption to be tested, not as the finding.

The empirical ground is Danzhai County, in Qiandongnan Miao and Dong Autonomous Prefecture, Guizhou Province. Miao batik (miao zu laran jiyi) was inscribed on China's first national inventory of intangible cultural heritage in 2006; Danzhai is one of the practice's principal localities (Song 2023). The 2003 UNESCO Convention frames such practices as living media of communication among communities rather than as relics to be stored (UNESCO 2003). Listing, however, does not by itself keep indigo costume inhabitable. Ceremonial dress thins as everyday wear; synthetic prints and bright chemical yarns occupy local markets; young consumers inhabit transnational taste regimes. Designers then face a familiar pair of failures. Repeating old silhouettes will not enter present life. Borrowing motifs as surface decoration empties the practice of the thought that once joined hand, cloth, and community (Walker 2011; Zhan et al. 2017). Between those failures, design has work to do. The work is not to choose a single correct pathway. It is to specify which layer of the designed object—and of the labour that produces it—has been changed.

The term Miao is used throughout in its official Chinese sense (Miaozu) and is geographically restricted, for the field material, to Danzhai. The communities in question belong principally to the eastern, Qiandong branch of Miao—often designated Hmu in linguistic scholarship—rather than to the Western Hmong of the Chuanqiandian dialect area, or to Hmong communities in Laos, Vietnam, Thailand, and the overseas diaspora. English-language writing sometimes treats Hmong as a simple equivalent of Miao; that equation is not adopted here. Where the argument turns to published reconstructions of Miao cutting beyond Danzhai, that wider nationality is named as such, and the cases are not presented as Danzhai practice.

Craft scholarship in this journal has already argued that locally based, context-specific making can be a direction for more sustainable manufacturing, and that design interventions fail when they parachute into artisan communities without remaining situated (Zhan et al. 2017; Mazzarella, Mitchell, and Escobar-Tello 2017). Research on design for social innovation has distinguished expert design from the diffuse design already performed by communities, and has warned that enabling solutions are not the same as extracting a look (Manzini 2015). Systemic design has shifted attention from isolated objects to circulating relations among people, materials, and institutions (Bistagnino 2011; Jones 2014). What remains underspecified, in the growing literature on Chinese craft and fashion mediation, is a method for reading garments and workshops with the same protocol, so that a brand lookbook, a lecture reconstruction, and a rural cooperative are not compared as if they were interchangeable tools.

This article therefore examines three existing mediations rather than proposing a studio collection of its own. It asks: (1) through what mechanisms do fashion branding, structural reconstruction, and community making each change—or fail to change—the living design of Danzhai Miao indigo costume; (2) which layer of design, sign, structure, or labour, does each mediation actually touch; and (3) what follows for design knowledge if the three do not automatically reinforce one another. The contribution is a layered object-analysis protocol and a misalignment claim: visibility, cutting ethics, and wages repair different damages, and in the material assembled here they do not recombine into a single sustainable pathway.

- 1. Which Layer Does Design Change?**
- 2. Cultural sustainability is not a motif kept**

Walker has argued that sustainable design cannot be reduced to cleaner materials or longer product life if the meanings that make objects worth keeping are stripped away (Walker 2011, 2014). Form, in this view, has to follow meaning rather than the stimulation of desire. Applied to indigo costume, the point is severe. A nylon surface that imitates the sheen of calendered glossy cloth (liangbu) may reduce some use-phase inconveniences of ceremonial dress, yet it does not carry the sequence of planting, fermenting, dyeing, beating, and wax drawing through which that sheen was historically produced. Calling the substitution sustainable because the polymer is said to be recyclable in its raw state mistakes a brand claim for a life-cycle argument, and mistakes a sign for a practice (Fry 2009). Zhan, Walker, Hernandez-Pardo, and Evans, writing in this journal on crafts in the Yangtze River Delta, likewise insist that craft's relation to sustainability lies in holistic making, context-based knowledge, and community-centred production, not in the quantity of goods issued under a heritage label (Zhan et al. 2017). Productivity is not the issue; quality of making and of livelihood is.

That distinction matters in China because ICH policy has strongly favoured systematic, often production-oriented, safeguarding (Song 2023). Systematic protection can thicken institutions around a craft. It can also license design to treat the craft as a repertoire of extractable signs. Zhu and Luo's account of relic elements re-created in product design describes exactly this extraction as a design method (Zhu and Luo 2013). The method is not illegitimate as fashion. It becomes a problem for cultural sustainability when it is reported as transmission.

- 3. Fashion mediation moves signs**

Barthes treated fashion as a system that converts garments into written and photographed signs (Barthes 1990). Kawamura's fashion-ology likewise locates fashion in the institutions that confer value, not only in cloth (Kawamura 2005). When a high-fashion collection dismantles Miao dress into elements and reassembles them, the decisive design operation is often decontextualisation: a sign is

lifted from ceremonial life and set to work inside another system of cut, price, and display. Public attention may increase. The hand–mind encounter of wax-resist may not. Design research needs a way to keep those two outcomes on different lines of the same analysis, rather than scoring both as innovation.

4. *Structure can travel without labour*

A second layer is construction. Cross's designerly ways of knowing include the reading of objects as evidence of how problems were framed (Cross 2006). Prown's material-culture method, though developed for historical artefacts, remains usable for designed garments: description, deduction, and speculation must be kept distinct, and what the object can show is not the same as what a community can still do (Prown 1982). He Yang's research on 'one piece of cloth' (yifang bu) argues that much Chinese, and specifically Miao, cutting proceeds from rectangular widths, with little waste, because cloth was hard-won from women's labour of spinning, weaving, and dyeing (He 2023). That ethic coincides with contemporary concerns for material restraint. Coincidence is not identity. A reconstruction in gambiered silk or machine-printed cloth can demonstrate the cut while changing the material system and leaving Danzhai wages untouched. Structure, in other words, can be taught as design knowledge without being practised as local labour.

5. *Labour, services, and the workshop*

A third layer is the organisation of making. Manzini distinguishes diffuse design, performed by everybody, from expert design, and describes enabling solutions in which communities collaborate toward more sustainable ways of living (Manzini 2015). Mama Makes, which invites visitors to draw wax, looks at first like such an enabling solution: consumers become makers, if only for an afternoon. Sanders and Stappers remind us that co-creation redistributes roles; it does not automatically redistribute power (Sanders and Stappers 2008). Mazzarella, Mitchell, and Escobar-Tello, again in this journal, warn against the designer's parachuting into textile artisan communities and call for situated services that remain meaningful locally (Mazzarella, Mitchell, and Escobar-Tello 2017). A study-tour in which students keep what they draw can be read as social innovation. It can also be read as a designed service that turns skill into an experience product. Both readings must remain available.

Systemic design, as developed by Bistagnino and extended by Jones and by Sevaldson's giga-mapping, would require that persons, materials, money, and authorisations be treated as one field (Bistagnino 2011; Jones 2014; Sevaldson 2011). This article does not claim to have mapped that field for Danzhai. A one-day visit cannot support a giga-map. What it can support is a workshop slice on the labour layer, set beside two object analyses on the sign and structure layers, under one protocol. That limitation is methodological, not rhetorical.

Methods

The research is qualitative and comparative. It does not treat the three cases as a statistical sample, nor as three tools already at work inside one Danzhai design field. They are three mediations of Miao indigo dress that designers and heritage actors currently cite as models of continuation. Only one of them was observed in Danzhai. The protocol is therefore used both to compare and to refuse false equivalence.

Layered object analysis asks the same three questions of each mediation. Sign: what identifiable marks of Miao or indigo practice are retained, and do they still connect to wax drawing, glossy cloth, or ceremonial use? Structure: what happens to loom width, seaming, the possibility of a continuous front-and-back plane, the destination of offcuts, and the substitution of cloth? Labour: who draws wax, who cuts, who prices, who appears in photographs, and where does money come from—orders, study-tours, subsidies, or retail markup? The questions are filled from what the object and the situation can show. Where they cannot be filled, the cell is left as a limit, not as a speculation dressed as a finding (Prown 1982).

Case selection follows contrast in layer, not typicality in Danzhai. MsMIN, founded in 2010 by the Xiamen-based designer Liu Min, is read as a high-fashion mediation of Chinese historical luxury. The garments discussed here belong to the Oilcloth / Modern Oilcloth series, released on 7 August 2024 as part of the brand's early-autumn 2024 collection, dated to the solar term Beginning of Autumn (liqiu). A coat from the series retailed at about 4,800 RMB. Published brand profiles document Liu Min's training at the London College of Fashion and the brand's circulation through Lane Crawford and later international retailers; they do not document a production relationship with Danzhai (Liu 2018). The author has further confirmed that Mama Makes, the only Danzhai workshop in this study, has no partnership, commission, co-branding, or supply relationship with MsMIN. Images are reproduced with permission of the brand. The case is therefore a contrast on the sign layer, not a pathway shown to be shaping Danzhai making, and not a collaborator of the cooperative analysed below. He Yang, former director of the National Costume Museum at the Beijing Institute of Fashion Technology, has since 2013 conducted fieldwork on traditional structure in southwest China and presented reconstructions in the Huaxia Yichang (Chinese Dress) lecture series in 2023 under the heading of yifang bu, 'one piece of cloth' (He 2023). The reconstructions analysed here concern a straight-collar, centre-opening Miao ceremonial jacket. They were not offered for sale. Lecture images are reproduced with permission. They are a contrast on the structure layer, not a Danzhai workshop practice. The Mama Makes (Mama zhizao) cooperative in Danzhai is the only situated case. Its principal is Zhang Yiping. Field material was gathered at its base on 23 October 2023: observation of wax drawing and teaching, photographic documentation, and one interview with a local woman textile artisan, aged forty-six, about livelihood before and after she entered the cooperative in 2019. Written informed consent was obtained for the interview, for publication of the consented livelihood passages, and for the workshop photographs. Secondary published sources locate the cooperative in a wider institutional landscape and are not treated as the author's observation.

The author's position is that of a visiting graduate student from outside the county, working in Mandarin, entering through the cooperative's public teaching space. The visit lasted one day. It is used as a workshop slice, not as an ethnography of Danzhai, and not as proof that a cultural-ecological system has been completed. After the visit, the author confirmed further organisational facts with the cooperative: study-tour fees enter the cooperative's accounts; students keep what they make and may alter motifs; income comes from government subsidy together with market orders; the cooperative supplies Guizhou Lanjin Dyeing Art Co., Ltd.; workshop production pauses during the busy farming season; and Mama Makes has no partnership, commission, co-branding, or supply relationship with MsMIN. Evidence for MsMIN and for He Yang's team is drawn from published collections, official brand presentation, and 2023 lecture documentation. Figures are cited in the order of first appearance. Income figures from a single life are not expanded into a regional average. In 2024 the author also recorded the cooperative's piece-rate schedule and local agricultural day rates, used below to locate the 2023 interview in a typical working year rather than to replace it.

Results and Discussion

6. *A Contemporary Design Predicament*

The difficulty of Danzhai Miao costume, for design, is not a single shock and does not require a civilisational origin story. It is a present split among wearing, showing, and selling.

First, ceremonial costume in many traditions has lost much of its everyday function. Beauty that cannot be worn to work, to school, or into a city street must find another vehicle. Elderly women in remote villages may still wear customary dress as a daily habit; younger residents often do not. The visual grammar of ritual Miao dress and the grammar of mass fashion no longer share a common ground, so the former cannot walk directly into the latter's market. Slow development of cut and cloth relative to urban Chinese fashion, and an aesthetic break, compound each other.

Second, transmission is internally contradictory. Entry into elite culture can keep a high density of design intelligence—cloth substitution, structural demonstration, editorial photography—but the public is small and the cost of circulation is high. Entry into popular life requires breaking and remaking cloth, cut, and pattern so that many people can accept the result. Either route demands technical change. A

practice that refuses all change will not be conserved; it will be abandoned. The design risk is the opposite refusal: to keep the look and discard the thought that once arose from the meeting of person, material, and locality (Walker 2011). In local markets, batik is already displaced in many settings by bright chemical threads, acrylic yarns, or machine prints. If designers merely insert indigo into that technical stream, they do not continue a craft. They overwrite it.

Third, China's ICH apparatus and rural creative industries now offer ready infrastructures for the overwrite: inventories, inheritor titles, study-tours, live-stream retail, and designer collaborations (Song 2023). Those infrastructures are not, by themselves, the problem. They become a design problem when every intervention is counted as safeguarding. The three mediations that follow are read against that risk, with attention to which layer each actually changes.

7. *Sign: Fashion Mediation without a Place of Making*

MsMIN has, since 2010, taken Chinese cultural sources as a well of form and has sought to present historical luxury through refined contemporary design. In the Oilcloth / Modern Oilcloth series, released on 7 August 2024 for early autumn, traditional Miao dress is dismantled into elements and reassembled. The decisive move is not a printed motif but a transformation of cloth. Designers work from the visual memory of Miao glossy indigo cloth (liangbu)—a calendered, light-catching surface that, in local dress, functions as a recognisable sign of indigo skill. The collection substitutes an Italian nylon, one hundred per cent, that is light, smooth, described by the brand as recyclable in its raw material, and finished for water resistance and calendering (Figures 1 and 2). A coat from the series was priced at about 4,800 RMB. That sum is already about one-third of Danzhai's 2023 rural per capita disposable income of 14,082 RMB (Danzhai County Bureau of Statistics 2024). The sign of glossy cloth remains; the performance of the garment, and its public, change. From the standpoint of fashion as a sign system, the operation is decontextualisation: a sheen produced by repeated dyeing, beating, and finishing is recoded as a technical textile inside another system of cut, price, and display (Barthes 1990; Kawamura 2005).



Figure 1. MsMIN Oilcloth / Modern Oilcloth padded jacket, recasting the sheen of Miao glossy cloth in technical nylon. Early autumn 2024. Source: MsMIN. Reproduced with written email permission of the brand.



Figure 2. MsMIN Oilcloth / Modern Oilcloth jacket and wide trousers in waterproof Italian nylon. Early autumn 2024. Source: MsMIN. Reproduced with written email permission of the brand.

The cut of the series also borrows a Miao intelligence that is easy to miss if one looks only at pattern: a complete garment can be obtained from relatively whole widths of cloth by simple cutting and seaming. That economy is not poverty of invention. It is an ethic of restraint, close to the insistence on using things without waste that He Yang isolates as *yifang bu* (He 2023). In the layered protocol, this is a structural borrowing attached to a sign conversion. It does not return labour or orders to Mama Makes: the two organisations have no partnership. On published evidence, no other Danzhai production relationship is documented either. In another series of batik-inspired knitwear, motifs are broken apart, screened, and rebuilt so that they can leave their original carrier and move across media (Figures 3 and 4). Floral signs that once sat on ceremonial cloth are enlarged onto a hooded ground. The brand thus uses a modern design language to recast cultural signs. The gain is real: public attention to indigo culture can increase, and a rural craft can enter mainstream aesthetic discussion. The labour cell, however, stays empty. Who drew the original wax, and who owns the motif, cannot be read from the lookbook. What can be stated more firmly is narrower: MsMIN and Mama Makes are not collaborators.



Figure 3. MsMIN knitwear with enlarged batik-derived floral signs moved onto a hooded ground. Source: MsMIN. Reproduced with written email permission of the brand.



Figure 4. MsMIN batik sweater in an editorial presentation, with floral signs detached from ceremonial cloth. Source: MsMIN. Reproduced with written email permission of the brand.

The same method is open to a serious objection from cultural sustainability. Transmission is not exhausted by the recombination of patterns (Walker 2014; Zhan et al. 2017). Wax-resist dyeing is a practice in which mind and hand meet on cloth within a local ecology of skill. If that encounter is dropped, public knowledge of batik may stop at a portable emblem (Zhu and Luo 2013). High-fashion positioning further limits the radius of the work: a coat at about 4,800 RMB does not become ordinary dress in Danzhai, where the same year's rural per capita disposable income was 14,082 RMB. The brand's claim that the nylon is recyclable in its raw material cannot be treated as a completed environmental argument. The substitution removes plant indigo, beeswax, and calendered cotton from the object; it introduces a fossil-based fibre whose microplastic shedding and end-of-life recovery are not evidenced here. Fry's warning against treating technical enablement as ethical completion applies directly (Fry 2009).

None of this makes the collection trivial as fashion. Breaking the ceremonial frame is one of the few ways Miao dress obtains visibility in contemporary editorial culture. The layered analysis simply refuses to count that visibility as a change in labour or as a verified change in Danzhai making. On present evidence, MsMIN is a contrast case in which the sign layer is highly worked, the structure layer is partly quoted, and the labour layer is not shown to be local. The collection post-dates the October 2023 workshop visit; it is read as a contemporary mediation of Miao indigo signs, not as an event in that day's field. If later research can document orders, co-design, or attribution to Danzhai artisans, the labour cell should be rewritten. Until then, the honest description is fashion mediation, not a Danzhai pathway.

8. *Structure: An Ethic of Cloth without a Local Wage*

In a 2023 lecture in the Huaxia Yichang series, He Yang argued that Miao cutting contains an ethic of using cloth to the full (He 2023). The point is not a folk curiosity. It is a view of making in which materials are treated with restraint because they were produced through long, often gendered, labour: planting, spinning, weaving, dyeing. 'One piece of cloth' names a construction logic in which rectangular widths are pieced with minimal cutting, and in which front and back may remain a continuous plane. The same structural family can, through wrapping, tying, and proportion, dress different bodies. Decoration then carries distinctions of group, gender, and marital status that the cut itself does not have to invent each time. Li and He have documented related square constructions in Miao poncho-style garments (Li and He 2018). This is design knowledge of a high order. It is also, in origin, a labour-saving method for women who had to clothe a household without being professional cutters (He 2023).

In reconstructions of the straight-collar, centre-opening ceremonial jacket, He Yang's team has kept the intelligence of single-cut construction and of minimal cutting with extensive piecing (Figures 5 and 6). Traditional structure is held; the cloth itself may change. Gambiered silk (*xiangyunsha*) and machine-printed grounds, more familiar to a contemporary public, are introduced so that an old silhouette can re-enter ordinary sight. The reconstructions were not offered for sale. The layered protocol records this clearly. Structure: strongly held. Sign: mixed, because machine-printed grounds can carry pattern without wax. Labour: not Danzhai labour, and not a market wage even for the reconstructed garments. *Xiangyunsha* is itself a demanding dyed and coated silk from another regional system. Substituting it for indigo-resist cotton demonstrates the cut while replacing the material ecology in which Danzhai batik is thinkable. The reconstruction is therefore an ethical demonstration of making, not a continuation of Danzhai making.



Figure 5. Traditional Miao straight-collar, centre-opening ceremonial jacket, laid flat to show panel construction. Source: lecture documentation, Huaxia Yichang, 2023. Reproduced with permission.



Figure 6. Contemporary reconstructions that retain a straight-collar Miao logic while changing cloth and motion. Source: He Yang team / lecture documentation, 2023. Reproduced with permission. The garments were not offered for sale.

The extreme economy of Miao cutting grew from a care for cloth. That origin coincides with contemporary sustainable design's interest in waste (Walker 2014; Zhan et al. 2017). Coincidence can be a resource. Innovation that begins from structure rather than from print is better placed to hold a cultural root and to return design to making rather than to styling. The garments that result still function as cultural carriers for those who can read them. Their prices often remain high, and the pleasure they offer is aimed at clients who can read brand value and cut together. The mass public may not buy. That fact does not cancel the circulation of the idea. It does, however, keep the labour cell empty for village artisans. Without feedback into local livelihood and place-based teaching, this

mediation remains an ethical demonstration detached from living transmission on the ground. It should be valued as design research and teaching. It should not be listed, without further evidence, among pathways currently shaping Danzhai indigo practice.

9. *Labour: A Workshop Slice at Mama Makes*

If sign and structure can travel without wages, the remaining question is whether a local organisation of making can hold labour without being reduced to souvenir manufacture or to a tourism service. Mama Makes (Mama zhizao) is a national programme initiated in 2016 by the China Women's Development Foundation with partners in social enterprise, intended to connect low-income women makers with design and markets across several crafts and provinces (Zhang 2020). In Danzhai, the batik node is led by Zhang Yiping, a Miao inheritor of batik who returned from migrant factory work, organised a cooperative, and later operated Guizhou Lanjin Dyeing Art Co., Ltd. under a company-plus-cooperative-plus-household model (CYOL 2020; Zhang 2020). The cooperative supplies the company. Those published facts locate the workshop. They are not a substitute for the 23 October 2023 visit, and they do not imply a fashion-brand partnership: Mama Makes and MsMIN have no cooperative, commission, or co-branding relationship.

On that day, at the Mama Makes base in Danzhai, batik was treated as a local cultural system involving artisans, a teaching studio, study-tour programmes, and rural income. Senior local artisans taught wax drawing (Figure 7). Visitors and students were given space to draw wax themselves and might keep what they made (Figure 8). Study-tour fees enter the cooperative's accounts; students may alter the motifs they draw. Consumers were not left only in the position of passive receivers. Producers and visitors stood, for the duration of the class, in a two-way relation. In Manzini's terms, this is close to an enabling solution: expert and non-expert design meet in a collaborative act (Manzini 2015). In Mazzarella, Mitchell, and Escobar-Tello's terms, it is also a service that must be judged as situated or as parachuted (Mazzarella, Mitchell, and Escobar-Tello 2017). A one-day visit cannot settle that judgement for the whole enterprise. It can describe what the service did in the room: it turned aesthetic recreation into an act rather than only a purchase, and it placed heated wax pots on shared tables where students' hands followed artisans' hands.



Figure 7. Artisans at the Mama Makes workshop in Danzhai drawing wax-resist motifs. Source: photograph by the author, 23 October 2023. Published with written informed consent.



Figure 8. Students practising wax drawing at Mama Makes, with heated wax pots on shared tables. Source: photograph by the author, 23 October 2023. Published with written informed consent.

The same afternoon, the author interviewed a local woman textile artisan, aged forty-six. She is not in the ordinary home-based group that takes mainly simple and medium orders. She takes more technically demanding work—large batik yardage, dense motifs, and costume parts of the kind Table 2 classifies as complex, and which only a skilled core of embroiderers can accept. She said that she had previously worked in farming, earning about 200 to 300 RMB a month, with little stability. After joining the cooperative in 2019 she could earn 3,000 to 4,000 RMB in a month when the workshop was running. Workshop production pauses in the busy farming season. Pay is piece-work, not a fixed monthly wage; the 3,000–4,000 RMB figure is a converted working-month total for this higher-skill load. Gender is not incidental. The makers in the room were women; wax drawing is a women's skill in this locality; the programme's name addresses mothers.

A converted month of 3,000–4,000 RMB is consistent with Table 2's complex tier, not with the ordinary home-based band. Local agricultural day labour in 2024 paid about 80–100 RMB a day for ordinary field work (weeding, planting, general harvest), 90–100 RMB for chilli and fruit picking, and 100–150 RMB, highly variable, for skilled spring-tea picking. Ordinary women farmers—the most common group, middle-aged and older—assemble only about 60–90 agricultural days a year, fragmented across spring tea in March–April and chilli, blueberry, or medicinal-herb work in June–September, and further cut by rain on Danzhai's slopes. Labourers who are called first to commercial bases may reach 100–130 days, still far short of 200. Sixty to ninety days at 80–100 RMB would give about 4,800–9,000 RMB a year from agricultural casual work. The interviewee's earlier 200–300 RMB a month from farming (about 2,400–3,600 RMB if counted across a year) is therefore a low, unstable cash return from household plots, not the 2024 base day-rate, and not Danzhai's official rural per capita disposable income of 14,082 RMB in 2023 (Danzhai County Bureau of Statistics 2024).

Mama Makes itself pays by the piece. A 2024 inquiry at the cooperative distinguished three product tiers (Table 2). Ordinary stay-at-home mothers, the main workforce, rarely work a full eight-hour day. Effective handicraft time is usually three to five hours; farming days compress it further. Most women mix simple and medium orders.

Table 2. Piece rates and daily output at Mama Makes, Danzhai, 2024 inquiry. Home-based figures assume housework; they are not eight-hour workshop shifts.

Tier (2024)	Typical goods	Piece rate (RMB)	Full 8-hour day	Home-based day (with housework)	Converted daily return (RMB)
Simple	Sachets, small ornaments, easy embroidered slips, bookmarks; main work for ordinary women	8–22 / piece	3–6 pieces	1–3 pieces	8–66; commonly 30–50
Medium (order mainstay)	Batik squares, simple scarves, small bags, simplified motifs	30–70 / piece	1–2 pieces	0.5–1 piece (half-days)	15–70
Complex (skilled core only)	Large batik yardage, dense Miao embroidery, traditional scarves, costume parts	100–300+ / piece	Cannot finish one piece in a day (1–3+ days)	2–5 days per piece	20–100

On that schedule, an ordinary woman mixing simple and medium work, at about 60–100 RMB of labour a day across 80–140 effective handicraft days, takes home about 4,800–14,000 RMB a year from the cooperative. The upper bound meets Danzhai's 2023 rural per capita disposable income; the lower bound does not. The forty-six-year-old interviewee belongs to the skilled core. Complex pieces pay 100–300 RMB or more but take one to three days, or two to five days at home; a converted working month of 3,000–4,000 RMB implies sustained complex work rather than the common home-based day of 30–50 RMB. The two figures describe two positions in the same piece-rate system: typical stay-at-home mothers on simple and medium orders, and a smaller group who can still take traditional, high-skill cloth. They should not be averaged. Even the skilled month, however, does not approach the 4,800 RMB retail price of a single MsMIN oilcloth coat unless several such months are stacked; and He Yang's reconstructions, which hold that skill as cut, were not for sale at all.

Figure 9 sets out only the flows the author can confirm. Materials (wax, cloth, dye pots) meet women artisans in piece-work across three product tiers. Cloth products leave for sale and teaching; they are not sold as full costume replicas. Typical home-based return in 2024 is about 30–50 RMB a day and 4,800–14,000 RMB a year, pausing when farming peaks. Study-tour fees enter the cooperative, whose principal is Zhang Yiping; students keep their work and may alter motifs. Income is a mix of government subsidy and market orders. The cooperative supplies Guizhou Lanjin Dyeing Art Co., Ltd., with livestream retail as an additional channel. The diagram's bottom band is the misalignment claim: agricultural day labour competes for the same calendar; Mama Makes has no partnership, commission, or co-branding with MsMIN, so the Oilcloth sign conversion does not enter this workshop as orders or wages; and He Yang's unsold reconstructions were not used here (Bistagnino 2011; Jones 2014; Sevaldson 2011).

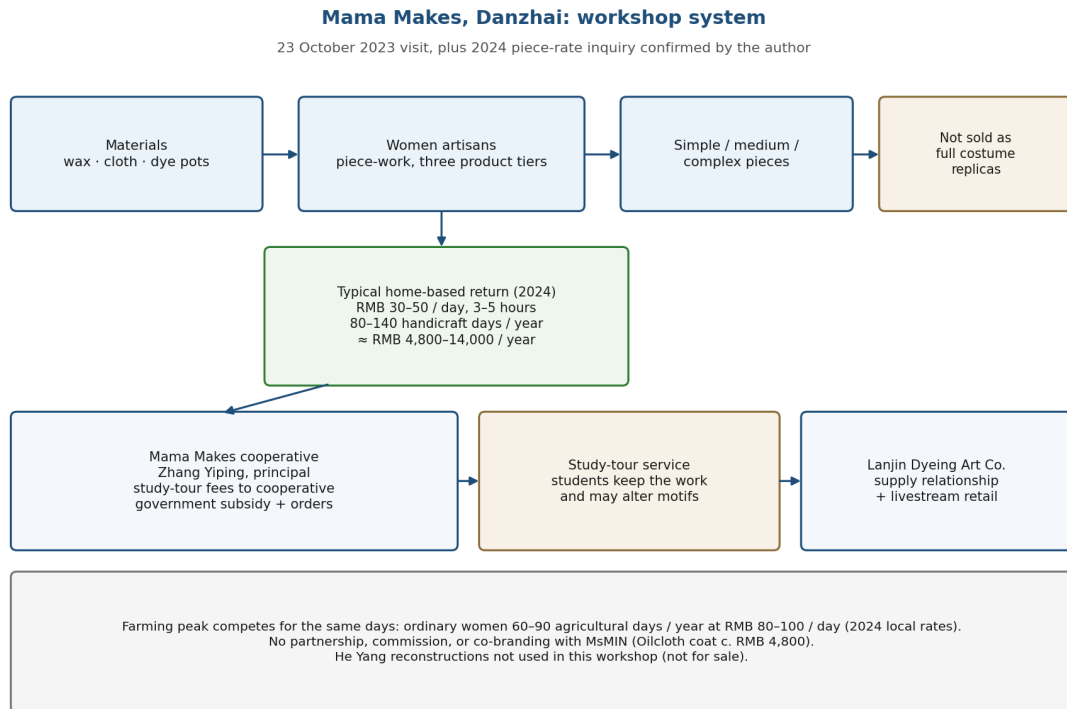


Figure 9. Confirmed material, labour, teaching, and market flows at Mama Makes, Danzhai. Piece-rate and farming-day figures: 2024 inquiry. Bottom band: no MsMIN partnership; He Yang reconstructions not used in the workshop. Source: drawn by the author.

Sanders and Stappers's caution applies. Visitors who draw wax are co-creators of an experience, not automatically co-authors of the craft's future (Sanders and Stappers 2008). If the cooperative's products slide toward souvenirs emptied of structural thought, the labour gain will have been real and still incomplete. The workshop slice shows that culture and livelihood can be organised as one process in a room in Danzhai. It does not show a commercial relationship with MsMIN, nor that this process already includes high-fashion sign conversions or the structural demonstrations of the academy.

10. Misalignment rather than a Single Path

Read together, the three mediations are not interchangeable tools and are not, on present evidence, three positions inside one local heritage field. They have different strengths and different relations to sign, structure, and labour (Table 1). High-end branding works the sign layer with great fluency and can quote structure; it does not show local labour. Structural reconstruction works the ethics of cloth and cut; it does not wage Danzhai makers and it may change the material system. Community making wages and teaches; it is territorially bounded, and in the slice observed it did not carry the full structural lesson of costume. Sustainable design for Miao batik is therefore not a matter of choosing one path, nor of declaring a division of labour in which community is foundation, aesthetics soul, and brand window. That triad would be a plan for a system that has not been evidenced. What has been evidenced is misalignment.

Table 1. Layered object analysis of three design mediations of Miao indigo costume.

Mediation	Relation to Danzhai	Sign layer	Structure layer	Labour layer	What remains untouched
MsMIN (fashion branding)	Contrast: no documented Danzhai production; no partnership with Mama Makes	High: liangbu sheen and batik florals recoded in 2024 Oilcloth / Modern Oilcloth	Quoted: whole-width cut, simple seaming	Not shown as local; coat c. RMB 4,800	Wax-resist encounter; village wage; everyday wear
He Yang team (structural reconstruction)	Contrast: southwest Miao research, not a Danzhai workshop	Mixed: silhouette held; print may replace wax	High: yifang bu, continuous planes, little waste	Academic labour; reconstructions not for sale	Danzhai livelihood; indigo-resist material ecology
Mama Makes (community making)	Situated: 23 Oct. 2023 slice; Zhang Yiping principal	Teachable motif on simple/medium goods; students may alter; ceremonial grammar thinned	Not the lesson observed	Piece-work, 3 tiers; typical home 30–50 RMB/day (4,800–14,000 RMB/year); skilled core (interview) 3,000–4,000 RMB in a working month on complex pieces; farming-peak pause	Reach beyond locality; costume structure; no MsMIN partnership; He Yang reconstructions unused here

Two implications follow for design knowledge. First, technical enablement is layer-specific. Nylon that holds a sheen, silk that holds a silhouette, and a study-tour that holds a wax pot each enable something. None enables the whole practice. Designers who report a layer change as a system change overwrite the craft in the very language of saving it (Fry 2009; Walker 2011). Second, feedback among layers is an empirical question. It would count as feedback if a brand commissioned Danzhai wax drawing rather than only quoting its signs; if reconstructions were taught in the cooperative as well as in lectures; if study-tour fees and product orders paid for structural costume, not only for motif souvenirs. Those mechanisms are not in place between Mama Makes and MsMIN, and they were not observed with He Yang's reconstructions. They remain possible as future design work. Possibility is not a finding.

The evaluation criterion offered at the end of many heritage-design essays—whether makers still recognise themselves in the cloth that travels—can now be used rather than merely quoted. On the MsMIN garments, Danzhai makers are not shown as authors. On He Yang's reconstructions, makers are present as a historical intelligence of cutting, not as living wage-earners in Danzhai. In the Mama Makes room, makers are present, paid, and teaching, but the cloth that visitors take away is often a student exercise. None of the three mediations, in this material, fully meets the criterion. That is a more precise result than a call for collaboration.

Conclusion

Set against the thinning of everyday indigo dress and the thickening of fashion and tourism around its signs, this article has taken Danzhai Miao batik as a case of layered design change. Three questions organised the argument: which mechanisms of branding, reconstruction, and community making actually operate; which layer—sign, structure, or labour—each touches; and what follows if the three do not recombine. The discussion has not read the three as complementary recipes. It has read them as mediations that repair different damages and that, in the evidence assembled here, remain misaligned.

Three conclusions follow. First, living transmission of costume cannot be separated from present life, but present life has more than one design layer. A form that cannot be inhabited, paid for, or taught will not be kept; a form that is only photographed, only reconstructed, or only experienced for an afternoon is kept as something else. Second, the three mediations are unequally situated. Only Mama Makes was observed in Danzhai, and only as a one-day slice. MsMIN and He Yang are contrastive

design analyses; MsMIN is not a partner of Mama Makes. Collapsing the three into pathways currently shaping Danzhai would repeat the extraction the article criticises. Third, the substance of sustainable design here is not a balance declared in advance among community, aesthetics, and brand. It is the discipline of saying which layer has been changed. Designers who wish to connect the layers will have to show the connecting mechanism—orders, teaching, attribution, wages—rather than the hope that visibility, ethics, and livelihood will support one another because they ought to.

The layered object-analysis protocol is offered as a working method for other craft mediations, not as a closed programme. Its test, in Danzhai as elsewhere, remains whether makers still recognise themselves—and can still make a living—in the cloth that travels. On present evidence they do so most nearly in the workshop, least of all in the lookbook, and only as historical intelligence in the reconstruction. That distribution is the article's finding.

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13. Ethics statement

The 23 October 2023 visit comprised observation in a public teaching workshop and one conversation with a woman textile artisan, aged forty-six, who takes technically demanding piece-work, about livelihood. Informed consent was obtained for the interview of 23 October 2023 and for publication of the workshop photographs (Figures 7 and 8). The interviewee reviewed the Chinese wording of the passages concerning age, skill tier, piece-work, the farming-season pause, and the income range, as well as the photographs, and gave written consent to their publication. Identifying details beyond age, gender, skill level, and the consented income range are withheld. Written informed consent for publication of identifiable details was also obtained from the cooperative principal on the Taylor & Francis consent-to-publish form. Formal institutional ethics review was not obtained for this short visit; the author treats that as a remaining limitation for further fieldwork. Income figures are reported as a single life-history and are not generalised to ordinary home-based workers. Signed consent forms are retained by the author and are available to the journal editorial office on request.

14. Figure permissions

Figures 1–4 are reproduced with written permission of MsMIN, obtained by email; the correspondence is retained by the author and is available to the journal editorial office on request. Figures 5–6 are reproduced with permission from the Huaxia Yichang lecture documentation / He Yang team. Figures 7 and 8 are the author's photographs, published with the written informed consent described in the Ethics statement. Figure 9 is drawn by the author.

15. Data availability statement

Interview notes are not deposited in a public repository in order to protect the interviewee. Reasonable requests to the author will be considered in anonymised form.

16. Use of generative AI

Generative AI assistance was used in restructuring an earlier draft, integrating English-language design-research literature, and standardising Chicago author-date references. The author reviewed

the manuscript and remains responsible for the accuracy of field observations, case descriptions, citations, and all statements of consent and permission.

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Authors

Yixin Long is a graduate student at the School of Arts, Soochow University. Her research concerns folk art and the innovative transmission of cultural heritage, with particular attention to how minority textile practices can enter contemporary life without being reduced to portable ornament. This paper grows out of fieldwork in Danzhai and from a longer interest in the meeting of Eastern design ethics with present-day making.