

THE RESILIENCE AND EVOLUTION OF HAND-BLOCK PRINTING AND AJRAK CRAFTSMANSHIP IN SINDH, PAKISTAN: AN ETHNOGRAPHIC STUDY

Asra Jan Muhammad

Assistant Professor, Department of Textile Design, SABS University of Art, Design & Heritages, Jamshoro

asra.jan@sabsu.edu.pk

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Corresponding Author: *

Asra Jan Muhammad

Abstract

This ethnographic study investigates the current state of hand-block printing in Sindh, focusing on Ajrak—a traditional textile integral to Sindhi cultural identity. Through field surveys, interviews, and structured questionnaires with eleven artisans across Bhitshah, Sehta, and Khyber, the research highlights the craft's precarious status amid mounting challenges. Key issues include severe water shortages, rising material costs, and competition from machine-made imitations. The study also documents a significant reduction in traditional Ajrak patterns, with only simplified designs remaining in regular production. Despite these pressures, artisans demonstrate adaptive resilience by diversifying into contemporary products such as block-printed apparel and home textiles. The paper argues for urgent, multi-faceted interventions—including infrastructure support, market protection, and cultural advocacy—to safeguard this intangible cultural heritage. This research contributes to broader discourses on craft preservation, sustainable livelihoods, and the dynamics of traditional knowledge in a globalized economy.

INTRODUCTION

Situating Ajrak in the Tapestry of Sindhi Culture and Global Craft Discourse

The province of Sindh, cradled by the Indus River, boasts a cultural legacy as rich and layered as its alluvial plains. This legacy is profoundly expressed through its material culture, particularly its handicrafts, which serve as non-textual archives of history, identity, and aesthetic philosophy (Bilgrami, 1990; Nadiem, 2002). Among these, textile arts hold a place of distinct honor, with hand-block printing representing one of the oldest and most sophisticated surface ornamentation techniques. This craft transcends mere decoration; it is a ritual of skill, a language of symbols, and a testament to a sustainable, human-centric mode of production that has thrived for centuries.

The apogee of this craft is the Ajrak—a unique, double-sided, resist-printed and dyed textile, traditionally in deep indigo, crimson, and white. More than a cloth, Ajrak is a cultural cipher. It functions as a turban, a shawl, a bedspread, and a gift of supreme respect. Its geometric and floral patterns—chakki (star/wheel), kakar (trefoil), and intricate borders like pai-wari wat—are not arbitrary but are believed by many artisans to be cosmological maps, echoing the Sindhi worldview and its connection to the natural and spiritual realms (Askari & Crill, 1997). The origin of Ajrak is shrouded in antiquity and debate. Some scholars trace block printing itself to China, while others point to archaeological finds in Egypt. Notably, local ustads (master artisans) often cite

the famous statue of the Indus Valley Civilization's "Priest-King" from Mohenjo-daro, interpreting the trefoil pattern on his shawl as an early kakar motif, thus claiming a pedigree stretching back over 5,000 years (Bilgrami, 1990, p.19). While this claim is archaeologically contested—Bilgrami (2006) suggests the shawl might be embroidered or appliquéd—it underscores the profound cultural and historical weight Sindhis invest in the Ajrak. However, this living heritage stands at a critical juncture in the 21st century. The forces of globalization, industrialization, and shifting economic paradigms have precipitated a severe decline in traditional craft ecosystems worldwide (Greenhalgh, 1997). Sindh is no exception. From a thriving industry with hundreds of centers, anecdotal and journalistic evidence points to a dramatic contraction. For instance, where Matairi once had 70 Ajrak-makers (Duarte, 1982), and Sukkur over 100, only a handful remain today (Daily Kawish, 2018). This decline represents more than an economic loss; it signifies the erosion of indigenous knowledge systems, the disintegration of community-based livelihoods, and the fading of a unique aesthetic language. This study, therefore, is driven by urgent ethnographic and preservationist imperatives. Its primary objectives are multifaceted: to meticulously document the current technical and socio-economic realities of hand-block printing and Ajrak-making in Sindh; to diagnose the root causes of the craft's decline through the lived experiences of its practitioners; to analyze the tangible and intangible impacts of mechanized alternatives; and to record the innovative, adaptive strategies—such as contemporary product diversification—employed by artisans for survival. Ultimately, this research aims to amplify the voices of the artisans, translate their struggles and aspirations into an academic and policy-oriented discourse, and propose a viable framework for safeguarding this invaluable component of Pakistan's, and indeed humanity's, intangible cultural heritage.

LITERATURE REVIEW

From Historical Ethnography to Theories of Craft Endangerment

The study of Sindhi textiles, and Ajrak in particular, exists within a niche but insightful body of literature. Seminal works by Noorjehan Bilgrami, notably *Sindh jo Ajrak* (1990) and *The Craft Traditions of Pakistan* (2006), provide foundational ethnographic and technical accounts, offering detailed descriptions of processes, motifs, and the craft's cultural context. Bilgrami's work is indispensable for understanding the craft's traditional form and its symbolic resonance. Similarly, Duarte's (1982) survey, *The Crafts & Textiles of Sindh & Balochistan*, offers a valuable historical snapshot of the craft's scale and distribution in the late 20th century, serving as a crucial baseline against which current decline can be measured.

Beyond region-specific studies, the research engages with broader theoretical frameworks concerning craft and heritage. Kopytoff's (1986) concept of the "cultural biography of things" is relevant in tracing how the social life and meaning of Ajrak have transformed from a sacred, identity-laden object to a commodity in a modern market. The tension between authenticity and adaptation is a central theme in heritage studies (Smith, 2006). This study investigates how artisans navigate this tension—whether the "authentic" Ajrak is defined by its traditional materials and processes (natural dyes, specific cotton, 16-step method) or by its continuous evolution and relevance.

The threat of mechanization is a global narrative in craft studies. The work of scholars like Wilkinson-Weber (1999) on Indian embroidery highlights how machine-made versions can de-skill artisans, depress prices, and confuse consumers about value. This study applies this lens to the Sindhi context, examining not just economic displacement but also the cultural dilution that occurs when machine-printed "Ajrak" severs the link between maker, process, and meaning.

Finally, the research is situated within discourses on sustainable development and ethical consumption. The hand-block printing craft, with its use of (historically) natural dyes and manual

labor, presents an alternative model of "slow fashion" (Fletcher, 2010). Its potential revival intersects with global movements advocating for environmentally sustainable and socially equitable production systems. This literature review thus bridges local craft specificity with global debates on cultural sustainability, economic viability, and heritage preservation in a rapidly modernizing world.

METHODOLOGY

An Immersive, Qualitative Engagement with Artisan Communities

To capture the nuanced realities of the craft, this study adopted a qualitative, phenomenological research design centered on the lived experiences of the artisans themselves. The methodology was built on three complementary pillars, ensuring both breadth and depth of understanding.

3.1. Field Survey and Site Selection:

A purposive sampling strategy was used to select field sites known as surviving hubs of Ajrak production. The towns of Bhitshah, Sehta, and Khyber were identified through prior scholarly work and local networks. Bhitshah, home to the shrine of the Sufi poet Shah Abdul Latif Bhittai, is a cultural epicenter and has become a refuge for artisans from other areas. Visiting these workshops was not merely observational; it was an immersive experience crucial for understanding the spatial, sensory, and logistical realities of the craft—the smell of dyes, the sound of blocks hitting fabric, the physical strain of the work, and the often-dilapidated state of workspaces.

3.2. In-Depth, Semi-Structured Interviews:

The core of the data collection involved in-depth interviews with eleven key informants: nine Ajrak-makers/block-printers and two of the last remaining specialist block-makers (poregars). The interview protocol was semi-structured, allowing for consistency across participants while permitting flexibility to explore unique narratives. Conversations, conducted in Sindhi, spanned 60-90 minutes each and covered several thematic areas:

- **Genealogy and Training:** Family history in the craft, intergenerational knowledge transfer.
- **Technical Process:** Detailed steps, changes in materials (fabric, dyes, blocks), time investment.
- **Economic Reality:** Pricing, market channels, seasonality, income stability.
- **Perceived Challenges:** Immediate practical problems and long-term threats.
- **Cultural Meaning:** Personal and community significance of Ajrak.
- **Adaptation and Innovation:** Responses to market changes, development of new products.
- **Future Visions:** Hopes and fears for the craft and for their children.

3.3. Structured Questionnaire:

To supplement the rich qualitative data and enable basic quantitative analysis for trends, a structured questionnaire was administered to the nine Ajrak-makers. This instrument gathered specific, comparable data on: years in operation, types of Ajrak and products made, dyes used, production time, formats and patterns produced, pricing, the impact of machine printing, and the identification of major problems through fixed-response and open-ended questions.

3.4. Ethical Considerations and Positionality:

The researchers approached the community with respect, acknowledging the artisans as experts and custodians of knowledge. Informed consent was obtained, and anonymity was offered, though many artisans wished to be identified. The researchers' positionality—as academics from a local university with a design focus—facilitated access but also required reflexivity to avoid imposing external aesthetic or commercial judgments on the artisans' realities. Data analysis involved thematic coding of interview transcripts and descriptive statistical analysis of questionnaire responses, triangulating findings to build a robust, multi-faceted picture.

RESULTS

The Voice of the Craft - Data from the Field

The field research yielded a wealth of data, painting a detailed portrait of a craft community grappling with tradition and transition.

4.1. Artisan Demographics and Historical Continuity:

The artisan community remains largely endogamous, with most Ajrak centers owned by individuals from the Soomra community, indicating a caste or kin-based specialization. The craft exhibits deep historical roots: 78% of respondents stated their business was initiated by their great-grandfathers or earlier, affirming its identity as a multi-generational family business. Current experience levels are significant: 33% have been working for 21-30 years, and another 33% for over 30 years, representing a repository of embodied knowledge. However, this continuity is under strain. While 56% of artisans reported their children are likely to continue the craft, a sobering 33% stated that no family member is interested in succession, citing the craft's hardships and uncertain future.

4.2. The Evolving Craft: Techniques, Materials, and Products:

- **Ajrak Types:** Teli Ajrak (considered the highest quality, using oil in its process) is made by 88% of artisans. Sabuni (using a soda ash solution) is made by 66%, while more specialized types like Kori (featuring shell work) and intricate formats like Hashe-wari or Kashi-wari are produced by a dwindling minority (22% or less), usually only on commission.
- **Dyes:** A hybrid practice prevails. 67% of artisans use a mix of synthetic and natural dyes. Natural dyes (basar ja pan, nim ja pan, haidh) are now reserved primarily for high-value contemporary products like ladies' suits, due to their cost and complexity, while synthetic dyes dominate Ajrak production for reasons of cost and consistency.
- **Production Time:** The defining characteristic of handmade Ajrak is its temporal investment. 67% of respondents require 30-40 days to complete a batch of forty Ajraks, involving

multiple stages of washing, resist printing, dyeing, and sun-drying.

- **Design Erosion:** A critical finding is the severe contraction in design diversity. Naare-wari Ajrak—a format with a narrow border—is produced by 100% of artisans because it is the cheapest and most popular. The central pattern is almost universally the chakki, with borders like pai-wari wat and cherh-wari wat. The vast canon of historical patterns documented by Bilgrami (1990) is no longer in active production, surviving only in the memories of older artisans or in special orders.
- **Pricing (2018):** Reflecting this simplification, a standard Chakki-wari Ajrak sells for PKR 900-1,500. Intricate, custom Hashe-wari Ajraks can command PKR 5,000. A two-piece block-printed ladies' suit ranges from PKR 1,200-2,000.

4.3. The Block-Makers: A Dying Sub-Craft:

The interview with the two remaining block-maker families in Bhitshah revealed a sub-craft on the brink of extinction. Using aged woods like babur (over 100 years old), nim, and keekar, a single set of 7 blocks for a complex Ajrak can take a month to carve and cost PKR 65,000-70,000. They cited the extreme eye strain, dwindling apprentices, and the cheap, mass-produced machine-made blocks from Karachi and Lahore as existential threats. Theirs is a powerful metaphor: the very tool that stamps the identity of the craft is itself becoming obsolete.

4.4. The Onslaught of Challenges:

The questionnaire and interviews converged on a stark set of problems:

- Water Scarcity:** 100% of respondents identified the lack of clean, running water as their primary, debilitating problem. Ajrak-making is hydro-intensive, requiring frequent washing. Contaminated or scarce water ruins fabrics and dyes, increasing cost and failure rates.
- Economic Precariousness:** 66% cited the high cost of materials (fabric, dyes, chemicals) as a major stressor, with profit margins becoming unsustainably thin.

- iii. **Infrastructure:** 22% lacked proper workspace, operating from cramped, makeshift quarters.
- iv. **Mechanization:** 76% affirmed that machine-printed Ajrak has "badly affected" their business. These imitations, produced in bulk at low cost, undercut handmade prices and flood the market, misleading consumers and devaluing the authentic craft.
- v. **Social Security:** 55% mentioned the lack of support for aged, retired craftsmen who can no longer work, highlighting the absence of a social safety net.

4.5. Adaptive Resilience: The Rise of Contemporary Products

A significant and hopeful finding is the adaptive innovation among artisans. 67% of respondents now produce a wide range of hand-block printed items beyond Ajrak. These include ladies' suits, scarves (on silk and linen), kurtas, waistcoats, table linens, purses, and even buttons—all featuring block-printed patterns, sometimes blending traditional motifs with new designs. This diversification represents a strategic pivot towards smaller, faster-to-produce, fashion-oriented items that cater to modern urban tastes and provide more regular cash flow than the capital- and time-intensive Ajrak.

DISCUSSION

Interpreting the Crisis and Glimmers of Hope

The results depict a craft ecosystem in a state of dynamic tension between erosion and adaptation. The discussion weaves these threads into a coherent analysis.

5.1. The Multidimensional Crisis:

The decline of traditional Ajrak-making is not monocausal but a syndrome. The water crisis is a visceral, daily manifestation of broader state failure in rural infrastructure. The economic squeeze is a result of globalized supply chains (synthetic dyes, imported fabrics) and local inflation, compressing artisans between rising costs and price-sensitive markets. Design erosion is a form of intangible cultural loss; as complex patterns vanish, so does the semantic richness and historical depth of the textile. This simplification

is a direct adaptation to a market that prioritizes affordability over artistry, a classic case of commodification leading to cultural dilution (Kopytoff, 1986).

The threat from machine-printed imitations is paradigmatic of the challenges facing heritage crafts worldwide (Wilkinson-Weber, 1999). It creates an uneven playing field where the faster, cheaper copy undermines the original. However, the research also reveals a nuanced artisan perspective: while 76% feel the negative impact, 55% still believe a discerning segment of customers—especially during cultural festivals like Sindhi Cultural Day—prefers and seeks out handmade Ajrak for its authenticity, depth of color, and tactile quality. This suggests a persistent, if niche, market for authenticity that can be cultivated.

5.2. Resilience through Reinvention:

The pivot to contemporary products is the most compelling evidence of artisan agency. This is not mere survivalism but creative entrepreneurship. By transferring the hand-block printing technique onto new substrates (silk, linen, jute) and applying it to new product forms (high-fashion suits, home décor), artisans are decoupling their skills from a single, endangered product (Ajrak). They are effectively writing a new "cultural biography" for their craft (Kopytoff, 1986), aligning it with global "slow fashion" and "artisanal luxury" trends. The artisan in Sehta who created Ajrak maps of Pakistan and the USA for heads of state exemplifies this—using traditional mastery to create unique, diplomatic art objects, thereby claiming a space for the craft in contemporary global narratives.

5.3. The Uncertain Future of Knowledge Transmission:

The intergenerational outlook is the most poignant finding. The fact that 56% of artisans are training their children, often with pride and hope, is a powerful testament to the craft's enduring cultural and emotional value within families. Yet, the 33% who see no family successor, and the near-extinction of block-makers, point to a breaking point. When children are encouraged to

pursue formal education for a more secure future—a rational choice by parents—the tacit, embodied knowledge of dye-mixing, block-registration (reet), and pattern meaning risks dissolution. The potential shift of the craft "to outsiders" (11% of respondents foresaw this) could ensure technical survival but may further detach the practice from its deep socio-cultural roots.

CONCLUSION

This study concludes that hand-block printing and Ajrak-making in Sindh are at a crossroads. The traditional form, as documented in the late 20th century, is undeniably contracting under immense pressure. The intricate, natural-dye Ajrak produced through a 16-step process is becoming a rare, museum-quality artifact. However, the craft itself—the knowledge of block carving, resist pastes, and rhythmic printing—demonstrates a resilient capacity for metamorphosis.

The existential threats are clear and demand targeted, multi-stakeholder intervention:

1. Immediate Infrastructural Support: The government, via its Cultural Department and local administrations, must address the basic needs articulated by 100% of artisans: provision of clean water and subsidized workspace in craft colonies. This is not a luxury but a prerequisite for the craft's physical survival.

2. Economic and Market Intervention: Initiatives are needed to reduce the cost of quality raw materials through cooperative bulk purchasing. Furthermore, creating Geographical Indication (GI) certification for "Sindhi Ajrak" and "Sindhi Hand-Block Print" could legally protect the terms, educate consumers, and add value to authentic products, helping combat machine-made imitations.

3. Documentation and Archiving: A systematic, digital archive of all known Ajrak patterns, processes, and oral histories from master artisans is urgently needed to preserve knowledge that is disappearing faster than the craft itself.

4. Intergenerational Bridges: Programs that link craft skills with formal design education can make the tradition relevant to youth. Apprenticeship schemes with stipends, coupled with modules in business and digital marketing, can present the craft as a viable, respected, and modern career path.

5. Cultural Advocacy and Public Engagement: As suggested in the paper, encouraging the younger generation, designers, and tourists to visit craft centers can create emotional connection, direct sales, and societal respect. Media campaigns showcasing the story behind a handmade Ajrak can rebuild its cultural capital.

In essence, preserving Ajrak is not about freezing it in time. It is about nurturing the ecosystem that allows it to live, breathe, and evolve. It requires honoring the mastery of the past while empowering artisans to be the innovators of the future. This research serves as both a record of a fragile heritage and a call to action—to ensure that the distinctive thap of the wooden block on fabric continues to echo the heartbeat of Sindh for generations to come.

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