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THE PERSISTENCE OF BANDHANI PRODUCTION IN
BARMER, RAJASTHAN, INDIA

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In Barmer, Rajasthan, India, traditional alizarin and alizarin-indigo cotton bandhani (tie-dye) garments are produced and distributed to rural populations. The producers of these garments are the Khatri, traditional Hindu dyers and weavers of cotton and silk, while the garments are purchased and worn by Sindhi Muslims and the Hindu Khumbhar women. Thus, the producers and consumers are socially distinct groups. This historical association between producers and consumers has created a tradition of bandhani production that is currently threatened by the introduction of inexpensive screen-printed textiles.

There are two aspects of this traditional bandhani production that may play an important role in determining whether production continues in future generations. First, since the producers and consumers come from different social groups, each may be influenced by different cultural and economic forces. This increases the vulnerability of bandhani production by increasing the number of social and economic variables that must remain stable for continued traditional textile production. Second, the production of these bandhani textiles requires many steps, and there are many individual contractors required to make a single piece. Therefore, the production of traditional bandhani requires the preservation of each task in the complex network of workers.

The work I present in this paper is based on research I performed in Barmer, Rajasthan, the major center of production of the alizarin and alizarin-indigo bandhani garments discussed. The bandhani garments produced in Barmer are distributed to the Sindhi Muslim and Khumbhar women who live in the rural areas throughout Barmer and Jaisalmer Districts of Rajasthan, and in the regions of Kutch, Gujarat and also the

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1 Bandhana is a Sanskrit word meaning "to tie or bind." It refers to the resist dye process in which fabric is tied or bound resisted from the dye prior to dyeing. Subdivisions of this term are the tie-and-dye processes of ikat, laheria, motra, and bandhani.

The word bandhani comes from Gujarati and refers to both a particular tie-and-dye technique and the textiles dyed using this technique. Plangi is the Indonesian word used and accepted internationally for what is termed bandhani in India. The process of bandhani involves tying off very small sections of cloth in a method that produces circular dye-resisted patterns.
Sindh region of Pakistan. Similarly styled bandhani garments are also produced in Sindh, but the motifs and layouts differ from those used in Barmer.

The bandhani garments produced in Barmer are the odhani, para, and pettee. The odhani (Fig. 1) is a large headcovering draped from the front left side of the waist of the skirt upwards across the back and over the head. The para is a tightly gathered skirt up to 9 m. in length which rests just above the ankles. The pettee is the lower front piece of the kanchali, one of the two styles of blouses worn by the Sindhi Muslim and Khumbar women, which is decorated with bandhani. The bandhani production techniques and design motifs are very similar for these garments. Below, I describe in detail the process of bandhani production to illustrate how the complex network of artisans may affect the future of bandhani production.

THE PRODUCTION PROCESS

The production of bandhani garments in Barmer involves a complex sequence of steps performed by a variety of different artisans. Orchestrated by the Khatri producers, the contracted artisans rely heavily on the income from the production of bandhani. The total time required from when the cloth is purchased to when it is ready for sale is approximately one month, and the production of a single garment may involve as many as 9 different contractors as well as the primary producer. Thus, the production of cotton bandhani in Barmer can be viewed as a process requiring a community of artisans, and preservation of the entire process requires the preservation of each of the different specialized tasks contracted to the artisans.

Purchasing the fabric is the first step for the manufacturers. The 100% cotton fabric is purchased from Bombay in three qualities. Unbleached khadi is the least expensive; lata is a pressed and calendered cloth, and costs more than khadi. Poplin, a mercerized, bleached lata is the most expensive grade. The purchased fabric is cut into lengths appropriate for odhanis, paras, and pettees. Fabric is never produced to be sold by the meter, only lengths cut and patterned for specific garments.

The fabric was historically washed in Nagasar Lake, a small lake within the city limits of Barmer. However, the city built a new well for textile producers that has many compartmental tubs for soaking and washing cloth. This is mostly used by bandhani producers, but anyone can use the well for a payment proportional to the amount of water used. The bodava, those that contract to wash the cloth, are usually men and are paid by the piece. The fabrics are washed in water to remove the starch
and impurities that inhibit absorption of dyes. The cloth is then beaten to smooth the surface and to disengage any remaining impurities.

After this initial washing, the textiles are immersed and worked in a solution of TR oil\(^2\) and water which aids in uniform dye penetration, color brightness, and fabric softness. The textiles are laid out in the sand to dry. The textiles are then washed again in water, followed by a washing in a solution of Tata Ash Soda and dried in the sun. Washed in water once again, the textiles are next soaked in a fiticaree or alum wash. This process is sometimes repeated to insure maximum dye fixation. Following this, the cloth is dried and again rinsed in water.

The prepared cloth is returned to the producers who stamp their trademark in a corner of each textile with a fugitive dye. Many producers of bandhani engage the same contractors in the various stages of the production process. The individual producer’s trademarks minimize confusion as to whose pieces are whose. After marking the cloths with the trademark, the producers determine the patterning for each piece. Surprisingly, the bandhani garments are produced in only a limited number of schematic variations. For example, there are only five basic layouts for odhanis produced in Barmer, and the particular layouts and motifs of these bandhani garments have changed very little over the last eighty years\(^3\).

The producers then deliver the cloths to the sutarana, the specialist who registers the patterns onto the cloth. Most sutarana for bandhani production are Khatri women who serve as contractors to the producers. The producers pay for each piece depending on its size and complexity. For registration, sutarana use a long table resting about one foot above the ground which is covered with several layers of fabric to create a soft work surface. The sutarana registers the motifs over the entire cloth. Odhanis which were stitched together to make the desired width remain stitched throughout the entire dye process. This allows for better alignment of patterns on the two pieces.

The tools used for registration are blocks made of iron, some backed with wood. The producers draw the designs and employ welders to

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\(^2\) TR oil is an abbreviation for Turkey red oil, a mixture of caster oil, salt, sulfuric acid, and caustic soda or soda ash that is used in the alizarin dye process. Specific recipes for TR oil are held secret by the producers. The term Turkey red refers to the technique of alizarin dyeing that is thought to have originated in the Near East (Gittinger 1982:21).

\(^3\) An odhani collected in Barmer in 1954 and now in the collection of the Calico Museum of Textiles in Ahmedabad shows the same layout and dye colorations as contemporary odhanis (Fig.1).

Interviews with Geree Khatri, mother of Asula Khatri, 8/1987, verified few changes over her lifetime.
fabricate the block. The blocks vary in size depending on the motif and the placement of the motif in the layout of the garment. Rodomine B-500, a pink fugitive dye, is used to make the block impressions. This fugitive dye lasts long enough for the piece to be tied and dissipates in the first dye bath. The blocks are pressed onto a dye pad made of several layers of absorbent cotton soaked in the dye and are then placed onto the cloth. The borders are printed first, and then the central ground is filled in. Specific motifs and their arrangements vary with each piece.

Once the pieces are returned, the producers must distribute the textiles for tying. Each tier has a particular expertise at a certain style or fineness of tie, and each piece of cloth is often contracted out to several tiers who each tie specified areas of the pattern. There are regional differences in tying specialization, as well as individuals within each region who often tie only their favored ties. One tier might be very proficient at tying borders of paras, while another might specialize in the center fields of the paras. A contract to tie a particular area of the pattern must be completed by the same tier, as variability in tying style is evident in the final product. Women and girls do most of the tying. The young girls tend to excel in the smallest ties because of their small fingers. Many castes of women tie, including the Khatri, but the Sindhi Muslims and the Khumbhar traditionally do not tie.

Tiers work with the cloth resting in their laps. From underneath, the tier pulls up a small portion of the textile with the pointed nail of her small finger, while her thumb works the front to prepare for the tie. Knots are tied with white cotton thread. After tying a knot, the tier continues to the next tie without cutting the thread. Thus, the thread runs from one tie to the next holding tension for each successive tie. The thread is run through some type of cylindrical tool, most often a left-over pen cartridge, for an even and taught thread wind. Since thousands of ties go into just one piece, it is amazing that a fast tier can tie a para in 3-7 days when tying for 6-7 hrs. a day. An odhani may take from 2-4 days.

The producers collect and sort tied pieces to be dyed so that large numbers of pieces can be dyed at the same time. In certain weather, dyeing is not feasible, particularly in rain or high winds. Although there is a rainy season in Barmer, this is hardly a factor compared to the high winds of the desert storms.

There are two dye variations, the alizarin coloration and the alizarin-indigo coloration. Traditionally, the alizarin and indigo were extracted from natural sources, but currently most dyers use artificial

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4 Some tiers purchase a ring with a point on it that rests on the finger like a thimble.
alizarin and indigo. A contracted dyer is paid for a 9-10 hr. work day which could include as many as six different dye baths. If an alizarin-indigo piece is desired, the piece is first dyed in indigo, particular ties are removed, and then the piece is dyed in an alizarin dye bath. The most expensive and sought after bandhani textiles are those dyed with both indigo and alizarin. The expense lies with the cost of two dye baths and the increased tying involved.

When the textiles are dry, the ties are removed by contractors, usually young female members of the producers family. Until recently, pieces were rinsed in plain water to remove the ties and the textiles were smoothed with the rinsing. However, now the ties are removed from the dry textiles and are not rinsed. This gives a crinkled or knotted look to the piece, which is the current fashion.

The textiles are further embellished with oromine, an orange fugitive dye. The dye is daubed onto specific motifs that were resisted white. On alizarin odhanis or alizarin paras, a green fugitive dye is also daubed onto certain motifs. Both the orange and green dyes will wash out in two or three washes. However, these garments are infrequently washed, so this coloration stays on the textiles longer than might be expected.

THE FUTURE OF ALIZARIN AND ALIZARIN-INDIGO BANDHANI TEXTILES

The continued production of cotton bandhani textiles in Barmer requires a sustained commercial market for bandhani garments. The popularity of the alizarin and alizarin-indigo bandhani textiles has been retained over the last 50-100 years, yet due to the desert environment with periods of drought and famine, there are lean periods and prosperous periods for both the consumers and producers. Thus, continued production of bandhani may depend on the overall economic health of the district in which garments from Barmer are sold.

There are three main problems which confront the producers of these bandhani textiles: the increased costs of the production of fine quality bandhani; competition from screen-printed garments; and the possible decrease in prestige and preference of traditional bandhani garments by customers.

The production costs for bandhani and the structure of payments to contractors fluctuate according to seasonal demand. The primary purchasing season for the alizarin and alizarin-indigo bandhani garments
is October to February, which is the traditional marriage season. Before this season, production is high to prepare inventories. With seasonal and year-to-year fluctuations in demand, the amounts paid to contractors vary accordingly. The payments to tiers are the most sensitive to changes in demand. During periods of high demand, tiers receive double or triple the usual payments. Payments to washers, sutaranas, and dyers increase or decrease much less. It is also becoming more difficult to find tiers who have the skills to tie the fine ties necessary for fine quality bandhani.

Some of the Sindhi Muslim and Khumbhar women are beginning to wear block-printed and screen-printed odhanis which imitate the traditional bandhani patternings. For example, a block-printed modification produced from dot-patterned blocks that simulate the bandhani technique is currently produced in Barmer. These odhanis are made from inexpensive cloth using very poor block registration, and they are dyed only once in a dye that emulates the alizarin-indigo coloration. They hold very little of the desired aesthetic of the alizarin-indigo pieces, yet are an inexpensive substitute in times of serious financial difficulties. In addition to local block-printed odhanis, screen-printed odhanis are imported to Barmer from larger cities. They have brighter colors than the traditional bandhani pieces, and some women find the screen-printed odhanis more comfortable in the summer due to the lighter-weight fabrics. Also, the screen-printed imitations are much more affordable.

It is difficult to estimate the extent to which the bandhani market has been eroded by competition from screen-printed textiles. Younger women are more often seen wearing the screen-printed garments than are the older women. This might indicate that bandhani production will decrease as the younger generation matures to become the major consumers of bandhani garments.

Survival of traditional bandhani production may depend on the creation of a larger commercial market. Although essentially all alizarin and alizarin-indigo bandhani textiles produced in Barmer are currently sold in the local markets for traditional garments, a few tourists are sifting into the region and purchasing bandhani textiles for uses other than traditional garments. The bandhani pettees which have lost some popularity with the local consumers are now occasionally sold to tourists as pillow covers. Odhanis which were frequently recycled into mattress covers by the consumers in the past are now sold as such to tourists. The growing sale of bandhani textiles to tourists may serve to greatly strengthen the market for bandhani, although the success of this expanded market depends on the ability of the producers to change their products in response to the different demands of a tourist trade.
CONCLUSION

Alizarin and alizarin-indigo cotton bandhani production in Barmer in 1987 was healthy, although its future is uncertain. The preservation of this entire process of bandhani production requires the preservation of each of the different specialized tasks contracted to the artisans. Thus, the complex structure of bandhani production makes this traditional textile form particularly sensitive to changes in regional economics.

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