



A Heritage of Patan Patola

Patolu with Elephant Design from the late 18th century, made in Gujarat for the Indonesian market. Silk double ikat. 43 by 182 inches. | Image courtesy of the Metropolitan Museum of Art. Purchase, Friends of Asian Art Gifts, 2012.

The exquisite artistry of double ikat weaving

BY SARAH MOSHER



The unique patola loom set up in the center of the demonstration area. Patola are displayed on the walls at the back of the space. | Courtesy of Sarah Mosher.

here are many cases of textile production and design processes emerging simultaneously in various cultures around the world throughout history; the impressive double ikat (a time-consuming dying and weaving technique requiring skilled precision and years of training) is no different, having multiple points of origin. However, the quality of this process—paired with a need for intense precision—means that very few places today make this textile with any regularity. The ancient city of Patan, located in the state of Gujarat in India, is arguably the most famous of these locations. Patan patola are spectacular sarees created with double ikat weaving techniques, incorporating intricate designs and vibrantly colored silk thread. This unique textile has

been famous for centuries as a highly prized trade good and inspiring textile makers in such places as Japan, Java, and Sumatra, among others (Billore and Hägerdal 2019).

Textiles can be patterned by applying the design after the fabric is woven, or by using colored thread to weave the textiles, with the weaving style creating the pattern (think gingham or plaid). Uniquely, Ikat textiles are made of yarns that have been dyed into patterns before being warped on the loom, with the final design only appearing once the fabric is woven. Through a painstaking process of tying and dyeing groups of carefullymeasured threads, the weavers prepare the final pattern. Once the fabric is woven, the pattern is deeply embedded in the fibers. Single ikat, the most commonly produced variety, can have patterns either on the lengthwise threads or the crosswise threads. Double Ikat has patterns dyed into both the lengthwise (warp) threads, and the crosswise (weft) threads; this greatly increases the difficulty in getting the pattern to emerge clearly, but also allows for a richer, more vibrant coloration in the fabric that will not fade over time. The common Gujarati saying is, "Padi Patole bhaat, phate pan fitey nahin"-"patola cloth may tear, but the design and colour never fades" (Karelia 2020).

Preserving History

In January 2024, I journeyed through India as a member of an OISTATselected group of artists and scholars from around the world. One of our visits was to Patan-a two-and-a-half hour bus ride from Ahmedabad in western India—and to the Patan Patola Heritage Museum, where we had the privilege of learning about the making of the famous patola (plural of patolu) from the Salvi family, who carefully maintain the process and preserve the art form.

Patan became the home of the patola in the 12th century CE when, as the story goes, King Kumarpal, the ruler of Gujarat, arranged to bring 700 families from Jalna to Patan to make patola there. The King wore patola every day as part of his religious practice, due to the sacred nature of the textile, which was thought to bring various protections and blessings to the wearer (Gaatha). Dr. Peter ten Hoopen notes on his online museum, Pusaka Collection, a number of cultures that came into contact with the silk patola attributed supernatural protective properties to the textile and has pointed out that "objects of such technical refinement" are often seen to have supernatural powers. In Textiles of Southeast Asia, Maxwell and Gittinger detail a variety of protective and healing uses for patola, including as wrappings for sick children and curtains for traveling rulers. In both Hindu and Parsi communities in Gujarat, silk patola are used as part of an important ceremony that takes place in the final months of pregnancy, offering blessings and warding off evil at this critical time.

The problem for King Kumarpal was that at that time patola were only made in Jalna, and he was forced to import them so that he could wear clean and new patola to the Jain temple. Legend has it that one day the temple priest declared the King's patola impure, and it was discovered that the King of Jalna was only allowing patola to be exported after using them as bedspreads, thus rendering them impure. As a result, King Kumarpal brought weavers up from Ialna and created an industry for patola in Patan where he lived, giving him firsthand access to the sacred textiles and ensuring his patola had not been previously used. Contemporary weavers in Patan trace their family lineage directly back to this time. The Salvi family, in particular, are known for their skill in weaving this fabric; they have remained the steadfast keepers of the process for nearly 900 years, refusing to adapt it for the purposes of cutting time or lowering costs, as other makers have done.

Located in a quiet neighborhood of Patan, the Patan Patola Heritage Museum—only constructed and opened in 2014-appears to be a striking example of earlier Indian architecture, its broad stone steps littered with the shoes of current visitors. It was Rahul Salvi, a trained architect, who shepherded the museum into being, quitting his job to return to the family and train to be a master weaver. He was aided by his cousin, Savan, a trained engineer, who likewise returned to Patan to make and promote patola; together, the two make up the 28th generation of weavers in their family. The Heritage Museum was created to display the artifacts the family has gathered from their own past and from weavers around the world, and to preserve the documentation they have retained over the past 300 years while promoting the artistry of patola to the public.

Savan Salvi met us in the building's large demonstration area, where in-process patola may be seen, to begin our tour and explain the intricate work his family does. The space was ringed with intensely colored patola sarees behind glass, showcasing the various patterns and colors that can be found in these traditional textiles, and was centered on a large hanging loom uniquely tilted down on the left side so that light can reach both the front and back of the weaving (see page 16). Savan gave us a brief history of the textile and his family before he began to explain the apprenticeship process to us.

Attention to detail and careful precision are the key skills that must be developed to make patola, so very early stages of learning (which can begin for children as young as four years old) involve meticulously coloring in grid squares. These grids of color are the patterns for patola design, and master weavers monitor young apprentices to verify that they are filling in the squares with consistency and care. Savan recalled his own experience being asked to redo his work over and over until it was perfect. Once the apprentice has shown that they can be trusted with this task (about six months in), they are introduced to the tying process. To begin, the master will teach the apprentice how to open the knots after dyeing. The process of learning how to do this carefully so as not to damage the threads underneath, and to

only remove the knots that need to be removed, extends another six months to a year depending on the capability of the apprentice. Finally, they are ready to learn to practice knot tying, sitting side by side with the master weaver.

Silk Sourcing and Dyeing

Patola are made with silk fibers to ensure pattern consistency and color vibrancy. Silk, which is sourced from the cocoons of silk moths, is naturally made in long continuous fibers, which can create a more lustrous and smooth finish to a textile, while offering the stability of long, unbroken filaments. Fibers such as cotton and wool are short in length and are twisted together to create threads, but variation in spinning or the material itself provides a level of stretch in the thread. Silk is highly prized for the nature of its long filament fibers, the sheen that can be achieved, and the lightweight nature of the fibers.

Additionally, and critically in the case of patola, silk takes dyes beautifully, deeply embedding vivid colors that would not be achievable in a cotton or linen. The Salvi family sources the silk from specific producers in Bangalore, hand-selecting the raw fibers for consistency of tensile strength and spinning them themselves into an eight-ply yarn to create delicate yet extremely stable fiber that will not stretch under the tension of the loom. The family's insistence on the particularity of this part of the process is crucial to their success, since the predyed yarns must line up precisely on the loom to create the beautiful patterns of a traditional patola. The silk thread is washed in a process called degumming, which removes the sticky sericin that holds the strands together to make the cocoon. Removing the sericin prepares it to receive dye optimally and reveals lighter, softer, and more lustrous strands as well as ensuring consistency of thickness and tensile strength. The prepared threads are drawn tight between two pegs with careful attention to providing even and consistent tension and then bundled into groups in preparation for the tying process.

Experienced weavers mark out patterns from the colored grids onto the silk yarns using a small stick with lines corresponding to the pattern as a guide (page 18, top), carefully lining up each



Savan Salvi hold the stick which is marked to guide the application of pattern onto the silk threads (seen in the bottom left). | Courtesy of Sarah Mosher.



An archeologist at work in front of carvings at Rani Ki Vac step well just outside Patan. | Courtesy of Sarah Mosher.

section in preparation for tying. Any error in measurement or marking at this stage can lead to the ruin of the whole textile, so great care is taken in making these marks and transferring the pattern. Traditional pattern motifs include the elephant (kunjar bhat), dancing girl (Nari), which is often paired with the elephant, flower (phool bhat), and leaf (pan bhat). The lotus (chhabadi bhat) symbolizes fertility and is popular for weddings, although the eight petals also made it a popular export to Buddhists in Indonesia as a symbol of the eightfold path. Specific motifs are important to certain communities; the most striking example is the Vohra Gaji, which is very popular with the Gujarat Vohra Muslim community. These same motifs are visible in architecture from the 12th century, including the stepwell Rani Ki Vav, which we visited the following day. A sharp-eyed group member noted several motifs similar to those that we had seen during our visit to the museum (left).

After eight months of tying knots under the watchful eye of the master weaver,



Warp yarns stretched and bundled with visible markings as well as some knots beginning to make the pattern. | Courtesy of Sarah Mosher.

apprentices are ready to tie on their own. Savan demonstrated for us the process of tying using cotton thread, which will swell when soaked in preparation for dyeing, choking off access to the silk threads underneath. He took a length of the cotton thread and began to wrap it tightly around a small bundle of silk fibers. The cotton yarn was under so much tension as he wrapped it that a small squeaking, thrumming noise was heard with every wrap of the yarn. He deftly tied off the end and snapped away the excess, leaving a tightly-bound length of yarns (above). He explained that, once all of the silk has been tied to match the pattern, the master weaver carefully checks each knot to ensure it is placed correctly and tied securely. One misplaced knot or loose wrap will ruin the entire bundle of silk threads and everything must be redone, so there is no room for careless errors.

When using natural dyes as the Salvi family does, the fibers need to be mordanted first to facilitate the chemical process of bonding the dyes permanently. To ensure the silk thread bundles are thoroughly and evenly mordanted, they are left to soak in the mordant bath for several days. This ensures complete saturation of the mordant into the fibers, and also that the cotton knots have swollen and will not allow dyes to pass through to the fibers underneath. Only then is the first dye introduced, again being allowed to soak fully into the fibers

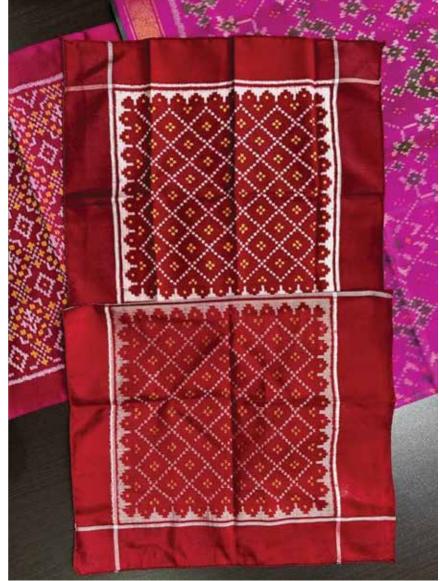


A group of yarn bundles with some knots untied revealing multiple colors laying on top of the pattern grid. | Courtesy of Sarah Mosher.

over several days. Bundles are rinsed and dried, and then are ready for the process to begin all over again in preparation for the next color. Knots that need to be untied are, and new knots are tied in the correct configuration for the next layer of color (above). The process of spinning the silk fibers into yarns—preparing them, tying them, and dyeing them repeatedly for one patolu the length of a saree, six yards long by 48" wide-takes about three to five months, sometimes longer. Finally, the weaving can begin.

Four-Month to Three-Year Process

The warp yarns are carefully strung on the loom by master weavers, who ensure that the pattern is lined up and continuous across the piece with every thread pulled taut with the same tension. The weft threads are loaded onto bamboo bobbins, with careful attention paid to the order of the bobbins and the way each bobbin is wound to ensure success in matching the patterns. Working together, two master weavers will work side by side at the angled loom all day. The weft yarn is inserted across the warp yarns, and the pattern is carefully lined up with the help of a long rosewood stick. A small tool with needle-like points is used to gently tease the fibers into place to ensure precision and balance the tensions between warp and weft so the pattern does not shift when the patolu is removed from the loom. Working together, the two master weavers can weave about nine inches a day, bringing



Two handkerchiefs made by the Salvi family. The top one is double ikat, and the bottom is single ikat. They lay on top of single ikat pieces dyed with synthetics dyes. | Courtesy of Sarah Mosher.

the total time to make a patolu to between four and six months. Intricate patterns can take longer, with the Shrikar Bhat patolu taking three years from start to completion.

The Shrikar Bhat patolu is a replica of two masterpieces made in earlier times by the family and depicts large elephants surrounded by figures of animals and people; it is displayed prominently in the self-guided museum portion of the building. The museum (where photographs were not allowed) was full of examples of the work of the Salvis from generations past, but also displayed many examples of ikat from around the world. Parallels could easily be drawn

between patterns and styles, although there was variation in color, fiber content, and intricacy. It was incredible to walk through the history of ikat in this way, experiencing the global perspective on this technique and seeing the fingerprints of trade and artistry. Examples of patola from Patan in turn are on display at museums around the world, retaining their intensity of color as if they had just been dyed (Slaczka 2018).

Upstairs in the store, ikat from the region is sold, beautifully rendered and breathtaking, although dyed with modern dyes and worked as a single ikat. The famous double ikat patola is prohibitively expensive for many people; a

patolu made using traditional methods costs between \$1,500-\$8,000 (Business Insider 2023) and there is a waiting list several years long. Once worn by royals the world over, this textile now adorns the new royalty, made up of celebrities and the wealthy. Those from the Bhatia community in Gujarat who can afford it will wear patola at weddings and baby showers to ensure good fortune, and they will pass down patola from generation to generation.

The Salvi family also creates handkerchief-sized samples of their work, which are still costly but within reach. It was here in the store that the vibrancy of the patola reveals itself, as they sit side by side with single ikat samples, including two pieces identical except that one is single and the other double ikat. I came home with a handkerchief worked with several colors, and only wished I could have brought back more of the precious cloth.

The level of craftsmanship, precision, and years of training needed to create these incredible textiles is something that is rare to find in the world today, and it is an exciting example of human artistry and technology. We continued to pester Savan with questions about his work. We learned that he has been training his whole life for this work, and so we pointed out that he must now be a master weaver teaching others. Surprisingly, he proceeded to explain that he was still learning and had several more skills to develop before becoming a master weaver. Currently, the Salvi family has only four master weavers, although 10 to 12 family members work on making a single patola. The necessary commitment to the craft, and the long process to complete the patola, along with lower global demand, means this art has been dying out steadily since World War II, when trade with Indonesia (the largest export market for patola) declined sharply. The only other patola makers in Patan do not do the painstaking work of using natural dyes, instead using manufactured dyes which speeds up their process; but even so, unless more weavers can be persuaded to come and dedicate their life to this work, these textiles will cease to be produced (Bannerjee 2018).

The legacy of artist/technicians like the Salvis includes the global influence on other ikat makers around the world, and their individual works are found in museums and private collections, being passed down as heirlooms. To me, one of the most striking items on display at the museum was a garment for a child made of patola cloth, which has been in the family for 200 years and has been worn by the Salvi children throughout that time. It is displayed alongside a photo of a member of the newest generation of Salvis wearing the dress in recent times, carrying on the tradition and promise of the patola. History is not stagnant here, but is lived out on a daily basis, with great hope for the future.



Sarah Mosher is a performance designer specializing in costume design and technology, a fiber artist, and an assistant professor at

Baylor University in Waco, Texas. She is interested in the critical area of sustainability in the textile and clothing industry, and the exploration of how to apply this thinking to theatrical construction and labor practices. She has a passion for costume history, specifically the impact on society, and reflection of the values of each time and place and an interest in universal design and design systems, cultivating design thinking in students, and engaging with questions about design lifecycles across disciplines. Mosher has worked professionally as a costume designer for theatre, opera, film, and dance in Seattle and in Central Texas. Her work has encompassed interdisciplinary devised work and she has a passion for the dramaturgical work inherent in theatrical design.

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