Irresistible Resist:
The Art of Indian Dyes and Design

When people imagine India, they often envision a world of vibrant colorful textiles with rich and complex designs. This seemingly romantic fantasy is actually based upon reality. South Asia has been producing vibrant textiles with intricate patterns for millennia. Many of the patterns were originally social signifiers of status, community, tribe, occupation, religion, stage in life, or gender, while other patterns are enjoyed for their aesthetic quality. With the expansion of global trade from the 17th to 19th centuries, textiles from the sub-continent could be found throughout the northern and southern hemispheres. In the modern context, textile artisans from India readily borrow designs from thousands of years of diverse regional images. What then are the secrets of these dazzling textiles? What makes them so irresistible?

This exhibition focuses on the resist dyeing processes that have made Indian textiles prized by people throughout the world. The textiles in this exhibition will be presented in four distinct categories: block-print, *kalamkari* (hand-painted), tie-dye, and ikat.

Until the late 19th century all dyes used on textiles were derived from natural sources — plant, mineral, and animal, requiring the use of mordants that bind and fix certain dyes to the cloth fiber. Resists, on the other hand, were used to block the dye from penetrating certain design elements on the textile. Mordants, resists, and natural dyes contributed to the creation of these popular textiles, adding to their rich coloring, wash-ability and color fastness. Indian artisans were known as master dyers, and it is thanks to them that India became a leader in textile production.

Block-printed and hand-painted textiles share similar techniques used in their creation: the main difference is that block-prints use hand-carved blocks to transfer mordants and resists to the cloth, whereas in *kalamkari a kalam*, or pen, is used. Diverse regions in India have developed their own methodologies and styles, a heritage that has been handed down over generations.
Gujarat require approximately 15 steps and that many different hand-carved blocks, to achieve the intricate geometric patterns and rich colors. With advancing technology, chemical dyes and a competitive marketplace, some steps have been modernized and most often natural madder root (used for red) and indigo dyes have been replaced by their synthetic counterparts. Despite the fact that synthetic dyes are cheaper and achieve more predictable colors, the traditional process of dyeing using mordants and resist is still maintained.

A series of blocks is carved for each design, the number of blocks dependent on the pattern and number of colors. These could include the outline block for black lines, the mordant block for red areas, and the resist block for areas that will prevent the indigo blue dye from penetrating the cloth. Resists can include mud paste (dabu), wax, lime with gum and tar, which are applied with a block prior to soaking in the indigo dye vat.

The block-printing process is an elaborate and multi-stepped operation. Some block-prints like ajrakh from Bhuj, Kalamkari in Andhra Pradesh and Telangana

Kalamkari painted and printed textiles belong to three distinct categories: painted textiles known as chintz that were exported to Europe and Southeast Asia; painted and printed textiles influenced by Persian motifs; and painted temple textiles depicting episodes from Hindu epics and the Puranas (ancient literature) written with Telugu captions.

The traditional kalamkari process is very similar to that described for block-prints. Designs are drawn on a cleaned and myrobalan-mordanted cloth with a charcoal stick made of burnt tamarind twigs. The black outlines are then over-painted with a kalam, made of a bamboo stick with a padded bulb fashioned with absorbent fabric and bound with thread. The artist dips the kalam into the black ferrous sulphate solution and can control the flow of dye with slight pressure of the fingers. A kalam with a thicker point is also used to fill in larger areas with color. Though traditionally red and blue colors were dyed using mordants and resists, the majority of today’s kalamkari are painted with chemical dyes, applied directly to the cloth. To date, the tradition of blocking with resists has been lost.
Ikat in Gujarat, Odisha, Andhra Pradesh, and Telangana

In other resist-dyeing techniques such as tie-dye and block-print, the resist is applied to the woven cloth, whereas in ikat the resist is applied to the threads before they are woven. (You can see vertical threads known as warp in the photo below. Horizontal woven threads are called weft.) The resist is applied by binding groups of threads with waterproof wrapping into the desired patterns, and is re-applied for each color. Ikat in India occurs as either warp-ikat, weft-ikat, or double ikat (both warps and wefts are tied) such as the complex and esteemed patola. One of the unique characteristics of ikat is the blurriness of the design, which occurs because the warp and weft cannot be aligned perfectly, but is in fact often prized by textile lovers.

**Tie-dye in Rajasthan and Gujarat**

(known as bandhani and bandhej)

Images of tie-dye can be found in the fifth century Ajanta caves, demonstrating that this technique has been utilized in South Asian textiles for millennia. In tie-dye technique, areas of the woven fabric are protected by tying tightly with thread. The tied areas will resist the dye, creating designs made of pointillist dots (bhindi).

The cleaned fabric is folded in half or into quarters which will achieve a mirror imaged design. Since the fabric will be tied through all these layers, it must be thin and easy to dye. Traditionally silk, wool, or thin and loosely woven cotton have been used for this process.

*Lehariya* in Rajasthan is a complex and elaborate tie-dyed fabric with a zigzag wave pattern or diagonal stripes and check pattern (*mothara*), often used for turbans and worn by Rajput nobility.
Special Events | In the EWC Gallery with free admission

Guided gallery tours will be offered Sundays at 3:00 p.m. (no tour January 21, 2018)

Sunday, October 29, 2:00–3:30 p.m.  
Exhibition Gala Opening including reception, block-printing demonstration by master artist Sufiyan Khatri, and walkthrough by exhibition curators.

Sunday, November 12, 2:00–3:00 p.m.  
Illustrated Talk: “Resist Methods for Textile Embellishment: A Global View” by Cheri Vasek, UH Mānoa Associate Professor of Theatre.

Sunday, December 3, 2:00–3:00 p.m.  
Illustrated Talk: “Lighting Design: Making Careful Choices” by Brian S. Shevelenko, UH Mānoa Assistant Professor of Theatre. In celebration of the EWC Gallery’s new lighting system, supported by the McNerny Foundation.

Sunday, January 21, 2:00–3:45 p.m.  
Film: “Dhanak” A blind boy crosses the Rajasthani desert to meet the movie star Shah Rukh Khan. Directed by Nagor Kukunoor, 2016, 105 minutes, subtitled and suitable for families.

From Tradition to Innovation

Brooklyn Raga Massive in Concert

Brooklyn Raga Massive is a collective of innovative musicians rooted in Indian classical tradition, dedicated to expanding diversity through raga-inspired music. Featuring sitar, tabla, violin and bansuri flute along with bass, guitar, drum set and other instruments, the group will perform classical raga, original compositions, and works by Ravi Shankar, John Coltrane, and Terry Riley.

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