

Dye Research Project

Indigo & Shibori

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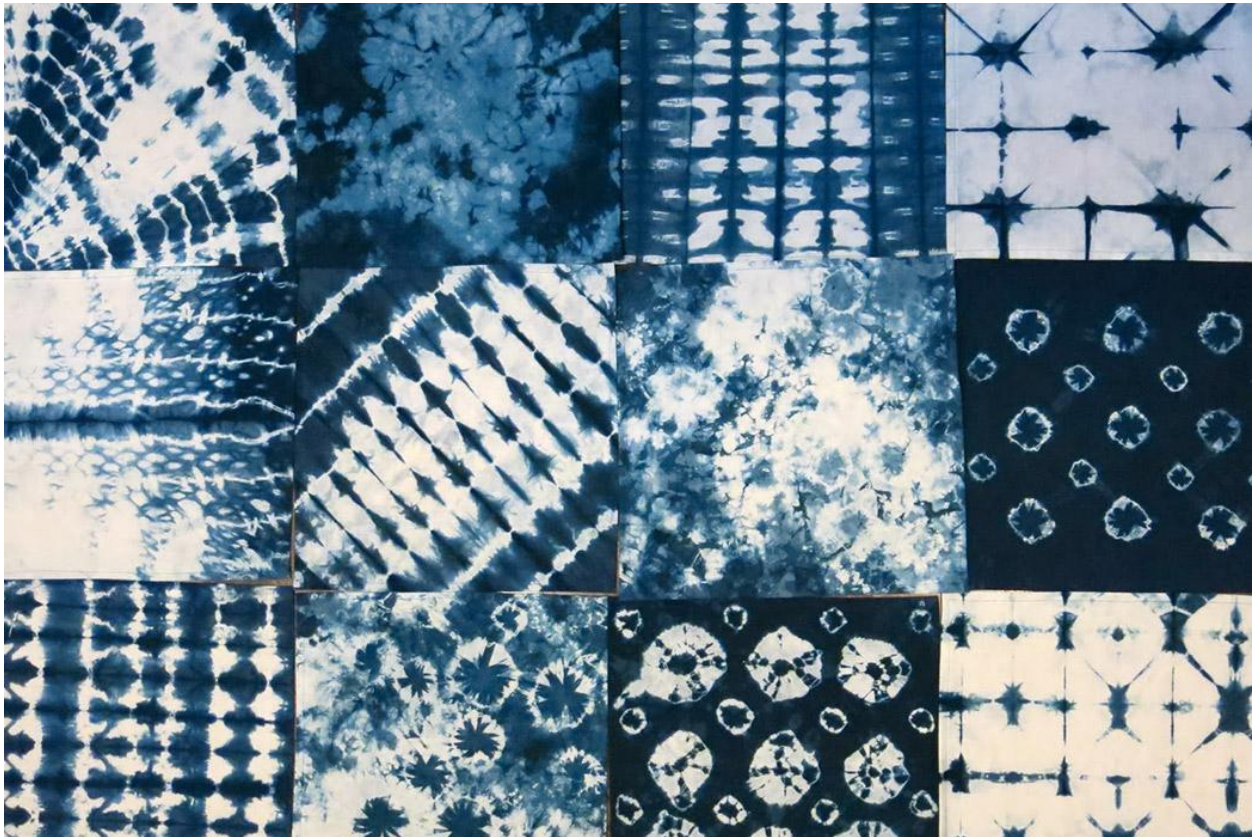


Figure 1. Multiple shibori patterns via Cassie Stephens

Course: Textiles

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2023 Course/Section: Spring /BUF 2246

Introduction

The art of indigo and shibori dyeing has a rich cultural history in Japan, and it has become a popular trend in the textile industry. As a researcher, I have decided to delve into this traditional dyeing method to reconnect with my Japanese roots and further explore the culture I was exposed to growing up. I found indigo and shibori dyeing to be a beautiful and fascinating way to deepen my connection with my ethnic background. Using natural materials such as indigo, salt, and baking soda, I have been dyeing 100% cotton fabric in various patterns, with tie-dye being my personal favorite. In this research, I aim to explore the traditional methods of indigo and shibori dyeing and their potential applications in modern textile design.

History

Shibori is a traditional Japanese dyeing technique that involves binding, twisting, or folding fabric before dyeing it with indigo or other natural dyes. The word "shibori" comes from the Japanese verb "shiboru," which means to wring or squeeze. (Parker, 2017)The technique has been used in Japan for over 1300 years and has been adopted by textile artists around the world.

Shibori has symbolic significance in Japanese culture and is often used in traditional garments such as kimonos (World Shibori Network, n.d.). Different patterns and techniques are associated with specific regions or seasons and may have symbolic meanings related to nature or the changing of the seasons.

Indigo has been used for centuries in Japan to dye textiles, and it is considered an important part of the country's cultural heritage. The dye was also widely used in other parts of the world, including India, Africa, and South America. According to a study by Samanta et al. (2016), indigo is a versatile and sustainable dye that can be used on a range of fabrics, including cotton, silk, and wool. The study found that indigo-dyed fabrics have excellent color fastness and resistance to fading, making them a popular choice for textiles that are subjected to wear and tear.

Indigo is known for its distinctive blue color, but the range of shades that can be produced with it is quite broad. Depending on the concentration of the dye and the length of time the fabric is immersed in the dye bath, indigo can produce a range of blue hues, from pale sky blue to deep navy blue. Indigo was historically an expensive dye, as it was difficult to cultivate and process. According to Higuchi (1996), the indigo dyeing industry in Japan was highly regulated and tightly controlled, with the production and sale of indigo dye monopolized by certain groups. The high cost of indigo dyeing led to the development of alternative methods, such as using cheaper synthetic dyes or natural dyes like madder and safflower. Despite its high cost, indigo has remained a popular dyeing material due to its unique properties and cultural significance. As Samanta et al. (2016) note, indigo is a versatile and sustainable dye that can produce vibrant, long-lasting colors on a range of fabrics. Indigo is a color and not a substance that has direct health benefits. However, indigo plant and its derivatives have been traditionally used in various cultures for medicinal purposes. Some studies have suggested that indigo has



Figure 2. [Japan Folk Crafts Museum](#), Shibori Kimono by Motohiko Katano

anti-inflammatory and antioxidant properties that may help with conditions such as psoriasis, rheumatoid arthritis, and cancer. Indigo has also been used in traditional medicine for its potential to alleviate pain, reduce fever, and promote healing of wounds.

There is no evidence to suggest that indigo was subject to sumptuary laws, which were regulations governing the wearing of certain fabrics or colors by different social classes. However, indigo has held significant cultural and symbolic meaning in various contexts throughout history.

In Japan, indigo-dyed fabrics were traditionally associated with peasants and commoners, as opposed to the silk and brocade fabrics reserved for the ruling classes (World Shibori Network, n.d.). However, indigo also had a spiritual significance in Japanese culture and was believed to ward off evil spirits and protect the wearer from illness (Higuchi, 1996). Indigo has also held symbolic significance in other parts of the world. For example, in West Africa, indigo-dyed textiles were used in religious and cultural ceremonies and were believed to have protective properties (Browner, 1993).



Figure 3. Woman Making Shibori by Utagawa Kunisada, 1845

The patterns created through Shibori have different meanings and significance depending on the design and the context in which they were used (Saito, 1988). Some examples of Shibori patterns and their meanings:

1. Kumo Shibori: This pattern resembles a spider web and is said to represent perseverance and determination.
2. Kanoko Shibori: This pattern looks like small dots or circles and is said to symbolize fertility and growth.

3. Miura Shibori: This pattern is created by pleating and binding the fabric to create a geometric design. It is said to represent the mountains and valleys of the Japanese landscape.
4. Nui Shibori: This pattern is created by stitching the fabric before dyeing, resulting in a unique pattern. It is said to represent the thread that binds families and communities together.
5. Itajime Shibori: This pattern is created by folding and clamping the fabric before dyeing, resulting in a geometric design. It is said to represent the harmony and balance of the universe.

These are just a few examples of the symbolic meanings associated with Shibori patterns. The meanings may vary depending on the region and the specific cultural context.

Shibori has become increasingly popular in fashion today, with designers incorporating the technique into their collections. The unique and intricate patterns created through Shibori can add texture and visual interest to garments, making them stand out in a crowded market. Many designers are also drawn to Shibori's sustainable and eco-friendly nature, as the dyeing process uses natural dyes and minimal water.



Figure 4. Merlette: The Artist Behind These Shibori Dresses Shares a Step-by-Step Guide for DIY'ing Your Own

Color in Fashion Today

I don't have a single favorite color, but I've loved lilac since childhood. Over time, I developed a fondness for blue and now silver. Lilac has a healing quality and promotes intuition, while blue is calming and perfect for decoration. Surrounding myself with blue in nature also brings me peace. Silver is the color of the future, and everything in silver looks fabulous.

My favorite item of clothing is a futuristic armor from my shop that resembles a Mugler piece. It's a precious item that I cherish and would like to pass on. I dress according to how I feel, and I use fashion to express myself and unleash my creativity. Good fashion inspires me, and it's contagious. When fashion is good, I cook better too, creativity flourishes in everything.

I don't focus on celebrities when I dress, but their styles do influence us subconsciously. Kate Moss is an inspiration to me, and she always exudes rock-chic coolness. Today's celebrities lack authenticity, and it seems that there is always a stylist behind their looks. Instead, I look to my friends who work in the fashion industry for inspiration.

I didn't think we would need to connect the celebrity connection to our dye project. However, in terms of personal style inspiration, I have always been drawn to counterculture and the rebelliousness of the 60s rock scene. The pattern and color that I've chosen for my project could be described as a mix of rock and natural spirituality with boho elements, which I believe Kate Moss would appreciate. The overall look has a strong, edgy vibe that reflects my personal style preferences.



Figure 5. My Favorite clothing piece
HARMONIANY.COM



Figure 6. Kate Moss Boho Style

Tutorial: Dyeing Process



Figure 7. My Shibori Art

Materials:

- Fabric (cotton or silk work well)
- Rubber bands or string
- Indigo Dye
- Large container or bucket for dyeing
- Gloves
- 1 tablespoon Baking Soda
- 1 tablespoon of Salt
- Bucket of water
- Clothesline or drying rack



Figure 8. 100% cotton and Indigo Dye

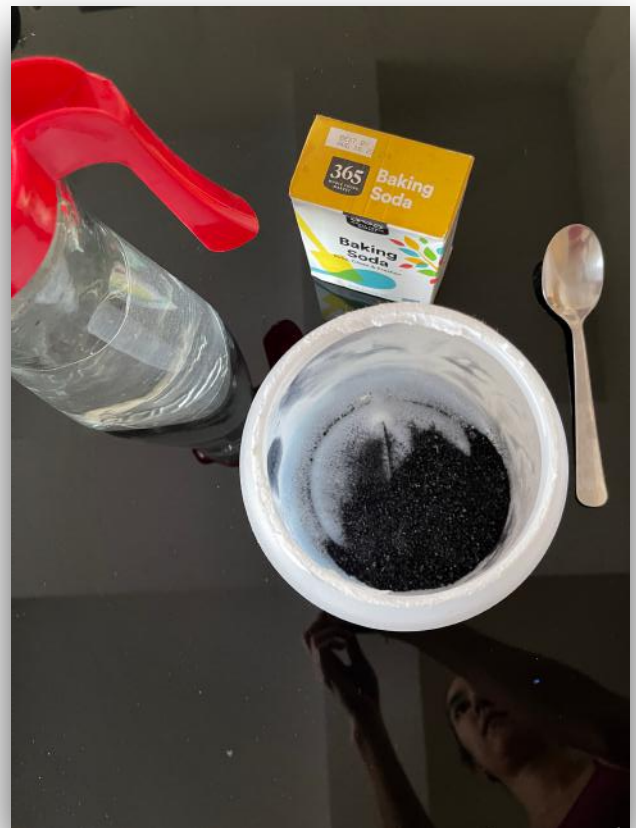
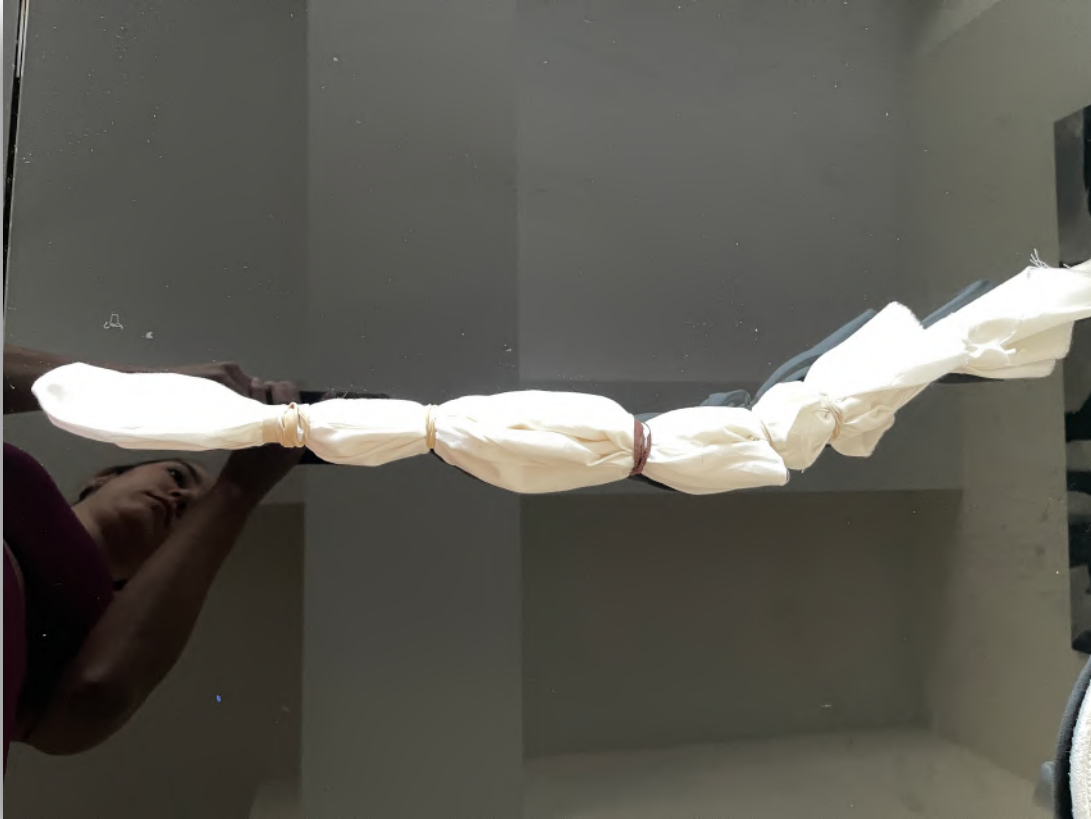


Figure 9. Materials

Instructions:

1. Wet the fabric thoroughly with water and wring out any excess.



Step 2. Fold and Twist for circular patterns.

2. Fold, twist, or bind the fabric with rubber bands or string to create your desired pattern. You can experiment with different techniques such as accordion folds, pleats, or spiral twists.
3. Prepare the dye by adding a cup of warm water to a water bucket, and add the indigo powder into the container or bucket. Add the mordants, salt, and baking soda to the mix.



Step 3



Step 5



Step 7

4. Wearing gloves, submerge the fabric in the dye and stir it gently for 5-10 minutes. The longer you leave the fabric in the dye, the darker the color will be.

5. Remove the fabric from the dye and rinse it thoroughly in cold water until the water runs clear.

6. Carefully remove the rubber bands or string from the fabric.

7. Hang the fabric to dry on a clothesline or drying rack.

Note: Make sure to follow all safety precautions when working with dye and wear a mask, black clothing, and gloves.



Photos of the Process

Here are the YouTube videos that demonstrates how to do Shibori:

<https://www.youtube.com/watch?v=EFw-gc2k8Nk&t=80s>

<https://www.youtube.com/watch?v=rgeLV0huXA>

Findings

Although I was unsure if the project was working out during the process, as the color seemed much more intense than what was shown in the YouTube tutorial, I was pleasantly surprised when I opened it up and saw the intricate pattern that had formed. However, I realized later that I forgot to take photos of myself while doing it but you can see my reflection on the table, the ones I did take did not turn out well I wish I didn't have to put them here.

The only issue now is that the color is still bleeding from the fabric, causing my surroundings to turn blue. Although adding salt and baking soda as mordants should have prevented this, I don't want to

risk ruining the pattern by washing it. I am considering washing it on a gentle cycle to remove the excess dye, but I am hesitant to do so. What I wrote above is the ideal tutorial but what I did is I waited to open it after the fabric was dry because I didn't have a drying rack and didn't want to risk making my bathroom blue.



My Shibori before opening

I was pleasantly surprised by the results of my Shibori project, as I did not expect it to turn out so well. It was a surprise to discover that I was capable of creating such a beautiful piece of art. I believe that it is ready to be exhibited in the school textile exhibition.

Conclusion

This research paper has shed light on the rich history and cultural significance of shibori, as well as its modern applications and potential for use in fashion. The experimentation with the technique yielded exquisite patterns, showcasing the remarkable strength and beauty of natural dyes. Through this research, I learned about Japanese Textile history. I also learned jeans are dyed with indigo, and also I ended up researching many unexpected things such as the meaning of Indigo child, which is The term "indigo child" a pseudoscientific New Age concept that emerged in the 1990s. It refers to children who are believed to possess special, supernatural, or paranormal traits or abilities, such as heightened intuition, psychic abilities, and deep spiritual awareness. These children are thought to possess a unique indigo-colored aura, which is believed to represent their special spiritual gifts. However, there is no scientific evidence to support the existence of indigo children or their supposed abilities, and the concept is widely regarded as a myth or a belief system without any basis in reality. The exploration of shibori has been an enlightening fun journey, highlighting the enduring appeal and versatility of this ancient textile art form. The findings of this study can inspire further exploration and experimentation, and perhaps even influence people to incorporate shibori techniques into their designs.

List of Figures

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