Corak
JURNAL SENI KRIYA

Received
Revised
Accepted

Article Process
: 09 Mei 2025
: 01 September 2025
: 30 November 2025

p-ISSN: 2301-6027
e-ISSN: 2685-4708

Corak : Jurnal Seni Kriya, Vol 14, No 2
30 November 2025

Kombinasi Tie Dye dan Bleaching untuk Menciptakan Efek Visual Warna dan Bentuk pada Kain

Erni Erlina Fanda Eva[1]
Universitas Negeri Surabaya, erni.23136@mhs.unesa.ac.id
https://orcid.org/no id orcid

Indarti Indarti[2]
Universitas Negeri Surabaya, indarti@unesa.ac.id
https://orcid.org/0000-0002-9486-3960

Li Hsun Peng[3]
National Yunlin University of Science and Technology, penglh@gemail.yuntech.edu.tw
https://orcid.org/0000-0002-6346-1256

[1] Ketintang, Kec Gayungan, Kota Surabaya, Jawa Timur 60231
[2] Ketintang, Kec Gayungan, Kota Surabaya, Jawa Timur 60231
[3] No. 123號, Section 3, Daxue Rd, Douliu City, Yunlin County, Taiwan 64002

Keywords:
Tie Dye, Bleaching, Visual Effect and Fabric.

ABSTRACT

Fabric dyeing techniques continue to evolve with unique and interesting innovations. An interesting combination to be explored is the tie dye and bleach technique, which can create visual patterns and textures on fabrics. The objective of this research is to find out the process and realization of the combination of tie dyeing and bleaching in creating the resulting visual effects on the fabric. The tie-dye technique is performed before the bleaching process to see if the pattern produced by the tie-dye can fade after the bleaching technique is applied. This research uses the Double Diamond Method, which consists of four stages: Discover, Define, Develop and Deliver, to explore and develop fabric designs in a structured and creative manner. The results show that the combination of tie dyeing and bleaching can produce more varied visual effects than using the techniques separately. Fabrics with natural fibers, such as rayon, give the best results in absorbing dyes and provide an optimal response to the bleaching process.

Kata Kunci:
Tie Dye, Bleaching, Efek Visual dan Kain.

ABSTRAK

Teknik pewarnaan kain terus berkembang dengan berbagai inovasi yang unik dan menarik. Salah satu kombinasi yang menarik untuk dieksplorasi adalah teknik *tie dye* dan *bleaching*, yang dapat menghasilkan pola dan tekstur visual pada kain. Penelitian ini bertujuan untuk mengetahui proses dan perwujudan kombinasi *tie dye* dan *bleaching* dalam menciptakan efek visual yang dihasilkan pada kain. Teknik ikatan (*tie dye*) dilakukan sebelum proses *bleaching* untuk melihat pola yang dihasilkan dari ikatan tersebut dapat

	memudar setelah diterapkannya teknik bleaching. Penelitian ini menggunakan metode Double Diamond, yang terdiri dari empat tahapan: *Discover, Define, Develop,* dan *Deliver,* untuk mengeksplorasi dan mengembangkan desain kain secara terstruktur dan kreatif. Hasil penelitian menunjukkan bahwa kombinasi tie dye dan bleaching dapat menghasilkan efek visual yang lebih beragam dibanding menggunakan teknik secara terpisah. Jenis kain dengan serat alami, seperti rayon, memberikan hasil terbaik dalam menyerap pewarna serta memberikan reaksi yang optimal terhadap proses bleaching.

INTRODUCTION

The fashion industry continues to grow significantly, encouraging designers to create various innovations, one of which is through the exploration of fabric dyeing techniques. The tie dye technique is the coloring of fabric by tying the fabric before dipping it into the dye, producing distinctive and unexpected patterns (Cintya et al., 2020). In Indonesia, this technique is known by various local names such as sasaringan in Banjarmasin, pelangi in Palembang and jumputan or tritik in Java (Zahro et al., 2021). The uniqueness of the tie dye technique lies in the spontaneous motions that arise from variations in binding and dyeing (Surya Tri W., 2013). This technique is widely used in making casual clothing and men's shirts (Fitriani et al., 2022). This process creates interesting patterns formed from parts of the fabric that are not exposed to dye due to the presence of barriers such as ropes, marbles, or stones (Diba et al., 2021; Maylina et al., 2020). The Tie Dye technique is still below the popularity of batik, but for the Tie Dye technique the simple way of making is different from batik, so the Tie Dye technique can be learned in a relatively short time (Wardoyo, S., & Widodo S. T. (2016).

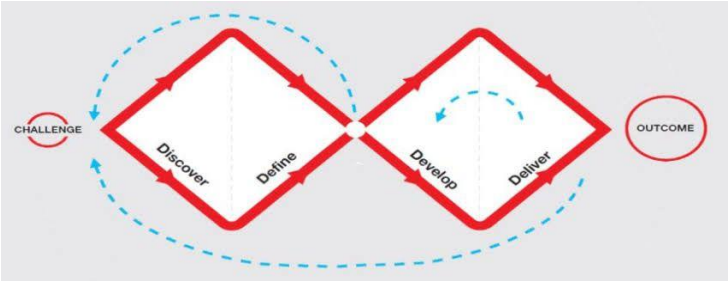
Meanwhile, the bleaching technique is the process of removing fabric colour to create a new lighter or patterned look using bleaching agents such as sodium hypochlorite (NaOCl), which can create abstract visual effects in the form of white, orange, brown to reddish-orange colours, depending on the characteristics and thickness of the fabric (Acmelia & Nursari, 2021). This technique can be applied in a variety of ways, including dyeing, splashing, brushing and even tie-dye techniques using bleach.

Combining these two techniques, tie dyeing and bleaching, can create interesting and more varied motif combinations. Fitriani et al (2022) mentioned that these techniques can create unique visual effects when combined correctly. The combination of tie-dye techniques with other techniques such as embroidery or patchwork has also been explored to add aesthetic value and provide a special texture to textile products, which has been done by (Elvin S & Theresia W, 2022) that the combination of shibori and embroidery techniques can produce a different visual appearance and add aesthetic value to textile products. The study by Wulandari et al (2024) on denim fabric shows that bleaching techniques combined with patches and embroidery can produce dynamic retro-style geometric motifs, proving that the exploration of this technique has great potential in the textile world. These two techniques offer a wide range of possibilities to explore motifs and encourage creativity in working with textiles. The combination of the two can produce unique and artistic works and has advantages in terms of visual expression, variety of motifs and even sustainability value as it can be applied to recycled fabrics.

However, the use of this technique is often limited to certain fabrics such as denim. Therefore, the aim of this research is to apply the combination of tie dyeing and bleaching to natural fibre fabrics such as cotton, rayon and other natural fibres to find out to what extent this combination can create interesting and aesthetically pleasing visual effects. In addition to enriching textile dyeing techniques, this approach is expected to provide a creative alternative for the reuse of used fabrics while supporting the development of a sustainable fashion industry.

METHOD

This research uses the Double Diamond approach, a design framework consisting of four main stages: discover, define, develop, and deliver. This model was first introduced by the British Design Council and aims to explore and find design solutions in an innovative and systematic way (Indarti, 2020; D. D. Antika, 2024).



Picture 1: Methode Double Diamond

Discovery

This initial phase focused on problem identification and finding design inspiration through observation. Researchers studied fashion trends and researched fabric dyeing techniques to generate ideas that were outlined in the mood board (Imaniyah, 2022; Hariana, 2020). The main inspiration came from the combination of tie dyeing and bleaching techniques that create artistic visual effects on fabrics (Amanda, 2019).

Define

This stage is the process of analyzing ideas and visualizing design themes through mood boards. The main techniques used are tie dye to create abstract and dynamic effects, and bleaching to create experimental gradation effects (Anggi et al. 2020). Color selection focuses on monochromatic palettes such as black, gray, white, brown, and orange to create a modern look.

Picture 2: Midnight Enigma - Moodboard

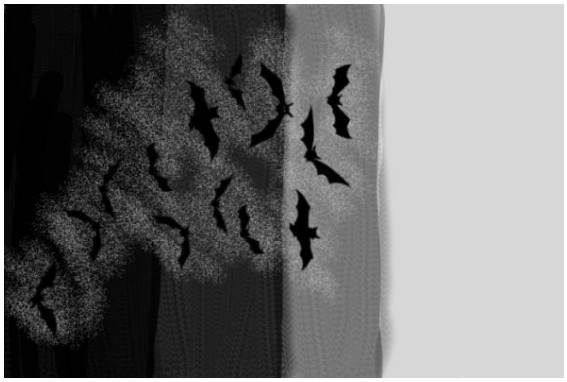
Midnight Enigma - Using tie-dye and bleach visuals with a nighttime theme. This mood board is all about the beauty and mystery of the night, combining tie-dye and bleach techniques to create a dramatic visual play of black and white contrasts. The main inspiration comes from nocturnal elements such as the starry sky, moonlight, bat silhouettes and insect forms such as spiders, all of which create a mystical and imaginative feel. The dominant colors are deep black, gray, white, and natural browns from the bleaching process. Visual elements such as tie-dye spirals and white floral motifs create a unique harmony between strength and softness. The design also features symbolic silhouettes such as bats and cats, giving it a mysterious yet aesthetic feel.

The bleaching technique is used to create a light effect on the dark background, as if to represent the moonlight breaking through the dark night. Meanwhile, the tie-dye technique presents dynamic textures and patterns, as if visualizing the movement of night energy.

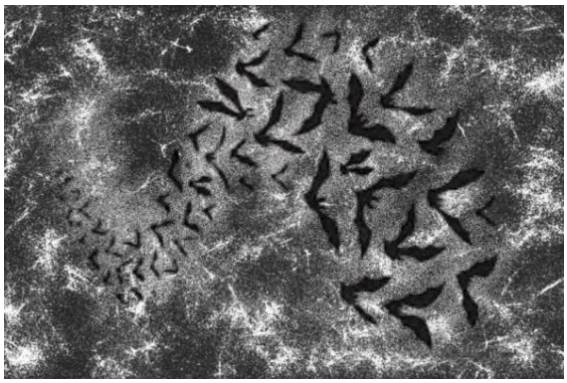
Develop

At this stage, the idea is expressed in the form of experimentation with fabric dyeing techniques. The process begins with a tie-dye technique to create a basic pattern through binding and dyeing, then continues with bleaching to fade colors in certain areas, resulting in unique visual gradations (Rahmawati, 2023). The inspiration from the mood board was then translated into several alternative fabric designs using different combinations of techniques.

Here are some inspirations of exploratory combination techniques designed using tie-dye and bleach techniques, and one of them will be selected to be realized as the final product:



Picture 3: Inspiration 1



Picture 4: Inspiration 2

Picture 5: Inspiration 3

Deliver

The final stage is the implementation of the design results into a real fabric form using a combination of the designed dyeing techniques. The experimental products are tested and analyzed to evaluate the visual effects resulting from the combination of these techniques.

RESULT AND DISCUSSION

a. PROSES AND RESULT

This process begins with the preparation of tools and materials. The tools and materials used include bat motif vectors, fabric bleach, spray bottles, fabric dye, water glass, white rayon fabric, rubber bands, buckets, and tissue as an optional supplement. The process continued with the application of the tie-dye technique using the crumple method. The fabric is spontaneously crumpled into irregular folds and then tied with rubber bands. This technique creates unpredictable patterns that give the fabric an abstract and dynamic look. The next step is the dyeing process, which involves spraying dye over the entire surface of the fabric, both front and back. This process is carried out on a plastic mat so as not to absorb the liquid. Once the dye is evenly distributed, the fabric is dried in a bound state to allow the dye to fully penetrate.

Picture 6: Tools and Material

Picture 7: Application of Crumple Technique and Coloring Process

The next step is to apply water glass as a color fixative to make the color more durable on the fabric. After the rubber is released, the fabric is dipped in a solution of waterglass mixed with water in a ratio of 1:2. After soaking, the fabric is dried in the sun until dry, then rinsed with clean water to remove the remaining waterglass and dried again.

Picture 8: Waterglass Application and Drying Process

The final process is bleaching using the spray technique. Bleach is sprayed randomly with a spray bottle to create an irregular fading effect. To create a specific motif, a bat-shaped vector was used, perforated on the inside. This vector was attached to the surface of the fabric and the edges were covered to prevent the spray from spreading out of shape. Bleach was then sprayed on the inside of the shape and the process was repeated until the desired design composition was achieved. This combination of techniques creates a unique and artistic visual effect on the fabric surface.

Picture 9: Bleaching Process of Splattering Technique

The combination of tie-dye and bleach techniques on rayon fabric creates unique, dynamic and unpredictable visual motifs. The crumple technique applied in the tie-dye process creates abstract patterns that spread randomly, while the bleach splatter technique adds a fading effect that enriches the visual texture of the fabric. The dyed colors of the fabric appear attractive with bright and vibrant shades thanks to the optimal absorbency of the rayon fabric. The bleach effect, applied randomly with a spray bottle, gives a sense of contrast that highlights certain parts of the motif, creating a natural gradation of color that attracts attention.

Once the dyeing process is complete, fixation with water glass successfully helps to lock in the color so that it does not fade easily when washed. However, the use of bleach in the bleaching process must be done carefully, as too much bleach can stiffen the texture of the fabric or even damage the fabric fibers. Therefore, setting the dosage and application technique of bleach is an important factor in maintaining fabric quality.

In terms of aesthetics, the combination of tie-dye and bleaching techniques provides a high artistic value. Each piece of fabric has its own uniqueness, no two are the same, increasing the exclusivity of the product. In addition to creating products with high aesthetic value, this technique also supports the concept of sustainable fashion by using manual methods that minimize waste and allow for diverse creative exploration.

However, this combination of techniques has its advantages and disadvantages, the advantages being that it is able to create original motifs and a strong visual appearance without the need for high technology. This technique gives designers a lot of creative freedom, especially in developing motifs that cannot necessarily be applied en masse. On the other hand, the results are not always controllable and there is a risk of fabric damage if the bleaching process is intensive. Overall, the research on the combination of tie-dyeing and bleaching proved that this method is relevant to current fashion trends that emphasize uniqueness, artistic value and sustainability.

Picture 10: Finished Result of Tie Dye and Bleaching Combination

a. RESULT OF PRODUCT EVALUATION

The results of product evaluation were evaluated by 19 students of D4 Fashion Design, Semester 4, Surabaya State University, who had taken textile craft courses. Data was collected through a Google Form questionnaire with a rating scale of 1–5 on five aspects: motif creativity, visual effect created, tie dye technique effectiveness, bleaching effectiveness, and motif harmony. The assessment results were summarized and analyzed by taking the highest score (most votes) on each aspect as the final evaluation result.

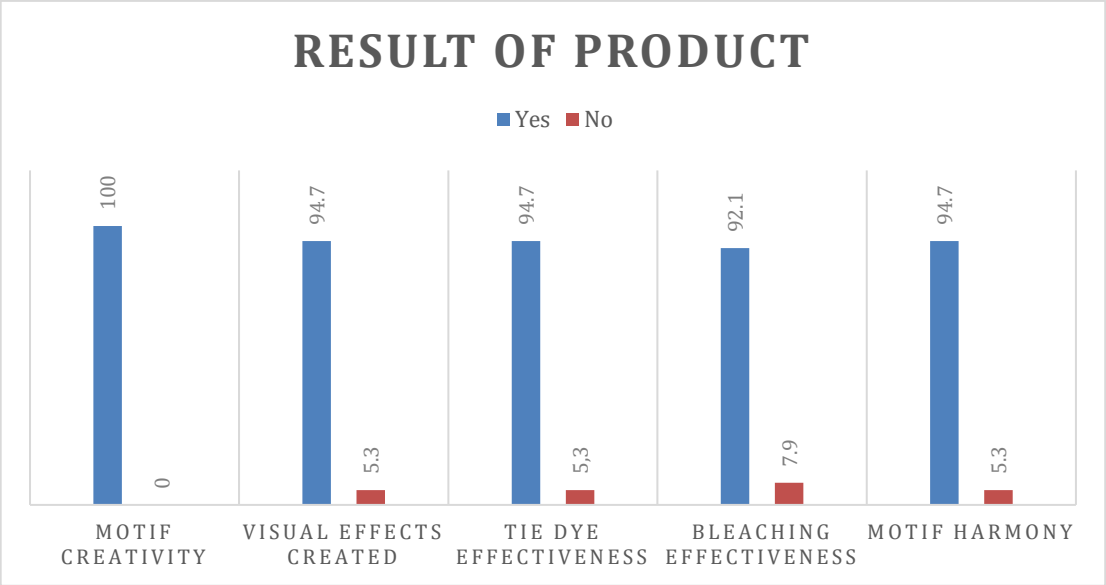


Figure 11: Diagram of Results

Based on Figure 11, it can be concluded that 100% of the respondents answered "yes" to both questions regarding the creativity of the motifs, i.e. that the motifs shown are unique and not on the market, and that there are innovations in shape and pattern. This shows that the motifs produced have successfully fulfilled the element of creativity, with original uniqueness and the development of innovative shapes and patterns. The percentage results show that 94.7% of the respondents answered "yes" and only 5.3% answered "no" to the three aspects of visual effect evaluation, namely the combination of colors that creates an illusion or artistic visual impression. This indicates that the majority of respondents found the visual effects produced to be very good, capable of creating visual appeal through effective and aesthetic combinations of colors and patterns.

Based on the percentage results, 94.7% of respondents answered yes and 5.3% answered no to the two indicators of Tie Dye's effectiveness, namely colors that penetrate well and abstract results that are consistent with the crumple technique. This shows that most of the respondents considered the Tie Dye technique used to be effective, with optimal coloration and abstract patterns consistent with the characteristics of the technique used. Meng et al. (2023) stated that the tie-dye technique offers significant advantages in terms of color fastness and visual appeal, indicating that the tie-dye technique produces unique and attractive motifs that support the respondents' positive evaluation.

The percentage results show that 92.1% of the respondents answered Yes and 7.1% answered No to two aspects of bleaching effectiveness, namely the clarity and evenness of the bleaching results and the absence of leakage areas. This indicates that, in general, the bleaching technique used is considered effective by the majority of respondents, with results that are clean, even, and as expected, although there are still evaluations from some respondents. Kabir and Koh (2021) showed that the use of peracetic acid as a bleaching agent on jute-cotton blended fabrics resulted in higher tensile and elastic strength compared to H2O2 bleach. This suggests that appropriate bleaching techniques can improve fabric quality without damaging the fabric fibers, which supports the respondents' positive assessment.

Based on the percentage results, 94.7% of respondents answered yes and 5.3% answered no to the two aspects of motif harmony, namely the combination of tie dye and bleach motifs that appear unified and there is no impression of separate or random motifs. This shows that the majority of respondents felt that the motifs produced had good harmony, with a harmonious combination of techniques that created a unified visual appearance and did not appear separate. According to Wahyuni and Suryawati (2021), the use of tie-dye coloring techniques with hot and cold dissolving media can affect the aesthetics of the resulting colors, shapes, and motifs. Variations in this dyeing technique allow for the creation of harmonious and unified motifs, which supports the respondents' positive evaluation of the harmony of the resulting motifs.

CONCLUSION

Research into the combination of tie-dye and bleach techniques to create visual effects on fabric proves that both techniques can create unique, dynamic and unexpected designs. The crumple technique in tie-dye provides interesting random patterns, while the splatter technique in bleach adds visual depth through contrasting fading effects. The rayon fabric as a dyeing medium proved to be highly absorbent, supporting a more vibrant and aesthetically pleasing motif. The end result reflects the great potential of this combination of techniques to create textile products that are exclusive, of high artistic value, and relevant to the creative and sustainable fashion industry. To achieve maximum results, it is important to pay attention to the choice of fabric type, the strength of the bleaching solution and the accuracy of the application technique so as not to damage the fabric. Testing on small pieces of fabric is highly recommended to check the desired visual result. Further development can be done by exploring folding techniques, bleaching patterns and more varied color combinations to enrich the design collection and meet the needs of the growing fashion market.

DAFTAR PUSTAKA

Acmelia N.M & Nursari F. (2021). Penerapan Teknik Bleaching pada Busana Berbahan Dasar Denim. Jurnal ATRAT 9(3), 233-235.

Anggi A. Dewi R & Putra B. (2020). Penerapan Mtode Design Thinking dalam Perancangan Busana. Porsiding seminar Nasional Desain 3, 112-120.

Amanda. S (2019). Teknik Bleaching dalam Desain Busana. Jurnal seni dan Desain 5(2), 45-53

Cintya. A, Salma Ayu N.R & Saskia. A. (2020). Motif Tie Dye pada Produk Tekstil Menurut Pebisnis Online di Tengah Pandemi, 01(1), 41.

D D Antika & I. Russanti. (2024) Penciptaan Bridal Gown Muslim Inspirasi dari Burung Kakak Tua. Journal of fhasion & Textile Design Unesa (5), 212-213.

Fitriani, F., & Maida, A. N (2022). Teknik Tie Dye menggunakan Daun Pepaya dan Pemutih Pakaian pada Pembuatan Mukena Anak. Journal HomeEc, 17(1),1-6.

F Diba (2021). Studi Literatur Pelatihan Ikat Celup Sebagai Upaya Pemberdayaan Masyarakat Terhadap Penggunaan Pewarnaan Alam. E-Journal 10(1), 127-136

Hariana. D (2020). Pengaruh Trend Terbaru terhadap Inspirasi Desain Busana. Fashion Journal Indonesia 8(1), 25-30.

Imaniyah N. (2022). Tahap Discovery dalam Proses Perancangan Produk Fashion. Jurnal Desain dan Kreativitas, 10(3), 99-105

Indarti, I. (2020). Metode Proses Desain dalam Penciptaan Produk Fashion dan Tekstil. BAJU: Journal of Fashion and Textile Design Unesa, 1(2), 128-137.

Kabir, S. M. M., & Koh, J. (2021). Bleaching of Jute-Cotton Blend Fabric with Peracetic Acid for Deep Dyeing. Journal of Fiber Science and Technology, 77(4), 146–156.

Meng, X., Yang, C., & Zhu, C. (2023). Impact of Tie-Dye Techniques on the Durability and Aesthetic Appeal of Textiles. Fibres & Textiles in Eastern Europe, 31(5), 43–55.

Mayliana. E & Galuh. A.I (2020). Pelatihan Teknik Jumputan Inovasi untuk Meningkatkan Kualitas Produk Tie Dye Kelompok Seni SEEJ.

Rahmawati, A. (2023). Eksplorasi Teknik Pewarnaan Tie Dye dan Bleaching dalam Desain Tekstil. Jakarta: Penerbit Mode Kreatif.

Setiowati, E., & Widiastuti, T. (2022). Combination of Shibori dan Embroidery Tevhniques in Textile Products. Corak: Jurnal Seni kriya, 11(1), 45-54.

Surya Tri Widodo. (2013). Kriya Tekstil Tie Dye (Ikat Celup): Sebuah Media Eksplorasi Estetis yang Populer. Corak: Jurnal Seni Kriya, 1(2), 101-122.

Wulandari. A, Larissa. T & Sgit R. M. (2024). Perancangan Produk Fashion Menggunakan Teknik Bleaching pada Kain Denim Tekstur dengan Penggayaan Retro, 11(06), 9505.

Wahyuni, S. P., & Suryawati, S. (2021). Teknik Pewarnaan Tie Dye dengan Media Pelarutan Panas dan Dingin Berdasarkan Estetika Warna, Bentuk, Serta Motif. Practice of Fashion and Textile Education Journal, 1(2), 75–82.

Wardoyo, S., & Widodo, S. T. (2016). Inovasi Perancangan Motif Tie-Dye (Ikat Celup) di Kota Yogyakarta. Corak: Jurnal Seni Kriya, 5(1), 81–90.

Zahro,S., Hartono, R., & Juniati, D. (2021). Analisis Visual Pencairan Glester untuk Ptoses Stilasi pada Kain di Bidang Fashion. Jurnal Sains dan Seni ITS, 10(2),26-31.