

Influence of Contemporary Fashion Developments on the Shifting Meanings of Hand-Drawn Batik Lasem, Indonesia

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Received	Accepted	Published
08.01.2024	27.03.2024	31.03.2024

<https://doi.org/10.61275/ISVSej-2024.11-03-11>

Abstract

Batik Lasem has been an icon of Indonesia which expresses the life & culture of the Lasem society. In this, the Javanese & Chinese ways of living are assimilated and conveyed through Batik colors, patterns & compositions. However, today, Indonesian contemporary fashion industry has developed many fashion collections using batik as its main material, resulting in changes in the modern batik from the way batik was created. Many disapprove the way it is sewn into fashion.

This paper employs a case study method, collaborative design, and development of fashion within the descriptive qualitative paradigm. Data is collected from the fashions developed by the fashion design students from Keimyung University, South Korea & Maranatha Christian University, Indonesia.

It concludes that the shifting of meanings of hand-drawn Batik Lasem through contemporary fashion developments are influenced by the creativity and fashion trends of the designers. Indeed, it is shown in the visual elements of fashion such as silhouettes, colors & the textile explorations.

Keywords: Meaning of Batik, Contemporary Fashion, Hand-drawn Batik Lasem, Indonesia.

Introduction

Batik is a resist-dye technique using wax. This technique has a long history, dating back to China during the Qin & Han Dynasties, as well as Egypt & India (Liu & Ko 2021; Widagdo, Ismail & Alwi, 2023). Understanding of the origin of batik is still vague due to the potential degradation of natural fibers over time. Although the origin of the batik technique in Indonesia has not been definitively established, Indonesian batik was designated as a World Intangible Cultural Heritage by UNESCO in 2009 (UNESCO 2009). The reason is that the significant historical background of Indonesian batik highlights its status as a hereditary craft that necessitates a certain set of procedures, including the selection of the canting (wax pen), design, pattern & color. According to Krisnawati, *et al.* (2019) and Langi & Park (2016), people have the ability to express their identity, social status, or cultural heritage by donning traditional attire. Batik, particularly in Java, is worn during significant stages of an individual's life, including nativity, maturity and mortality (Angkawijaya, Agustina & Chuan, 2020). Hence, batik holds a significant cultural and national importance in Indonesia.

Lasem is one of the earliest centers for batik production in Java. The establishment of the company is associated with the era of the Majapahit Kingdom, spanning from 1293 to 1478 (Darmayanti & Bahauddin, 2020). Hand-drawn batik Lasem is widely regarded as a luxury item, leading to its international distribution in countries such as Singapore, Malaysia & Thailand (Darmayanti & Bahauddin, 2020). According to Achjadi, *et al.* (2018), Lasem batik collection from the early period is considered to be one of the notable batik collections curated by King Chulalongkorn in Thailand.

In the early 1800s, Lasem emerged as a prominent hub to produce batik. According to Lukman, Setyoningrum & Rismantojo (2019), the Lasem batik industry saw a period of zenith during the mid-20th century, followed by a subsequent decrease from the 1980s to the early 2000s. This decline can be attributed to political instability and the evolving lifestyles of the Indonesian women. The distinctive quality of the Lasem batik business is the particular abilities that each worker has throughout the batik-making process. From the moment they begin working until they quit creating batik, this skill is maintained. There are six abilities available for each artisan, which is master-motif drawing, tracing or drawing motifs on cloth, batik-making process: klowong canting (*nglowong*); cecek canting (*isen-isen*); tembok canting (*nembok*) and coloring & removing wax (*ngelod*) (Mulyanto, 2022).

Currently, there is a resurgence of traditional textiles and garments in Indonesian fashion (Ratuannisa *et al.* 2020). However, amidst the present era of globalization, decentralization of local cultural values is possible (Langi *et al.* 2020). In fact, the appreciation of local culture might extend to foreign cultures. This presents the designers with the chance to produce a fashion collection that transcends their particular cultural contexts. Nevertheless, the issue occurs when designers lack adequate understanding while formulating concepts rooted in a specific culture. In relation to the batik tradition, fashion designers are expected to demonstrate reverence for both the sacred & profane batik themes. Needless to say, Batik has become integrated into the Indonesian culture as a reaction to the modern way of life (Angkawijaya, Agustina & Chuan, 2020).

Recently, Batik has undergone a decline in its status as a sacred & valuable textile due to the influence of modernism (Selamet 2018). It is a commercially made fabric that is consumed for financial gain. The responsibility of a designer is to effectively incorporate batik fabric and its significance into modern fashion for societal usage. In this background, this paper examines the significance of hand-drawn Batik Lasem, both in traditional & contemporary contexts. It analyzes the shift of meaning in hand-drawn Batik Lasem when it is adapted by contemporary fashion. In fact, it aims to reveal the shifting of meanings of the hand-drawn Batik Lasem through contemporary fashion developments. Its objectives are

- (1) To reveal the motifs, categories and meanings of implementing batik into contemporary fashion.
- (2) To reveal the shifting of meanings when they are adapted using Indonesian and Korean fashion trends.

Theoretical Framework: Meaning of Batik

When discussing the meaning of Batik in Indonesia, it is crucial to ascertain its origins. The meaning of Batik is embedded in its motifs and colors, which are then conveyed through distinct cultural meanings. This statement explains that the batik motifs & colors serve as a representation of the creator's cultural identity.

This is in accordance with Langi & Park (2016b) who say that Indonesian traditional textiles convey its creator's cultural philosophy and purpose through the production processes, colors and visual patterns. Parmono (1995) says that various elements exert influence on the production of batik and its meanings, including but not limited to, the geographical location, the characteristics and economic structure of the region in question, cultural beliefs and traditions, prevailing natural circumstances and the interconnections or associations among batik-producing regions.

The significance of a similar pattern and color may vary based on the culture in consideration (Nurchayanti, Mulyanto & Sachari, 2021). In fact, there are two distinct categories

of batik based on their geographical locations: coastal batik, which is produced near the fishing sector in the coastal areas and inland batik, influenced by the social and environmental conditions of the Keraton (kingdom). Coastal batik shows the distinctive qualities of the region using marine-inspired patterns and vibrant hues. Inland batik shows the rules and regulations of the Keraton called *pakem*, characterized by symmetrical patterns inspired by agrarian life earthy color tones (Moertini & Sitohang, 2005; Nurcahyanti, Mulyanto & Sachari, 2021; Erwantoro, Sofianto & Rostiyati, 2023).

The meaning of batik in Indonesia is described by tipping points by Febriani, Knippenberg & Aarts (2023). The pivotal moments in the transformation of batik into the national icon of Indonesia are as follows:

- (1) The rule of Agung, which symbolized regional authority.
- (2) The four *Vorstenlanden*, who established distinct batik styles & symbols.
- (3) The creation of *tjap*, which facilitated the dissemination of batik as a symbol of Indonesian identity.

Ratuannisa, *et al.* (2020) provide additional details on the evolution of Indonesian Batik, which emerged as clothing in reaction to the fashion trends during the period of 1930-1940. In fact, experts have identified the meanings of batik in Indonesia historically based on the batik process, colors and visual patterns. The meanings of batik have evolved throughout history, from signifying one's status into a business commodity as Indonesia's icon. The meaning of traditional hand-drawn Batik Lasem is categorized based on the main motifs, complementary motifs, *isen-isen* (filling every vacant space on a piece of fabric with designs) and color.

Literature Review

In Indonesia, numerous studies have examined the art of hand-drawn Batik Lasem and the process of adapting traditional fabric into contemporary fashion. Nevertheless, there has been no prior effort to collaboratively analyze the transformation of the symbolic significance of hand-drawn Batik Lasem when it is incorporated into contemporary fashion. Majority of these works have mostly focused on the historical significance and symbolism of the batik Lasem motifs. For instance, Lukman, Setyoningrum & Rismantojo (2019) and Mahesti, Sugiarto & Nugrahani (2023) have conducted a semiotic analysis of Lasem batik motifs to uncover the underlying ideology buried within them. It is derived from the core principles of the multi-ethnic Lasem civilization, which is influenced by the ideologies of Taoism, Confucianism and the Javanese philosophy of life. Basiroen (2019) further elaborates that based on its cultural codes, Lasem batik depicts the natural environment, historical narratives, and plant and animal life of the region, as evidenced by its historical background. The characteristics of motifs originate from the cultural fusion between Javanese & Chinese themes, as well as the native motifs of Lasem (Rizali & Sudardi, 2016). The distinctive codes found in Batik Lasem are their techniques, motifs and colors (Kurnia & Windarti, 2019).

According to Nugraha (2018), artists & designers make three distinct initiatives to ensure the survival of traditional artefacts: preservation, revitalization & transformation. Traditions emerge because of people spontaneously creating and adopting specific recurring patterns of behavior. Attempts in incorporating Indonesian traditional culture into fashion items as a source of inspiration have been made. The clothing style of batik in Indonesia has been shaped by diverse external influences, including factors such as functionality, form, silhouette and characteristics following current trends (Ratuannisa *et al.* 2020).

Langi *et al.* (2020) assert that the creative process is necessary to redefine cultural design elements. This method leads to the creation of distinctive products that align with the evolving creative industry, while yet upholding cultural and aesthetic principles. The concept of 'think globally' for the market, yet 'act locally' in terms of design has been upheld by Lin, *et al.* (2007). Indeed, designers can employ a cultural product design paradigm to conduct research, engage in interactions and develop and implement their concepts into a product design. Therefore, the design of cultural products can be seamlessly incorporated into the contemporary market.

While fashion design schools primarily focus on nurturing individualism among the designers, it is important to recognize that creating is ultimately a team activity (Onur, 2020).

Collaborative design between a university and a company is an educational method that allows the student designers to gain practical experience in working together with fashion companies to create fashion products (Lee & DeLong, 2018). Through this approach, students acquire problem-solving and communication abilities (Bye, 2010). Thus, it is incumbent upon one to provide a resolution and make a decision (Whitham, *et al.*, 2019).

Overall, despite extensive prior research on Lasem Batik and the significance of modernizing traditional products, there remains a dearth of studies examining the evolution of the meaning of batik when incorporated by the fashion designers, particularly within a global context. Therefore, this research is important.

Research Methods

This research employs quantitative methods using collaborative design, as well as case-study method examining the development of fashion through a descriptive-qualitative analysis.

Collaborative design is a specific design technique that encourages effective involvement of the stakeholders. According to Whitham *et al.* (2019), the objective of collaboration is to construct a design by integrating various roles, ideas and team members. The importance of multiple perspectives and approaches in understanding and creating value will enhance the knowledge of researchers and the professionals. The cooperative technique in this study refers to the collaboration between two academic institutions and two companies or batik houses from February to June 2023.

The case-study method is a strategic approach in which the researcher is supplied with a specific problem or situation to analyze. The case-study method facilitates the examination of an authentic problem inside a particular context by employing several data sources with diverse skill sets (Herrera *et al.* 2016). This approach in design offers a significant benefit as it allows for a thorough understanding of the creative process and effectively preserves the context and unique characteristics of the creator (Gruber & Wallace, 1999 in Lee & Danko, 2017).

The methodology was as follows: each university is provided with 20 pieces of hand-drawn batik Lasem, followed by a collaborative design exercise in which the students selected the batik and then developed the concept and the design based on the current trends.

Data Collection and the Materials

Two universities have linked this research with the application of the case-based method to ongoing courses: Maranatha Christian University's Studio & Clothing II course (25 students) & Keimyung University's Fashion Brand Planning course (3 students) & Experimental Fashion Practice course (5 students). In the end, there are 8 designs chosen from Maranatha Christian University & 8 designs from Keimyung University.

The main materials used in this research are 20 pieces of two-colored hand-drawn batik Lasem and 20 pieces of three-colored hand-drawn batik Lasem from Pusaka Beruang Batik House & Kidang Mas Batik House.

Procedure and Analysis

The process involved comprehending the significance of each hand-drawn batik Lasem motif and creating a fashion collection inspired by the concept and the current trends. Participating students analyzed the chosen batik through descriptive qualitative methodologies to examine the transformation of meaning when hand-drawn Batik Lasem is incorporated into both Indonesian and Korean fashion trends. The result of this research is the creation of two fashion collections, consisting of 5 art wear appearances and 11 ready-to-wear appearances.

Findings

This study examines the shift of meaning of hand-drawn Batik Lasem in Indonesian and Korean design. The objective of this research is to enhance the utilization and complexity of traditional Batik Lasem through international partnership. Keimyung University curated an artistic compilation featuring diverse Batik Lasem application techniques and themes, with a commercial

selection inspired by the Korean trend. Maranatha Christian University created a range of clothing that is ready-to-wear, which was inspired by the current fashion trends in Indonesia.

The students enrolled in the Experimental Fashion Practice course created garments that diverge from the conventional commercial standards to convey significant narratives on a wide range of themes, varying in importance from the local to the global. The theme of this year's Artwear class assignment was "Everything Changes". Existence entails transformation. Change is an inherent process that is essential to our existence on Earth, from the moment one is born until the moment one dies. Art possesses the capacity to envision and manifest change, even within our perpetually physical and corporeal realm. Students in the Studio and Clothing II course designed and produced ready-to-wear clothes inspired by their own interpretations of the hand-drawn Batik Lasem. These notions are aligned with the current fashion trends in Indonesia. This study contends that the shift of meaning of hand-drawn Batik Lasem in the current fashion is shaped by the designer's creativity in terms of concepts and fashion trends as seen in the case study presented below.

Case Study 01

Kim Chae Heun, a student from Keimyung University, choose hand-drawn Batik Lasem that conveys wealth and & kindness. The bird known as the Hong or phoenix in Chinese culture is commonly linked to female personalities who possess qualities of tenderness, grace and kindness (Lukman, Setyoningrum & Rismantojo, 2020). In Javanese culture, Lerek Parang Gunung Ringgit, also known as Mount of Ringgit, symbolizes a perpetual bond through the representation of a knife or parang (Lukman, Setyoningrum & Rismantojo, 2019). The Latohan motif, which is derived from *algae*, is a symbol of peace in Lasem culture. Yellow is traditionally associated with femininity and is believed to have the power to repel demons. Red represents bravery.

In contrast, the design was inspired by the housing issue in Korea, as depicted in the film 'Parasite by Bong Joon Ho'. The designer became fascinated by the transformative properties of fungi, particularly the mold that thrives in semi-basements. A crucial aspect of the study involved the creation of experimental textiles (Fig 2). The designer employed a diverse range of styles and textures to effectively communicate her storyline, owing to the lively characteristics and motifs of Batik Lasem. Hand-drawn Batik Lasem is included in the textile exploration in this design. The message transforms from wealth and kindness into a powerful and artistic representation (Fig. 3).



Fig. 2: Fashion Design Development Kim Chae Heun
Source: Kim Chae Heun, 2023



Fig. 3: Fashion Look Kim Chae Heun
Source: Kim Chae Heun, 2023

Case Study 02

Kim Yun Seo, a student from Keimyung University, chose a feminine and courageous hand-drawn Batik Lasem. The primary element in this design is the Phoenix, accompanied by butterflies and vines. Phoenix symbolizes long life, while the vines and flowers signify the attraction between Man (butterfly) and woman (flower) (Lukman, Setyoningrum & Rismantojo, 2020). The colors purple and red symbolize courage.

The student designer conducted an initial investigation on the topics of meditation, stress reduction, religion and physical activity. The artist Lucas Samaras' artwork, which explored the concepts of self, persona and societal perspectives, ignited my curiosity about the inner workings of the human mind (Fig. 4). The designer used inspiration from rituals, yoga and child-wrapping blankets to convey the essence of Batik Lasem. Hand-drawn Batik Lasem is included in the design. Batik remains discernible as a head covering and as lines that envelop the body. The meaning undergoes a transformation from the feminine and courageous into a tranquil state or the serene (Fig. 5).

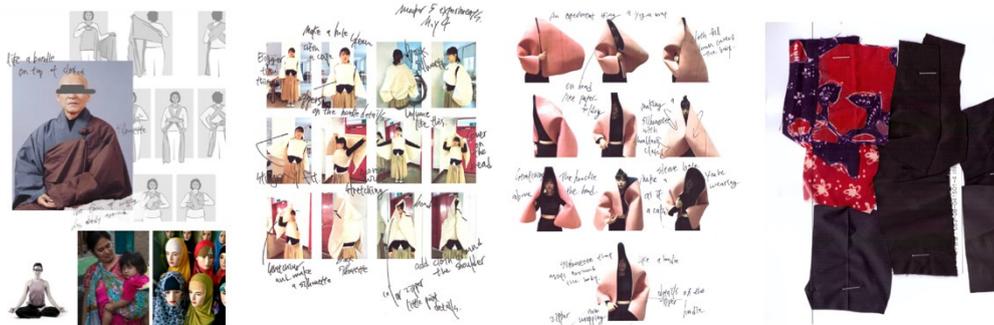


Fig. 4: Fashion Design Development Kim Yun Seo
Source: Kim Yun Seo, 2023



Fig. 5: Fashion Look Kim Yun Seo
Source: Kim Yun Seo, 2023

Case Study 03

Cathlin Audrey Wiratma, a student at Maranatha Christian University, uses two types of hand-drawn Batik Lasem. The hand-drawn Batik Lasem delivers a meaning that is both opulent and serene. The flower and vine theme symbolizes longevity, with the addition of both the large and little dots as decorative elements. The color scheme is white, brown and black. The second batik design incorporates the prominent Latohan motif, which represents peace, together with the complementary vines that symbolize longevity. Small dots are utilized to occupy the vacant areas. This fabric exhibits a color scheme consisting of white and blue.

The student was motivated to create a fashion collection influenced by the diverse nationalities found in Lasem. The designer's primary emphasis was on the vivid hue of Lasem. The series drew inspiration from the color blue, symbolizing harmony and serenity concerning ethnic, cultural and religious distinctions. This collection incorporated three different batik patterns to produce a patchwork-style design, which was enhanced by lines (Figure 6). The use of denim and oversized silhouettes align with the current fashion trends. Multiple batiks are reconfigured into a novel structure. The message transforms into a playful meaning (Figure 7).



Fig. 6: Mood Board & Sketch Cathlin Audrey Wiratama
Source: Cathlin Audrey Wiratama, 2023



Fig. 7: Fashion Look Cathlin Audrey Wiratama
Source: Cathlin Audrey Wiratama, 2023

Fashion Development: Shifting Meanings

The preservation and development of this traditional legacy will provide academics with concrete instances of the application of Batik Lasem. Additionally, it will offer evidence showcasing several methods and techniques for designing with hand-drawn Batik Lasem through a detailed analysis (Table 1).

The original meaning of the hand-drawn Batik Lasem and the final meaning of the collection demonstrates a shift in the meanings. The ultimate significance of hand-drawn Batik Lasem is greatly shaped by the concept and the prevailing trend. The design components, including silhouette, color and the textile exploration are observed to align with the final meaning.

Table 1: Shift of Meaning Hand-Drawn Batik Lasem Used in This Research

Source: Author

Image	Category		Meaning	Used in Design	Shift of Meaning
	Main Motif	Burung Hong / Phoenix	Associated with female figures with gentleness, grace & kindness.	Kim Chae Heun	Powerful & artistic
	Complementary motifs	Lerek Parang Gunung Ringgit / Mount of Ringgit	Parang means knife or cleaver. The parang is a powerfully rhythmic pattern with gentle curves that portray a never-ending relationship. Mount of Ringgit represents prosperity for the wearer		
	<i>Isen-isen</i>	Latohan / Algae / <i>Caulerpa lentillifera</i>	Equal to peace		
	Color	Combination of yellow, black, red	Yellow signifies woman & believes to ward off demons. Red symbolizes courage.		
	Main Motif	Burung Hong / Phoenix	Associated with female figures with gentleness, grace & kindness.	Kim Yun Seo	Serene
	Complementary motifs	Butterfly & Vines	Signifies long life, together with vines & flowers representing the attraction of man (butterfly) to woman (flower)		
	<i>Isen-isen</i>	-	-		
	Color	Combination of purple & red	Red symbolizes courage		

Image	Category		Meaning	Used in Design	Shift of Meaning
	Main Motif	Flower & vines	Luxuriant growth & long life (vines)	Cathlin Audrey Wiratama	Playful
	Complementary motifs	Big dots			
	<i>Isen-isen</i>	Small dots / <i>cecek</i> in Javanese	Batik décor to fill in spaces		
	Color	Combination of white, brown & black			
	Main Motif	Latohan Algae / <i>Caulerpa lentillifera</i>	Equal to peace		
	Complementary motifs	Vines	Luxuriant growth & long life (vines)		
	<i>Isen-isen</i>	Small Dots / <i>Cecek</i> in Javanese	Batik décor to fill in spaces		
	Color	Combination of white & blue			

Conclusion

This research uncovered insights by employing collaborative design and by utilizing a case-study method and a descriptive qualitative approach in the production of fashion. Following findings derive the conclusions.

(1) Motifs, categorization and significance manually sketched Batik Lasem represent the philosophical ideas of Chinese, Javanese & Lasem cultures. Chinese culture is reflected in the natural aspects of Nature and the animals. Javanese motifs serve as a representation of the Javanese civilizations. The visual style of Lasem is characterized by the presence of natural materials indigenous to the region. It becomes evident that the hand-drawn Batik Lasem undergoes a change in its significance when incorporated into modern fashion. Student designers provided a new interpretation by taking into account the compositions, meanings and colors of the batik motif.

(2) Alteration of significance when incorporating Indonesian and Korean fashion trends is greatly influenced by the concept and current trend of contemporary fashion. The significance is conveyed through the visual components of fashion, including silhouette, color and textile exploration. The outcome reveals a novel interpretation of 'strong & artistic', 'serene' & 'playful' connotations. The hand-drawn Batik Lasem can be reinterpreted and given new significance because it functions as a commodity. Batik Lasem possesses inherent cultural significance and is highly versatile.

This study demonstrates the versatility of Batik Lasem when it is seen as a fashionable item. The shift in meaning in hand-drawn Batik Lasem serves as a means to ensure the longevity of the batik business and preserve the batik culture.

Acknowledgments

The authors thank Keimyung University as the collaborator of this research, especially Pusaka Beruang and Kidang Mas Batik House for their help in supplying hand-drawn batik Lasem and identifying the Lasem motifs. This work was supported by the Directorate of Research and Community Service, LPPM, Maranatha Christian University, Indonesia.

References

- Achjadi, J., Gluckman, D.C., Muddin, S. and Niessen, S. (2018) *A Royal Treasure: The Javanese Batik Collection of King Chulalongkorn of Siam*. Queen Sirikit Museum of Textiles.
- Angkawijaya, Y., Agustina, I.A. & Tee Chuan, A.O. (2020) Batik as Part of Pop Culture. In: *Proceedings of the 4th International Symposium of Arts, Crafts & Design in South East Asia (ARCADESA)*. [Online]. 5 November 2020 ISI Yogyakarta, SSRN. p. Available at: doi:10.2139/ssrn.3807717 (Accessed: 19 November 2023).
- Basiroen, V.J. (2019) The Acculturation of Batik Lasem's Culture With Chinese Motif in the 18th to 20th Century. *Lekesan: Interdisciplinary Journal of Asia Pasific Arts*. 2 (2), 59–67.
- Bye, E. (2010) A Direction for Clothing and Textile Design Research. *Clothing and Textiles Research Journal*. [Online] 28 (3), 205–217. Available at: doi:10.1177/0887302X10371505.
- Darmayanti, T.E. and Bahauddin, A. (2020) Cultural Heritage of The Peranakan Batik Kidang Mas House of Lasem, Central Java, Indonesia. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*. [Online] 11 (13), 1–14. Available at: doi:10.14456/ITJEMAST.2020.252.
- Erwantoro, H., Sofianto, K. & Rostiyati, A. (2023) Gender Bias in 'Batik Larangan' Clothing at the Yogyakarta Royal Palace: A Semiotic Perspective. *International Society for the Study of Vernacular Settlements*. 10 (1), 249–263.
- Febriani, R., Knippenberg, L. & Aarts, N. (2023) The making of a national icon: Narratives of batik in Indonesia. *Cogent Arts & Humanities*. [Online] 10 (1), 2254042. Available at: doi:10.1080/23311983.2023.2254042.
- Gruber, H.E. & Wallace, D.B. (1999) The case study method and evolving systems approach for understanding unique creative people at work. In: *Handbook of creativity*. New York, NY, US, Cambridge University Press. pp. 93–115.
- Herrera, S., Cruz, C., Ramírez, Y. & Cisternas, L. (2016) Conceptual process design for Boric Acid: A case study for engineering education. In: *Computer Aided Chemical Engineering*. [Online]. 2016 Elsevier. pp. 1437–1442. Available at: doi:10.1016/B978-0-444-63428-3.50244-7 (Accessed: 22 November 2023).
- Krisnawati, E., Sunarni, N., Indrayani, L.M. & Sofyan, A.N. (2019) Identity Exhibition in Batik Motifs of *Ebeg* and *Pataruman*. *SAGE Open*. [Online] 9 (2), 215824401984668. Available at: doi:10.1177/2158244019846686.
- Kurnia, E.D. & Windarti, N.K. (2019) Local Wisdom in The Expression of The Written Batik Lexicon in Lasem (Ethnolinguistic Study). In: *Proceedings of the Fifth Prasasti International Seminar on Linguistics (PRASASTI 2019)*. Advances in Social Science, Education and Humanities Research. [Online]. 2019 Semarang, Atlantis Press. p. Available at: doi:https://doi.org/10.2991/prasasti-19.2019.24.
- Langi, K.C. & Park, S. (2016a) An Analysis on Characteristics of Ancient Indonesian Textiles (I). *Journal of the Korean Society of Costume*. [Online] 66 (6), 67–78. Available at: doi:10.7233/jksc.2016.66.6.067.
- Langi, K.C. & Park, S. (2016b) An Analysis on Characteristics of Ancient Indonesian Textiles (II): Focus on the Techniques and the Patterns of the 'Sacred Cloths'. *Journal of the Korean Society of Costume*. [Online] 66 (7), 34–49. Available at: doi:10.7233/jksc.2016.66.7.034.
- Langi, K.C., Sabana, S., Ahmad, H.A. & Widiawati, D. (2020) Killer's Fashion: Transforming the Potential of Nias Saber's Amulets into Indonesian Fashion Accessories. *Humaniora*. [Online] 11 (2), 121–128. Available at: doi:10.21512/humaniora.v11i2.6416.
- Lee, J.S. & Danko, S. (2017) Revealing the Design Process: Inventing a Meta-Analysis Method for Documenting the Fashion Design Process. *The Design Journal*. [Online] 20 (5), 659–682. Available at: doi:10.1080/14606925.2017.1346983.
- Lee, Y.K. & DeLong, M. (2018) Re-birthed fashion handbags as a collaborative design project. *Fashion and Textiles*. [Online] 5 (1), 15. Available at: doi:10.1186/s40691-018-0131-7.
- Lin, R., Sun, M.X., Chang, Y.P. & Chan, Y.C. (2007) Designing "Culture" into Modern Product: A Case Study of Cultural Product Design. In: Nuray Aykin (ed.). *Usability and Internationalization. HCI and Culture*. Lecture Notes in Computer Science. [Online].

- Berlin, Heidelberg, Springer Berlin Heidelberg. pp. 146–153. Available at: doi:10.1007/978-3-540-73287-7_19 (Accessed: 21 November 2023).
- Liu, Y. & Ko, Y.C. (2021) Research on Inheritance Education of Miao Batik. *Adult and Higher Education*. 3 (3), 78–90.
- Lukman, C.C., Setyoningrum, Y. & Rismantojo, S. (2020) *Nilai Tidak Kasat Mata Pada 23 Motif Batik Laem Bersertifikat HKI*. [Online]. Bandung, Pelita Ilmu. Available at: <http://repository.maranatha.edu/6433/1/Nilai%20Tidak%20Kasat%20Mata%20Pada%2021%20Motif%20Batik%20Lasem%20Bersertifikat%20HKI.pdf>.
- Lukman, C.C., Setyoningrum, Y. & Rismantojo, S. (2019) Revealing the Intangible Values in Lasem Batik Motif. *Journal of Arts and Humanities*. [Online] 08 (09). Available at: doi:<https://dx.doi.org/10.18533/journal.v8i9.1728>.
- Mahesti, N.D., Sugiarto, E. & Nugrahani, R. (2023) Symbolic Values and Meanings in Lasem Batik Motives. *Catharsis: Journal of Arts Education*. 12 (1), 45–53.
- Moertini, V.S. & Sitohang, B. (2005) Algorithms of Clustering and Classifying Batik Images Based on Color, Contrast and Motif. *ITB Journal of Engineering Science*. [Online] 37 (2), 141–160. Available at: doi:10.5614/itbj.eng.sci.2005.37.2.5.
- Mulyanto (2022) Establishing A Business Production For Written and Stamped Batik Crafts. *MUDRA Jurnal Seni Budaya*. [Online] 37 (2), 108–118. Available at: doi:<https://doi.org/10.31091/mudra.v37i2.1868>.
- Nugraha, A. (2018) Transforming Tradition in Indonesia: A Method for Maintaining Tradition in a Craft and Design Context. In: *Design Roots: Culturally Significant Designs, Products and Practices*. London, Bloomsbury Publishing. pp. 147–161.
- Nurcahyanti, D., Mulyanto & Sachari, A. (2021) The Role of Artisans in the Batik Designs Development as a Traditional Textile in Indonesia. *Fibres and Textiles*. 28 (2).
- Onur, D.A. (2020) Integrating Circular Economy, Collaboration and Craft Practice in Fashion Design Education in Developing Countries: A Case from Turkey. *Fashion Practice*. [Online] 12 (1), 55–77. Available at: doi:10.1080/17569370.2020.1716547.
- Parmono, K. (1995) Simbolisme Batik Tradisional. *Jurnal Filsafat*. [Online] 23. Available at: doi:<https://doi.org/10.22146/jf.31609>.
- Ratuannisa, T., Santosa, I., Kahdar, K. & Syarief, A. (2020) Shifting of Batik Clothing Style as Response to Fashion Trends in Indonesia. *MUDRA Jurnal Seni Budaya*. 35 (2), 133–138.
- Rizali, N. and Sudardi, B. (2016) Social Relation Between Javanese and Chinese Community in Batik Processing in Lasem Central Java. *Journal of Education and Social Sciences*. 5 (2), 166–169.
- Selamet, J. (2018) Indonesian Batik Translation: A Case Study. *The International Journal of Visual Design*. [Online] 12 (3), 11–17. Available at: doi:10.18848/2325-1581/CGP/v12i03/11-17.
- UNESCO (2009) Indonesian Batik *Intangible Cultural Heritage*. [Online]. Available at: <https://ich.unesco.org/en/RL/indonesian-batik-00170>.
- Whitham, R., Moreton, S., Bowen, S. & Speed, C. (2019) Understanding, capturing, and assessing value in collaborative design research. *CoDesign*. [Online] 15 (1), 1–7. Available at: doi:10.1080/15710882.2018.1563194.
- Widagdo, J., Ismail, A.I. & Alwi, A. (2023) The Meaning and Function of Klitikan Sintok Motifs in Cyntok Bhatik. *Russian Law Journal*. [Online] 11 (4), 121–128. Available at: doi:<https://doi.org/10.52783/rj.v11i4s.817>.