

Preservation of Balinese batik knowledge as an effort to preserve indigenous knowledge

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Abstract

Balinese batik, a traditional cloth, is rich in motifs and philosophical meanings that reflect the culture of the Balinese people and need to be preserved. Preservation efforts aim to ensure that the knowledge contained in Balinese batik can be sustainable in the long term. This study examined the knowledge and preservation of Balinese batik cloth to preserve indigenous knowledge. This study used a qualitative method by analyzing the knowledge contained in Balinese batik cloth using Peirce's semiotic approach and a case study to explore the preservation efforts carried out by the UPTD Bali Museum. The data collection technique used interview and observation methods, which were conducted from May to June 2024. Data analysis was carried out through data reduction, data presentation (data display), and conclusion. Study results showed that if examined more deeply, Balinese batik contained philosophical meanings that reflected the culture of Balinese society due to the influence of Hinduism and local values. Balinese batik motifs were also inseparable from the influence of Chinese cultural elements that contain spiritual and mythological values. The Bali Museum conducted preservation efforts through processes such as identifying and validating knowledge in local communities and academic circles, recording and storing this knowledge in a database, and disseminating it to the broader community. This study concludes that Peirce's semiotics can assist in identifying the indigenous knowledge of Balinese batik, and in this case, the Bali Museum plays an important role in preserving local wisdom.

Keywords: Balinese batik; Semiotics; Meaning; Knowledge preservation

Preservasi pengetahuan kain batik Bali sebagai upaya pelestarian indigenous knowledge

Abstrak

Batik Bali sebagai kain tradisional kaya akan motif dan makna filosofis yang mencerminkan kebudayaan masyarakat Bali dan perlu untuk dilestarikan. Upaya pelestarian bertujuan agar pengetahuan yang terdapat di dalam batik Bali memiliki keberlanjutan hingga masa mendatang. Penelitian ini bertujuan untuk mengkaji pengetahuan dan preservasi pengetahuan batik Bali sebagai upaya pelestarian indigenous knowledge. Penelitian ini menggunakan metode kualitatif dengan menganalisis pengetahuan yang terkandung di dalam kain batik Bali dengan pendekatan semiotika Peirce, dan studi kasus untuk menggali upaya preservasi yang dilakukan UPTD Museum Bali. Teknik pengumpulan menggunakan metode wawancara dan observasi. Proses dari analisis data melalui proses reduksi data (data reduction), penyajian data (data display), dan conclusion drawing. Hasil penelitian menunjukkan bahwa batik Bali, bila ditinjau lebih dalam terdapat makna filosofis yang mencerminkan kebudayaan masyarakat Bali yang dipengaruhi oleh agama Hindu dan nilai-nilai lokal. Motif batik Bali juga tak lepas dari pengaruh unsur budaya Tionghoa yang mengandung nilai spiritual dan mitologis. Langkah preservasi dilakukan dengan melalui proses identifikasi dan validasi pengetahuan pada masyarakat lokal, dan akademisi, merekam dan menyimpan pengetahuan dalam basis data, dan penyebarluasan pengetahuan ke masyarakat oleh Museum Bali. Kesimpulan dalam penelitian ini adalah semiotika Peirce dapat membantu mengidentifikasi indigenous knowledge batik Bali, dan dalam hal ini, Museum Bali memainkan peran penting dalam pelestarian indigenous knowledge batik Bali.

Keywords: Batik Bali; Semiotika; Makna; Preservasi pengetahuan

INTRODUCTION

Bali is the most prominent cultural gem of Indonesia, known for its stunning natural beauty. Bali is also rich in traditions and arts rooted in the daily lives of its people, one of which is Balinese batik. Bali has batik cloth motifs that reflect the values embraced by its people. The motifs on Balinese batik cloth are not only beautiful visual objects to look at but also contain indigenous knowledge. Balinese batik is not only a cultural identity but also a representation of indigenous knowledge that is rich in symbolic and philosophical meaning. The meaning and philosophy contained in batik cloth are indigenous knowledge that batik artisans must preserve.

Balinese batik cloth motifs have their characteristics, one of which is Lokcan batik, which is closely related to the acculturation of Balinese and Chinese cultures. It can be seen from the motifs that adopt elements of flora and fauna, as well as spiritual and religious symbols that are common in Balinese and Chinese cultures. This symbol depicts sacred and spiritual things, namely mythological creatures, that are very popular in Chinese culture. Balinese batik is also a means to express one's social status. Bali is one of Indonesia's most popular tourist destinations, and the Balinese people are very rich in culture; the art of batik on this island is growing rapidly (Senoprabowo et al., 2023).

Balinese culture has developed and integrated deep meanings in various aspects of art to become a cultural heritage rich in philosophical and spiritual values. Inherent customs with certain standards determine how to wear batik and on what occasions Balinese people wear Balinese batik. Knowledge of Balinese batik motifs refers to certain spiritual and philosophical

objects and values, which the community interprets as a reflection of cultural identity. Thus, batik is not only an aesthetic work of art but is also full of meaning because it enriches and preserves the cultural heritage of Bali and Indonesia. Balinese cloth is considered "religious" due to its ability to interact with and harness the powers of nature, containing and carrying the power of the supernatural through its aesthetics, materials, and uses (Mohan, 2019).

However, over time, batik has undergone a process of cultural acculturation, where regional batik has begun to be influenced by foreign cultures in terms of design, color, and manufacturing techniques. This has led to the emergence of mixed and contemporary batik as a form of visual innovation that produces new, more diverse batik variants according to the tastes and needs of the times. Proving that wearing batik cloth as traditional clothing is not as complicated as before, so there is a shift in the meaning of clothing to fashion (Darmaputri, 2015). Moreover, Bali, as a foreign tourist destination that is in great demand by tourists, makes contemporary batik a widely known cultural attraction. This will certainly result in the fading of knowledge as *indigenous knowledge* of Balinese batik due to commoditization and commercialization. Tourism negatively impacts the Amhara region's cultural heritage, leading to commoditization, erosion of local assets, and production of inauthentic products (Alamineh et al., 2023).

Indigenous knowledge embodies the perspective of traditional knowledge that is a reference for behavior and has been practiced for generations to meet the needs and challenges in the life of a society.

Indigenous knowledge is a guideline for behaving in society, preserving natural and human resources, maintaining traditions and culture, and providing benefits for life (Kristiyanto, 2017). Batik cloth is part of local wisdom that is inseparable from people's lives. Batik, as an iconic representation of Indonesian identity, can be sustainably modernized through heritage tourism initiatives, preserving the wisdom of generations and promoting social and environmental benefits (Poon, 2020).

Currently, the use of traditional fabrics is becoming a popular trend among Gen Z, so the fashion trend of wearing batik is becoming a popular trend. However, it should be noted that the loss of knowledge about traditional fabrics should not threaten the cultural entity itself. It is necessary to have an inventory of traditional cloth to maintain the essence of Balinese traditional cloth. According to Law Number 5 of 2017 concerning the Advancement of Culture, the Government can carry it out through the stages of recording and documenting, determining, and updating data. In this case, as an effort to preserve the Balinese batik cloth, this law encourages efforts to preserve and develop batik as an integral part of Balinese cultural identity. Indigenous knowledge is essential for the survival of human societies and must be preserved and protected (Maraña et al., 2023).

The characteristics of the preservation of intangible cultural heritage are stated in the UNESCO *Convention for the Safeguarding of Intangible Cultural Heritage 2003*, which emphasizes preservation not on final cultural works but on the process of passing them on to the next generation, which has the potential for changes in cultural expression. Cultural heritage education

under UNESCO's cultural conventions is an essential and growing part of States' obligations, involving various stakeholders and requiring synergy with the convention-based action (Jagielska-Burduk et al., 2021). Therefore, knowledge preservation plays a vital role in the extensive and effective preservation of intangible cultural heritage, ensuring that the process of cultural transmission can continue even as cultural expressions change. Balinese batik is not only seen as a textile product but also as a heritage that contains meaning that must be preserved and passed on to future generations. Therefore, the preservation of indigenous knowledge in Balinese batik is important to maintain the sustainability or desire for local wisdom possessed by Balinese culture.

This study aimed to identify Indigenous knowledge contained in Balinese batik motifs in the context of meaning and analyze how this meaning can support the process of preserving Indigenous knowledge through the role of institutions responsible for preserving cultural heritage, namely the Balinese museum. Concerns about the disruption of the transmission of traditional knowledge due to cultural shifts, modern lifestyles, and the commercialization of batik are the background to this research. The steps were to explore the symbolic and philosophical meaning of Balinese batik through Peirce's semiotics to reveal knowledge about Balinese batik cloth motifs. Thus, the Bali Museum expects that local knowledge contained in Balinese batik can continue to be preserved and passed on to future generations.

RESEARCH METHODS

This study used a qualitative research method by exploring and analyzing the

knowledge contained in batik cloth and how indigenous knowledge in Balinese batik was preserved to preserve cultural heritage. The researcher chose this method to gain a deep understanding of the value of cultural knowledge contained in Balinese batik motifs. This study used Peirce's semiotics. According to Peirce (2014), semiotics is the process of giving meaning through the process of semiosis, and states that a sign represents various things (Pangestuti, 2021). Peirce's semiotic analysis consists of three categories: *representation*, *object*, and *interpretant*. The relationship between these components is called semiosis, which is the process of interpreting signs that starts from a basis called representation, then refers to the object and finally, the interpretant process occurs (Aryani & Yuwita, 2023). Based on Peirce's semiotic analysis, the researcher explored the meaning contained in Balinese batik cloth, where signs and signifiers indicated Balinese *indigenous knowledge*.

In addition, the researcher also used a case study approach to explore the efforts made by authorized institutions to preserve Balinese cultural heritage, one of which is Balinese batik. The subjects of this study were Balinese cultural figures who focused on craft arts and institutions that have the authority to preserve cultural heritage, namely the UPTD Bali Museum. This study was conducted in May 2024 in Denpasar City, Bali. The informant-determining technique used the snowball technique. Informant 1 in this study was the curator of the Bali Museum, who also a teacher, and acted as a key informant. Informant 2 was a Balinese cultural figure, an expert in craft arts.

The data collection technique in this study used interview and observation methods to obtain in-depth knowledge

contained in Balinese batik cloth. It included researchers conducting literature studies to obtain supporting data from various written sources, such as books, journals, photos, and other relevant documents. The data collection process was carried out by identifying Balinese batik at the Bali Museum. However, taking photos of the Balinese batik collection was not allowed, so interviews were conducted to dig deeper into the meaning of the batik cloth that Balinese cultural figures had identified. Supporting data in data collection was obtained from visual images obtained from multiple sources. After obtaining the data results, the next stage was analyzing the data. Data analysis will follow the process of data reduction, data display, and conclusion.

RESULTS AND DISCUSSION

In this section, Balinese Batik Indigenous Knowledge was explored through in-depth semiotic analysis to identify and explore the meanings embedded in Balinese Batik. In coastal areas, Balinese batik motifs were the result of a blend of two or more cultures, one of which was the influence of Chinese culture. Balinese batik with motifs influenced by Chinese culture, was previously only worn by the nobility. A Balinese cultural expert who assisted in this study identified the types of Balinese batik and thoroughly explained the meaning contained therein.

"Historically, during the Balinese kingdom, batik was used as clothing for the nobility at that time. The batik-making process used silk fabrics from China, India, and the Middle East, which were distributed through ports in Bali, the ports of Singaraja, Buleleng, Karang Asem and Badung"


(Informant 2, Interviewed, May 8, 2024).

Balinese batik, with motifs influenced by Chinese culture, is called Lokcan or Lasem batik. The variety of Chinese decorative motifs in Lasem Batik developed from the 18th to the 20th century, producing distinctive shapes, colors and meanings (Basiroen, 2019). Lokcan Balinese batik has been known since the era of the Balinese Kingdom and was used as a gift for the king's wife and children. The marriage between the Balinese king and a woman of Chinese descent also influenced Lokcan batik. An example was the marriage between the Balinese King Sri Raja Jayapangus and a Chinese princess named Kang Cing Wei in the 12th century (BBC Indonesia 2018), which created an acculturation of the two cultures. Lokcan batik even became one of the elements of clothing worn in several Balinese traditional ceremonies.

Mythological creatures from Chinese culture are visible in the Lokcan Balinese batik motif. In various traditional

ceremonies and rituals, Balinese people often wear the Lokcan Balinese batik motif as a form of appreciation for Balinese cultural elements. The flora and fauna or the natural wealth of a region also inspire Balinese batik motifs. These batik motifs include animal, plant, human, geometric and other motifs. Batik motifs often indicate a person's status (Trixie, 2020). The Balinese Hindu community utilizes these plants based on the community's belief in certain plants that are used in carrying out religious rituals that have been carried out for generations (Ristanto et al., 2020). The following are the Balinese Lokcan batik motifs; these motifs were analyzed by the researcher using Peirce's semiotic theory, which included objects, representations, and interpretations as tools to explore the meaning contained in Balinese batik as Balinese indigenous knowledge. Semiotics and culture are interconnected through intermediaries, communication, and the creation of patterns in the human environment (Rozin, 2020).

Table 1
Dragon Motif

Object	Representation
	Strength, well-being, balance between nature, man, and spirit
	Interpretation As a protector, people with high social status, people who have <i>power</i> and authority.

Source: Info Batik (2020)

In the story of *Pemutara Mandragiri*, the dragon is an entity that helps the god Indra get water for livelihood. The dragon symbol is often associated with the symbol of clouds, sky, or air found in a realm far above the realm of human life, namely the sky (Amboro, 2022). The dragon in the

Lokcan batik motif in Table 1 is a symbol of strength, prosperity, and luck, so at that time, the dragon batik motif could only be used by nobles.


"People in ancient times obeyed and understood the dragon batik essence that it contained motifs, colors and

symbols that could only be worn by certain circles” (Informant 2, Interviewed, May 8, 2024).

The dragon is also a symbol of authority and strength that is unifying. The dragon in Balinese batik is not a single object, but there are other objects or motifs, such as clouds, water, fire, and plants. The components of the motifs reflect the balance and harmony between various natural elements. Moreover, dragon batik also means that a person lives with strength and authority because, without these elements, he cannot live. After all, all the works created by ancient humans are related to

nature. It gives people who wear dragon motif batik a sense of confidence and visual respect for traditional and spiritual values. Dragon batik is also a representation of social strata in Balinese society. Dragon motif batik was previously only used by the nobility. “People who wear Lokcan batik with dragon motifs indicate that they are descendants of nobility since ancient times” (Informant 2, Interviewed, May 8, 2024). Dragon ornaments on batik cloth are applied because of their visual beauty and their meaning as a protector and symbol of power (Widayat, 2022).

Table 2
Qilin Motif

Object	Representation
	Luck and prosperity
	Interpretation People with high social status, prosperous people, and female fertility.


Source: Museum Ranggawarsita (2020)

Next is the Qilin batik motif in Table 2; the object of this motif is a mythological creature, which has the body of a deer, a horse or an ox and a dragon’s face. This motif is a representation of social strata or social status and is also used in religious ceremonies in Bali. "The qilin motif is generally used by Chinese people, symbolizing social status or respect during important ceremonies" (Informant 2, Interviewed, May 8, 2024). This Qilin batik motif signifies or symbolizes good luck and prosperity. People who wear Qilin batik represent that human life is related to fertility and prosperity. The king's wives widely used this Qilin motif in ancient times, "People who wear Qilin batik are a representation of this, namely associated with fertility and prosperity, which in

ancient times were widely used by the king’s wives” (Informant 2, Interviewed, May 8, 2024).

According to Chinese beliefs, the mythological creature Qilin is believed to appear at the birth of a ruler or wise man. The arrival of Qilin is believed to bring prosperity to nature and humans (Lukman et al., 2018). The existence of mythological creature Qilin is near the Singaraja area, where various Qilin artifacts have been found and have become cultural objects of the Singaraja Chinese community (Hardiman, 2018). The Qilin is usually considered a symbol of balance between spiritual and worldly powers, much like the role of other sacred animals in Hindu-Balinese culture, such as the Barong or Naga.

Table 3
Hong Bird Motif

Object	Representation
	Justice, goodness, prosperity, immortality, virtue, responsibility, good deeds, humanity, and trust.
	Interpretation A woman and a man desire to become one united person and become a person of authority.

Source: Hudah (2023)

The Hong bird (phoenix) is considered the king of all birds and symbolizes various concepts such as justice, goodness, and prosperity. This Hong bird is often referred to as Feng Huang. Feng and Huang are females with the philosophy of eternity and gentleness. The Hong bird is a metaphorical depiction of the main human nature: the head symbolizes virtue, the wings symbolize responsibility, the back symbolizes good deeds, the chest symbolizes humanity, and the stomach symbolizes trustworthiness (Hibatullah, 2019).


In Balinese batik motifs as shown in Table 3, the Hong/Feng Huang bird is often depicted paired with a dragon, which symbolizes the male species. The Hong bird also symbolizes the desire of a woman and a man to become one. The Hong bird can also be interpreted as a symbol of husband and wife, and a symbol of the emperor and

empress (Hibatullah, 2019). Socially, Balinese people who wear batik with a Hong bird motif indicate that their social strata will rise and have an image of authority,

“People who wear batik with a Hong bird motif symbolize that the person's prestige increases because if they wear this batik, their appearance will be different: they look authoritative, their aura is haunted, and their supernatural powers appear. Therefore, people who wear the Hong bird motif are not random because they are usually worn by spiritualists or the nobility” (Informant 2, Interviewed, May 8, 2024).

The Hong bird in Chinese mythology has evolved from symbolizing the Sun God, Fire God, and Wind God to symbolizing love, femininity, happiness, and harmony (Yuan', 2023).

Table 4
Butterfly Motif

Object	Representation
	Happiness, longevity, life, balance of nature
	Interpretation A person who has courage, for men; beauty and charm, for women.

Source: Titu (2023)

In some cultures, butterflies are considered a symbol of life and natural balance. In Balinese society, butterfly motif in Table 4 is worn by the people of the

Karangasem kingdom, one of which was during the war between the Karangasem people and the Dutch government in 1897 (Ramadani et al., 2020). This proves that the

Balinese people, especially in Karangasem, have adopted butterfly batik as part of their culture.


Wearing butterfly-patterned batik cloth by the Karangasem people who were at war was not only part of the aesthetic aspect but also provided a psychological influence that they dared to fight their war opponents.

“The beauty that radiates from butterflies during the kingdom in Karang Asem when they were in a war position was very beneficial because the soldiers in Karang Asem,

with yellow butterfly troops, used gold accessories in the shape of butterflies, they could trick their opponents through the beautiful butterfly symbol” (Informant 2, Interviewed, May 8, 2024).

In addition, during the royal period in Bali, butterfly batik motifs were also commonly used by the king’s daughters because women were beautiful, like flowers in bloom. So, for the Balinese people, those who wore butterfly batik motifs symbolized beauty or attractiveness.

Table 5
Peony Flower Motif

Object	Representation
	Beauty, perseverance, happiness, and well-being
	Interpretation People who have luxury, prosperous people, people who have high social status, and a symbol of femininity.

Source: Javapitu (2024)

The peony flower is a typical Chinese symbol often found on luxury and branded goods. In Table 5, the peony flower symbolizes a woman's beauty, fortitude, happiness, and prosperity in old age. Therefore, peonies are associated with luxury, prosperity, and high social status because, in Chinese culture, some goods have class levels. "The peony flower symbolizes that the person who uses it has aesthetic value, has a high social status in Balinese society, and is associated with feminine values."

“The representation of people who use peony flower batik motifs is expressing a sense of aesthetics, high social status, or appreciating beauty or wanting to radiate its beauty. Moreover, a woman who wants to highlight her feminine side, softness,

and beauty can choose this motif." (Informant 2, Interviewed, May 8, 2024).

Historically, knowledge of the peony flower originated from the Chinese, who brought it to Bali through trade with traders and influenced batik. Since the Tang Dynasty (618-907), the peony flower has been regarded as the king of flowers. The peony pattern on Chinese silk dates back to the Kaiyuan period of the Tang Dynasty (712-741); as a symbol of wealth and good fortune, the peony flower has always been used to represent national beauty and heavenly fragrance (Zhang et al., 2021).

The process of preserving Indigenous knowledge goes through several processes. Namely, Indigenous knowledge includes recognition and identification, validation, recording and documentation, storage,

transfer, and dissemination (Sharma, 2014). The following is the process of preserving indigenous knowledge from Balinese batik cloth carried out by the UPTD Bali Museum under the auspices of the Bali Provincial Government's Culture Service.

The Bali Museum has identified knowledge of Balinese batik cloth through various references and studies, which link motifs to objects used in Balinese traditional and religious ceremonies. "Start by searching for information through books, literature, or batik research results" (Informant 1, Interviewed, May 7, 2024). Through direct observation and interaction with the Balinese people, the identity of Balinese batik motifs can be recognized, particularly in traditional and religious activities, thus allowing the classification of various batik motifs. Recognition is a necessary category in society, and its absence can lead to aggression and hinder integration and progress (Salmin, 2021). The identification revealed that Balinese batik motifs have unique characteristics, with some incorporating Chinese cultural elements, reflecting the historical relationship between Balinese and Chinese cultures during the ancient kingdom. Indigenous knowledge plays a crucial role in the Indigenous communities' planning process and serves as an irreplaceable source of guidance for Indigenous community revival and national development (Whyte, 2018).

Validation of Indigenous knowledge is assessing knowledge by looking at predetermined aspects, namely function, relevance or relationship, and authenticity of sources (Putri & Desriyeni, 2023). The validation process conducted by the Bali Museum curator ensures the authenticity and cultural richness of each Balinese batik motif. The validation stage involves

experts, including academics and native Balinese people, to confirm the validity of the identified knowledge,

"In practice, the validation process for batik cloth motifs is carried out in stages and has not yet been fully realized because it involves collaboration with experts such as academics and the Balinese community directly to curate the data" (Informant 1, Interviewed, May 7, 2024).

Furthermore, validation of indigenous knowledge reveals that the philosophical and symbolic meaning of Balinese batik motifs has functions and relevance in both daily life and spiritual aspects, as seen in their use in clothing, religious ceremonies, and performing arts. The Bali Museum curator must involve all stakeholders in the acquisition, preservation and dissemination of indigenous knowledge for sustainable development and environmental protection (Chigwada & Ngulube, 2023).

Recording and documentation is the practice of collecting, understanding, and managing information about cultural heritage to inform decisions regarding its handling. Careful documentation of cultural heritage is essential to passing it on to future generations and ensuring its preservation (Jebur, 2022). Recording and preserving cultural heritage is crucial so that future generations can utilize and enjoy it (Kapil, 2023). The knowledge about Balinese batik cloth that has been obtained is transformed from tacit knowledge to explicit knowledge by converting the knowledge into a real physical form (Putri & Desriyeni, 2023). This means that the knowledge gathered from Balinese batik cloth was initially abstract but was converted into a physical form that was

recorded and documented in certain media. The recording of indigenous knowledge ensures the preservation, interpretation and dissemination of ceremonial performances for the benefit of indigenous communities (Ford, 2020).

The process of storing recorded and documented knowledge is then processed into a database storage. In carrying out its duties, the museum manages Balinese batik knowledge by grouping and storing the knowledge in a server database so that users can easily reuse it when needed. The Balinese batik cloth database contains information about Collection Name, Registration Number, Old Inventory Number, New Inventory Number, CD Number, Material, Place of Manufacture, Place of Acquisition, Method of Acquisition, Size, Date/Year of Entry, Storage Place, Condition of Goods, Function, Creator, Literature, and information or description of Balinese batik cloth. To access the "Balinese batik cloth" database, the Bali Museum uses a closed system that is only managed through the museum server using one server computer, and only internal Bali Museum personnel can access it.

"Access to this database is limited to museum staff who understand detailed information regarding Balinese batik motifs. If anyone needs detailed information about Balinese batik, the museum can provide that information" (Informant 2, Interviewed, May 7, 2024).

The Bali Batik Museum can give access to the database to museum curators, conservators, collection registrars, and heads of collections sections as collection supervisors. The Bali Batik Museum currently has 28 batiks that are included in the ethnographic classification in museum

knowledge. Documenting Indigenous knowledge is essential to preserving and passing on traditional ways of life to future generations, overcoming potential obstacles such as biopiracy and lack of support (Adam et al., 2022).

Transfer is a process of transferring or sharing knowledge from someone who knows more to someone new who does not yet have that knowledge (Putri & Desriyeni, 2023). In its implementation, the Bali Museum is still in the planning stage to transfer knowledge about Balinese batik motifs. Several Balinese batiks have been exhibited in joint exhibitions with other Bali Museum assets, which are routinely held annually. Although there have been efforts to disseminate information through books after they have been reviewed so that the library service can distribute them; however, this has not yet been implemented due to limited funds. In addition, the Museum's efforts to disseminate knowledge through social media are still general and have not specifically explored Balinese batik motifs. This indicates that the Bali Museum has not implemented the knowledge transfer process in an effort to preserve Balinese batik motifs. However, awareness of knowledge transfer efforts has been recognized and considered an integral part of efforts to preserve cultural and historical heritage. Indigenous knowledge transfer helps address challenges such as education, poverty, access to justice, and climate change by promoting integrated knowledge systems and involving Indigenous groups in decision-making (Magni, 2017).

Knowledge dissemination is the transfer of knowledge within and across communication settings. The expectation is that the knowledge will be used by the

recipient to change practices or perspectives or for intellectual growth (Salvi, 2020). The comprehensive dissemination of Balinese batik indigenous knowledge processed by the Bali Museum has not yet been realized. The plan to publish a special book on Balinese batik is still in the development stage, constrained by funding issues.

"The dissemination of detailed and in-depth information about each collection, especially batik, has not yet been fully implemented because no in-depth study has been carried out on the information to be recorded. This is due to limited funds to support the research. However, the plan to disseminate information in book form through library services is a positive step in disseminating knowledge" (Informant 2, Interviewed, May 7, 2024).

Books as a medium for disseminating knowledge about Balinese batik cloth are the right media as a container for disseminating more comprehensive information and aspects of the text and context of knowledge about Balinese batik cloth. Exogenous media, such as books, can effectively preserve and document indigenous knowledge, culture, and native language (Adebiyi, 2015).

This discussion highlights that Balinese batik is a sign system rich in indigenous knowledge, with each motif symbolizing social, spiritual, and political values. The Bali Museum plays a crucial role in preserving and sharing indigenous knowledge for present and future generations by documenting the various Balinese batik meanings. Using a semiotic approach, the museum can identify and explain these batik pieces, helping to preserve indigenous knowledge. Cultural

heritage documentation is essential for the study and interpretation of present and future generations and is essential for monitoring changes over time, degradation, modifications, and conservation interventions (Haddad et al., 2021). Identifying Balinese batik and its symbolic meaning is essential to preserving indigenous knowledge accessible to various communities.

The Bali Museum bridges Balinese batik knowledge with contemporary interpretations. Peirce's semiotic theory explains that signs (representations) relate to objects and meanings, which are constructed through interpretation (interpretants). A sign is a physical or perceptual entity that represents an object, that is, the thing or idea being represented (Akbar & Astuti, 2022). The symbols in Balinese batik motifs are signs that indicate the social and spiritual status of Balinese society. Peirce's concept of interpretant reveals the social background and mechanisms constructing a sign's multiple meanings (Zhang & Sheng, 2017). The interpretant brings out the understanding or meaning that emerges when someone interacts with a sign. It refers to how the meaning of Balinese batik is processed, interpreted, and understood by Balinese people in a social context. The meaning of Balinese batik is not fixed but is formed by various factors and social mechanisms that exist in society. The interpretant serves as a bridge that connects the signs in the motif with the meaning of Balinese batik.

Semiotics of culture give us a more flexible understanding of cultural history and allow us to notice the complementarity between cultural history and the history of culture (Torop, 2017). Thus, the Bali Museum functions as a mediator, helping the community understand the symbolic

meaning embedded in Balinese batik. The museum acts as a knowledge laboratory in culture, preserving and empowering culture through informal learning institutions and impacting local communities (Wahid & Isa, 2022).

The meaning of Balinese batik serves as an effective educational tool for the preservation of indigenous knowledge. Museums play an important role in education by preserving cultural heritage, both tangible and intangible, exhibiting it, and providing a means for students and researchers to utilize it for educational purposes (Jahangeer et al., 2021). As a link between the community and various cultural objects, the Bali Museum plays a vital role in teaching the local wisdom embedded in Balinese batik to the younger generation. The museum plays a role in cultural education by combining collection and research functions to provide educational opportunities for visitors (Wang, 2022). Peirce's semiotics provides a systematic framework for explaining how these motifs function to convey deeper cultural values.

Peirce's semiotics can help the Bali Museum construct a narrative that connects Balinese batik motifs to cultural identity, highlighting how batik historically represented social status and spiritual standing. By interpreting these motifs, people can better appreciate and preserve Balinese traditional values. Culture is considered a priceless national asset and one of the sources of knowledge for society in understanding the traditions and history of a region (Maisyaroh & Oktavia, 2019).

In the context of globalization, the Bali Museum plays a vital role in preserving local wisdom in Balinese batik as part of a cultural heritage. Textiles can convey meaning and emotion through subtle

communications in social spaces, evoking shared notions and emotions in cross-cultural populations (Deepshikha et al., 2018). This heritage is not only seen as an art object but also as a means of conveying cultural knowledge.

CONCLUSION

Bali has five batik motifs influenced by Hindu and Chinese cultures: dragon, qilin, hong bird (phoenix), butterfly, and peony flower. Using Peirce's semiotics, the study reveals that Balinese batik has signs related to spiritual elements, mythology, and social identity, reflecting indigenous knowledge. The Bali Museum plays a key role in preserving indigenous knowledge of Balinese batik through stages such as identification and recognition, validation, recording and documentation, storage, transfer, and dissemination. However, the transfer and dissemination stage remain underdeveloped, as plans for a special Balinese batik exhibition are still in the planning stage, and limited funding hampers the publication of books. Despite the challenges, the Bali Museum is steadfast in protecting Balinese batik from cultural homogenization, emphasizing the importance of collective preservation efforts. This study implies that Peirce's semiotics is effective in revealing indigenous knowledge in Balinese batik in the context of meaning. This study also emphasizes the need for collective efforts, spearheaded by institutions such as the Bali Museum, to preserve this cultural heritage.

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