

## TRANSLATING BATIK PERANAKAN MOTIFS INTO JEWELRY DESIGN WITH CULTURAL LAYER MODEL

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**Abstract:** Indonesia's diverse culture has resulted in a rich array of arts and crafts, one of which is Batik Peranakan - a fusion of Chinese, Malay, and European culture. This cultural heritage provides rich inspiration for designers seeking to combine traditional culture with contemporary design characteristics. To translate local culture into design, the study uses the cultural layer model, which maps culture based on its tangibility, including its material, behaviour, and inner culture. This study focuses on the Batik Peranakan culture, mapping it into cultural layers and translating each layer as inspiration in designing jewellery. Jewellery is chosen as a study case because it is an object that can be highly valued through its design. The research aims to explore the cultural significance of Batik Peranakan motifs in fine jewellery design, using the cultural layer model as a framework. The study produces a jewellery design and a design framework for translating local culture into design objects with the cultural layer model, named Layers of Culture Design Framework (LCDF). This research contributes to the preservation of cultural heritage through design and provides a framework for designers to interpret and translate local culture into design objects. This research finding emphasizes the importance of thoroughly identifying cultural layers and design elements associated with specific artifacts, incorporating visceral and functional considerations, engaging in design explorations, and prototyping designs that reflect the artifacts' cultural significance, aesthetic appeal, and functionality

**Keywords:** Batik Peranakan Culture, Jewellery Design, Cultural Layer Model

### INTRODUCTION

Indonesia is a country known for its rich cultural diversity, and one of notable example of this richness is the acculturation of Chinese Peranakan culture. As stated by Koentjaningrat (1984), a renowned Indonesian anthropologist, acculturation is a social process that takes place when a group of people with a distinct culture is exposed to elements of a foreign culture in a manner that allows the gradual acceptance and incorporation of these foreign elements into their own culture, without compromising their cultural identity. This richness can serve as a valuable resource for design process. Hence, there is a growing trend for nations to embrace culturally oriented products and used design as a strategy to attract consumers (Wang, Qin and Harrison, 2000). According to Razzaghi, Ramirez and Zehner (2009) design serves as a vehicle for storytelling by narrating the history, values, and narratives of the culture. Design allows individuals to connect with and understand the cultural significance behind the products they engage with. This fosters a deeper appreciation and recognition of historic traditions, leading to the preservation of these customs and practices. As a result, there is an increasing demand for culturally sophisticated design.

To create culturally sophisticated design, design researchers have been talking about it all the time and proposing various research models, one of which is the cultural layer model (Arnould and Thompson, 2005; Liu and Wang, 2012; Chen et al., 2020). The Cultural Layer

Model (CLM) is a methodology used to translate different cultural elements into design elements that serve as a source of inspiration for the design process (Lin, 2007). By utilizing the CLM, designers can create designs that resonate with consumers on a deeper cultural level, fostering a stronger connection and appreciation for the products.

Our study aims to provide an illustrative example on application of the Cultural Layer Model (CLM) in the design process by utilizing the rich cultural heritage of Chinese Peranakan culture, specifically focusing on the intricate art form of batik tulis. Through our research, we aim to showcase how CLM can serve as a powerful tool for transforming culture into contemporary designs.

### 1. Peranakan Culture

Peranakan culture is a unique hybrid of Chinese, Malay, and Western cultures that emerged from the first waves of Southern Chinese settlers to maritime Southeast Asia (Britanica, 2023).

The Peranakan community is defined by their genealogical descent from these settlers and is characterized by its unique hybridization of ancient Chinese culture with the local cultures of the Nusantara region (Gumulya, Batangtaris and Octavia, 2013). One of Peranakan culture is its Handwritten batik.

#### History of Peranakan Batik





During the 14th to 15th centuries, Chinese merchants introduced embroidered silk and porcelain adorned with various motifs such as hong birds, dragons, kilin, nanji (swastikas), cranes, peony flowers, and plum blossoms to Indonesia. These motifs were later adapted for batik and combined with Indonesian cultural ornaments like machetes and kawung. The Indonesian-Dutch influence from the mid-nineteenth century to 1942 played a significant role in shaping Indonesian batik. Indonesian-Dutch women introduced floral bouquets, which were further developed by the Peranakan Chinese community.





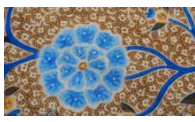









Types of Indonesian Chinese peranakan batik,

- a. Pekalongan Batik Oey Soe Tjoen, Batik by Kwee Nettie, Batik by Oey Kok Sing, Batik by The Tie Siet.
- b. Batik Lasem (Bang-Biru, Bang-Ungon, Bang-Biru-Ijo, Bang-Bangan, Bang-Ijo)
- c. Batik Kudus, Banyumas, Cirebon, Sidoarjo, Kelengan

The study will primarily focus on Batik Oey Soe Tjoen as it provides the most accessible literature for research purposes.

**Table 1. Identification of Batik Characteristics of Oey Soe Tjoen**

Oey Soe Tjoen Batik	Isen-isen details and motifs	Characteristics
		The Batik Bouquet features a captivating combination of flowers, butterflies, and small birds (prinia). The choice of soft and soothing colors in this batik style is influenced by the social dynamics of the Pekalongan Peranakan community, which has a slightly closed nature.
		

		<p>The intricate details of isen-isen, characterized by delicate dots and arsir lines, complement the overall design. Additionally, the Latar Parang Pagi - Sore pattern adorns long fabrics, adding a touch of elegance.</p> <p>The motifs prominently feature floral and fauna elements, with bouquets showcasing a variety of flowers such as shavings, roses, lotuses, magnolias, tulips, and more. These motifs celebrate the beauty and diversity of nature, contributing to the timeless charm of Batik Bouquet.</p> <p>Through our study, we aim to delve deeper into the symbolism, artistic techniques, and cultural significance of Batik Bouquet, preserving and appreciating the rich heritage embedded within this unique form of Indonesian Chinese Peranakan batik.</p>
		
		
		
		
		
		

## 2. Cultural Layer Model (Clm)

Culture can be defined as the way of life within a society, and it encompasses various aspects (Lee, 2004). In the field of design, (Lin et al., 2007) introduced a framework that conceptualizes culture with multiple layers, including artifacts, tradition, and values.

The first layer is called outer layer. It refers to the physical or material elements of a society, such as arts, architecture, food, music instruments, and garments. These objects serve practical, social, and symbolic purposes, contributing to people's well-being, identity, and social status. The outer layer provides visceral design features, encompassing aspects like color, texture, form, shape, details, patterns, and decorations.

The second layer is called middle layer. It refers to the social and behavioral aspects, encompassing human relationships, social organization, and customs. Traditions and customs

shape the social fabric and guide people's behaviors within a society. The middle layer provides behavioral design features, focusing on functionality, usability, and the production process.

Lastly, there is the inner layer. It refers to the spiritual layer, which encompasses the belief systems of a society, including religion, myths, and stories that provide a sense of purpose and meaning. The inner layer offers reflective design features, which involve storytelling and the communication of deeper meanings. Each cultural layer possesses distinct characteristics that are uniquely associated with the culture itself.

After doing research about the CLM and Batik Peranakan we raise the research question: How might we translate the cultural design elements of Batik Peranakan into contemporary fine jewelry design?

## METHODS

The research conducted in this study follows a qualitative approach with research through design methodology. Research through design is a scholarly research approach that utilizes the methods, practices, and processes of design (Zimmerman and Forlizzi, 2014). involves translating knowledge and insights into tangible outcomes through hands-on design work.

The research process begins by identifying the cultural design elements of Batik Peranakan. This involves a thorough examination and understanding of the outer, middle, and inner design elements that characterize Batik Peranakan. Building upon this knowledge, the researchers embark on design explorations, drawing inspiration from these cultural elements. These design explorations aim to capture the essence and visual aesthetics of Batik Peranakan in a contemporary context.

Throughout the design process, prototypes are developed to materialize and refine the design concepts. Prototyping allows for iterative refinement, testing, and evaluation of the designs, ensuring that they effectively capture and express the cultural elements of Batik Peranakan. The use of prototypes enables a hands-on approach to validate and communicate the research findings.

By employing the research through design approach, this study aims to bridge the gap between theory and practice, generating practical and tangible outcomes that showcase the cultural richness and significance of Batik Peranakan. The design process serves as a vehicle for materializing knowledge and insights, allowing for a deeper understanding and appreciation of the cultural heritage embodied in Batik Peranakan.

## FINDINGS AND DISCUSSION

The result is structured in three sections: cultural design identification, design exploration and prototyping.

### The Cultural Design Identification of Oey Soe Tjoen Batik based on the Cultural Layer Model

**Table 2. The Cultural Design Identification of Oey Soe Tjoen Batik based on the Cultural Layer Model**

OUTER Physical Elements	MIDDLE Function Elements	INNER Symbolic Elements
Floral Motifs <ul style="list-style-type: none"> <li>● Roses bouquet</li> <li>● Peony flowers</li> <li>● Gerbera flowers</li> <li>● Carnation flowers</li> <li>● Lotus flowers</li> <li>● Bouquet (flower arrangement)</li> </ul>	Pagi – Sore batik is a type of batik that can be used with different sides.	Each floral motif symbolizes various concepts, such as purity, happiness, wealth, and abundant sustenance, among others.

<p>Fauna Motifs</p> <ul style="list-style-type: none"> <li>● Stork</li> <li>● Bird</li> <li>● Butterfly</li> <li>● Peacock</li> </ul>	<p>The function of batik as clothing, sarong, and so on.</p>	<p>Each fauna motif represents positive aspects while rejecting negative associations.</p>
<p>Isen-isen and Lataran</p> <ul style="list-style-type: none"> <li>● Cecekan</li> <li>● Cocohan</li> <li>● Latar parang</li> <li>● Latar bimbingan</li> <li>● Latar kawatan</li> <li>● Latar galaran</li> </ul>	<p>Batik Pekalongan as a legacy of Indonesian cultural acculturation</p>	<p>Acculturation signifies the essence of Peranakan batik, highlighting the close relationship between Chinese and Javanese cultures.</p>
<p>Canting Hot wax Dye</p>	<p>The process and technique of creating batik fabric by hand using a traditional wax-resist dyeing method. It involves the intricate process of applying hot wax to the fabric in specific patterns or designs, which then acts as a barrier to prevent dye from penetrating the waxed areas. The fabric is then dyed, and the wax is removed to reveal the desired pattern.</p>	<p>It emphasizes the craftsmanship, skill, and attention to detail involved in creating batik tulis, as well as its cultural significance and traditional heritage.</p>

After the identification process, we have identified several elements that can serve as design inspiration, specifically focusing on the outer layer perspective of Indonesian Chinese Peranakan batik. One of the key ornamental features is the background filler motif called "lataran" and "isen-isen." These elements are used to enhance and emphasize the main ornamental motifs. For instance, Pekalongan Peranakan batik is characterized by floral motifs like bouquets and fauna motifs. Additionally, Pekalongan batik is distinguished by two defining characteristics: "isen-isen" and "lataran." These elements are manifested as lines and points on the batik background, highlighting the ornamental diversity of Pekalongan batik motifs.

Moving to the middle layer perspective, the primary characteristic is the meticulous process and technique of creating batik by hand. This emphasizes the craftsmanship and skill involved in the traditional batik-making process.

Finally, considering the inner layer perspective, we observe the close relationship and cultural ties associated with Peranakan batik. This aspect reflects the cultural fusion and the strong bonds between different communities.

### Design Exploration

In order to capture the essence of the middle cultural layer, which involves the intricate process of creating batik by hand, the authors embarked on exploring the technique of hand engraving on copper metal and silver (both are chosen as they are the most common material in fine jewelry). By delving into this method, they aimed to gain insights and inspiration that could be translated into their design work.



Figure 1. Experiments process

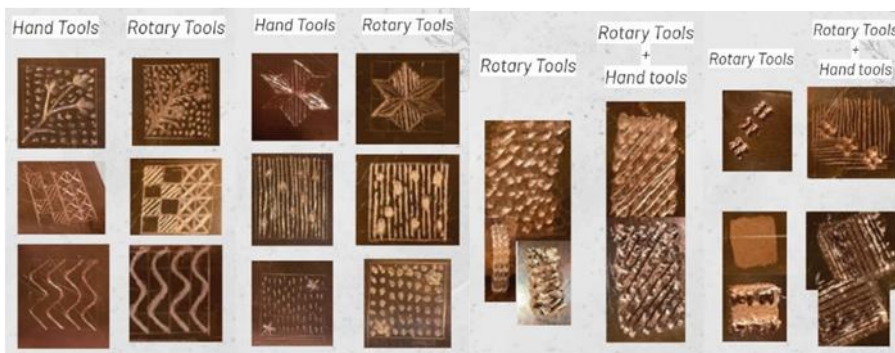


Figure 2. Experiments Comparing Hand Engraving Techniques Using Hand Tools And Rotary Tools On 2mm Thick Copper



Figure 3. Experiments Comparing Hand Engraving Techniques Using Hand Tools And Rotary Tools On 20mmx20mm Silver Plate

Based on our experiments, we have drawn several significant conclusions that should be taken into account during the design process. In comparison to hand tools, rotary tools offer the advantage of quicker creation of lines and points, while hand tools excel in producing more consistent and precise lines. Hand tools are particularly suitable for crafting long and tight lines, whereas rotary tools are better suited for creating circles and grooves. Additionally, engraving on silver, being softer than copper, allows for deeper and more intricate engravings.

After conducting the experiments, we proceeded to create a moodboard encompassing three key themes: organic, pattern, and detail oriented.



**Figure 4. Moodboard with The Theme Organic, Pattern and Detail Oriented**

The term "organic" is derived from the characteristics of the ornamental motifs found in the Peranakan Oey Soe Tjoen batik, which predominantly feature floral bouquets and fauna motifs with their natural and organic shapes. The keyword "pattern" reflects the repeating patterns present on the body of the batik fabric and the contrasting motifs on the edges, as well as the Pagi-Sore batik, which showcases similar patterns but with variations in color and arrangement. The emphasis on "detail-oriented" stems from the intricate hand engravings found in jewelry design, drawing inspiration from the diverse range of isen-isen motifs and the batik background in Peranakan Oey Soe Tjoen batik. Our designs encompass two main categories: signature jewelry and everyday jewelry. Signature jewelry includes necklaces, chokers, bracelets, headpieces, and earpieces with larger sizes and more intricate designs, while everyday jewelry consists of pieces designed for regular wear.



**Figure 5. Everyday jewelry design Explorations**



**Figure 6. Signature Jewelry Design Explorations**

### Prototyping

The prototyping process encompasses several stages, starting with casting and shaping, followed by welding, and cleaning the jewelry. Next, the hand engraving process takes place, followed by stone setting, polishing, plating, and finishing. The initial shape is created through the casting method, using 3D resin for molding and printing with silver. The components are then assembled using jump rings and chains. After plating, the jewelry undergoes plating process to achieve a shiny appearance. Engraving is performed using gravers and rotary tools on each jewelry component, based on the findings of previous experiments. Stone setting is carried out to place stones on the jewelry. Finally, silver is polished and plated to achieve a glossy surface, using nail dye to selectively cover areas that need to maintain their original color during the plating process, such as yellow gold and rose gold.

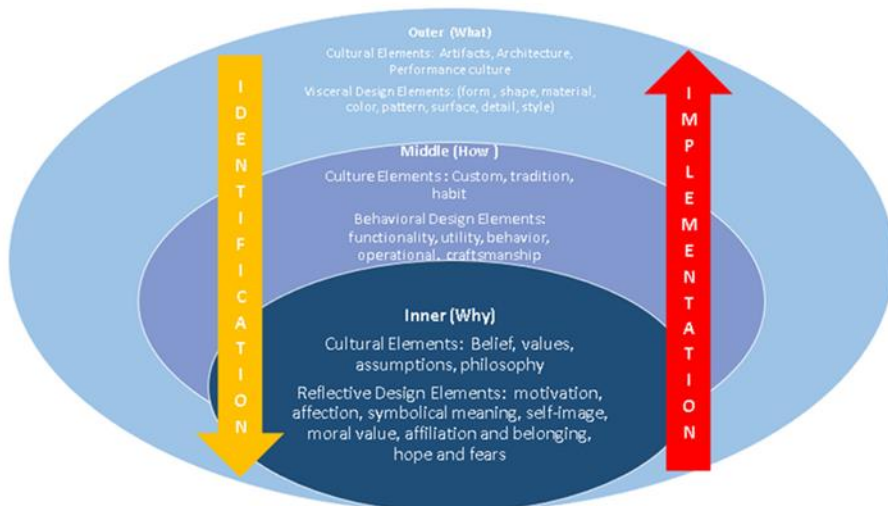


**Figure 7. Signature Jewelry**



**Figure 8. Everyday necklace**

From the design activities we propose a framework on how to apply cultural layer model on design process which we name Layers of Culture Design Framework (LCDF). The framework is a valuable reference for product designers who wish to design product inspired by culture. The framework enrich the Lin's (2007) model.



**Figure 9. Layers of Culture Design Framework (LCDF)**

1. The first step is to thoroughly identify and analyze the cultural layers associated with specific artifacts that represent a specific culture. These cultural layers encompass the artifact's outer, middle, and inner design elements. Designers must concentrate on visceral design elements such as form, shape, material, color, pattern, and intricate details for the outer layer. Understanding how these visual elements contribute to the artifact's overall aesthetic and cultural significance is required. Designers should focus on the functional aspects, utilization, and craftsmanship of the artifacts in the middle layer. Examining how the artifact is used, its practical purpose, and the level of skill and artistry involved in its creation are all part of this.
2. After identifying the cultural design elements, the next step is to implement them through design explorations. Designers engage in a creative and iterative process, experimenting with various design possibilities and combining and interpreting cultural elements. This

stage allows designers to delve deeper into the cultural context and meaning of the artifacts while also pushing the boundaries of creativity and innovation.

3. The final step is to prototype the design using the best materials and techniques to effectively capture and reflect the artifacts' inherent beauty and cultural essence. Designers carefully select materials that are appropriate for the artifact's cultural significance and desired aesthetic. They also use appropriate techniques and craftsmanship to ensure that the prototype visually appealing and authentically embodies the intended cultural design elements. The goal is to create a prototype that not only highlights the cultural identity of the artifacts, but also their artistic and functional qualities, preserving and promoting the cultural heritage they represent.

## CONCLUSIONS

The study successfully develops a jewelry design and establishes a comprehensive design framework for effectively translating local culture into tangible design objects using the cultural layer model. However, it is important to acknowledge certain research constraints that may have influenced the outcomes. For instance, the study focuses specifically on a particular type of jewelry design inspired by the cultural heritage of a specific region or community, which may limit its generalizability to other contexts.

Further research could explore the application of the design framework to different cultural contexts, allowing for a more comprehensive understanding of how local cultures can be translated into design objects. Additionally, investigating the impact of design objects on cultural preservation and identity formation would provide valuable insights into the role of design in sustaining cultural heritage. Moreover, exploring innovative technologies and materials that can be integrated into the design process would enhance the intersection of culture, art, and technology, pushing the boundaries of design possibilities.

By addressing these research constraints and pursuing further investigations, designers and researchers can continue to contribute to the preservation of cultural heritage through design. It is through transdisciplinary approaches that we can truly appreciate and harness the power of design to capture the essence of culture, elevate artistic expression, and leverage technological advancements for the benefit of cultural preservation and societal enrichment.

We express our gratitude to Dr. Martin L. Katoppo S.T.M.T., the Dean of the Faculty of Design, and Dr.-Ing.Ihan Martoyo, S.T., M.Sc., the Chairman of the Center for Research and Community Development (CRD), for their support in this research endeavor. This article is one of the research publications in a series conducted under the registration number PM-009/SOD/I/2018 at Pelita Harapan University's Center for Research and Community Development (CRD).

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