

Woodcarving Motifs of Melaka Traditional House: Rumah Mohd Hassan Bin Ali

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ABSTRACT

Woodcarving is a traditionally significant art. Historic woodcarving of Malay traditional houses still exists in Melaka. The previous documentation of woodcarving motifs at traditional houses is not comprehensive, especially on the West Coast, particularly in Melaka. There is also a lack of understanding about the aesthetic value of woodcarving. This research aims to provide historical background about woodcarving motifs in one of Melaka's traditional houses, which is in Rumah Mohd Hassan. The objectives of this paper are to identify the woodcarving motifs and to categorise the woodcarving motifs. This study uses the qualitative method. Meanwhile, the primary data was gathered via field studies through photography. This study also incorporated The Theory of Malay Aesthetics by Zakaria Ali to interpret the motifs. This study showed different categories of motifs such as flora, fauna, geometry, still life, cosmos, nature, and a combination of motifs. The woodcarving motifs have achieved the six principles of the theory highlighting aesthetic consideration based on function, delicate, unity, contrast, symbol, and meaning. This research is beneficial in preserving knowledge about woodcarving motifs in Melaka traditional houses, and it is recommended that further exploration be conducted to compare woodcarving motifs with other states.

Keywords: Melaka, Traditional Houses, Motif, Aesthetic, Woodcarving

INTRODUCTION

One of the most well-known and remarkable crafts heritages in Malaysia is traditional woodcarving. The physical form of Malay woodcarving is characterised by the shape of the pattern, composition of motifs, and type of perforation and incision within a specified shape, size, and dimension of a wooden board or panel (Zumahiran & Ismail, 2008, p.103). Woodcarving is produced by expressing the creativity of the woodcarver guided by the source of inspiration, the source of life, religion, and customs, as well as traditions. Suhaimi et al. (2015) mentioned traditional woodcarving as a profound ornamental art (p. 55).

Ornament in architecture is defined as the motif of additional detail added to enhance the beauty and characteristics of the building. These ornamentations generally take the form of woodcarving (Wan, 1981, p.28). Woodcarving is an important component of the traditional Malay houses.

Nowadays, traditional houses can still be found in Melaka and are being preserved by Perbadanan Muzium Melaka (PERZIM) or cared for by their generation. Previous literature studies have indicated a lack of documentation on Melaka's traditional houses. According to Fadhlina (2016), the research conducted on ornament (motif) in traditional houses in Malaysia is more focused on traditional houses in East Coast areas of Malaysia. Documentation and specific studies on traditional houses in the West Coast areas, such as Melaka, are not widely available and not comprehensive, even though Melaka is very famous and rich in historical treasures (p.9). The woodcarving motifs in Melaka traditional houses have to be documented so that future generations can learn about their uniqueness before they disappear due to modernisation.

There is also a noticeable gap, and limited attention has been received regarding woodcarving motifs employing the aesthetic theory. Such lack of awareness is underpinned by the lack of understanding about the aesthetic values of carvings (Hana et al., 2021, p.2). Therefore, this study will use the Theory of Malay Aesthetics - The Principles of the Malay Concept of Beauty by Zakaria Ali to interpret and analyse the woodcarving motifs. Furthermore, this paper intends to focus on the woodcarving motif at one of Melaka's traditional houses. The chosen house is Rumah Mohamad Hassan bin Ali, known as Teratak Sireh Pinang. The house was selected based on the beauty and value of the motifs. This house possessed a variety of hollow carvings and direct piercings. The house still survives in this era, and it has been repaired and improved using funds allocated from Melaka State Conservation and Restoration in 2021 to be used as one of the cultural tourist destinations in Melaka. This paper aims to identify the woodcarving motifs at Rumah Mohd Hassan and categorise the woodcarving motifs at Rumah Mohd Hassan. This study presents the primary data collected by observation on field studies carried out through site observation. The information depends on the availability of woodcarving motifs at the houses.

LITERATURE REVIEW

Woodcarving is one of the vital handicraft traditional arts in Malay society. Ismail (2005) stated that woodcarving is the art of partially removing wood from a board or a plank following specific motifs and orders (p.2). Meanwhile, Hamdzun et al. (2014) mentioned that woodcarving is tearing off the wood surface using various tools, such as carving chisels and knives (p.936). Malay woodcarving is a carving design based on flora (plants) that has principles and a specific philosophy that its shape is chained-beginning from one point and develops until it fills the space (Aida et al., 2021, p.38).

Mohd (2000) mentioned that a motif is defined as repetitive ornamentations that form a particular pattern. Motifs are arranged in a pattern, repeated, and adjusted according to suitable position until the carving is done. Hamdzun et al. (2014) claimed that flora, fauna, geometrical, cosmos, and calligraphy motifs are usually carved on wood (p.936). The characteristics of Malay woodcarving are comprised of design attributes such as the types of flowers, leaves, and design elements (Nursuriani and Ismail, 2011). One of the famous components in vernacular buildings is the ornamental component, which is prominent in traditional buildings (Irfan, 2018, p.88).

Malay traditional houses have become a symbol of ancient craftsmanship skills with beautiful architecture and rich ornamentation. The homes are typically decorated with excellent carvings with

distinctive features such as external walls, over doors, and windows to provide ventilation, decoration, and fascia board of gable end (Mohamad et al., 2005). The carvings also signify the residents' status and ownership and display the craftsmen's skillfulness (Ismail, 2005, p.3). Their carvings exhibited a wealth of high levels of artistry and technique (Zumahiran & Ismail, 2008, p.102). Woodcarving motifs can be found widely around Malaysia, including in Melaka, which is well-known for its historical relics.

The traditional Malay houses in Melaka, called long-roofed Melaka houses, can be found in all districts of Melaka, which were built with special architectural styles (Ismail et al., 2014, p.42). The Melaka traditional house has two types. In Melaka, *'rumah berbumbung panjang'* is a type that features similar heightened columnar expressions facing the front, balanced with an open verandah (Shireen et al., 2017. p.22). Sabrizaa et al. (2019) mention that the *'rumah berbumbung limas'* roof shape was architecturally derived from the pyramidal concept and fitted with a 'V' shape (p.2). Melaka's largest types of houses consist of the main house, central house, and kitchen, which have a verandah and porch. These units are separated by intermediate areas, *'selang'* or *'pelantar'* (Moktar, 1992, p.17). Based on the Malaysia National Heritage Department and PERZIM, the characteristics of Melaka traditional houses include features such as *'tunjuk langit,' 'tangga batu', 'alas tiang', 'kekisi tingkap', 'tebar layar'* and *'atap tinggi'*. Some of these features are not available in other traditional Malay houses in different parts of Malaysia (Ismail et al., 2014, p.42).

Malay aesthetic is the decorative element in Malay handicrafts, including woodcarving, which has a form and meaning. Sabariah (2016) mentioned that aesthetics encapsulates two meanings: firstly, a set of principles concerned with nature and appreciation, and secondly, artistic taste (p.5). There are six (6) principles in the concept of Malay aesthetics by Sulaiman Esa that establish the concepts of refinement, flexibility, balance, unity, functionality, and symbolism. Syed Zulflida claims six principles: affinity to nature, the utility of craft, unity, contrast, symbolism, harmony, and balance. Besides, the theory of Zakaria Ali highlighted six aesthetic principles: unity, functionality, contrast, delicate, symbol, and meaning (Zakaria, 1989, p.206). Woodcarvings serve as ornamental components crafted to enhance the aesthetic appeal of an object (Juliana et al., 2024, p.282). According to Noor et al. (2021), woodcarving revealed the identity of Malay culture that has been assimilated into traditional buildings to add aesthetic value to its architecture (p.59). The woodcarving motif on traditional houses serves aesthetic and ornamental reasons and provides functionality for different purposes.

This paper will focus only on Rumah Mohd Hassan bin Ali. This house, known as 'Teratak Sireh Pinang, ' is located in Kampung Pinang A, Melaka Tengah. This house was built in the 1900s. The house was originally located in Kampung Pinang B and was moved jointly by lifting it to Lot 1192, Kampung Pinang A, before being sold and moved again to Lot 1184 (PERZIM, 2021). Several changes and additions have been made for current needs, including additional space at the back of the house, which has been rebuilt using bricks. The uniqueness of this house is that it has twelve (12) main pillars consisting of the main house '*rumah ibu*' and kitchen '*rumah dapur*', a porch '*anjung*' and verandah '*serambi*' that are not walled, and a beautiful brick staircase. It is characterised by the long-roofed Melaka house, '*rumah bumbung panjang*,' where the ridges are straight and horizontal, and the position extends according to the size of the house. The verandah and porch do not have walls, which differentiates Melaka traditional houses from other state-traditional houses. In 2021, through the Melaka Museum Corporation, this house was repaired and improved using funds allocated from the Melaka State Conservation and Restoration Trust fund to be used as one of the tourist destinations in Melaka (Perbadanan Muzium Melaka, 2021).



Figure 1. Rumah Mohd Hassan Bin Ali (Source: Author's personal collection)

RESEARCH METHODOLOGY

This paper uses the qualitative method as a way to understand the motif of woodcarving. The house of Rumah Mohd Hassan was selected because of the beauty and aesthetic value of woodcarving motifs. This research uses observation methods on field studies carried out through site observation. Data collection of motifs was documented through visual photography and sketches, depending on site availability, and captured from different angles of the camera. Data collection focuses on woodcarving motifs at the front and side view of the houses according to spatial organisation, architectural components, and decorative elements. Next, the woodcarving motifs will be transformed into vector format using design software that provides more detail for analysis. The measured drawings were displayed in black and white 2D images and then digitised into a single-line form. The findings will show the attributes of woodcarving motifs and list down classification types and categories of motifs at Rumah Mohd Hassan. Besides that, the interview with the woodcarver, Encik Abdul Jalil bin Bahrim, was used to seek verification from the interviewer of woodcarving motifs. He is an experienced woodcarver and a former Perzim staff member at the Melaka Museum and Gallery. In addition to direct observation and the interview, the research drew upon secondary data sources, such as journals and books, to strengthen the research findings and enhance the depth of information gathered. This paper will also use the Theory of Malay Aesthetics - The Principles of the Malay Concept of Beauty to interpret and analyse the woodcarving motifs using Zakaria Ali's book - Seni dan Seniman: Esei-Esei Seni Halus written in 1989. The six principles are the functional principle (prinsip berguna), delicate principle (prinsip berhalus), unity principle (prinsip kesatuan), contrast principle (prinsip berlawan), symbol principle (prinsip berlambang) and meaningful principle (prinsip bermakna).

FINDINGS

This finding has two objectives to be shown in this research. This finding focuses on the first objective, which is to identify the woodcarving motifs in Rumah Mohd Hassan. The woodcarving motifs are shown in items from different spatial organisations, such as the porch, verandah, main house, and kitchen. The details of the woodcarving motif include the name and motif illustration. This finding also focuses on the second objective, which is to categorise the woodcarving motifs in Rumah Mohd Hassan. The woodcarving motifs in this house are flora, fauna, cosmos, geometry, still life, nature, and a combination of motifs. There is also a combination of woodcarving motifs combined into one composition.

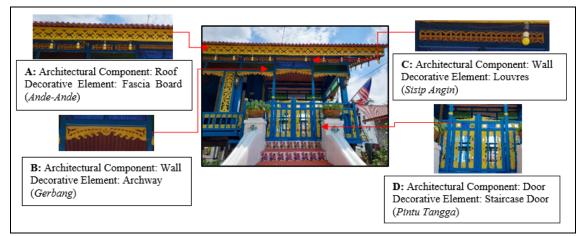


Figure 2. Woodcarving Motifs at Spatial Porch: Front View (Source: Author's personal collection)

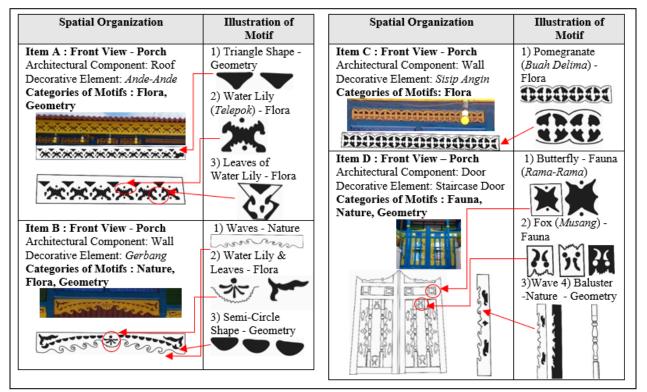


Figure 3. Analysis of Woodcarving Motifs at Spatial Porch: Front View (Source: Author's personal collection)

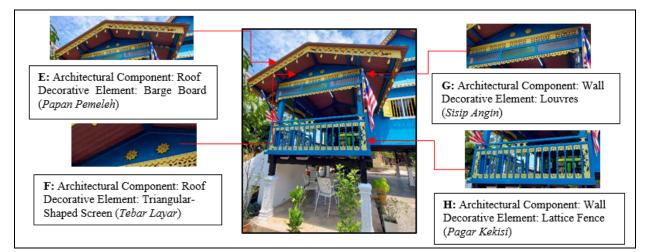


Figure 4. Woodcarving Motifs at Spatial Porch: Side View (Source: Author's personal collection)

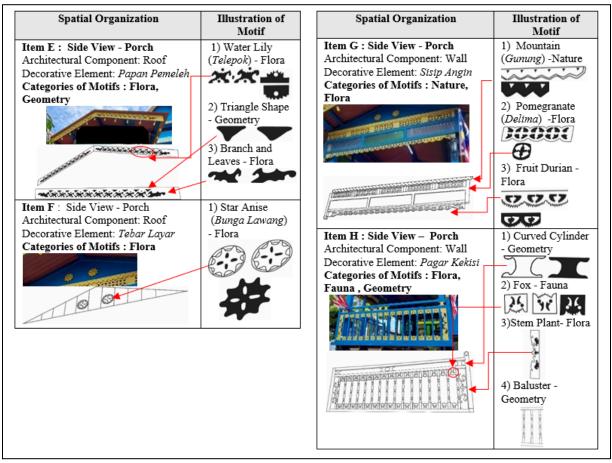


Figure 5. Analysis of Woodcarving Motifs at Spatial Porch: Side View (Source: Author's personal collection)

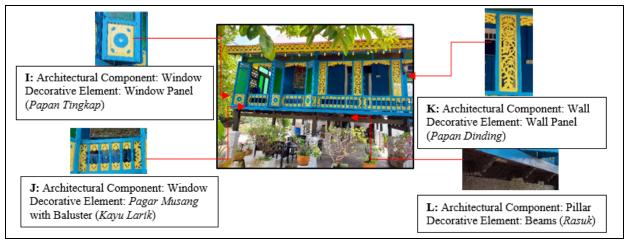


Figure 6. Woodcarving Motifs at Spatial Verandah: Front View (Source: Author's personal collection)

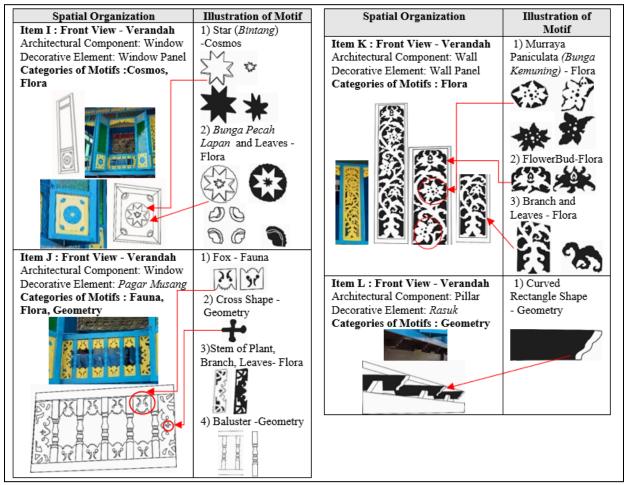


Figure 7. Analysis of Woodcarving Motifs at Spatial Verandah: Front View (Source: Author's personal collection)

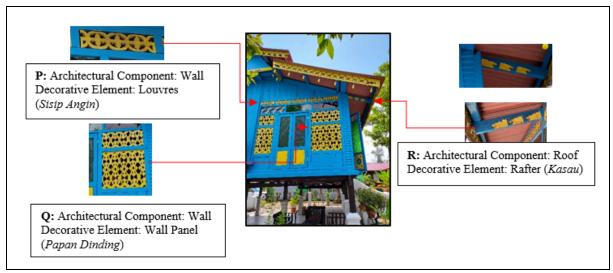


Figure 8. Woodcarving Motifs at Spatial Verandah: Side View (Source: Author's personal collection)

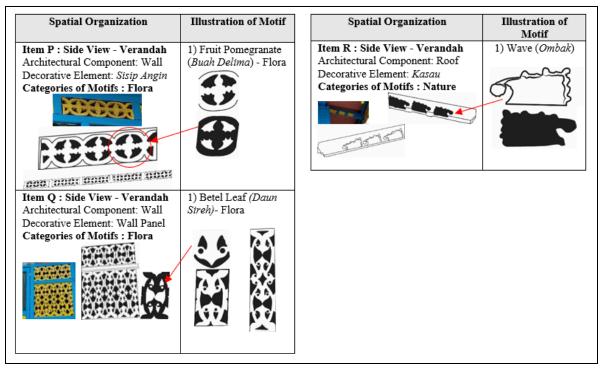


Figure 9. Analysis of Woodcarving Motifs at Spatial Verandah: Side View (Source: Author's personal collection)

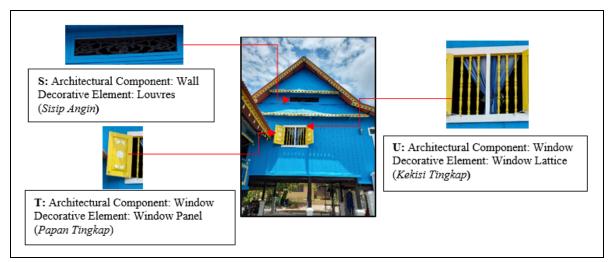


Figure 10. Woodcarving Motifs at Spatial Main House: Side View (Source: Author's personal collection)

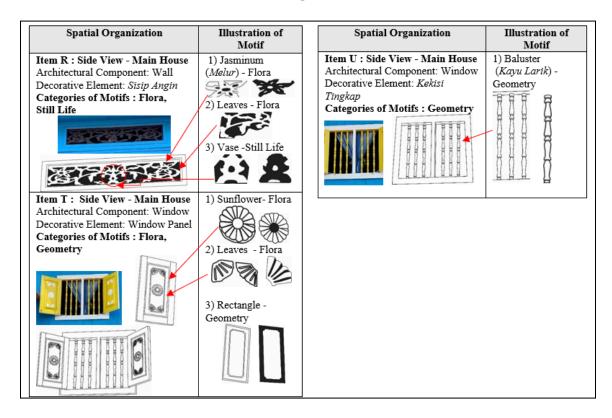


Figure 11. Analysis of Woodcarving Motifs at Spatial Main House: Side View

(Source: Author's personal collection)



Figure 12. Woodcarving Motifs at Spatial Kitchen: Side View (Source: Author's personal collection)

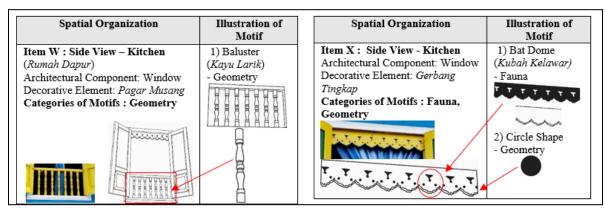


Figure 13. Analysis of Woodcarving Motifs at Spatial Kitchen: Side View (Source: Author's personal collection)

The carved components with woodcarving motifs of flora, geometry, fauna, still life, cosmos, and nature, and a combination of motifs are portrayed according to the specified shape, size, and dimension of the wooden panel. Woodcarving motifs at Rumah Mohd Hassan are primarily identified on porch and verandah because they become an attraction as entrances to the houses and enhance the beauty of the houses with various details of woodcarving motifs and have a higher finesse carving. The main categories of these two spatial are flora motifs such as water lily 'bunga telepok,' murraya paniculata 'bunga kemuning', sunflower 'bunga matahari', 'bunga pecah lapan', pomegranate 'buah delima', betel leaf 'daun sireh' and star anise 'bunga lawang'. In addition, the woodcarving motif in the house displays the beauty of the flora motif in terms of design motif and the woodcarver having inspiration from its own surroundings, primarily from the flowers and plants. Besides, for categories of fauna motifs, some motifs have been modified to be concise and do not resemble the shape of an animal, such as fox 'musang', butterfly 'rama-rama', and bat dome 'kubah kelawar'. There are also other categories of geometry motifs, such as semi-circles, rectangles, and curved cylinders; still-life motifs, such as vases; cosmos motifs like stars; and nature motifs like waves and mountains. Thus, Rumah Mohd Hassan displayed simpler motifs in the main house and kitchen. The woodcarving motifs can be found in this space, even though the woodcarving is more straightforward in design and motif because it is hidden from view. The woodcarving motifs are primarily located at decorative elements, such as pagar musang, 'gerbang tingkap', 'sisip angin', 'papan tingkap', and 'papan pintu'.

The election of the motifs in woodcarving is mainly inspired by its environment and surroundings. Nature elements become the source of inspiration for the woodcarver to create motifs. The transformation of a natural element into a woodcarving motif is indicative of the imagination, skillfulness, and creativity of the woodcarver. The findings also revealed a combination of categories of woodcarving motifs displayed in Rumah Mohd Hassan. A combination of woodcarving motifs consists of two or three categories for each item of woodcarving motif, such as a combination of flora motif and geometry motif, the combination of fauna motif and geometry motif, and a combination of flora motif, fauna motif, and geometry motif. Combination of the geometry motifs with different categories also becomes a favourite for woodcarvers.

The use of the Theory of Malay Aesthetics by Zakaria Ali to describe the house of Mohd Hassan included all six principles of the theory. First, the woodcarving motifs in Rumah Mohd Hassan adapted to the functional principle as ventilation openings, part of the security and enhance the house's beauty. The staircase door functions as a barrier part of the guard from people and animals entering the entrance of the house. Lattice fence (*pagar kekisi*) serves as a safety bar for children from falling and leaning on their bodies and hands. Besides, the fox fence (*pagar musang*) provides good airflow into the space and reduces the possibility of a person falling off. The function of *tebar layar* is for the path and distribution of air and sunlight. Louvres (*sisip angin*) also have functions for ventilation and lighting. A variety of hollow carvings with direct piercing (*tebuk tembus*) promotes air and light and a screen to reduce glare from the amount of daylight. The other function of the woodcarving motif is to decorate a space and increase the house's beauty with embossed relief piercing (*tebuk timbul*). Mostly, woodcarvings placed at the front of the house elicit admiration and create a sense of visual beauty with coloured paints.

The delicate principle (*prinsip berhalus*) in Rumah Mohd Hassan displays mostly beautiful flora motif details and simpler woodcarving motifs. The delicate wood carving around the house shows the skill of craftsmen and the level of carving techniques by showing flora motif shapes in accurate detail. The fineness of the woodcarving shows how fine carving is not rough in its execution and has a good formation of motifs. Besides, there are also simpler woodcarving of flora and fauna motifs, which are less complicated in producing methods in terms of the detail of motif and carving technique but still show good finesse in the result. Next, the unity principle portrays the relationship between motifs and elements that comply with the composition. First, the floral motif in a complete pattern in Rumah Mohd Hassan combines a central flower, branches, leaves, and flower buds. The motif was arranged in balance and harmony within the frame. Following the unity principle can also be seen in the frame pattern at the wall panel, in which the design motif is arranged vertically in one frame rail without overlapping each other. The examples show a sense of unity and harmony in the composition of motifs.

An example of the contrast principle in Rumah Hassan is a contract between two or more types of wooden surfaces. The lattice fence has an upper panel with a curved cylinder motif and a bottom panel with a fox motif, stem of the plant, branch, leaves motif, and baluster in one frame pattern. The different types of motifs are arranged horizontally and vertically between more types of wooden surfaces in order to obtain a good and perfect composition. Next, the example of a motif in this house has a symbol principle, which is growing flowers that carries a symbol of beauty and praise to nature. The woodcarver obtains inspiration from natural beauty, especially from flowers and plants. Hence, the woodcarver manifests imagination to duplicate original flowers into woodcarving motifs. Besides, the use of flora motifs highlighted the culture of Malay people, who prioritise the beauty of flowers to reflect the identity of the house.

The example of the woodcarving motif in this house has the meaning principle of a water lily (*bunga telepok*). It carries the meaning of rebirth because the flower only blooms in the morning. *Bunga kemuning* represents reconciliation and the value of love. *Bunga Melur* has the meaning of purity, which depicts a very wide and universal relationship. Sunflowers have the meaning of cheerfulness and give happiness to their recipients. Bunga *lawang* is the spice that brings a symbol of helping and beneficence,

which emphasises cooperation. *Daun sireh* represents teamwork, consensus, and brotherhood. The nature of the betel tree that creeps and climbs without damaging the host plant is associated with the personality trait of always honouring others and being a giver. The fauna motif, meaning the butterfly, represents the majesty of love and a symbol of transformation from birth to the real world. Besides, a fox is a kind of animal that lives wildly, is very cunning, and likes to hide. This motif means that it is earnest human nature to find a way out of every problem. Mountains are the symbol of the earth and have the meaning of persistence. Wave means peace and tranquillity of the soul. The undulating wave shows the power and majesty of its creator. A star is an astronomical object and has a meaning of divinity and hope. Lastly, the vase is a symbol of the seed, meaning the birth of nature from one seed.

An interview with the woodcarver, Encik Abdul Jalil, supports the findings that were conducted to obtain a view of woodcarving motifs at Rumah Mohd Hassan. The interview session with Encik Abdul Jalil was conducted at the Melaka Sultanate Palace Museum. Encik Jalil stated that the main motifs of woodcarving are flora and geometry motifs. In flora motifs, flowers, branches, roots, and leaves often dominate in woodcarving in Rumah Mohd Hassan. After the arrival of Islam in Melaka, animal motifs were not allowed to be stylised, and much focus was placed on flora and geometric motifs. He explains that a woodcarver needs a calm soul to produce woodcarvings with a high degree of finesse. Woodcarvers also need patience, persistence, and diligence to produce woodcarvings. Natural elements inspire the surroundings and environment of the woodcarver. Encik Jalil highlights the woodcarving motif at Melaka's traditional houses, including Rumah Mohd Hassan, which has its own identity.

CONCLUSION

Based on the findings, Rumah Mohd Hassan bin Ali presented different categories of woodcarving motifs consisting of flora, geometry, fauna, still life, cosmos, nature, and a combination of two or more categories of motifs. This finding showing the main categories of woodcarving motifs in this house are flora motifs. The selection of motifs in this house shows the diversity of the source of inspiration of nature elements to depict real or abstract motifs in the art of woodcarving. The woodcarving motifs in Rumah Mohd Hassan have achieved the six principles of The Theory of Malay Aesthetics by Zakaria Ali. The finding shows that Malay woodcarvers highlight aesthetic considerations based on the function, delicateness, unity, contrast, symbolism, and meaning of woodcarving. This house also has a beautiful woodcarving motif with coloured paint, which is functional for the house and expresses the delicate of the woodcarving motif. Woodcarving motifs at Rumah Mohd Hassan are used as ornamentations of the houses for aesthetic reasons, designed as functional pieces of art in Malay traditional houses, and have the symbolic significance of woodcarving motifs and interpretation of the meanings attributed to woodcarving motifs. As a result, this study showed the authenticity and uniqueness of woodcarving motifs in Rumah Mohd Hassan bin Ali. Lastly, this research benefits the preservation of woodcarving motifs and carries new knowledge and understanding of woodcarving motifs in Melaka's traditional houses. It is recommended that more in-depth woodcarving studies should be further explored on the southwest coast, especially in woodcarving motifs and comparison of woodcarving motifs with other states of traditional houses in Malaysia.

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REFERENCES

- Aida Kesuma Azmin, Fadzidah Abdullah, Aliyah, Nur Zafirah Sanusi, Zeenat Begam Yusof & Nayeem Asif (2021). Sustainability of Malay wood craftsmanship symbolism in deciphering Malaysia's architectural identity. *Proceedings of DARCH 2021*. http://doi.org/10.46529/darch.202124
- Fadhlina Ahmad. (2016). Gaya rupa dan peletakan ornamen senibina pada rumah tradisional bumbung panjang Melaka. [Doctoral Thesis]. Universiti Teknologi Malaysia. http://eprints.utm.my/id/eprint/78714
- Hana Hapiz, Siti Nur Anis Apandi, Farah Atikah Shaari, Suraya Sukri, Nordiana, Hanisa Hassan & Nurulahda. (2021). A study on floral motifs of fruit carving: analysis on Sukor Rahim's works. Proceeding of International Conference on Advanced Materials Engineering & Technology (ICAMET 2020). https://doi.org/10.1063/5.0054148
- Hamdzun Haron, Nor Afian Yusof, Mohamad Taha & Narimah Abdul Mutalib. (2014). Cut out carving: an innovation of Malay heritage design pattern (Labu Sayong), *Middle-East Journal of Scientific Research*. 21(6), 936–944. https://www.idosi.org/mejsr/mejsr21(6)14/11.pdf
- Irfan Ullah (2018). Wood carving traditional art of Malaysia to be safeguard and protected. *Ideology Journal of Arts and Social Science*. Vol.3 No.1, 87-94. https://doi.org/10.24191/idealogy.v3i1.45
- Ismail Basri, Nik Hashim & Abd Majid. (2014). Tourists' perceptions toward the authenticity or unique features of Melaka traditional Malay houses as cultural heritage tourism product. *Hospitality and Tourism: Synergizing Creativity and Innovation in Research*. CRC Press, 41–45.
- Ismail Said. (2005). Timber species in Malay wood carving. Proceedings of the International Seminar Malay Architecture as Lingua Franca. Architecture Department, Faculty of Civil Engineering and Planning & Research Institute, Trisakti University Jakarta. http://eprints.utm.my/813/Timber_Species_in_Malay_Wood_Carving(2005)_isamail_said.pdf
- Juliana Adlin Ahmad, Arbai'iyah Ab. Aziz & Mohamad Kamal Abd. Aziz. (2024). Meaning behind the carving motifs of traditional Malay houses. *Pertanika Journal of Social Sciences and Humanities*, 32(1). https://doi.org/10.47836/pjssh/32/1/13
- Mohd Yatim Othman. (2000). *Mengukir kegemilangan lalu, Biografi Wan Su Othman, penerima Anugerah Seni Negara, 1997*. Kuala Lumpur: Kementerian Kebudayaan Kesenian dan Pelancongan.
- Muhammad Affandi Yahya. (1995). *Simbolisme dalam seni bina rumah Melayu Kelantan* (Symbolism in Malay House of Kelantan). Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Moktar Haji Ismail. (1992). *Rumah Tradisional Melayu Melaka*. Kuala Lumpur: Persatuan Muzium Malaysia Muzium Negara. Kuala Lumpur: United Selangor Press Sdn. Bhd.
- Noor Hanita Abdul Majid, Zaiton Abdul Rahim & Zuraini Denan. (2021). Climate responsive strategies versus the cultural and religious dimension in the architecture of Malay traditional houses. *In Malay Vernacular Architecture: Traditional and Contemporary Expressions*. IIUM Press.

- Nursuriani Shaffee & Ismail Said. (2011). A multidisciplinary approach for the carved fenestration in floral design of Malay vernacular architecture. *Proceeding of the 12th International Conference on Sustainable Environment and Architecture*. http://umkeprints.umk.edu.my/292/1/Paper%201.pdf
- Perbadanan Muzium Melaka. (2021). *Rumah tradisional Encik Mohd Hassan bin Ali*. Melaka Heritage. Retrieved April 25, 2024, from https://melakaheritage.com/ms/category/rumah-tradisional
- Sabariah Ahmad Khan. (2016). Allegorical narratives: redefining the evolution of ornamented aesthetic principles of Langkasuka art of the Malay peninsula, Malaysia. *WIT Transactions on The Built Environment*, Vol 159. https://doi.org/10.2495/IHA160011
- Sabrizaa Rashid, Mohd Nurfaisal Baharuddin, Kartina Alauddin & Iryani Abdul Halim Choo (2019). Decorative elements of traditional Malay house: Comparative study of Rumah Limas Bumbung Perak (RLBP) and Rumah Limas Johor (RLJ). *IOP Conf. Series: Earth and Environmental Science*. https://doi.org/10.1088/1755-1315/385/1/01/012022
- Shireen Jahn Kassim, Norwina Mohd Nawawi & Noor Hanita Abdul Majid (2017). *The resilience of tradition Malay allusions in contemporary architecture*. Areca Books.
- Suhaimi Tohid, Rafeah Legino, Ruzaika Omar Basaree, Ponirin Amin & Rahman Amin (2015). Classification design motifs of traditional Malay wood carving. *In Proceedings of the International Symposium on Research of Arts, Design and Humanities* (ISRADH 2014). https://doi.org/10.1007/978-981-287-530-3_6.
- Wan Burhanuddin Wan Abidin. (1981). *The Malay house: rationale and change*. [Master Thesis]. M.I.T., Massachusetts. Cambridge. https://dspace.mit.edu/handle/1721.1/7582
- Zakaria Ali. (1989). Seni dan seniman (Art and Artist). Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Zumahiran Kamarudin & Ismail Said. (2008). Composition of Malay woodcarving: Case studies on two traditional timber. *Jurnal Alam Bina*, 11(2), 101–118. https://eprints.ukm.my/id/eprint/8233/