



The Symbolism and Survivability of Royal Identity (RI) for the Upper Section of the Taoist Temple Built in the 19th Century in the Klang Valley, Malaysia

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ABSTRACT

Taoist temples are considered a nation-specific religious and exceptional cultural landmark regionally. The design principle of the lower, middle, and upper sections of the physical building profoundly symbolised royal identity (RI). Scholars discovered that despite Chinese lineage positively recognising the importance of this symbolism, they were clueless about it, notably the configuration of the upper section. The objective of this paper is primarily to identify the design symbolism of the Taoist temple and assess the survivability of the RI for the upper section: 1) roof form; 2) ornamentation and 3) roof colour. Qualitative research was administered by conducting an observational study amongst the ten selected Taoist temples constructed in the 19th century in the Klang Valley. The results revealed that most of the design symbolisms inherited from the Southern region of Mainland China and RI were lessened. Interestingly, the samples synthesised the orthodox RI with indigenous local Malay vernacular architecture, the ventilated roof. The finding not only potentially intensifies the Chinese community by providing insightful knowledge, but it also eases the practical-knowledge gap amongst design practitioners and revitalises the tourism industry in the culture, arts, and heritage domains.

1.0 INTRODUCTION

Geographically, the strategic location of Malaysia has benefited the country in its maritime trade with the governments of India and China by providing support to the sailing fleets routinely travelling through the Straits of Malacca by protecting the merchants' goods (Han & Beisi, 2016; Widodo, 2016). The traders who travelled to Southeast Asia via ship offered diverse experts ranging from traders, builders, fishermen, peasants and business merchants. The after-effect of this event has ultimately formed a settlement or coastal cities in Southeast Asia, including the Chinese settlement in Malaysia (Lockard, 2013; Widodo, 2016). Subsequently, the intrusion and occupation of colonials during the 19th century (Moffett et al., 2003) undoubtedly introduced

indigenous western features. As a result, a biodiversity culture had beautifully woven into this region, showing the richness of its architectural landmarks, cultural and historical traits (Soudangi, et.al., 2013b).

The presence of the Chinese settlement had a significant impact during the 19th century, attributed to the group of mine workers who travelled far from their homeland and resided in Malaysia to earn a better living (Kohl, 1978; Hew, 2015). The golden period of the mining trade resulted in the Klang Valley as a glorious region. Simultaneously, the influx of Chinese diaspora sojourned there (Yip, 1969). They brought over their cultural identities during their arrival in Malaysia, intermingling with the local cultural contexts, social patterns, political and other factors to localise themselves and build homes. This transitional nature had then interwoven the ideology of Mainland China and the wisdom of local elements. The modification and adaptation of the vernacular features introduced by the Chinese community eventually formed a new habitat with its distinctive local identity (Widodo, 2009b). That is no different for a century-old Taoist temple in Malaysia, as an entity of art production, engulfed with orthodox ornaments and constructed opulently by the Chinese diaspora as their homage towards their homeland.

A city serves as a habitable core for cultural development and should be resilient and sustainable, as stipulated by the United Nation's Sustainable Development Goals 11 (SDG) (United Nations, 2015). Nevertheless, the dynamic historical cities in Southeast Asia have a continuum and resulted in a breakdown in cultural identity due to the burgeoning of urban development and improper maintenance (Gao et al., 2020; Widodo, 2009a). This nationwide issue is a consequence of irresponsible human activities, particularly the urban transformation, destruction or refurbishment of the existing fabric (Widodo, 2018). A recent research paper revealed that there was a challenge in sustaining a tangible cultural, particularly the design identity for the Taoist temple built in the 19th century, in the Klang Valley, Malaysia (Yeong et al., 2020). The scholarly research also found that the Chinese community was clueless about the dominant symbolism of the Taoist temple. The respondents, as Chinese lineage revealed, positively recognised and acknowledged the importance of this symbolism, and addressed their appreciation of the temple as they regarded this temple model was established by their forebear in Chinese genealogy (Yeong et al., 2016). The author elucidated that this underlying knowledge deserves the right-propaganda. The resurgence of eminence design for Taoist temples built in the 19th century in the Klang Valley should be fostered widely as it will potentially enhance the research and practical gap.

Chinese treatise of Taoist temples was seemingly ubiquitous in China due to its superabundant heritage and archaeology sites. As accredited to the imperial officer, Li Jie (李誡) (1035 A.D.–1110 A.D.) had successfully developed *Yingzao Fashi* (营造法式), a building standardisation based on scientific attainment. It is a design and construction directorate that has meticulously documented the royal symbolism and design philosophy of the building from top to bottom and it solemnly serves as an authoritative source for design guidelines. The structural, ornamental, poetry, ritual writing and official statuary construction process for the Palace and Taoist temple were profoundly illustrated in detail throughout ancient China (Lin, 2013; Feng, 2012; Lip, 1995; Luo, 2016). The maturation of these events had shown stability and richly offers an excellent opportunity for academic research in China.

As for Malaysia, despite many of these assets being over a century old, the knowledge relevant to the century-old building was in a rudimentary stage (Mohd-Isa et al., 2011). Various acts like the National Heritage Act 2005 and organisations, like the National Heritage Department of Malaysia, have been proudly established for the purpose of exploring and protecting the value of these withstanding historical assets for the country's betterment (Azhari & Mohamed, 2012). According to the data from the National Heritage Department of

Malaysia, only 130 buildings have been registered and designated as heritage buildings and none of them are Chinese religious buildings (Jabatan Warisan Negara, 2021). The little attempt, under exploration and inference in Chinese treatise mainstream, may hinder the research domains, such as century-old Chinese religious buildings.

There has been extensive research discussing the domain of conservation and preservation of historical buildings in Malaysia; (Azmi et al., 2017; Hasbollah, 2014; Henderson, 2012; Said et al., 2013; Sodangi et al., 2013a), building maintenance (Adegoriola et al., 2021; Kayan, 2006; Sodangi et al., 2014; Tan et al., 2016) and public awareness of heritage building (Azhari & Mohamed, 2012). Scholars' interest in Malaysian religious buildings stretches from the past few decades merely discussed mosques in the context of; architectural, environmental and design framework (Asif, et al., 2018; Asif, et al., 2019; Azmi & Kandar, 2019), Islamic art for interior (Othman & Zainal-Abidin, 2011), and emergency shelters, (Utaberta & Asif, 2017).

Hitherto, the available literature for Taoist temples erected and backdated in the 19th century in the Klang Valley, Malaysia, upon the arrival of the Chinese diaspora is far fewer. Specifically, the upper section of the Taoist temple is essentially regarded as a pivotal configuration for the holistic Taoist temple (Blaser, 1995; Chen, 1998; Liang & Fairbank, 1984). Therefore, this paper dives into the investigation, primarily to identify the design symbolism and to assess the survivability of the RI for the upper section, specifically: 1) roof form; 2) ornamentation and 3) roof colour for Taoist temples built in the 19th century, in the Klang Valley, Malaysia. The encapsulated finding introduced on the ground has better drives for future reference.

1.1 The Chinese Religious and the Arrival of the Chinese Diaspora during the 19th Century

Worshipping to nature, wind and thunder, rivers and lakes, stars and moon, etc., is an indigenous theory of theistic, perpetuated universally by the Chinese descendants since ancient China. As deeply ingrained in the mind of devotees, worshipping God is a powerful intrinsic exercise that positively offers better spiritual protection to safeguard their living. Thankfully, without being meddled by political parties, this imperishable religious practice brought by the Chinese diaspora upon their arrival had solidly been promulgated in Malaysia (Tan, 2018). The patron deity brought over by the Chinese diaspora in the heyday of the mining trade during the 19th century was a delicate statue exclusively crafted in approximately four inches and surfaced in gold finishing (Tan, 2018). They personally housed the statue in their accommodation to safeguard their living in a new land, i.e., Malaysia. Occasionally, they worship this spiritual deity by burning incense candles, joysticks or incense papers (Chen, n.d).

An independent small religious building, namely a temple, decorated with flamboyant ornaments, was finally established in their village with the all-out effort of the Chinese community (Tan, 2018). Architecturally, wooden materials have been applied as the main structure (Liu, 2015). The patron deity as a representational object houses nicely in the Taoist temple and serves an essential role in offering a better sense of security and comfort to the Chinese diaspora, the descendants of the Qing dynasty (1644 A.D.–1944 A.D.), who were peasants in their home country (Amos, 1969). As recorded by scholars, diverse natural calamities, economics and political consequences forced them to leave their homeland and search for better hope (Suyama, 1962). Residing in Malaysia to serve as coolies or miners was a better choice for them (Hew, 2015).

1.2 The Taoist Temple in Malaysia and China

The architecture of each building portrays the authenticity of its local historical values (Lefebvre & Wertheimer, 2006). The earliest Taoist temple in Malaysia is a forerunner of the Chinese association and religious institution, featuring a nation-specific architecture manifested in Chinese religion, seen inseparable from the public cemetery. The earlier materials like attap and wood materials were an identification of the Taoist temple. However, permanent materials were adopted, including cement, concrete brick walls and roof tiles ever since the oldest, namely Xian Shi temple in Kuala Lumpur, was burnt to the ground in 1872 and 1881 (Kohl, 1978).

Taoist temples were built in primitive buildings concerning their authentic and palpable totem design and rested exclusively on the grand podium (Liu, 2015). The temple synthesised three physical attributes, consisting of the lower (the main podium), the middle (the essential body) and the upper sections (which symbolises the head as well as signifies heaven) (Blaser, 1995; Chen, 1998; Liang & Fairbank, 1984). The holistic body of the temple, enclosed with a thin wall, circular and splendid wooden columns, and covered with a single or double giant roof gabled or hipped, completely formed a distinctive religious building (Liang & Fairbank, 1984). The interior configuration is more complex to accommodate various Taoist activities.

On the vice-verse, the design symbolism of Taoist temples in Mainland China is seen as nonhomogeneous, and it can be differentiated by regions with their respective characteristics. The northern region profoundly adopted the royal symbolism, while the southern region adopted the plebeian or commoner symbolism (Armani & Arbi, 2014). The indigenous and vernacular architecture landmarks, for example, the symmetrical layout and theory of courtyard, were found commonly used regardless of the royal building or commoner dwelling, according to the local cultural context inclusive of traditional legends, religious, environmental factors and its functions (Kohl, 1978). The liveability design principles drive the premises; a) optimal indoor air performance and thermal comfort, b.) salutary air circulation within the interior (Chen et al., 1997). The similarity of the functions can be highly distinguished by the contemporary temple in Mainland China equipped with extended and shadow temples to house ancestral and cultural halls, memorials and elderly activity halls to facilitate daily activities for interaction and socialising purposes (Chen, 2016).

1.3 The Philosophy of the Ornamentation

The quaint ornaments and the building's architecture are affiliated. The antiquity ornaments are not extravagant; instead, there are underlying salient cultural art and connotation, ritual interpretation, encased with aesthetic value (Luo, 2016; Makkreel, 2006), in compliance with the notion of the Confucian etiquette. The Confucian etiquette is an ancient wisdom meticulously portrays a magnitude of design principle in carving, shape and several contexts of the roof, namely 1) functionality in scientific attainments; 2) characteristics of visual aesthetics and 3) peculiarity of religious and cultural contexts (Li & Liu, 2017). Nelson (1988) elucidated that the building materials, ornaments detail, interior features and the holistic built environment complimented the historic character and orthodox identity of the building (Azmi et al., 2017). The presented realistic objects are spectacularly delivering the ideology in duality, representational and decorative in the form of animism, such as metaphysical immersed in philosophy, religious symbolism or literal allegorical expression (Luo, 2016; Makkreel, 2006; Williams, 1984). The beauty of ornaments with their intrinsic values often encases their iconography or cultural symbolism, implying the core notions of philosophy and function in both. For example, the courageous goat or Chiwen, located at the end of the roof ridge, signifies fire prevention as it features the spit water gesture symbolising protection over the building (Hernandez, 2018).

1.4 The Symbolism of Royal Identity for the Upper Section

An ancient monograph, namely *Yingzao Fashi*, had precisely stipulated the royal symbolism for spectacular royal buildings and Taoist temples since ancient China in Mainland China. This statutory treatise denotes a design terminology for building construction, with scientific attainment, rigorously developed during the Northern Song dynasty (960-1125C.E.) by Li Jie (李诫) (1035–1110) (Luo, 2016). In accordance with this monograph, grandeur palaces, royal buildings and Taoist temples were comparable and equitable in rank since ancient China (Gou & Wang, 2010). The roof of a Taoist temple symbolises the head and signifies heaven (Blaser, 1995), regarded as the most important chromatic icon in which its design is regulated by hierarchy (Lip, 1995). The richness in use, the sizes and quantity of ornaments and decorations crafted painstakingly manifested one social status, luxury and the temple ranks (Cai, 2010; Lip, 1993).

The upper part of the Taoist temple is solemnly constructed with a single, double hip and gable roof. The encaustic tiles and glazed semi-circular material are strictly reserved for palaces, royal buildings and Confucian or Taoist temples (Hernandez, 2018). This holistic complexity reflected the superiority of royal buildings and Taoist temples. Contrastingly, the remarkable unrealistic animals are presented as a personification due to their anthropomorphic features (Li & Liu, 2017) and in compliance with geomancy interest. For example, the identifiable solemn mythical figurines consist of eleven animals constructed at the end of the roof ridge, orchestrated sequentially in the following order: immortal hen (仙人), dragon (龙), phoenix (凤), lion (狮子), heavenly horse (天马), auspicious seahorse (海马), mythical lion (狻猊), wind-and-storm-summoning fish (狎鱼), courageous goat (獬豸), evil-dispelling bull (斗牛) and immortal guardian (行什) (Kohl, 1978). The number of animals constructed on the roof signifies the hierarchy of temples (Lip, 1995).

Colour essentially served as a protection for a building. The colour selection for the roof tile is a subtle embellishment for a Taoist Temple (Luo, 2016). Nonetheless, it has been restricted by: (1) the technique of tile-making; (2) hierarchy; (3) the essence of colours and (4) the philosophy of geomancy (Gou & Wang, 2010). Yellow colour, officially manifested royal or ruler's power; in particular, the roof is delicately designed with margins to be highly ranked (Lip, 1995). In contrast, the green colour is partially applied for royal buildings, solely reserved for the Empress and Rani's residence (Gou & Wang, 2010). Beyond the royal consideration, some colours mean to convey auspiciousness in general. For example, the red colour applied to the key components of the Taoist temple exemplifies good fortune and happiness. Whereas blue manifests blessing, white is associated with gold elements representing mourning, and the black colour indicates darkness (Lip, 1993).

2.0 RESEARCH METHODS

Qualitative research was employed due to the suitability of the anecdotal and idiosyncratic approaches that can precisely scrutinise the specific subjects and describe small samples – ten Taoist temples built in the 19th century in the Klang Valley (Yin, 2017). This paper examines the upper section of the Taoist temple through the lens of ontology (the philosophy of reality) and epistemology (the theory of knowledge). Data collection through on-site observation and documentation is the most effective method that can provide concrete evidence to achieve the best outcome (Coll & Chapman, 2000). The sample for this research was chosen by using mean targeted sampling and the data obtained from the Catalogue of Chinese Temple in Malaysia (My Time, 2017). In total, fifty-four Taoist Temples were built in the Klang Valley in the 19th century. Once the location and ages of the samplings were validated, a filtration cycle was carried out by using

Chinese Epigraphic Materials in Malaysia, referenced by Franke and Chen (1985). The samples beyond Taoist temples, built with an unknown date and out of the Klang Valley region, were excluded. Finally, ten Taoist Chinese temples were exclusively selected; two temples were situated in Kuala Lumpur, while another eight were in Selangor.

Kvale and Brinkmann (2009) suggested that sampling should range between five to twenty-five to ensure reliability. Therefore, having ten samples was justifiable to produce meaningful data. A checklist of ornaments for the upper section of the Taoist temple was comprehensively developed. Ornaments were well-captured based on the literature, according to the theories by (Chen et al., 1997; Chen, 1998; Kohl, 1978; Li & Liu, 2017; Yang, 1989; Tan, 2018; Widodo, 2004).

Coding has been assigned to each sample and the ornaments by using a combination of alphabetical and numerical symbols. A total of seven components were assessed, inclusive of: C1-Hip roof (single /double), C2-Gable roof (single /double), C3-Roof tile in yellow colour, C4-Mythical figuring (roof ridge), C5-Ridge end animal (Chi Wen, 蚩吻), C6-Semi-circular glaze tile and C7-Wooden dougong. To observe and describe the conditions and phenomenon of the physical site without tampering with its natural setting and configuration (Kvale & Brinkmann, 2009), first-hand materials, including observation, consolidation of sketches and photographs of the upper section were taken and labelled sequentially from Sample 1 to Sample 10 (S1–S10) for three aspects: 1) roof form; 2) ornamentation and 3) roof colour. Analytical findings will be interpreted, and conclusions were drawn to identify the design symbolism and the survivability of RI for the upper section of the Taoist temple, based on the below-outlined approach:

- 1) Roof form and mythical animals – descriptive analysis in frequency with percentage.
- 2) Colour property of the roof tiles – NSC navigator was procured, commonly used in scientific research (Hård & Sivik, 2001).

3.0 ANALYSIS AND RESULTS

The observational study revealed that despite the roof design of the ten samples found dichotomy, the foyer and main hall had applied the design symbolism differently. Nevertheless, it dominantly carried respective conventional systems with the below significant values:

- 1) The main hall roof synthesised the plebeian symbolism, which originated from southern China with a ventilated roof, an indigenous feature and common trait of Malay vernacular architecture.
- 2) Partial of the samples revealed that the foyer bears a significant correlation with the transcendental RI.
- 3) The analysis unveiled that the RI survivability for the upper section was minimally correlated.

3.1 The Roof Form: Hip and Gable Roof

The findings demonstrated that the building layout consists of two parts, mainly the primary egress, namely the foyer and the main hall (See [Figure 1\(A\)](#)). The data showed that 60% of the samples possessed a foyer bearing a significant correlation with the transcendental RI, hip, and gable roof (See [Figure 1\(C\)](#)). Refer to [Figure 1\(C\)](#); amongst the ten samples, samples four (S4) and nine (S9) recorded that the foyer was built with a hip roof while samples one (S1), three (S3), five (S5) and seven (S7) showed the foyer was constructed with a gable roof. Contrastingly, the remaining samples found the design of the foyer and main hall was built with an overhang and flush roof, demonstrating a plebeian symbolism (See [Figure 1\(B\)](#), picture 4 and picture 5).

Beyond that, three samples (S2, S6 and S9) adapted the courtyard principle, featuring an indigenous design from Mainland China. The remaining of the samples (S1, S5, S7, S8 and S10) showed the main hall adopted a ventilated roof, an orthodox symbolism featuring an indigenous Malay vernacular (See Figure 2). S3 and S4 exhibited their architectural attribute without featuring the principle of a courtyard or ventilated roof. Ironically, none of the samples showed that the top of the main hall had a single or double-level hipped and gabled structure.

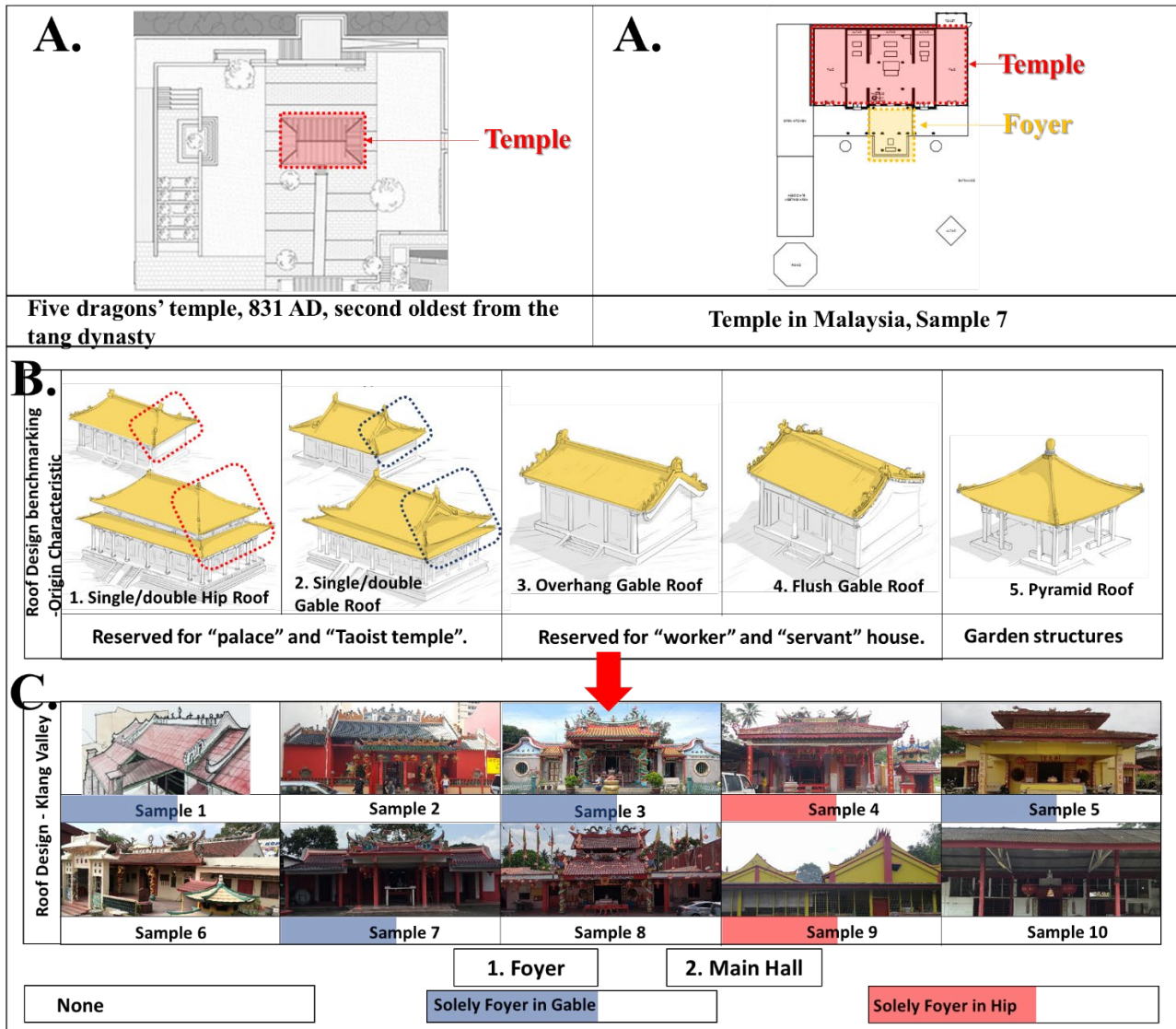


Figure 1. (A) The Roof model of the Taoist temple from China and Malaysia (B) Roof model in Royal symbolism (C) The sample from Klang Valley. Photo was taken by the author, and Sample 1 was drawn by Amir Fauzan (2016).

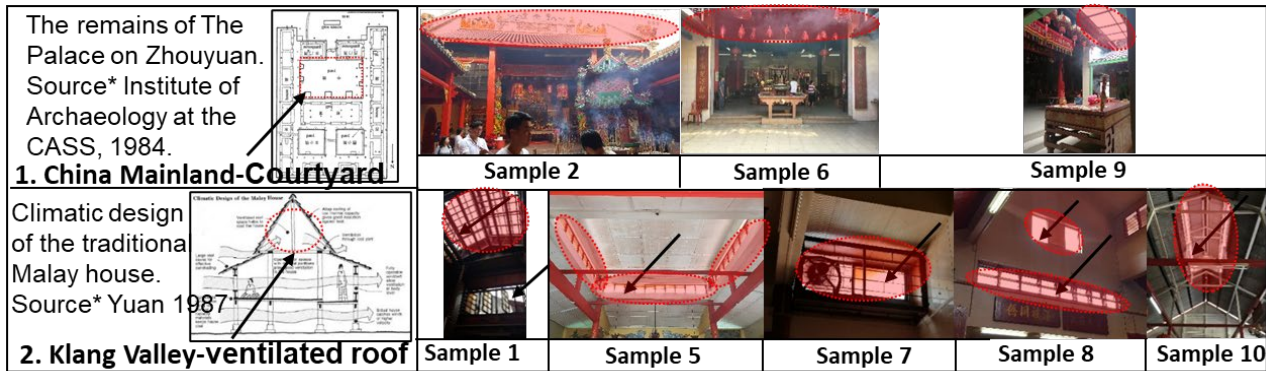


Figure 2. The samples found in the characteristics of a courtyard; an Indigenous Vernacular Architecture in Mainland China, and ventilated roof; an Indigenous Vernacular Architecture in Malaysia.

3.2 The Ornamentation

The results were presented in descending percentages among the seven ornaments.

- 1) Semi-circular glaze tile has been commonly found in the architectural design of royal buildings and Taoist temples since ancient China. However, only 20% of the samples were observed to have applied this material.
- 2) Only 10% of samples were built with wooden dougong, ridge end animal (Chi Wen, 蚩吻), and roof tiles in yellow colour.
- 3) Subsequently, none of the samples was found with solemn mythical figures (roof ridge), hip and gable roofs for the holistic architecture attribute.

Interestingly, the author discovered irregular sequences of mystical figurines in the samples. In **Figure 3**, illustrations show merely two solemn creatures brought into Malaysia, namely the dragon (龍), consistently found in samples 1, 2, 3, 4, 7, 8 and 9, followed by the phoenix (鳳), only found in sample 6. Another creature was not adhered to the setting of the Yingzao Fashi, found in sample 5, and lastly, sample 10 did not have any creatures on the roof. The placement of the dragon and phoenix, derived from the second and third images, is in accordance with the conventional setting of the Yingzao Fashi (**Figure 3**, image 2 and image 3 coloured in red). Nonetheless, the existence of these figurines showed variants in shape and size. The dragon was crafted lively on the roof ridge in gigantic apparent and painted beautifully, whereas the phoenix was positioned symmetrically on both sides of the roof.

3.3 The Pragmatism Color of the Roof Tiles

To analyse the colour variation of the roof sample, the NCS matrix colour sheet system was applied. This method accurately identifies the roof colour due to its highly reliable. The findings indicated out of ten samples, the majority were presented in the red shade family, followed by yellow and blue (See **Figure 4**). The statement below revealed the percentage of roof colour, presented in descending order.

- 1) According to the NCS notation, 50% of the temples had roofs in red colour (i.e., Sample 4 - S 0515-R, Sample 7 - S 8010-R10B, Sample 8 - S 6010-R30B, Sample 9 - S 5020-R20B and Sample 10 - S 6502-R)

- 2) Followed by yellow (i.e., Sample 1 - S 3050-Y70R, Sample 2- S 1030-Y20R, Sample 5 - S 2020-Y70R, and Sample 6 - S 1020-Y70R) consisting 40%, the last three samples showed proximity to the red family.
- 3) Sample 3 - S 5010-B50G, blue family is as low as 10%.

3.4 The Survivability of RI for Taoist Temple

The results obtained from the observational study collectively showed the RI of the upper section with seven ornagements for ten samples was seen lessened. **Figure 5** below has summarised the data from the lower, middle, upper and other structures and ornaments of the Taoist temple (See **Figure 5(B)**). The upper section shows the lowest percentage; merely 19% of elements survived with RI. **Figure 5(C)** demonstrates seven ornaments, individually, and results are presented in descending order. 20% of the samples were built with semi-circular glazed tiles, while wooden dougong, ridge end animal (Chi Wen, 蚩吻), and yellow roof tile, respectively, consisted of 10%. None of the samples were built with hip and gable roofs, neither double nor single, as well mythical figurines. Last but not least, **Figure 5(D)** revealed only samples 2 and 3 partially survived with the RI.

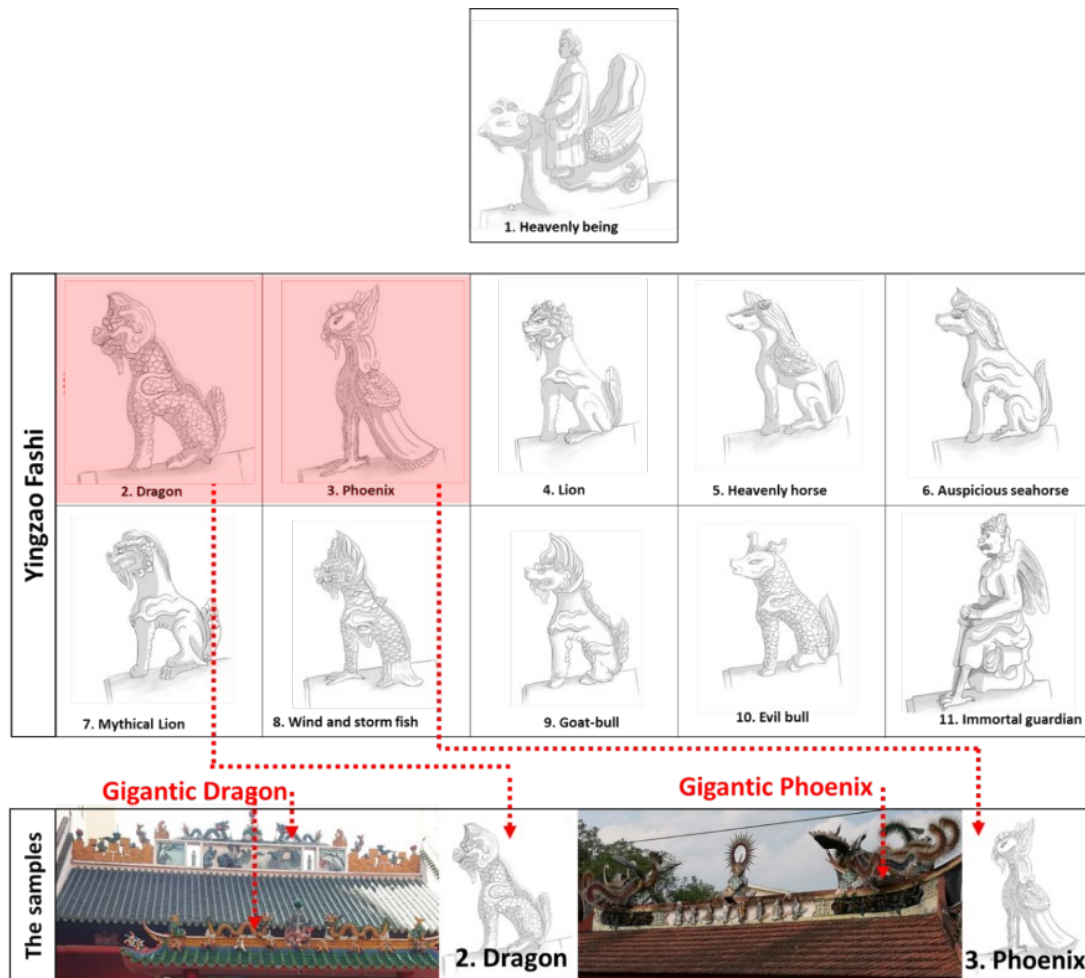


Figure 3. (Top) A miniature mythical animal, obtained from Yingzao Fashi, was placed on the left and right roof ridge (Bottom) Mystical animals found on the samples, only two figurines adapted on the roof, Kuanti Temple, KL, and Xian Shi Temple, Serenda.

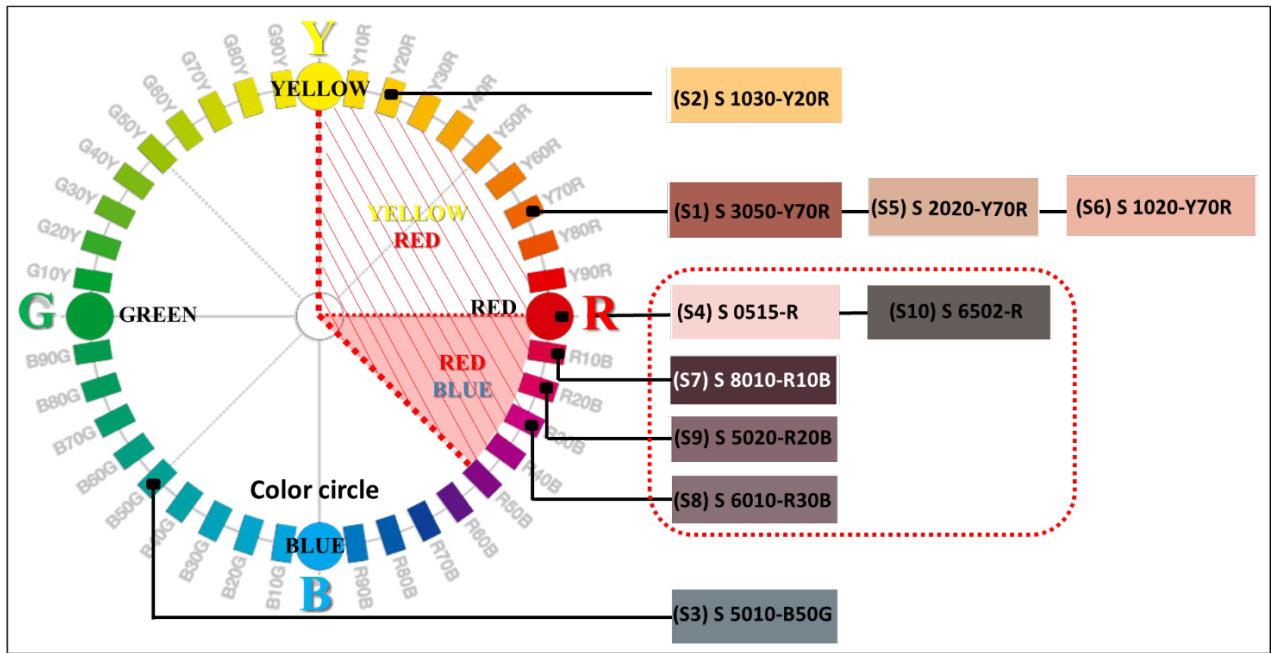


Figure 4. Colour samples of the roof tile, obtained from the ten samples, mapped with the NCS notation. The majority of the samples found between red and blue, highlighted in red.

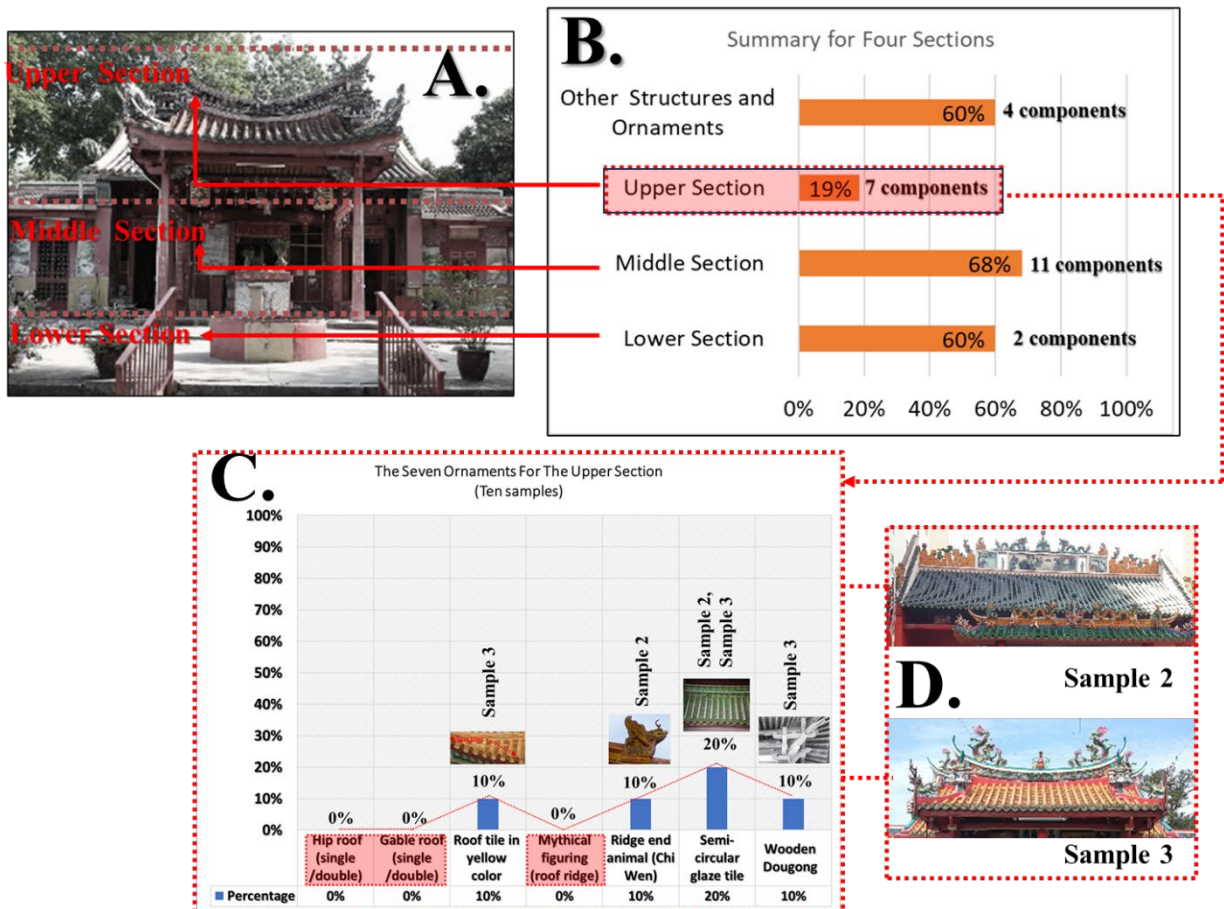


Figure 5. The result of the upper section is found to be constructed with less Royal Symbolic meaning.

4.0 DISCUSSION

4.1 The Roof Form: Hip and Gable Roof

The upper section symbolises the head and heaven, signifying the temple hierarchy (Blaser, 1995; Gou & Wang, 2010; Li & Liu, 2017). The single or double hip and gable roof coherent with the bracketing system and dougong are the distinctive components exclusively reserved for supreme royal buildings and Chinese Taoist temples dating back to ancient China (Lip, 1995). It has, however, not reflected on the samples. Given it had proven by Chinese treatise, the Taoist temple is legible to apply design symbolism with royal identity. Nonetheless, the ill-defined standstill samples found the symbolism of the architecture attributes was generally seen as constructed in mediocre, signifying plebeian houses in Mainland China (Lip, 1995; Armani & Arbi, 2014), which reflected no representations of royal identity.

Anecdotally, Sino-Malay architecture, which featuring Southeast Asia architecture, was discovered from the ten samples including three features: courtyard, ventilated roof and foyer design partially constructed with royal identity. This phenomenon aligns with a scholar's narration that the adaptation of construction materials and techniques for traditional houses built in Southeast Asia had primarily dealt with the local climate (Joshi & Widodo, 2018). Nevertheless, the shortage of written evidence made vague renovation dates over the past century also create ambiguities if the roof was built from the 19th century or has been modified. According to the scholar, the ventilated roof presented from the samples was potentially designed to enhance the interior thermal comfort to achieve better indoor air quality (Lim, 1987). As for a courtyard, it is traditionally identified as a global architecture, symbolises a wealthy feature for a building in particular to honour ancient China's emperor. Scholars asserted this principle was merely introduced in Penang and Singapore by a group of wealthy Chinese communities in the 19th century, between years 1869 and 1900. As for the ventilated roof portrayed in the sample, the installation of the sky and louvre window, this architectural model can be differentiated from the one in Mainland China due to this may not be present in Mainland China.

The research study certainly highlighted that the transcendental local feature of the upper section of the Taoist temple, built by the Chinese diaspora during the 19th century, was dominated by the "Sino-Malay" vernacular architecture. This conventional system mainly serves for circulating the indoor air, as geographically, Malaysia is a country in high humidity all year round due to its proximity to the equatorial area, had made the rainforest region associated with warm temperatures (Lim, 1984). Definitely, this vernacular architecture possesses optimal performance, which is legitimately used to deal with the climate for eliminating the interior temperature.

4.2 The Ornamentation: Mythical Animals

Many scholars have affirmed that the mythical animals and their quantity symbolise the temple's hierarchy (Kohl, 1978; Lip, 1995) and considerable protective benefit from a geomancy perspective (Kohl, 1978). Scholars asserted a Taoist temple is decently entitled to the privilege to construct the design element with RI. As alluded to by pundits, the adaptation of mythical animals since the Song Dynasty de facto had been constructed excessively in Taoist temples (Guo, 1998). Nonetheless, this application has not been visited from the sample. Future research should fathom if the aspects of ranking, geomancy implication and religious concerns are out of consideration during the establishment of these samples. This shows, amongst the diaspora was a paucity of knowledge that the Taoist temple was entitled the privilege to construct the elements with RI.

The upper section is supposed to be highly embellished with ornaments opulently (Gou & Wang, 2010; Kohl, 1978; Lip, 1995). Nonetheless, the orchestration of these ornaments was seen marginalised. Despite the ornaments constructed from the samples were found perfunctory and less correlated, nonetheless simulacrum to RI. From the finding, the dragon and phoenix created rather contentiously portrayed a significant gap. It was questionable, in particular the placement and the sizes found dichotomy with the idea of RI. Pundits affirmed from the *Tomb Architecture of Dynastic China: Old and New Questions*, published by Guo, fathomed that the dragon had never been mounted on the roof the royal building and Taoist temple (Guo, 2004). Similarly, it had documented from the Chinese treatise that no dragon was found on the wall or roof (Hua, 2008), and dragons could only be found entwined on the column (See [Figure 6](#)).

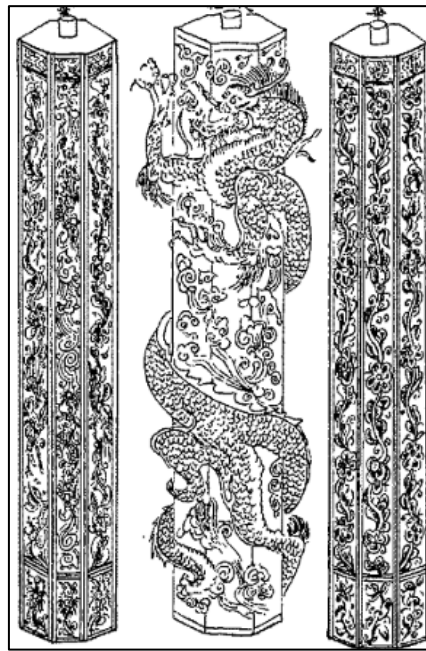


Figure 6. Yingzao Fashi Vol 29:8 Documented the Entwined Dragon on the Column. Source: (Hua, 2008)

4.3 The Pragmatism Colour of the Roof Tiles

The finding for colour pragmatics had surprisingly discovered that the roof samples consisted of the majority in the red family, which has seen dichotomy with the idea of RI. The presence of the red family found in the samples was possibly associated with various factors, according to the pundits:

- 1) The temperature will affect colour, especially the products manufactured in tropical countries. The tiles turn out reddish if baked under low temperatures due to a large amount of oxygen (Guo, 2000).
- 2) Rooted deeply in mind since ancient China, red is proclaimed as an auspicious colour and provides divine security in Chinese traditions due to spiritual protection (Lip, 1992; Lip 1993; Lip 1995). The diaspora community possibly seeks this powerful protective benefit to safeguard their lives in Malaysia in religious concerns, particularly the homesick diaspora apart from their motherland.

In accordance with the comprehensive data from the publication entitled “the development of roof colour in ancient China,” the roof samples collected from the Shang Dynasty (1600 B.C.–1046 B.C.) to the Qing dynasty (1644 A.D.-1911 A.D.) revealed red shade family was absent in royal buildings and Taoist temples

regardless of glazing or common tile (Gou & Wang, 2010). The current researcher asserted that this finding is worth investigating in future.

5. CONCLUSIONS

Impressively, the ideation of royal symbolism from the northern and plebeian symbolism from the southern region had been reflected in the sample partially. The author conclusively summed up that configuration of the upper section for the sample demonstrates little RI. However, these transcendental ornaments had encapsulated tangible evidence, highly regarded as an art form, newly developed by the Chinese diaspora that arrived in the 19th century. This research has yielded an intriguing finding and should not be restricted to the Chinese community and academic domains. This can be broadened, promoted and addressed unconditionally and explicitly on the ground to the public-private and civil society and the potential Architect and interior designer to ease the practical gap. Besides, the tourism landscape in Malaysia should be leveraged for country interests, particularly for building up the resource strategies nationally. As mentioned by the United Nations, the statement of “promoting sustainable human settlements development” specified in Sustainable Development Goal 11, titled sustainable cities and communities, the development of commerce, science, productivity, social, human, economic and cultural serve as an element essentially to make the cities sustainable, and habitable – it ultimately achieves the objective of safe and resilient under this statement. The finding of this research suggests clearer prospects and offers guidelines glanced on these domains under SDG 11;

- 1) Cultural development: The growth of the Taoist temple built in the past century contributes to the arts and heritage.
- 2) Commerce and economic development: Revitalising the tourism industry in generating a profitable return for the country betterment.

Therefore, the body of knowledge for this research is worthily to be promulgated.

REFERENCES

- Adegoriola, M. I., Lai, J. H. K., Chan, E. H., & Amos, D. (2021). Heritage building maintenance management (HBMM): A bibliometric-qualitative analysis of literature. *Journal of Building Engineering*, 42(March), 102416. [cross ref]
- Amir, F. (2016). *White Blood-Measuring the Lifeliness of the Sin Sze Shi Ya Temple*. Taylor's University. [cross ref]
- Amos, R. (1969). *House form and culture (Foundations of cultural geography series)*. Englewood Cliffs, N.J.: Prentice Hall.
- Armani, S. & Arbi, E. (2014). A comparative study on chinese architecture in Peninsular Malaysia and Mainland China. *Journal of Design and Built Environment*, 14(2), 1–16. [cross ref]
- Asif, N., Utaberta, N., & Sarram, A. (2019). Architectural styles of Malaysian mosque: Suitability in compact urban settings. *International Conference on Built Environment and Engineering (IConBEE2018)*, 1, 06001. [cross ref]
- Asif, N., Utaberta, N., Sarram, A., & Ismail, S. (2018). Design framework for urban mosque in the city of Kuala Lumpur: A qualitative approach. *International Journal of Architectural Research*, 12(3), 170-182.
- Azhari, N. F. N., & Mohamed, E. (2012). Public perception: Heritage building conservation in Kuala Lumpur. *Procedia - Social and Behavioral Sciences*, 50(July), 271–279. [cross ref]
- Azmi, N. A., & Kandar, M. Z. (2019). Factors contributing in the design of environmentally sustainable mosques. *Journal of Building Engineering*, 23, 27–37. [cross ref]
- Azmi, N. F., Harumain, Y. A. S., Ali, A. S., Zaini, S. F., & Abdullah, M. F. (2017). Character-defining elements of shophouses buildings in Taiping, Perak. *Journal of Design and Built Environment*, 17, 139–149. [cross ref]
- Blaser, W. (1995). *Courtyard house in China: tradition and present*. Birkhauser.
- Cai, Y. X. (2010). *Chinese Architecture. Palaces, gardens, temples and dwellings*. China Intercontinental Press, Beijing.
- Chen, N. (2016). Governing rural culture: Agency, space and the re-production of ancestral temples in contemporary China. *Journal of Rural Studies*,

- 47, 141–152. [\[cross ref\]](#)
- Chen, Q., Feng, Y., & Wang, G. (1997). Healthy buildings have existed in China since ancient times. *Indoor and Built Environment*, 6(3), 179–187. [\[cross ref\]](#)
- Chen, V. F. (1998). *The Encyclopedia of Malaysia: Architecture*. Archipelago Press.
- Chen, W. (n.d). God of Wealth. Incense Burners and Feng Shui: Enhancing Energy Flow in Your Home. [\[cross ref\]](#)
- Coll, R. K., & Chapman, R. (2000). Choices of methodology for cooperative education researchers. *Asia-Pacific Journal of Cooperative Education*, 1, 1–8. [\[cross ref\]](#)
- Feng, J. (2012). *Chinese architecture and metaphor: Song culture in the Yingzao Fashi Building Manual*. Hong Kong University Press. [\[cross ref\]](#)
- Franke, W., & Chen, T. (1985). *Chinese epigraphic materials in Malaysia: collected, annotated, and edited by Wolfgang Franke and Chen Tieh Fan* (Vol. 2). University of Malaysia Press.
- Gao, J., L. S. S. . & Z. C. . (2020). Authenticity, involvement, and nostalgia: Understanding visitor satisfaction with an adaptive reuse heritage site in urban China. *Journal of Destination Marketing and Management*, 15(January), 100404. [\[cross ref\]](#)
- Gou, A., & Wang, J. (2010). The development of roof color in ancient China. *Color Research and Application*, 35(4), 246–266. [\[cross ref\]](#)
- Guo, Q. (1998). Yingzao Fashi: Twelfth-century chinese building manual. *Architectural History*, 41(1998), 1. [\[cross ref\]](#)
- Guo, Q. H. (2000). *Tile and brick making in China: A study of the Yingzao Fashi*. The Construction History Society.
- Guo, Q. H. (2004). Tomb Architecture of Dynastic China: Old & new questions. In Swenarton, M. (Ed.), *Architectural History* (47th ed.). [\[cross ref\]](#)
- Han, W., & Beisi, J. (2016). Urban morphology of commercial port cities and shophouses in Southeast Asia. *Procedia Engineering*, 142, 189–196. [\[cross ref\]](#)
- Hård, A., & Sivik, L. (2001). A theory of colors in combination - A descriptive model related to the NCS color-order system. *Color Research and Application*, 26(1), 4–28. [\[cross ref\]](#)
- Hasbollah, H. R. (2014). *A theoretical framework for conserving cultural values of heritage buildings in Malaysia from the perspective of facilities management* (Publication No. 28465077)[Master's thesis, School of the Built Environment College of Science & Technology University of Salford, UK]. ProQuest Dissertations and Theses Global. [\[cross ref\]](#)
- Henderson, J. C. (2012). Conserving heritage in South East Asia: Cases from Malaysia, Singapore and the Philippines. *Tourism Recreation Research*, 37(1), 47–55. [\[cross ref\]](#)
- Hernandez, M. (2018). *The Forbidden City's unique architecture*. South China Morning Post. [\[cross ref\]](#)
- Hew S.T. (2015). *The glittering history of gravel pump mining industry*. Dream Seed Publisher.
- Hua, C. K. (2008). *Representation of architecture in Jiehua & Yingzao Fashi : Cognitive Studies on Graphical representation of geometric space* [PhD Thesis, National University of Singapore]. Scholar Bank @ NUS Repository. [\[cross ref\]](#)
- Jabatan Warisan Negara. (2021). *Senarai Bangunan Warisan Kebangsaan*.
- Joshi, N. & Widodo, J. (2018). *Managing change : Urban heritage and community development in historic Asian cities*. Department of Architecture, School of Design & Environment, National University of Singapore. [\[cross ref\]](#)
- Kayan, B. (2006). Building maintenance in old buildings conservation approach: An overview of related problems. *Journal of Design and Built Environment*, 2(1), 41–56. [\[cross ref\]](#)
- Kohl, D. G. (1978). *Chinese architecture in the Straits Settlements and Western Malaya* [Master thesis, University of Hong Kong]. The HKU Scholars Hub. [\[cross ref\]](#)
- Kvale, S., & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research*. SAGE, 230–243.
- Li, X., & Liu, Y. (2017). The “shape” and “meaning” of the roof arts in Chinese classical architecture. *IOP Conference Series: Earth and Environmental Science*, 61, 012110. [\[cross ref\]](#)
- Liang, S., & Fairbank, W. (1984). *A pictorial history of chinese architecture: A study of the development of its structural system and the evolution of its types*. MIT Press Cambridge.
- Lim, J. Y. (1984). Under one roof: The traditional Malay house. *IDRC Report*, 2(4), 15–16. [\[cross ref\]](#)
- Lim, J. Y. (1987). *The Malay house: Rediscovering Malaysia's indigenous shelter system*. Institut Masyarakat.
- Lip, E. (1992). *Chinese numbers: Significance, symbolism, and traditions*. Times Books International.
- Lip, E. (1993). *Out of China: Culture and traditions*. Addison-Wesley Pub.
- Lip, E. (1995). *Feng shui: Environments of power: A study of chinese architecture*. John Wiley & Son.
- Liu, Y. (2015). *Design characteristics of China's early Ch'ing Dynasty exteriors and interiors, and their reinterpretation in America* [Master Thesis, Iowa State University]. Iowa State University Digital Repository. [\[cross ref\]](#)
- Lockard, C. A. (2013). Chinese migration and settlement in Southeast Asia before 1850: Making fields from the sea. *History Compass*, 11(9), 765–781. [\[cross ref\]](#)
- Luo, D. (2016). *A Grain of Sand : Yingzao Fashi and the Miniaturization of Chinese Architecture* (Publication No. 10160145) [Doctoral dissertation,

- University of Southern California]. ProQuest Dissertations and Theses Global. [\[cross ref\]](#)
- Makkreel, R. (2006). Aesthetics. In Haakonssen, K. (Ed.), *The Cambridge History of Eighteenth-Century Philosophy*. Cambridge University Press. [\[cross ref\]](#)
- Moffett, M., Fazio, M. W., & Wodehouse, L. (2003). *A world history of architecture*. Laurence King Publishing.
- Mohd-Isa, A. F., Zainal-Abidin, Z., & Hashim, A. E. (2011). Built heritage maintenance: A Malaysian perspectives. *Procedia Engineering*, 20, 213–221. [\[cross ref\]](#)
- My time. (2017). *Chinese Temple in Malaysia*. My Time.... Chinese Temple in Malaysia. [\[cross ref\]](#)
- Nelson, L. H. (1988). *Architectural character: identifying the visual aspects of historic buildings as an aid to preserving their character*. National Park Service.
- Othman, R. & Zainal-Abidin, Z. J. (2011). The importance of Islamic art in mosque interior. *Procedia Engineering*, 20, 105–109. [\[cross ref\]](#)
- Said, S. Y., Aksah, H., & Ismail, E. D. (2013). Heritage conservation and regeneration of historic areas in Malaysia. *Procedia - Social and Behavioral Sciences*, 105, 418–428. [\[cross ref\]](#)
- Sodangi, M., Khamdi, M. F., & Idrus, A. (2013a). Maintenance management challenges for heritage buildings used as royal museums in Malaysia. *Journal of Applied Sciences & Environmental Sustainability*, 1(1), 55-68. [\[cross ref\]](#)
- Sodangi, M., Khamdi, M. F., & Idrus, A. (2013b). Towards sustainable heritage building conservation in Malaysia. *Journal of Applied Sciences & Environmental Sustainability*, 1(1), 1-19. Retrieved from [\[cross ref\]](#)
- Sodangi, M., Khamdi, M. F., Idrus, A., Hammad, D., & Ahmedumar, A. (2014). Best practice criteria for sustainable maintenance management of heritage buildings in Malaysia. *Procedia Engineering*, 77, 11–19. [\[cross ref\]](#)
- Suyama, T. (1962). Pang societies and the economy of Chinese immigrants in Southeast Asia. *Journal South-East Asian History*.
- Tan, C. (2018). *Chinese Religion in Malaysia*. Brill. [\[cross ref\]](#)
- Tan, S. Y., Olanrewaju, A., & Lee, L. T. (2016). Maintenance of heritage building: A case study from Ipoh, Malaysia. *MATEC Web of Conferences*, 47, 04003. [\[cross ref\]](#)
- United Nations. (2015). *Department of Economic and Social Affairs Sustainable Development: Sustainable cities and human settlements*. [\[cross ref\]](#)
- Utaberta, N., & Asif, N. (2017). Mosques as emergency shelters in disaster prone regions. *Pertanika Journal of Social Sciences and Humanities*, 25(August), 207–216. [\[cross ref\]](#)
- Widodo, J. (2004). *The boat and the city: Chinese diaspora and the architecture of Southeast Asian coastal cities*. Chinese Heritage Centre.
- Widodo, J. (2009a). Morphogenesis and hybridity of Southeast Asian coastal cities. In Ismail, R., Shaw, B. & Ooi, G. L. (Eds.), *Southeast Asian culture and heritage in a globalising world: Diverging identities in a dynamic region* (1st Ed, pp. 79–92). [\[cross ref\]](#)
- Widodo, J. (2009b). Morphogenesis and Layering of Southeast Asian Coastal Cities : Re-conceptualization of urban and environmental model1. “*Asian Environments Shaping the World: Conceptions of Nature and Environmental Practices*”, 1–13. Retrieved from [\[cross ref\]](#)
- Widodo, J. (2016). Sustainability Lesson From Southeast Asia: Singapore Experience. *International Journal on Livable Space*, 1 (1), 1-10. [\[cross ref\]](#)
- Widodo, J. (2018). Blurring our Boundaries and Caring for Our Common Space: Cultural and Environmental Imperatives. *The International Seminar on the Power of Proximity Between East and West Timor: “Bridging the Social, Political, Economic, and Cultural Gaps,”* (October). [\[cross ref\]](#)
- Williams, C. A. S. (1984). *Chinese Symbolism and Art Motifs* (Fourth Rev). Tuttle.
- Yeong, Y. M., Abdul Rahman, K. A. A, Ismail, N. A., & Utaberta, N. (2020). Challenges of sustaining design identity in chinese taoist temples built in the 19th century in Klang Valley, Malaysia. *Alam Cipta*, 13(Special Issue1), 24–31. [\[cross ref\]](#)
- Yeong, Y. M., Rahman, K. A. A., Utaberta, N., & Ismail, N. A. (2016). The assessment of young generation understanding and awareness toward artistic ornamental of Taoist Chinese temple from 1800-1900AD in Klang Valley, Malaysia. *International Social Science, Humanity and Education Research Congress (SSHRC-16)*, 7–13. [\[cross ref\]](#)
- Yin, R. K. (2017). *Case study research and applications: Design and methods* (Sixth Ed.). Sage Publications.
- Yip, Y. H. (1969). *The development of the tin mining industry of Malaya*. University of Malaya Press.