# CHALLENGES OF SUSTAINING DESIGN IDENTITY IN CHINESE TAOIST TEMPLES BUILT IN THE 19TH CENTURY IN KLANG VALLEY, MALAYSIA

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#### **ABSTRACT**

Traditionally, Chinese philosophy has revealed the principle of building materials as Earth and Wood (土木), The principle applies to various buildings worldwide including the Chinese Taoist temples. The objective of this paper was to examine the interior design and materials applied within the Chinese Taoist temples built during the 19th century in Klang Valley, Malaysia, based on design typology. A qualitative research methodology was employed which involved semi-structured interviews and direct observation of ten selected Chinese Taoist temples (N=10) within Klang Valley. Interviews were recorded and sketches and photographs were compiled. The data were analysed using content analysis. The results showed that over the past century, the buildings had lost their design identity due to a lack of proper maintenance and design guideline. It was also revealed that the Chinese community, despite having many years of experience working in temples, lacks understanding in handling the preservation of the buildings. This has eventually resulted in the dramatic dismissal of the original design character. A benchmark for restoration and conservation of the buildings has to be established for the Chinese community via certain platform to ensure that the "sustainability" of ancient designs within the Chinese Taoist temples is able to propagate to the next generation.

**Keywords:** : Building Maintenance, Building Materials, Chinese Taoist Temple, Design Typology, Identity, Interior Design, Ornamental

#### 1. INTRODUCTION

Generally, the philosophy of sustainable design identity is to maintain the origin, design and character of the continuity of significant tangible culture to specific buildings (Said, Aksah, & Ismail, 2013). This dynamic design identity narrates "physicalism", a consistent virtue of the architecture building, which is often in line with the pattern of society and human behaviour as well as a response to community needs (Brahman & Torabi, 2013). In conjunction with this, restoration work is pivotal to conserve each component of a building in order to sustain the original designs and characters and enhance the building lifespan. Chinese Taoist temples are listed as religious buildings by the Jabatan Warisan Negara in Malaysia (Department of Heritage, Malaysia, 2005) as part of the Chinese Architecture established in Malaysia since the 19th century by the Chinese immigrants from the northern and southern China (Kohl, 1978). The accommodation and Chinese Taoist temples in the village were established by a group of Chinese diasporas as a place to pray and to safeguard their lives. Therefore, the temples significantly reflect the cultural traits of the builders during the 19th century.

Klang Valley, an area located in the capital of Malaysia, was listed as one of the regions experiencing a glittering period of trade mining in the 19th century (Hew, 2015). However, previous research has found that the Chinese community was completely clueless about the symbolic meaning of the ornamental art in Chinese Taoist temples established in the 19th century in Klang Valley, Malaysia (Yeong, Rahman, Utaberta, & Ismail, 2016). Notwithstanding, the respondents of this research viewed the respective

symbolic meaning as important to the folks. This indicates that there are failures in sustaining the original design identity and the symbol of the ornamental art from the century-old building in the local community, prohibiting these transcendent Chinese classical features to survive and promulgate in Malaysia. The Chinese community mobilisation in the Klang Valley is regarded responsible in making the design identity sustain successfully for the century-old temple. As such, the preservation works for these transcendental buildings are imperatively needed. This paper investigated the perception and role of the Chinese community in the process of preserving Chinese Taoist temples and assessed the design identity of the buildings built in the 19th century in Klang Valley, Malaysia, specifically in two aspects—the sustainability of the design character and the conditions of the physical buildings.

#### 2. LITERATURE REVIEW

#### 2.1 The Identity and Architecture Design of Taoist Chinese Temple

Extensive literature and archaeology evidence have shown that majority of the incredible design components of Chinese temples and shrines are well established and inherited since ancient China (Williams, 2012), backdated from Zhou Dynasty as an ancestral temple within the palaces (Andersson, 2001). Zhouyuan (周原) Palace, Qishan (岐山县) in the Shaanxi province and Great Shangqing (上清) Palace, Yingta (鹰潭) are both great monuments in compliance of reliable design identity. According to Brahman and Torabi (2013), all architecture buildings consist of the principles of spatial organisation, time organisation, semantic organisation, general design principles, shape and forms, building materials, and relationship with contexts in order to maintain the persistency of the design identity. Conventionally, Chinese Taoist temples possess the unbreakable privilege in sharing the same design identity and character with the royal palace (Gou & Wang, 2010). The original design characters of the physical attributes can be categorised into three sections: lower, middle and upper section (V. F. Chen, 1998) with regard to its authenticity. An iconography of the design character does not merely signify its cultural and religious connotation, it also profoundly features its physical beauty and art symbolism. Architecturally, the lower section is an earth platform constructed with vertical solid timber structure; the middle section of the building is sided with masonry wall in red colour, and the surrounding of the vertical elements, the grand column remains in a round form and in red (Jinpeng, 2009; Andersson, 2001); and the upper section is inclusive of horizontal beam, bracket and Dougong (斗拱) as a support and the ceiling covered with roof tiles, and mythical animals are rested at the roof edge (Lip, 1995) (see Figure 1 and Figure 2). Auxiliary, carpentry and jointly work (Guo, 2000) are elegantly crafted with various auspicious miniature in the forms of animals, plants, shapes and decorative motifs within the building. The solidarity and persistence of the design identity are undoutedly the biological culture originated from ancient China.

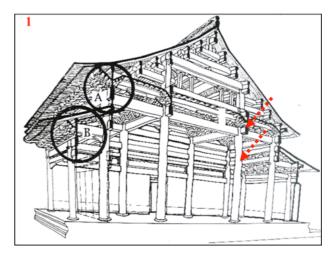


Figure 1: The original design identity of the Taoist Chinese Temple-the vertical and horizontal elements

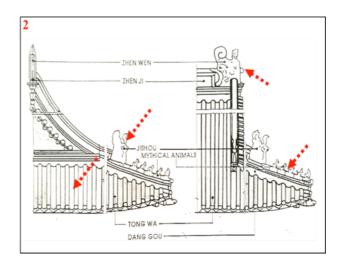


Figure 2: Mythical animal constructed on the upper section. Source (Evelyn, 1995)

These authentic classical features adopted the idea of Yingzao Fashi, formerly known as the oldest technical manual and formation for building construction, meticulously compiled by a reputable architect, Li Jie 李誡 (1035A.D.-1110A.D.) during the Northern Song dynasty (960A.D.-1127A.D.) (Gou & Wang, 2010). He was commissioned by the emperor to document all relevant design process, methodology, and theory with specific dimensions precisely in two and three dimensions as well as graphical representation for construction used. The first print was in the year 1103A.D. His ideas with regard to technical or aesthetic aspects were calculated accurately and scientifically. For example, the mythical animal demonstrates its beauty in a form of allegorical and animism expression whereby the design is associated with functionality of being fire resistant. All theories application were taken into account for the fulfilment of royal palace and Chinese religious building as a permanent identity instead of ephemeral features and in the consideration of sustaining for a minimum of two hundred years (Brahman & Torabi, 2013). Beyond Yingzao Fashi, the theory of building form, "Quadrangle" was another greatest achievement of its universal design. The open courtyard was wisely employed nationwide that included cloisters since the Carolingian dynasty (7th century AD) in the western region (Boto, 2017) due to the building optimal performance (Chen, Feng, & Wang, 1997).

#### 2.2 The Sustainability of the Chinese Taoist Temples: Physical Building

The sustainability of the physical buildings and built environment are often correlated with the sustainability of the community events, orientation, passage of time and their perception (Throsby, 1995; Gür & Heidari, 2019). The achievement of sustainability for century-old temples is beyond beautification. It requires efficient maintenance in order to avoid deterioration and ensure potential prolongation of lifespan (Munarim & Ghisi, 2016) and sustain the original character as a whole to reflect the local authentic value and its design identity. 'Attap' and wooden materials were first introduced in Malaysia by the Chinese community to establish the physical building of Xian Shi temple in Kuala Lumpur (1864). However, society transformation has made changes to these building materials. Attap and wooden materials have become the society identity, which is also the reflection of Chinese diaspora, coolies or miners during the 19th century in Malaysia. Nonetheless, they were eliminated because the temple was burnt to the ground between 1872 and 1881. Sir Frank Swettertham was credited for the idea of adoption for permanent and modern materials, i.e. cement or concrete brick wall and roof tiles for buildings in 1884 (Kohl, 1978) which led to an introduction of a new intervention. These materials offered a new appearance of architecture building, as well as a better building lifespan for Chinese Taoist temples. Also, as the building is a place for prayer, the excessive use of incense and candles is inevitable.

#### 2.3 The Current Society Gap

Despite past research which has highlighted the importance of maintenance and management of heritage buildings (Said et al., 2013; Idrus, Khamidi, & Sodangi,2010), there was a lack of better methodology in maintaining a religious building i. e. the Chinese Taoist temple. Incense, made up of a wide range of materials including synthetic chemicals, aromatic and essential oils, and resins that potentially releases toxic air particle such as formaldehyde (Zhang, Chen, Li, Yu, & Zhao, 2015), is being used extensively within the interior of the building. This particle is not only harmful to human health, it is also harmful to the building. Therefore, a better methodology is required to preserve the temple in order to enhance its physical durability. Sodangi, Idrus, and Khamidi (2013) hypothesised that poor maintenance and management practice would ultimately result in poor physical condition of buildings.

#### 3. METHODOLOGY

A qualitative case study methodology was employed in this research which included site observation and semi-structured interview. There were two phases involved in the sample selection and data collection in this research. In Phase One, an inventory list of Chinese temples was created, and the process of filtration was executed to select the samples. The only criterion of temple selection was to include Chinese Taoist temples built in the 19th century in Klang Valley, Malaysia. In total, eleven (N=11) Chinese Taoist temples fulfilled the criterion; however, one of the temples was unwilling to participate. Therefore, only ten (N=10) Chinese Taoist temples were included in this research. In Phase Two, consolidation of sketches and photographs were taken which prioritised the physical building and the design typology of ornamental crafted interiorly and exteriorly. The data obtained from site observation were used for the mapping process to determine the original designs and the physical conditions of the Taoist temples. A questionnaire was systematically developed, and semi-structured interviews were conducted among the committee members to discover the general process involved in preserving the temples. Content analysis was adopted to analyse the data obtained from the semi-structured interviews. The process of transcription was conducted sequentially to obtain primary and secondary codes, and finally, themes were introduced. The themes were used to interpret the general process of preserving the temples. This process was mainly used to ensure the reliability of the results obtained. It also provided a clearer prospect and better understanding on how respondents handled preservation work.

#### 4. RESULTS AND DISCUSSION

Of the total of 10 respondents (N=10), one of them was a shaman, two were secretaries, and seven were chairmen of the temples. All the respondents are committee team members in the temples with an average of 10 years of experience in managing the temples (Refer to Table 1). They are frequently involved in administration as well as various day-to-day activities and events in the temples. Therefore, the responses given by them are reliable and trustworthy.

Referring to Table 1, the findings obtained from the semi-structured interviews of the ten samples (N=10) consist of six variables on the Importance of Chinese Taoist Temple (ICTT1-6): accountability (1), challenges (2), importance of preservation (3), tourism heritage (4), degenerating (5), and contribution (6). After content analysis was done, three themes were created: 1) Lack of fund, 2) Limited knowledge, and 3) Shortage of craftsman for preserving and maintaining the temples. The findings were then categorised into two aspects: sustainability of the "design character" not found and the sustainability of the "physical building" that remained in poor condition. Both were affected due to the societal gap and lack of technical knowledge for preserving the temple.

Table 1: The Finding from the semi structure interview. Source\* Author 2019

ICTT1 - Accountability		ICTT4 - Tourism Heritage	
Management work	- Tangible culture	Agreed	- Strong historical value - Devotee believe
			- Strong contribution
	- Intangible culture	No idea	- Little contribution
			- No distinctive features
			- Less tourist
ICTT2 - Challenges		ICTTs - Degenerating	
Temple preservation	- Lifespan prolongation	Acknowledge the trend	- Aim to propagate
Insufficient	- Expert/Craftsman - Fund - Knowledge	No idea	-
ICTT3 - Importance of Preservation		ICTT6 - Contribution	
Agreed	- Promoting art culture - Historical value - No publicity	Acknowledge the trend	- Putting an effort - No knowledge

#### 4.1 Shortage of Fund, Knowledge and Skilful Craftsman

The results of the content analysis revealed that the respondents had limited knowledge towards the symbolic meaning of the ornaments built in Chinese Taoist temples. Design identity is a sensation. It gained value through a process from the past history of civilization in one place. It may vary, possibly permanent or reducible due to the interconnection and civilization from the attachment place that has changed over time (Aly, 2011). Obviously, the Chinese community has made the design identity "reducible", ultimately degenerating.

Overall, the physical building and ornament required a skilful craftsman to serve the maintenance purpose and to enhance the durability of the building. The respondents highlighted that the ornament and furniture in Chinese Taoist temples are often made of wood and porcelain in huge quantity with distinctive profile. Unfortunately, there is no skilful craftsman available in the local market. There seems to be a shortage of skilful craftsmen in the furniture industry prevalent in Malaysia (Osman, Rahman, Rahman, & Ja'afar, 2018). The variance of societal structure over the past decade has caused the community to lose its interest towards contributing efforts in the wood-based furniture (Hamid, Rahman, & Ismail, 2018), particularly in the miniature ornament in Chinese Taoist temples. Data obtained from the observation indicated that amongst the ten temples built regardless of the northern, central or southern of Selangor, the identity of the design all remained within the character of the folk tradition instead of according to the theory of Yingzao Fashi (Figure 1 and Figure 2), a classical design for the Chinese Taoist Temple.

# 4.2 Design Characters of Chinese Taoist Temples

Results obtained from the respondents have revealed that no particular "preservation process" has been conducted within the samples over the past century. Only general renovation would be carried out if needed or allowed financially. From the samples, it can be clearly seen through the various typical design identities and authentic artwork skilfully produced for the temples, inclusive of interior, ceiling and roof components in bearing the Chinese and nation-specific idiosyncrasy, were found dismissed in the Chinese Taoist temple. The Xian Shi Temple (仙河谷) in Semenyih is questionable. A classical design identity, a pair of wooden swing door with a figure of door god, was dismissed and replaced with a modern element, an aluminium sliding door (Figure 3: Image 1). Door god was intentionally attached to the front door to safeguard the space users and devotees of the building. However, this general design principal was not found.



Figure 3: Design character- without the classical design identity and replace with modern materials. Image 1&2: Xian Shi Temple in Semenyih, Image 3: Nam Tian Gong in Ulu Yam, Image 4: Xian Shi Temple in Sungai Tekali.

Source\* Author 2018

In Figure 3: Image 2, no quadrangle or courtyard was built within the temple. The structure was replaced with the modern architecture—sliding and louvre windows instead of embodied with classical design identity. The modern features aimed to serve the purposes of maximising the natural sunlight and allowing quality air for better circulation. Nevertheless, the opening from the courtyard in serving the same purpose as a window is supposed to be associated with the water outlet constructed on the floor to achieve effective pollutant clearance (Chen et al., 1997). Despite the natural sunlight and air which are able to penetrate the interior via louvre and sliding window, there is a dissimilitude character between "open courtyard" and "louvre window". Additionally, no water outlet built within the parameter of the floor was found; therefore, it can be concluded that the new alterations of the temple did not achieve Chen's theory considerably. Kohl (1978) stated that the courtyard model was introduced solely in Penang and Singapore in 1869 until early 1900s by a "wealthy Chinese community". As for the ten samples who were established by the Chinese diaspora, they were coolies or miners and did not belong to the group of "wealthy Chinese community". They did not have the financial ability and luxurious materials in constructing the said model. In addition, a supposition for the absence of this model is possibly due to the unaffordability of land supply or local geography issues as open courtyard requires huge land to construct the temples. However, this parameter is far beyond the study.

Research has shown that ornaments and design character applied within the temple portray historical value or Chinese cultural (Chen, 1998); (Kohl, 1978). In Figure 3: Image 3 of the Nan Tian temple (南天宫), the wooden Dougong (斗拱), usually crafted splendidly on the vertical and cantilever beam, was dismissed and has lost the general design principal. The ceiling was replaced with bare plaster ceiling instead of the classical Chinese design as recorded in Yignzao Fashi, a wooden material with cantilevered Dougong. According to the respondents, they lacked funding and had limited knowledge and expertise to preserve the temples and sustain their "classical" features with the authentic design identity. These samples were established during the 19th century by the Chinese immigrants from Northern and Southern China with their background as farmers (Amos, 1969). They intentionally left their homeland to work as mining workers or coolies with the aim to earn better income in Malaysia (Hew, 2015). This is undoubtedly the diaspora that possesses limited knowledge of design identity of Chinese Taoist temple. Farida (2014) stated the community or one-man knowledge reflects the social identity. Therefore, this is unavoidable as the samples established by the group of diaspora or peasant, prominently reflect the society's image in "folk tradition" concept, and unlikely in the upper class or royal character.

#### 4.2.1 The Transformation Within the Chinese Community

Kuala Lumpur and Selangor are located in Klang Valley, which is the central region of Malaysia. It is one of the highly populated regions for mining trade in the 19th century and has gone through a state transformation (Kohl, 1978) in the past century. Many small villages in these districts were established by the Chinese diaspora and coolies during the glittering period of mining trade (Hew, 2015). The increasing population in small villages has gradually transformed the place into a city credited to the country's economic growth. It ultimately formed another urban settlement rapidly and created a new profile of the modern community. This process of transition and time interval brought new creation to the architecture identity. The advancement of the technology over the past decade was a key role in the process of society transformation. The flexibility of internet and online service formed a new living peculiar, giving more convenient to the local community. Aly (2011) mentioned that the implementation of technology is a sign of "artificial environment" and is part of the components for urban identity. In this scenario, respondents had taken the advantage of online services to purchase the needed ornaments or replacement for the temples as part of the "preservation process". The committee prioritised the aim for purchasing beautiful ornaments based on individual preferences within the financial budget through online services without considering the original character. Obviously, this execution was not appropriate for preserving the temples. During the inappropriate preservation process for temples over the past century, the loss of the design identity for the samples were unnoticed by the committee members as they had no ability to justify the right preservation method. Thus, the design identity of the temples remained unclear, ultimately forced to be accepted by the generation with the current perceived outcome.

#### 4.2.2 The Ignorance of the Design Identity

As mentioned by Lip (1995), the ornaments on the roof signify the temple's reputation and ranking. In Figure 3: image 4, the facade of Xian Shi temple ( 仙师爷) in Sungai Tekali was constructed with no design identity within the roof, column and facade and not even the mythical animals (see Figure 2). This phenomenon suggested that there is an ignorance of design identity of the Chinese Taoist temple within the community, which has not solely lost the design principal, but also the form and shape for this century-old religious building due to a lack of significant cultural sense in the design and building environment. Eventually, the "semantic organisation" was lost; the evocation of the religious sense was not retrievable within the physical building. Semantic organisation emphasises the feeling and perception to specific object with the value (Brahman & Torabi, 2013). The temple appeared as a residential building rather than a religious building, indicating that the Chinese community seems to show less appreciation towards the design identity of the temple. In addition, the respondents claimed they were experiencing a tough period without committee members to manage the temple over the past few years. This had negatively resulted in the deterioration of the physical condition of the building. As mentioned by Sodangi (Sodangi, Khamidi, & Idrus, 2013), the objective of the preservation was to ensure the continuity of cultural significance for the benefits of the next generation. It can be argued that the overall phenomenon reflected that preservation was not prominently practised by the Chinese community, and it was conducted based on individual preferences. Therefore, the classical design identity is not highly reliable and unable to promulgate the future.

#### 4.3 The Sustainability of Physical Building

Maintenance is pivotal for the "sustainability" of the physical buildings (Sodangi, Khamdi, Idrus, Hammad, & Ahmedumar, 2014); (Sodangi, Idrus, et al., 2013); and (Said et al., 2013). Building material was one of the factors affecting the physical building and its design identity (Brahman & Torabi, 2013). The observation made on three of the samples shown in Figure 3

demonstrated: 1.) Inconsistent use of modern materials such as aluminium sliding door, louvre glass window, and ceramic wall tiles, plaster ceiling, were among the said materials used for the commercial and residential building instead of the benchmark for Chinese Taoist temple, and 2.) Poor maintenance of physical building without appropriate preservation occurred due to limited knowledge.

The samples shown indicated that the architectural features were built according to the folk preferences from the perspective of materials selection which caused the loss of persistency in design identity. According to the respondents, they had insufficient knowledge in preserving the permanent materials and finish for both the exterior and interior, and that was their greatest challenge. Figure 4, image 1, (Fu Ling Gong, 福) shows the ceiling that was replaced with wood panelling, and the selection of material that was done according to the folk preferences such as material availability in the market in Klang Valley and financial affordability. Figure 4, image 2, shows the broken cantilever beam and Dougong (斗拱), the century-old structure which was eventually placed in the "Display Gallery" due to lack of skilful craftsmen available for restoration work and the relatively high cost of restoring these transcendent components.



Figure 4: Building Structure-maintenance from the temples. Images 1&2, Fu Ling Gong (福灵宫,) Image 3, Long Bang Temple (龙邦古庙), Image 4, Xian Shi Temple (仙师) in Semenyih. (Source: Author, 2018)

Image 3 in Fgure 4 of Long Bang Temple (龙邦古庙) demonstrates the failure of maintaining the masonry wall in the century-old building. The lack of restoration work has caused the cements to crack and ultimately resulted in poor physical wall. This was impacted mainly by the excessive incense burning which disseminated harmful particles within the temple over the past century. The committee was left with no option and forced to lay ceramic tiles for easy maintenance despite their awareness of a lack of proximity between selections of material and its design identity. Similarly, in Figure 4, image 4 of Xian Shi Temple (仙河今) in Semenyih, a mark of water leakage can be seen clearly on the plaster ceiling. This could be due to inappropriate application of material whereby the material selected was financially affordable, suit the design trend and was available in the market in Klang Valley. Needless to say, this material is not practical for outdoor use.

## 5. CONCLUSION

This research has yielded several constructive findings from the site observation and interview sessions carried out. It was discovered that the Chinese Taoist temples in the Klang Valley have lost their design identity and that the physical condition of the buildings remain to be in poor quality. In addition, none of the interviewees was aware of the categorisation of lower, middle and upper sections attributed to the buildings. Design identity, according to Brahman and Torabi (2013), is an inheritance, a connection with the past, immerses with distinctive features to engage with the audience. It was found that over the past decade, the physical changes of these samples have undergone extensive changes with regard to the design identity. In addition, the results obtained from content analysis have revealed that the entire preservation process was conducted without appropriate methodology and sufficient technical knowledge. This indicates that the committee members of the temples might not be the right persons to execute preservation work. Appropriate training should be provided to the respondents by relevant authority with immediate effect.

Brahman and Torabi (2013) stated that architecture components are regarded as part of the identity of a community. As such, in shaping the design identity of these temples, it has to relate to the people, place and social identity. The samples in this research serve to be a memory, a recognition and an evocative of "art production" inherited from the epochs of Malaya settlement during the 19th century bestowed to the Chinese community. Technically, the architecture and built environment of several samples still portray the image of a "religious building". Nevertheless, it is less rhetoric due to inconsistencies and lack of reliability of the oriented-design identity of the samples. The rediscovery of Yingzao Fashi in 1919, 20th century in NanJing Jiang-Nan

library (Glahn, 1975), suggested that Chinese classical buildings constructed in the 19th century or prior to 1919, were built without making references to original design and construction, both in China and Malaysia. Therefore, it is understandood that the samples from Klang Valley, Malaysia, established in the 19th century by the Chinese diaspora, were without much authentic design identity and character. The drastic loss of these unique classical features from the samples could be significantly related to the sudden dismissal of YingZao Fashi. However, further research is required to verify this supposition. The findings of this research supported the hypothesis that a lack of proper maintenance of the building has resulted in poor physical condition (Sodangi, Idrus, et al., 2013). Therefore, immediate treatment should be given to the ten samples (N=10) in order to sustain the design identity and the physical of the buildings.

Researchers asserted that the theory of indigenous knowledge (IK), emphasising the understanding of fundamental in local art, is a core practice in the discipline of art (Shaari, Aidil, & Abd, 2017). The idea of IK application could benefit the committee members of the Chinese Taoist temples. With this theory or technical knowledge, it enables the Chinese community to carry out a better preservation work. Therefore, all Chinese Taoist temples built in the 19th century should be imperatively taken over by the heritage stakeholders or relevant authorities. It is suggested that firstly, short courses be conducted to ensure the committee members are properly equipped with the fundamentals of IK theory or technical knowledge for preservation work. Secondly, it is compulsory for the samples in this research to be taken over by Jabatan Warisan Negara, Malaysia, placed under the law protection of Uniform Building by Law (UBBL Malaysia), and audited yearly by the authority. It is strongly believed that proper preservation is able to enhance the lifespan of the century-old buildings and sustain the design identity for future betterment.

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