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DETERMINING THE INTERVENTION STRATEGY FOR HERITAGE SHOPHOUSE FACADES AT IPOH, PERAK

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Abstract

Nowadays, there are a large number of heritages shophouses remain intact in the major urban area in Malaysia, including Ipoh, Perak. However, some of the shophouses are facing inappropriate façade changes due to improper actions committed against the heritage property. The situation resulted in the phenomenon of inconsistency elements of building facades. This paper focuses on two aspects; first, identifying the improper actions committed against heritage shophouse facades compared to proper conservation approaches, and second, classifying the condition of the heritage shophouse facades to determine the current problems and dilemmas. From the literature review, five terms of improper actions are relevant; refurbishment, replacement, redesign, alteration, and deterioration. A pilot test involved twelve shophouses have been selected via purposive sampling. The results show that the terms are reliable to classify the condition of the shophouse facades. Most of the samples encounter dilemmas, mainly replacement and deterioration of the elements of the façade. The terms are also seen as relevant for a future heritage shophouse grading system for inventory purposes. The research findings may promote greater awareness among the owners, stakeholders, and the local authority on the prevailing situation experienced by the heritage shophouses.

Keywords: Heritage shophouse, façade, improper actions, conservation

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INTRODUCTION

Heritage buildings are synonymous with the history of the development and growth of several major cities in Malaysia. These buildings have been built since the 1600s in Malacca, late 1700s in Penang, and the early 1800s in Ipoh (Fee, 2008). The three cities have been through colonisation eras that have influenced the building characters and architectural landscape. For decades, most heritage buildings that are integrated with the Malay, Chinese and European styles (Mohd Jaki & Muhammad Firzan, 2020) are still occupied and remain in their original form and design. It conveys cultural heritage significance, which means a building possessing architectural, aesthetic, archaeological, historical, scientific, social, or cultural values (National Heritage Act 2005, 2012; Tan et al., 2016).

Conservation means the process of understanding, safeguarding, and protecting from being destroyed or changed in an inappropriate manner (Fielden, 2003). Therefore, in maintaining the integrity of heritage buildings, the selection of conservation approaches is crucial to meet the current condition of the buildings that include prevention, consolidation, restoration, rehabilitation, reproduction, preservation, reconstruction, adaptive reuse, and maintenance (Department of National Heritage, 2016). Other than that, conserving heritage buildings demands determination and dedication to preserve their cultural, historical and architectural significance (Nur Shahirah & Junainah, 2021). The procedure embraces all acts that extend the life and basic functions (Arazi et al., 2010; Fielden, 2003) of the buildings by providing maintenance, repair, restore (Orbasli, 2008; A Ghafar, 1997). Curl (2006) added that, in complying with the conservation principles, the building characters or details are supposed not to be altered or destroyed, even though repairs or changes may be necessary. In other words, these changes should be managed dynamically, which only involves minimal intervention (Fielden, 2003). According to Siti Norlizaiha (2011), the design and materials that include the architectural styles and construction techniques are the most authentic criterion to be prioritised as they brought together the history of the past evidence of knowledge, ideas and the golden era of the heritage buildings. Thus, there is a need to refer to a complete and standard data regarding the architectural styles and materials to maintain the original design of the heritage buildings (Wan Nordiana & A Ghafar, 2021a).

However, the heritage shophouse is facing a dilemma in preserving its integrity due to several factors. There is an increasing number of interventions on the elements of building façades (Toong, 2015) that ignore the architectural characteristics (Noorfadhilah & Shamzani, 2012; Tan, 2014; Shuhana et al., 2012, Pheng, 2014; Nur Farhana et al., 2017) due to improper actions taken against the façade, thus, creates a phenomenon of inconsistent elements that lead to visual problems. This situation gave negative impact on the architectural styles, characters and historical images of the city (Omar & Muna, 2016; Toong, 2015;

Amir Hossien & Kamariah, 2009; Zalina & Rodzyah, 2012; Elnokaly & Wong, 2014) and eventually will lose their sense of place (Nur Raqena et al., 2020).

The question is, what are the terms for the activities that can be used to classify the improper actions? And what are the parameters for classifying the current condition of the heritage shophouse facades? To ensure that the heritage buildings are well preserved and minimise the occurrence of inconsistent elements of the heritage shophouse facade, precise and clear information about the façade's current situation should be recorded. A set of specific terms for classification or grading purposes is, therefore, need to be developed. The terms are useful as references to the stakeholders for various reasons, such as applying for planning permission, inventory, documentation or conservation. While development and modernisation are necessary, there is a need for a comprehensive conservation management plan for heritage buildings (Wan Nordiana & A Ghafar, 2021b).

RESEARCH BACKGROUND

Ipoh is the capital city and the administrative centre for the state of Perak Darul Ridzuan. It is located in the North of Peninsular Malaysia, approximately 200 km from Kuala Lumpur. The city began in 1874 with approximately 100 units of attap houses and a small market. However, in 1892, a great fire broke out and destroyed most of the houses (Hin et al., 2013; Sinnadurai, 2006). The town then was rebuilt with brick buildings in a more systematic grid system for roads and shophouses. The rapid growth of the mining industry has led Ipoh to be the most productive tin ore field in the country and reached its glory in the 1950s. At the 1970s, the economy of the tin-mining industry of pricing collapse, and the city's growth stagnated tin mines were brought to a close. In 1988, Ipoh was granted city status by the Sultan of Perak (Zulqarnain, 2017). On 18th December 2014 due to the provision of the Town and Country Planning Act (Act 172), the heritage area of Ipoh City consists of Core Zone (79.70 hectares) and Buffer Zone (175.50 hectares) has been gazetted. The uniqueness of the city is the architectural asset, which includes 1,022 shophouses that reflect a variety of styles from the early 80s to the 90s (Ipoh City Council, 2014). Apart from its unique heritage shophouses, Zulqarnain (2017) highlighted that Ipoh is a fascinating city and has received several global recognitions, including 9th Best City to Retire in the World 2013, 6th Best Destination in Asia 2016, 9th Best Tourism Region 2017 and others.

LITERATURE REVIEW

Heritage shophouse

The shophouse is usually listed in the category of mixed-use and commercial. Due to its double function as residential on the upper floor and business at the ground floor, the shophouse is more appropriate to be under the mixed-used category (Gurstein, 1990). Nowadays, the heritage shophouse that is no longer occupied for residence is categorised for commercial use. This long-narrow building consists of a façade, commercial area, air-well, dining area, kitchen, and bedroom on the upper floor. The most significant element is the front façade as a medium to convey the design era when it was built and the building's function. A Shophouse façade is defined as 'a building element facing the street consisting of structural, enclosure, opening, fenestration and ornamentation' (Burden, 1996, 2004; Wooi, 2015; Hopkins, 2013; Curl, 2006; Harris, 1983; Ahmad Sanusi and Shaiful Rizal, 2012; Wan Nordiana & A Ghafar, 2022). By referring to the definition, five main elements of the façade will be focused on determining the condition of the façade.

Intervention and improper actions

Intervention is rapidly increasing, which threatens the survival of the heritage buildings. Breslin (2016) defines intervention as involving oneself in a situation, mainly to prevent conflict. However, in heritage buildings, intervention means what is done to the building (Tyler, 2000). The 'something done' to the building is the treatment strategy and represents an appropriate intervention situation. Interventions practically always involve some loss of a 'value' in cultural property but are justified to preserve the objects for the future. According to Fielden (2003), the various scales and levels of intervention intensity are determined by the physical condition, causes of deterioration, and anticipated future environment of the cultural property under treatment. The seven ascending degrees of intervention are (1) prevention of deterioration; (2) preservation of the existing state; (3) consolidation of the fabric; (4) restoration; (5) rehabilitation; (6) reproduction; and (7) reconstruction.

The intervention may cause some changes to a place that should be guided by the cultural significance of the place and its appropriate interpretation (UNESCO, 2005). The change that reduces the value of cultural significance is likely due to improper actions committed against the heritage property. The improper actions refer to terms or approaches that do not comply with the conservation principles, as shown in Figure 1. The terms can be used to identify the problems and classify the conditions of the heritage shophouse facade.

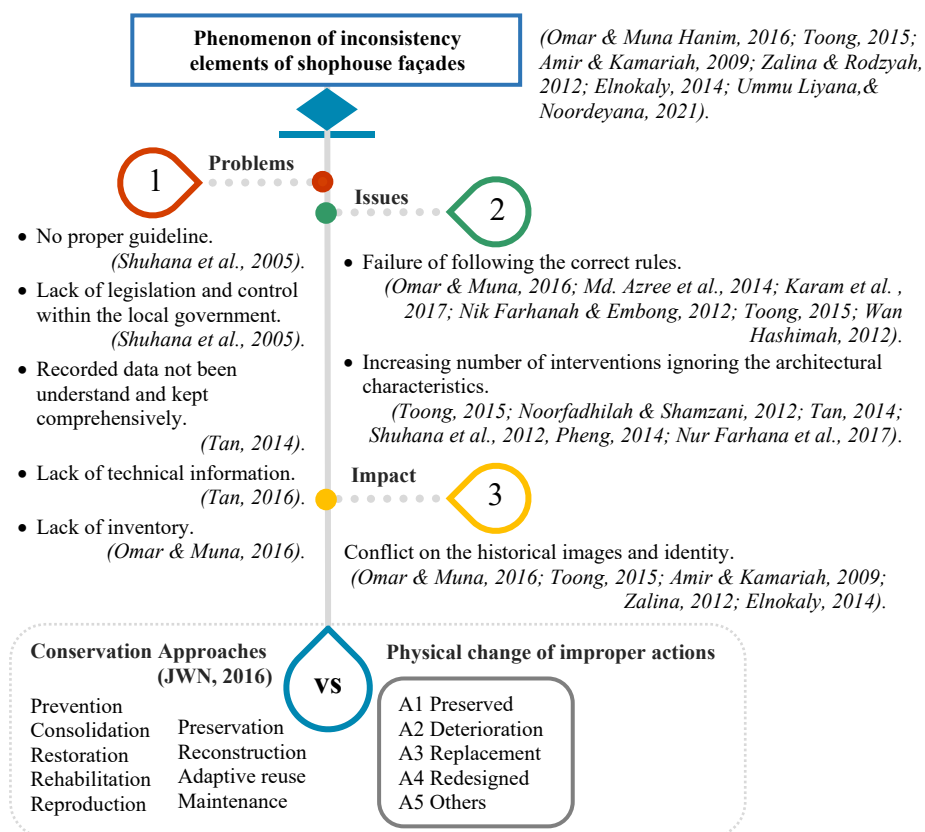



Figure 1: Conservation approaches and improper actions.

The six (6) steps for determining the intervention level of the heritage shophouse facades formulated and adapted from the concept by Zhang and Dong (2019) as illustrated in Table 1:

- i. Stakeholders: are the owners, sponsors, governments and non-governmental organisations.
- ii. Typology: Types of heritage buildings are heritage shophouses.
- iii. Existing fabrics: Physical character of the heritage shophouse facades includes beams, columns, roof, walls, doors, windows, air-vent, fenestration and ornament for Transitional, Eclectic, Neo-Classical, Early Modern and Modern.
- iv. Functional change: Determine the preservation of the heritage shophouse facades whether it maintains the original elements, maintains the original elements and adds a little new element or new element.

- v. Potential problems: Identify the problems that occurred on the heritage shophouse facades, deterioration, replacement, redesign and others.
- vi. Conservation action: Five (5) levels of intervention from minimum up to maximum intervention namely maintenance, rehabilitation, restoration, reconstruction and combination of interventions.

Table 1: An intervention strategy for heritage shophouse facades.

Intervention strategy for heritage shophouse facades at Ipoh, Perak					
Stakeholders		Owner, sponsor, government and non-government bodies.			
Typology		Heritage shophouses			
Existing fabric	Physical characters: Beam, column, roof, wall, door, window, air-vent, fenestration and ornament.				
		Transitional, Eclectic, Neo-Classical, Art Deco, Early Modern & Modern			
Functional change & potential problems	1)Preserving existing elements 2)Preserving existing elements and adding some new elements 3)New elements Others				
	Potential problems				
	Preservation The shape, colour or material of the elements and structures are in an existing state and well maintained.	Deterioration The elements and structures are in an existing state but affected by fungus, broken, cracked, rusted, faded or vegetation growth.	Replacement Replacing the damaged part of the facade with new elements in existing shape and design.	Redesign Changed shape, colour or existing material to a new scheme.	Others The elements were hidden by signage or vegetation, demolished, new buildings, in-fill, etc.
Conservation actions	Intervention levels				
	← Minimum intervention ----- Maximum intervention →				
	Intervention scales				
	5 Maintenance & prevention Repair work, supervision and continuous care to prevent decay or obsolescence without changing the original condition.	4 Rehabilitation & consolidation Modernization without changing the original use and adding supports to continue durability.	3 Restoration Replacing missing details or restoring the building to match the appearance and original construction materials.	2 Reconstruction Rebuild in whole or in part.	1 Combination Implement other approaches and actions that comply with heritage building conservation guidelines.

METHODOLOGY

In preparing this research paper, a research framework had been developed. Firstly, problems regarding the architectural scope of heritage shophouses contributing to issues were identified and extracted from articles. The data collection for this research is using multiple methods. Firstly, by reviewing documents to identify the appropriate terms for improper actions committed against the heritage property. Sources of data are from books, dictionaries, and government reports ranging from local to international authors such as Tyler (2000), Fielden (2003), Burden (2003), Orbasli (2008), and Department of National Heritage (2016). The relevant terms were finalised by its definition: replicate, refurbishment, replacement, redesign, alteration, and deterioration. Secondly, fieldwork for the pilot test was conducted. By using purposive sampling, twelve (12) shophouses had been selected. The criteria of the facades were; they were not properly conserved to identify the problems encountered. Assessment is focused on nine (9) parameters that include beam, column, roof, wall, door, window, air vent, fenestration and ornamentation.

FINDING AND DISCUSSIONS

The selected heritage shophouse facades in Ipoh are shown in Table 2 and consist of a few architectural styles such as Transitional, Eclectic, Neo-Classical, Art Deco, Early Modern and Modern. Each is coded from S1 to S12. The improper actions are coded from A1 to A6 (see Table 3). There are nine (9) codes for the element of facades. The codes represent; structural (beam and column), enclosure (roof and external wall), opening (door, window and air vent), fenestration and ornamentation (See Table 4).

Table 2. Heritage shophouse facades, Ipoh.



The condition of each element is evaluated and the result is shown in Table 4. The most affected elements are roof, door, window and wall, due to replacement, deterioration, redesign etc. Eight (8) facades did not retain the original design and material (See Table 5). S12 is the most affected by the improper actions whereby almost all of its elements were intervened followed by S3, S6 and S10. Only S2, S5, S7 and S8 are still above average (50% is considered average) whereby, only three to four elements of the façade have been affected by the improper actions that cause problems.

Table 3: Analysis of improper actions of elements heritage shophouse façades.

Theme	Times	%	Remarks	Conservation
A1 Preserved	43	39.8	In existing condition / well maintained.	Maintenance / Prevention
A2 Deterioration	26	24.1	Wall paint was left peeling.	Rehabilitation / Consolidation
A3 Replacement	24	22.2	Change of terracotta roof to zinc and traditional timber panel door to steel roller shutter.	Restoration
A4 Redesign	10	9.3	Traditional style to modern style.	Reconstruction
A5 Others	5	4.6	Use of temporary steel column instead of brick.	Combination
Total	108	100		

Table 4: Result of the current condition of the facade.

Theme	Subtheme	A1	A2	A3	A4	A5	Preserve	Problem
F1 Structural	B1 Beam	8	3	1	0	0	7.4	3.7
	B2 Column	5	3	0	0	4	4.6	6.5
F2 Enclosure	B3 Roof	0	0	10	2	0	0	11.1
	B4 Wall	3	7	2	0	0	2.8	8.3
F3 Opening	B5 Door	1	2	7	1	1	0.9	10.2
	B6 Window	2	6	1	3	0	1.9	9.3
	B7 Air-vent	4	4	3	1	0	3.7	7.4
F4 Fenestration	B8 Fenestration	11	0	0	1	0	10.2	0.9
F5 Ornamentation	B9 Ornamentation	9	1	0	2	0	8.3	2.8
		43	26	24	10	5	39.8%	60.2%
		%	39.8	24.1	22.2	9.3	4.6	

Table 5: Analysis of 12 samples of heritage shophouse facades, Ipoh.

Code	Architectural Styles	Elements of heritage shophouse façade									Condition (%)	
		F1		F2		F3			F4	F5	Preserve	Problem
		B1	B2	B3	B4	B5	B6	B7	B8	B9		
S1	Eclectic	A1	A1	A3	A2	A3	A2	A2	A1	A1	44	56
S2	Early Modern	A1	A2	A3	A2	A2	A1	A1	A1	A1	56	44
S3	Eclectic	A2	A5	A3	A1	A5	A2	A2	A1	A2	22	78
S4	Eclectic	A1	A1	A3	A2	A3	A2	A2	A1	A1	44	56
S5	Transitional	A1	A1	A3	A3	A3	A4	A1	A1	A1	56	44
S6	Art Deco	A2	A2	A4	A2	A2	A2	A2	A1	A1	22	78
S7	Transitional	A1	A1	A4	A1	A3	A4	A4	A1	A1	56	44
S8	Transitional	A1	A1	A3	A1	A4	A1	A1	A1	A4	78	22
S9	Eclectic	A2	A5	A3	A2	A1	A2	A1	A1	A1	44	56
S10	Eclectic	A3	A5	A3	A2	A3	A4	A3	A1	A1	22	78
S11	Neo-Classical	A1	A2	A3	A2	A3	A2	A3	A1	A1	44	56
S12	Modern	A1	A5	A3	A3	A3	A3	A3	A4	A4	11	89

CONCLUSION

This study aims to ascertain the improper actions that lead to the dilemma of retaining the integrity of the heritage shophouses in Ipoh compared to proper conservation approaches. The terms for improper actions were further defined by assessing the current condition of 12 heritage shophouse facades, of which six were subsequently identified. The terms are including preservation, replacement, deterioration, redesign etc. Based on the fieldwork analysis, a few elements of the shophouse façade affected by the improper actions include the roof, wall, door and window. 22.2% of the elements were replaced by changing the traditional timber panel door to steel roller shutters, and terracotta roofs to zinc. 9.3% traditional style redesign to the modern style of the facade. 4.6% of the elements are using different approaches by applying temporary steel columns. Lastly, 24.1% of the elements are deteriorated which involved the peeling of wall paint. In the presence of such information, the local authority can advise the building owners to do restoration works to the affected elements such as maintenance, prevention, rehabilitation, consolidation, restoration, reconstruction or a combination of these conservation approaches.

From this study, the heritage shophouse facades in Ipoh are facing a dilemma mainly deterioration, followed by replacement, redesign and others. The set of terms is applicable for the classification of the current condition of shophouse façades. It is recommended to be applied in the assessment tools or inventories that need to be examined in future research. Besides that, conservation management should be more effective because it is afraid that the improper actions against facades will increase after the pandemic due to business survival in attracting customers or tourists.

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