

Preliminary study on Authenticity in adaptive reuse of heritage building in Ipoh, Malaysia

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Abstract: *Heritage building is one of the urban characters for the city and should be very much protected not only because of the value and story but it also because of existing building stock. Reusing existing building stock can add to battle the environmental load significantly by decreasing the material, transport, energy consumption and contamination in the development of new building. In recent years, adaptive reuse of heritage building is increasing so rapidly, compared to the earlier years, when heritage building experiences broken down as well as poor conditions. Adaptive reuse is changing the function of the heritage building, which services and technology are obsolete to another building function to meet the present demand. Be that as it may, in the excitement of the owner and local authority while applying the adaptive reuse approach in heritage building, this approach has been as of late criticized for imperiling the authenticity of the heritage building. Henceforth, the point of this study is to establish the authenticity issue in adaptive reuse of heritage building with previous researchers claimed and in a practical scenario. It is trusted that this study can help reminding the stakeholder about the difficulties to actualize adaptive reuse in holding the authenticity of the heritage building. To do as such, a preliminary study by observation has been conducted to the adaptive reuse of heritage building in Ipoh to grasp all data relating issues in authenticity in adaptive reuse of heritage building. It is trusted that the result of this study will inspire the stakeholder interested in adaptive reuse for their future references.*

Index Terms: *Authenticity, adaptive reuse, heritage building, issue*

I. INTRODUCTION

Heritage building in Malaysia have their own value and story, [1] and they are portrayed through building styles [2]. These buildings have a variety of interesting styles, influences, as well as a sign of the economy change and become one of the urban identities of the city[3]. Presently, heritage building preserved not only because of the value and story but also because of existing building stock. By using existing building stock, it contributes to combat the environmental load significantly within the next 20 years and this can contribute to sustainable development by

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mitigating the material, transport, energy consumption and pollution in the construction of new building [4]. 75% of all buildings expected to be operating in the year 2040 by reusing the existing building[5]. This statement stressed that it is vital to conserve heritage building for our future development. As heritage building show a lot of signs as mentioned above, adaptive reuse approach will be used to retain the heritage building to extend the building's life and avoid demolition waste, encourage reuses of the embodied energy and also provide significant social and economic benefits to the society[6], [7].

II. HERITAGE BUILDING

Building is a structure with a roof and walls that is used as a place for people to live, work, do activities, store things, etc.: the act or process of making structures by putting together materials [8]. Heritage means features belonging to the culture of a society, such as traditions and languages. Heritage is something transmitted by or acquired from a predecessor [9], [10]. In short, the definition of heritage building is a building possessing architectural, aesthetic, historic or cultural values which is declared as heritage building by local authority or competent authority in whose jurisdiction such building is situated. Heritage building serve as cultural and heritage symbols and thus, act as a hub for individual and community life. Heritage building have a variety of interesting architectural styles, influences, and become one of the urban identities for the city, example for heritage buildings situated in Ipoh, Malacca and Georgetown [2], [11], [12].

Heritage building portrays the character of the city at various time [13] as well as symbol of the economic development [3]. Heritage building should be preserved because they have their own emotional, cultural, and historical values[1], [14], [15]. However, failure to maintain the property can impair the structural integrity of the fabric and accelerate the decline in investment returns[16]. One way of keeping the heritage building is by applying adaptive reuse on them to contemporary uses which fit the new development need. The practice of adaptive reuse of heritage building could save them from being replaced by new buildings which will contribute to social, economy and environment purpose [17]. Therefore, the best way to keep the minimum loss of heritage building authenticity and contribute to combat the environmental load significantly is by applying adaptive reuse in the right way. If not, the heritage building was turned into corpses, dead spaces in the daily life of the street, where nothing useful to the local community is happening. Consequently, after a while,



people no longer care about these buildings [18].

III. ADAPTIVE REUSE

Adaptive reuse converted the function of the old building which services and technology were outdated into a new building purpose for new needs of the inheritors due to development by injecting new materials and ideas while at the same time retaining the original structure and fabric[6]. Adaptive reuse is beginning to receive widespread attention because of the economic, social and environmental benefits that can be espoused. Adaptive reuse of heritage building is popping out so fast, compared to the previous year which mainly suffers from dilapidated[19], neglected and turned into corpses [20]. Adaptive reuse is one of the conservation techniques which can save heritage building being replaced by the new building and preserve the identity of the place[21], [22]. The reuse of heritage building enables the future generation to appreciate the identity of the building [23] as the heritage building represent unique architectural, aesthetic, political and social features of a different time[24]. Therefore, the best way to keep the minimum loss of heritage building authenticity and contribute to combat the environmental load significantly is by applying adaptive reuse in the right way. Adaptive reuse of heritage building might compromise the authenticity to satisfy the development needs [25]. However, if the stakeholder strive to respect, understand and appreciate the cultural heritage, the intervention can be minimized and the authenticity of heritage building will be retained[26].

Presently in the eagerness of owner and local authority applying the adaptive reuse, this approach has been recently criticized for compromising the authenticity [27]–[31] which continue to harm and resulted the great impact on the heritage building. They want to conserve the heritage building but at the same time ruin the authenticity [32]. If no tremendous effort is thrown in an adaptive reuse approach, it can jeopardize the precious heritage building life, value, and story.

IV. AUTHENTICITY

Authenticity can be defined as a condition of the heritage resource including artistic, historical and cultural dimensions. It is related to the aesthetic, structural and functional form of the object or site, material, and technology, as well as physical and socio-cultural context [33]. Authenticity can be defined as something that sustains and proves itself, as well as having credit and authority from itself. This refers to something creative, an authorship, something having a deep identity in form and substance. It means something specific and unique [34]. Authenticity is a principle that shared by conservation and sustainability [35]. In conservation based on the Venice Charter, authenticity indicates how to slow down the heritage property erosion process; especially in buildings. Based on conservation principle, authenticity can minimize the intervention and can be considered as an aesthetic aspect while the process is the ethics to restore it [36]. In the context of adaptive reuse of heritage building approach, the most important aspect is the ethics rather than aesthetics. Thus, in conservation, beauty is

not the measurement of restoring the heritage building to the original [37]. The authenticity can slow down the heritage building property erosion process[38]. The authenticity based on conservation principle does not hinder development, but in fact act as a catalyst to the development and well-being of a town [39]. It will be most important to take great care to maintain the authenticity of existing heritage resources from the past as they will form a reference for future memory and will, therefore, need to be conserved with due respect for relevant issues [33].

V. AUTHENTICITY ISSUES IN ADAPTIVE REUSE OF HERITAGE BUILDING FROM PREVIOUS STUDIES

People nowadays paying greater attention to adaptive reuse, but the issue appears now is regarding the authenticity of the heritage building. Previous studies have discussed the improper conservation of the heritage building that diminishes the authenticity of heritage building. Owner of building reuse and adapt all sorts of buildings without proper planning [40]. 8% of the early heritage building in Malacca are still in the original form while 51% had been renovated and 41% had either perished or lost their originality due to renovation works in adaptive reuse [28]. Only certain heritage building in the row to be preserved, the rest were subjected to the hideous conservation works that totally destroy the authentic value [12]. There are still many buildings that have been adaptively reused without following the regulations, thereby, losing the building's authenticity and historical significance[29]. Recent evidence said, most of the walls in adaptive reuse of heritage building lose their authenticity of material and design [27], [41]. In short, it showed that lack of authenticity in heritage building is a serious issue and need to be properly addressed due to the negative effects happened to the heritage building value as well as the environmental significance.

From this issue, the lack of authenticity may be influenced by many interrelated factors. Most of the researchers agreed that there are lacking in conservation guideline in control the authenticity of adaptive reuse work for building elements in heritage building [20], [42], [43] and the stakeholders unable to follow most of the guidelines due to incomplete information and details for each component of the building elements regarding authenticity in adaptive reuse approach [18], [44]contribute to this issue. Previous researcher added that an effective authenticity control strategy should be implemented in controlling recycle and preserving activities to maintain the heritage value of the buildings. This includes a better control on the sizes of the openings on the façade, the color of the facades, the use of the buildings[45]. Inefficiency of local conservation framework, approaches and practices also contribute to problem inflicting in Malaysian heritage building which influence the authenticity in adaptive reuse of heritage building [46], [47]. For that reason, to tone up the information pertaining to issues faced in authenticity in adaptive reuse approach, observation is done to gain more

information in a practical scenario when implementing adaptive reuse of heritage building as well as can help the author to fill the loophole in applying this approach.

VI. RESEARCH METHOD

To obtain the objective, the essential stages of methodology were performed in several stages. This research begins with completion of literature reviews from publication. The literature review is mainly acquired from published books, research papers, seminar papers, and journals. The research is further reinforced from preliminary study. This preliminary study is to identify the direction of the study more accurately, compare the literature review with practice scenario, and to get up to date data pertaining authenticity issue in authenticity in adaptive reuse of heritage building. The data was collected by observation on the heritage building that applied adaptive reuse in Ipoh. During the observations, pictures were taken to record and analyze the changes made to the heritage building. All heritage building in the study have changed their intended use and, after the adaptation process, a visual inspection was conducted to check whether the buildings' elements followed the guideline provided by Majlis Bandaraya Ipoh, Rancangan Kawasan Khas Ipoh 2020.

The observation of the activities in Ipoh was done over a period of two months. As this is a preliminary study, it was focused on the external building element due to ease detect the compliance with the guideline. Through studies, the authenticity issue in implement adaptive reuse of heritage building in Malaysia are identified, established and up to date at the end of the stage. The results of the preliminary study will help to fill the loophole in applying this approach and give benefit to all stakeholders.

VII. DATA COLLECTION AND DISCUSSION

Preliminary study has been conducted to establish detailed information on authenticity issues in adaptive reuse of heritage building in a practical scenario with the literature review and help the author to get up to date data. By conducting a preliminary study, the author can identify the direction and narrow down the study [48]. This study was done based on an observation at the heritage building located at Ipoh. This section will focus on the changes done in adaptive reuse of heritage building consists of three items embraced of rear façade, 5-footway and opening in the heritage building. Based on the observations, it was determined that a various change done to these buildings can be identified as post-conservation work.

A. Rear Façade

Based on observation, color of the external wall is always changed in adaptive reuse of heritage building. In Ipoh, the owner usually changes the color scheme with vibrant clashing color paint to meet the present demand and attract the visitor. Most of the owners do not maintain their original color and the owner decorated the external wall with quirky mural which can ruin the originality of the external features of the heritage building. Even though they retain the original material of external wall finishes, they

tend to change the color scheme of heritage building. The owner also does not uniformly paint their building with the same colors with the neighbor building. The buildings do not follow the requirements of the guideline because their colors do not fall in line with the typical characteristics of heritage building. The ideal color scheme for heritage building is soft or pastel colors. Using vibrant colors may be good for attraction purposes, but in terms of preserving the building's historical value, striking colors are not allowed as the aesthetic value and authenticity of a heritage building will be ruined. The façade design of the building also not standardize with the neighbor's building. The owner is compulsory to make sure that the building's design harmonizes with the neighboring buildings.

From the heritage building rear façade observation also it derived that the owner of heritage building in Ipoh, using the big signage which cover the façade of the building as shown in figure 1 and 2. Modern signage or billboards used as commercial signposts or advertisements are installed in large sizes and cover the view towards the building facade. These billboards illuminated with a variety of lighting concepts that will affect the fabric of the heritage building. Installation of signage or billboards like this should be controlled in terms of size, design and color so that the heritage building is protected. The oversize signboard placed has impaired the building character.



Fig. 1 Modern signage that cover the entire facade of the building are not allowed



Fig. 2 The advertisements are installed in large sizes and cover the view towards the building facade

B. 5-footway or verandah

5-footway are the area below the first floor of shophouses of heritage building. The size is about five feet. The function is to shield the pedestrians from the hot sun and rain. This hallway is not allowed to be covered with any temporary or permanent elements. From observation, it is found that some of this area are covered with the decoration and disturb pedestrian from using it as shown in figure 3 and 4. The floor finishes and wall finishes of the original heritage building are also replaced with modern style.



Fig. 3 Replace the floor and wall finishes with modern style



Fig. 4 Decoration that block the pedestrian path

C. Opening (door and window)

From the overall observation on the opening, many Ipoh adaptive reuse heritage building have changed their opening materials with new ones. Usually, materials used are those that can be easily obtained nowadays such as steel doors as shown in figure 5 and tempered glass windows. The use of

glass windows is usually an option because of the factor of air-conditioning used as shown in figure 6. For example, the Milkcow café uses glass door and windows, on the front facade. With these changes, it slightly changes the heritage building façade and ruin the authenticity of the building. New opening is permitted but must be in similar material especially in front façade opening.



Fig. 5 Using roller shutter as a steel door



Fig. 6 Glass door and windows

VIII. FINDING AND CONCLUSION

After reviewing and analyzing all observation findings of the adaptive reuse of heritage building in Ipoh, the authenticity issues are identified and established. This observation revealed that most of the heritage buildings did not undergo major structure restoration project. They only involve building façade changes. Changes usually involved in adaptive reuse of heritage building façade in Ipoh are:

- a) Color: owner using vibrant clashing color paint to attract the visitor.
- b) Decoration: decorate the wall with quirky mural paint which not related with the heritage building for that era.
- c) Neighboring building: the owner usually ignores the requirement in making sure



the heritage building looks similar and harmonize with the neighboring building.

d) Modern signage and billboard: most of the signage and billboard in Ipoh covered the façade and ruin the appearance of the heritage building.

e) 5- footway: Owner covered the hallway with the decoration and block the pedestrian walkway.

f) Door and window: Owner replaced the material of the opening with dissimilar material from the original which ruin the authenticity of the heritage building façade as this new modern material can be easily obtained.

In conclusion, from the observation, it is established that in the excitement of the owner and local authority applying adaptive reuse of heritage building approach, this approach has been imperiling the authenticity of the heritage building. This statement parallel with the previous researcher finding. Even though the guidelines state that original materials and the building method should be done accordingly, the contractors and building owners were unable to follow most items stated in the guidelines. By viewing into the issue, improper guideline and no specific assessment method in authenticity could be tricky among stakeholders which can give tremendous impact to the authenticity of the elements in a heritage building. This statement similar with the previous researchers' finding mentioned above that most of the researchers agreed that there is no effective legal protection and control pertaining to authenticity within the local authority in adaptive reuse and the stakeholders unable to follow most of the guidelines due to incomplete information and details for each component of the building element regarding authenticity in adaptive reuse approach. Obviously, the local authority needs to take action to ensure that proper guidelines sufficient among stakeholders to facilitate the authenticity assessment in adaptive reuse. Local authority contribution is necessary for attaining the authenticity in the adaptive reuse of heritage building because, in the end, it may give the benefit to the economic dynamic of society.

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