

# The Component of Historical Study Influencing Heritage Building Conservation Decision: A Literature Review

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## Abstract

The fundamental practises of conservation can be classified into several stages that span the time before, during, and after its execution. Before beginning any form of conservation work, one of the most important and vital part is conducting historical study on heritage building background. A thorough historical study is essential to gain a knowledge of the authenticity and significant values linked with a heritage building. As according to Article 6 of the Burra Charter, "the cultural significance of a place and other issues affecting its future are best understood by a sequence of collecting and analysing information before making decisions." Understanding significance can be accomplished by conducting a background study of the place and its extent, investigating the place history, usage, associations, and fabric, which will ultimately aid in the decision to conserve.

**Keywords:** Historical Study, Conservation Approach, Heritage Building, Decision to Conserve

## Introduction

A heritage building is one of a country's historical structures that holds significant worth for the nation (Naquiuddin et al., 2013). Every Malaysian heritage building has its own fascinating history and importance, which is expressed through architectural styles (Lilawati et al., 2019). According to Zolkafli et al (2019), it is crucial to preserve the history, aesthetics, society, archaeology, culture, architecture, documentation, and symbolic meaning of heritage buildings because each has its own distinct worth in these areas. Conservation is a strategy that was implemented to stop the deterioration of a structure while still keeping its original character intact (Harun, 2011a).

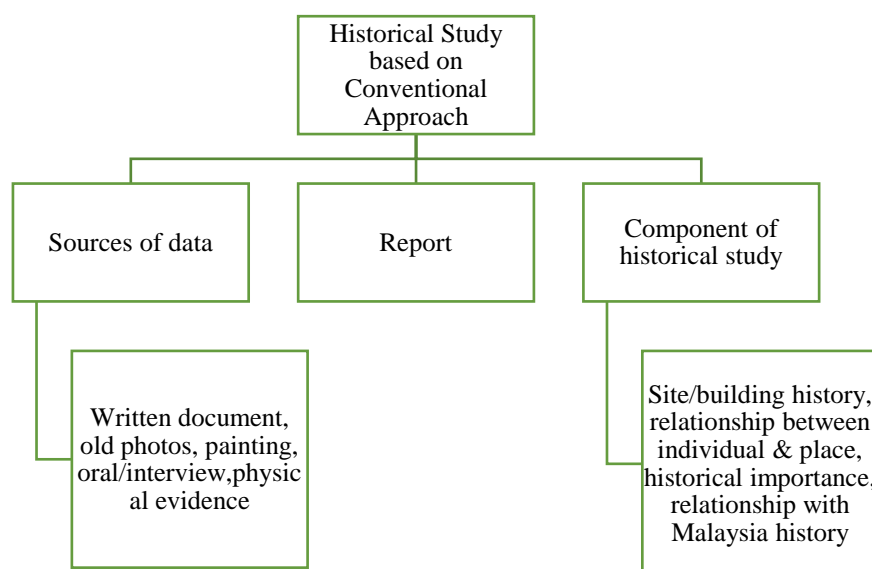
Before conservation work is carried out, a preliminary study is conducted, which includes investigations into the history and background of the building. Before suggesting a proper conservation approach, it is essential to look into the building's history and context in order to fully comprehend it. The initial phase of conservation work is historical study, and it is the one that can have the greatest impact on the entire process. With historical study, the

conservator is able to comprehend the building's chronology, including its physical changes. These alterations may have been made by the building's owner or occupants (Harun et al., 2020).

### ***Heritage Building***

Simply put, heritage refers to something of significance or value that is passed down from one generation to the next. It includes culture and tradition, as well as historic sites and buildings or structures. UNESCO defines heritage buildings as groups of buildings (separated or connected) that, due to its architecture, homogeneity, or place in the landscape, are of remarkable universal value from a historical, artistic, or scientific perspective (NHDM). Historic buildings that have been passed down from earlier generations are an integral part of contemporary society. The phrase "heritage" is refer to historically, artistically, or architecturally significant locations, buildings, structures, and artefacts. Three aspects are considered when determining whether or not a place should be registered as a heritage property: its historic significance, its integrity, and its surrounding environment (Al-Sakkaf et al., 2020). According to Harun (2020), historical or old buildings have their own distinct significance that must be protected. The heritage which old buildings represent has both tangible and intangible value. Heritage can be viewed and experienced through little relics or artefacts, or even through the city's buildings and historic sites. All these values relate to the community's culture, which is symbolic and meaningful. Historic buildings serve prominent roles in history, including the preserving both history and beliefs.

Whether it be history or events that have been preserved narratively or in the shape of monuments and buildings, the nation is home to a significant number of historic buildings that each have their own unique history. These buildings can be found all over the world. Some of these buildings are still in use, such as palaces and religious buildings, while others, such as monuments, statues, and certain cities, have been conserved as heritage buildings and landmarks (Harun, 2020). Furthermore, preserving heritage building will ultimately protect its architectural and cultural significance. The worth of a building or historic property is based on more than just the opinions of its people; it also reflects the building's history, appearance, architectural fabric, archaeology, and cultural patterns. Heritage buildings should be restored to its original form and condition. It encompasses the authenticity of the building in various aspects including its architecture, building materials, construction methods and techniques right up to details in elevation/façade, appearance/texture and even color. The work processes carried out must be guided by principle based on NHDM guideline.

*Historical Study Conventional Approach*

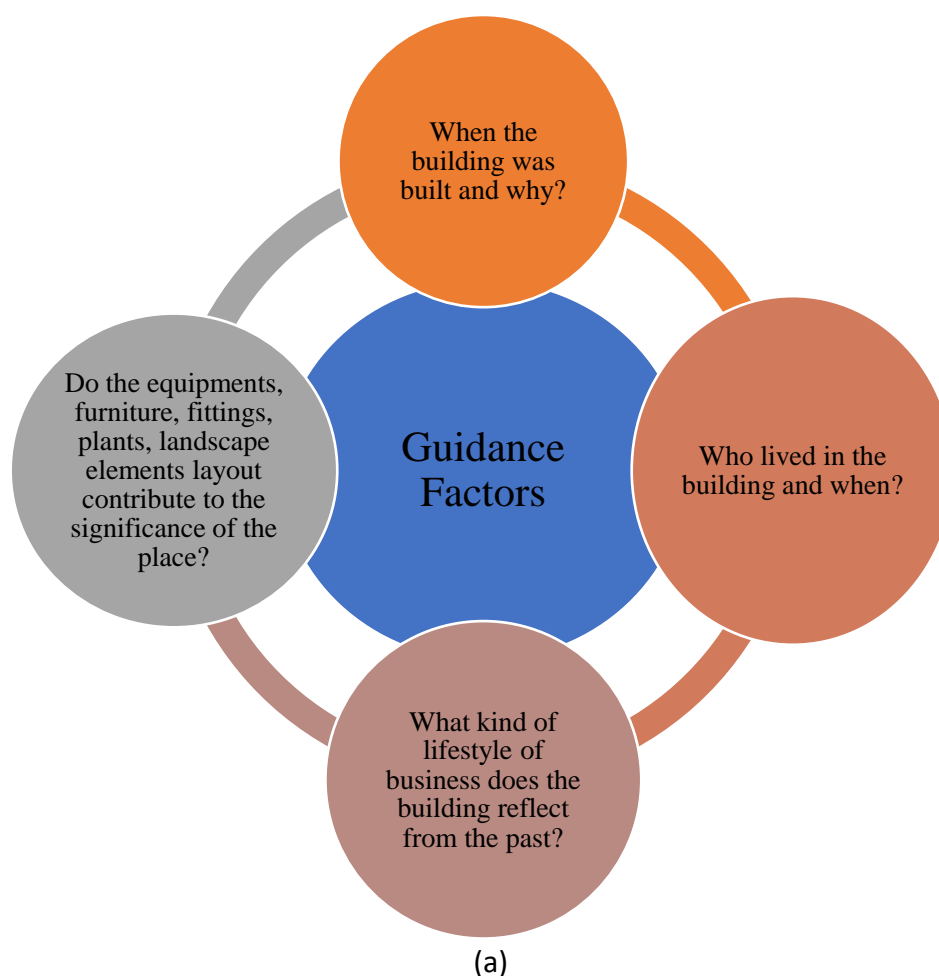
(a)

Figure 1.1 Historical Study Conventional Approach  
sources: (Harun, 2011a)

(Harun, 2011b) Conventional historical research methods rely on data gathered from written documents, old photographs, paintings, oral/interviews, and physical evidence. Research considerations including site/building history, individual/place relationships, historical significance, and ties to Malaysian history should guide the collection of these details. You can use this data to compile a report useful for historical analysis. Khalil et al (2021) suggest a classification of documentation for heritage building conservation; one of the key categories is history or archaeology, which comprises historical record, previous drawing, historic text, archaeological findings, historic photograph, oral history, and multimedia. Further information on the structure and its evolution over time can be gleaned from these sources. Historic records are information sources such as maps, official building registers, and any other sources connected to the history of the building, building owners, construction history, building function, and changes over time. However, historic text is essential for understanding the structure's history, including social and economic developments; this knowledge eventually leads to building techniques, materials, and architectural styles. Second, oral history is another type of evidence that can be utilized in historical research documentation. It can provide information about the building's usage and function from the beginning by using witnesses from the local community (older generation), users, and building owners. Aside from that, archaeological findings reported through study are a primary source of evidence that can provide information about the building's materials, processes, original form, and function. Finally, historic photographs can be used to compare prior and contemporary building conditions as well as changes over time (Khalil et al., 2021).

*Historical Study Influencing Conservation Decision*

A building's identity is determined by its location within a city or area, according to Harun (2022) it may also act as a cultural symbol representing its community and their surroundings. Visual, functional, and historical aspects all contribute to the character of a structure. The character of the building is assessed based on the influence brought and the present influence on the heritage site. The presence of both natives and outsiders, such as immigrants and nomads, had an ambiguous impact on the development of heritage structures. According to Harun (2022), "factors that will shape the decision including whether to restore or rehabilitate and to what extent, involves understanding its history; its architecture; and the present condition of its materials, finishes, and systems".



**Figure 1.2** Guidance Factors Influencing Conservation Decision sources: (Harun, 2022)

The decision to conserve is made not only on the basis of character, but also on historical and architectural engagement, as well as the condition of material finishes and systems. Both can be used to make rational conservation decisions. Guiding aspects during the assessing building history stage; by emphasizing questions, conservators can get ideas and assistance on what to look for during the investigation. As said by Harun (2022), the diagram above highlights numerous questions that can be added as a guiding aspect. These questions concern the original character of the building, which is connected to its history and previous occupants. The goal of historical study is to comprehend how the building has changed over

time, as it relates to residents, events, and equipment, or even furniture, as shown in the diagram above. The historical study may be undertaken by professionals i.e architects, conservators, historians, and the process comprise procedure that include historical research and documentation part.

According to Zancheti et al (2009) based on Venice Charter (1964) which, as mentioned in article 16, states “...in all works of preservation, restoration or excavation, there should always be precise documentation in the form of analytical and critical reports, illustrated with drawings and photographs...” This article is related to the notion mentioned in the NHDM documentary that significant values of heritage buildings must include four primary aspects: history, culture, architecture, and engineering. Hence, a component of historical study is produced based on the principle, and it can affect heritage building conservation decisions. It has come to a complete parameter of historical study components by research of numerous sources, as outlined below

HISTORICAL RESEARCH COMPONENT	LITERATURE REVIEW							REMARKS
	(Harun S. N., 2020)	Bin Rafidee	(Hew et al., 2014)	(Azmi et al., 2014)	(Zahari & Bahari,	(Baroldin & Din,	(Harun, 2011b)	

**1. History (H)**

H-1 Building Function	/							1/8
H-2 Building Era/Years of Built/Date	/					/	/	3/8
H-3								
People/Owner/Users/Community	/		/	/		/	/	5/8
H-4 Sequence of Development/Chronology		/					/	2/8
H-5 Past Events				/				1/8
H-6 Relation with Achievement				/				1/8
H-7 Building Changes						/		1/8

**2. Culture (C)**

C-1 Economic		/	/					2/8
C-2 Social			/					1/8
C-3 Political			/					1/8
C-4 Ecological			/					1/8

**3. Architecture (A)**

A-1 Material	/			/		/		3/8
A-2 Building Form/Type/Design	/	/		/	/	/		5/8
A-3 Decorative	/		/					2/8
A-4 Layout/Space	/							1/8
A-5 Color Scheme	/			/		/		3/8
A-6 Roofing Design	/							1/8
A-7 Ornament	/					/		2/8

A-8 Craftmanship	/	1/8
A-9 Architectural Style	/	1/8
<b>4. Construction/Engineering (CE)</b>		
CE-1 Construction		
Method/Technique	/	/
CE-2 Early Technology	/	1/8
CE-3 Geographical Area	/	1/8

(a)

**Figure 1.3** Parameter of Historical Study Components by Research of Numerous Sources

**“Building Function”**: Most heritage buildings serve different functions, including offices, train stations, residences, industries, churches, mosques, and many more. All of these varied buildings are appropriate for people to conduct their daily business. Some commercial building lots have a mixed use to make sure that people of all ages and activities can use it. Understanding the building function of historic buildings is crucial, particularly to comprehend any modifications to the building function and how they would affect the heritage building (Darmawan & Enis, 2016).

**“Building Years of Built/ Era”**: To recognise the architectural style, it is essential to know the structure's construction years or the era in which it was built. According to Baroldin & Din (2012), there are a few eras of heritage buildings in Malaysia, including the Dutch Style in the 1600s to 1700s, Southern Chinese style in the 1800s, Early Shop House style in the 1800s to 1900s, Early Transitional Style in the 1840s to 1900s, Early Strait Eclectic Style in the 1890s to 1920s, Late Strait Eclectic Style in the 1920s to 1940s, Art Deco style in the 1930s to 1950s. These buildings differ from one another in terms of their construction materials, designs, architectural styles, and ornamental elements.

**“People/ Owner/ Community”**: Consider the place as full entities or fusions of physical elements and activities to which people have strong emotional and psychological attachments to determine the extent of place in forming identity. Natural elements of extraordinary beauty, iconic structures, activity nodes, history routes with rich memories, and gathering places are some examples of the former, according to the Ministry of Housing and Local Government (2010). This suggests that it is the cultural significance of a location that distinguishes it and makes it valuable to the community and society as a whole. This criterion requires that a location be significant in its affiliation with a community or cultural group in a specific area for social, cultural, educational, or spiritual reasons. As a result, it fosters a positive sense of place and identity among residents (Azmi et al., 2014).

**“Chronology”**: Chronology is one of the most essential concerns for both experts and the general public. "How old is it?" is a valid inquiry that any person interested in the past would ask. When the answer is tied to the age of an early culture, particularly when that prior culture is viewed as the inheritance of a certain human group, the audience may be moved. The answer to the issue would have ramifications for historians and archaeologists regarding the change rate and evolution. There are certain distinctions between archaeological and historical dates; historical dates are derived from documentary records, but archaeological

dates are based on time estimates; these differences provide obstacles to chronological investigations (Lee, 2002).

**“Past Events”**: A place may have historical importance if it is associated with past events, developments, or cultural places that are significant to the place's history, exemplifies technical or creative achievement from a specific period, or has a strong association with the life or works of a person, group of people, or organisation that helped form that place. Physical evidence of such a correlation strengthens and contributes to the asserted historical importance (Azmi et al., 2014).

**“Relation with Achievements”**: Heritage buildings have diverse meanings and values for different people and places depending on the time period. Historical buildings are important and contribute to a place's identity. Value often correlates with the quality of irreplaceable historic assets (Azmi et al., 2014). One of the qualities is demonstrated by the relationship of the building to achievements, as seen in colonial cities such as Malacca, Kuala Lumpur, and Penang, where these heritage buildings are evidences of this country's colonisation and resultant independence. For example, Bangunan Sultan Abdul Samad is a heritage structure that is associated with an achievement; it used to be a government office, but after the state government relocated to Shah Alam, the building was renamed Bangunan Sultan Abdul Samad in combination with the name of Sultan Selangor.

**“Building Changes”**: There will be numerous usage changes, additions, and demolitions throughout the lifespan of a heritage building. Depending on the owner's capability, willingness, and preparation, the interior arrangement may be changed. This may have an indirect impact on how deeply the lifestyle, culture, and social structure that has been in place for a long time may alter (Baroldin & Din, 2012).

**“Economic”**: According to Hew et al., (2014), the economic activity offered by shophouses in Ipoh succeeded as a centre for dining and entertainment, then it continued to expand and grow, and these economic activities finally developed several buildings that are now classified as heritage or historical buildings. There are various towns that are used as offices, warehouses, and residential roads, demonstrating the area's economic progress. Economic factors are, in fact, a key component of historical studies.

**“Social”**: Heritage itself is viewed as the meanings linked in the present to the past and is regarded as a knowledge defined within societal (Harun, 2011a). A location considered in this criterion must be significant in terms of its affiliation with a community or cultural group in a specific area for social reasons. Social value is less dependent on physical fabric survival. People frequently wrongly believe that places are socially important for amenity reasons, even though this is the most difficult criteria to identify (Azmi et al., 2014).

**“Political”**: Building heritage is deeply embedded with historic significance, and these buildings are usually significant towards the locality's history. For example, Kuala Kubu Baru town is one of Malaysia's historically important towns. In Kuala Kubu Baru, there are several important buildings in political history, such as Al-Hidayah Mosque and the old police station, which is believed to be the only surviving building from the original Kuala Kubu town (Azmi et al., 2014).

**“Ecological”**: Cultural ecology refers to all aspects of the connection between people as a cultural component and the natural world as an ecological component. Human



interaction and environmental adaptations make up the bulk of the content in the topic of cultural ecology. Buildings made of numerous parts are an illustration of how humans have adapted to their surroundings. Buildings are one sign of the identity and characteristics of cities in different climatic zones since climatic and natural circumstances strongly impact their structural elements and architectural styles (Caesarina et al., 2020).

**“Material”**: Conservation necessitates the preservation of a suitable visual context, such as form, scale, colour, texture, and substance. In conservation projects, following specified norms of conduct that adhere to conservation principles helps retain the authenticity of the structure and should concern original circumstances in terms of building materials. "identifying, keeping, and protecting the form and detailing of those architectural materials and characteristics that are vital in establishing the historic character" of a property, whether for repair or replacement (Bahari & Zahari, 2011). Accurate dating evidence for a certain brick bond used in one state may be unreliable for the same period in another. Regional variation applies to both construction and building materials. Aside from regional and local variations, an investigator must recognise that each structure has its own distinct construction and material history (McDonald, 1994).

**“Building Form/ Design”**: The majority of structures change over time. Housing, probably more than other types of buildings, are frequently subjected to a full range of modification that reflects a wide range of alternatives for adding extra living space or eradicating obsolete spaces. Architectural changes to old dwellings can be examined by closely inspecting structure and decorative features. By peeling back its layers of occupation and combining plan alterations, a series of consecutive solutions or transformations that indicate people's continual desires for new and improved living conditions can be constructed (McDonald, 1994).

**“Decorative”**: In order to resolve an architectural query or clarify a challenging feature of the work itself, decoration or ornamental finishes need to be researched and acknowledged. The ability to trace the history of the structure and its changes through time is in some way made possible by historical study of decorative features (McDonald, 1994). For instance, the use of reinforced concrete in the early strait eclectic style from 1890 to 1920 allows for large roof overhangs and cantilevered concrete embellishment (Baroldin & Din, 2012). Another illustration of this influence is the Greek and Roman column at the Old Post Office building in Ipoh, which features ornate accents in the Renaissance Pre-Victorian architectural style (Zahari & Bahari, 2011).

**“Layout and Spaces”**: The way people use the space in historic buildings is a reflection of local identity, memories, events, and sources of inspiration for the local community. Social value of the place and spaces in the heritage building and site display history, but not memory. It is the events that need to be shared with everyone in the community and explored (Rafidee Bin Hasbollah & Baldry, 2014). The layout of the interior is sometimes changed to fit the needs, desires, and abilities of the owner. This has an indirect effect on how much lifestyle, culture, and social systems have changed over time (Baroldin & Din, 2012), depends on groups of buildings, the spaces they occupy, roads, public spaces, and the views from important landmarks and vantage points. From a historical point of view, the idea could be expanded by saying that a "historic townscape" is a place with



historical significance that adds to people's senses through its heritage buildings and ongoing traditional activities (Azmi et al., 2014).

**“Color Scheme”**: The colour scheme of a structure is of utmost importance, and if there is no source for it, the replacement material must be compatible with the original's expression, look, texture, size, colour, materials, and form (Harun, 2011a). It is stressed that the role of colour in establishing place in its explanation of the theory of identity and place (Azmi et al., 2014). The colour of old buildings frequently has a history all of its own. Some buildings' colours represented the owner's financial success while also serving as a community benefactor. Buildings can be distinguished from one another using colour schemes. Moreover, colours were permitted as a way to identify historical building eras. The colour of historical buildings contributes to their distinctiveness, acts as a landmark, and indicates technology that were common at the time of creation. It is acknowledged that the colours of a historic building's façade play a significant part in defining its identity. It satisfies the majority of the conventional and modern criteria for colour design, including the need to convey information, produce beauty, denote a building's key attributes, denote society's relevance, and even contribute to energy efficiency. The consensus in society is that colour should not change significantly in terms of hue, saturation, or value during the preservation process of historic buildings (Ivanova et al., n.d.).

**“Roofing Design”**: A roof plays a significant role in the architectural character of historic buildings. Architectural design and roof characteristics frequently reflect local climate, regional traditions, and material availability. Each heritage building has a unique roofing style that can be identified by the years it was built. Based on Baroldin & Din (2012), the Early Shop house architecture in from 1800 to 1900, the roofing design is a straightforward pitched roof with roof tiles. The simple pitched roof and roof tiles of the early transitional style from 1840 to 1900 persisted, but rows of expressive gable ends were added. Several characteristics of the "grand" classical style are incorporated into the Early Strait Eclectic Style (1890–1920), and to fit the style, roofing design during these years included larger roof overhangs and more complex cantilevered concrete decoration (consoles).

**“Ornament”**: Building ornament typically combines local and outsiders design elements. Building colours are often natural colors or mixtures of dark and light colours. Big columns are frequently used in heritage buildings to accentuate their façades (Caesarina et al., 2020). As an instance, the Baba Nyonya (Chinese population in Malaysia) use ornaments to represent luck, directions, seasons, the winds, and constellations. The building was adorned sparingly between 1840 and 1900, with the top consoles frequently extended and simply ornamented with floral themes. Early straight eclectic architecture from 1890 to 1920 is distinguished by structures with very limited ornamentation on their façades. Although glass was eventually used frequently in the form of small plates on the shutters, doors and windows are still primarily timber-framed and shuttered. Glass-filled transoms are flat, arched, or semicircular in shape. Vents are used between windows in elegant and economical architectural compositions, such as squares or diamonds (Baroldin & Din, 2012).

**“Craftsmanship”**: In order to conserve the unique aspects of the building's materials, architecture, and craftsmanship, conservation efforts must be conducted with

sensitivity and competence (Harun, 2011a). The definition of "craft" is "a specific sort of making in which objects are manufactured by hand through the expert use of tools." Craftsmen create craft products by hand and with the use of specialised tools, requiring a certain set of skills, expertise, and technical expertise and involving an act of creation. As a subset of traditional craftsmanship, building crafts refer to the building-related crafts. What is involved is building craftsmen exhibiting their special knowledge, techniques, and expertise regarding local building culture through the use of handcrafted equipment. The preservation of traditional craftsmanship requires proper documentation, transmission from down the generations, and the continuation of the techniques carried out by craftsmen in practise. Accurate documentation requires a holistic understanding of craftsmanship, taking into account both its tangible and intangible elements (Karakul, 2022).

**“Architectural Style”**: Generally, the architectural style of a heritage building featured designs for the structure's exteriors, such as decorative ornaments and motifs. These styles varied from the neoclassical era to revivals in architecture, such as Gothic Revival and Art Deco. There are few examples of architectural styles that may be identified by ornament, such as a symmetrical facade with a triangular pediment or a Neo-Classical courthouse with classic balcony balustrades. Second, ornamental elements of the Eclectic Style occurred on classical balcony balustrades and classic Renaissance windows with lintel cornice (Saad Fathalla, 2022). Historic shophouses are prevalent in the majority of Malaysian cities, including Terengganu, Alor Setar, Kota Bharu, Ipoh, and Penang. Generally built between the 1800s and 1970s with contiguous blocks and shared party walls, the design and materials used to construct heritage shop houses vary according to the architectural style of the buildings. Early Shop House, Early Transitional Shop House, Strait Eclectic Shop House, Art Deco Shop House, and Modern Style Shop House are the five acknowledged styles. Individual expression, culture, and other variables largely influence the architectural style of historic structures, such as the use of openings, colours, and materials (Mohd Abdullah et al., 2020).

**“Construction Method and Techniques”**: the building's construction technique is regarded an important value since it binds together the history. The conservation technique must follow traditional practise in accordance with information on the original building method and technique, as well as historical research and harmony with the historic character (Harun, 2011a). The construction method and technique of a heritage building is crucial, as it is typically tied to the technical talents of the artisans. During conservation or restoration activities, these traditional skills of craftsmen are required to keep the building's resemblance to its original condition. So, for the continuation of building crafts, it is necessary to create new current domains in which craftsmen and craftsmanship might thrive, in addition to restoration procedures (Karakul, 2022).

**“Early Technology”**: A heritage building contains evidence of prior technology innovation (Harun, 2011a). Knowing the history of system technology can assist forecast the physical evidence that may be discovered and how it will look once found (McDonald, 1994). Material, construction techniques, and technological methods were already available and well-known in the countries of the colonisers' origin. The colonisers chose to use the best construction technologies at the time

to build buildings that could support their activities in the colonies. As a result, the majority of heritage buildings have exceptional durability and quality, allowing them to last for a very long time. The majority of early technology was developed by colonisers; nevertheless, simpler technology is available in vernacular architecture, namely traditional houses built by locals; colonialists also use traditional buildings as inspiration for their designs (Caesarina et al., 2020). Most traditional Malay buildings are built with wood using a unique method called *tanggam* (connecting woods), which has high strength and is simple to assemble and disassemble. In addition, each framework of a traditional Malay home functions as a unit to support each component, such as the *tiang seri*. This demonstrates how early technology is implied in heritage structures (Rahman et al., 2022).

**“Geographical Area”:** Heritage cities and buildings can be found in practically every region of the world, with varying climatic and natural conditions. Because of the diversity of natural circumstances, the characteristics and features of each heritage building varies depending on where it was erected. Because climatic and natural conditions have a profound influence on building components and styles, architecture is one indicator of the identity and features of cities in various climatic zones (Caesarina et al., 2020). Most heritage building characteristics in tropical nations (Malaysia, Indonesia) share similarities due to natural environment adaption. The presence of colonists who mostly lived in town, causing a significant influence on heritage structures, demonstrates that the influence of colonisers' cultural dominance, tastes, and background is higher than the impact of local (traditional) residents who occupy these areas. Rather than being occupied by locals, these areas are heavily influenced by vernacular architecture, namely traditional Malay houses (Caesarina et al., 2020).

### **Significance of The Study**

This study has the potential to offer a valuable contribution to the conservation industry by augmenting the existing comprehension of the role and advantages of historical research, which is considered a crucial phase that must be undertaken prior to commencing conservation efforts. Additionally, offering improved guidance on the documentation of historical research for each conservation project can be beneficial. Ultimately, it also assists in identifying the most suitable conservation methodology. The significance of this study lies in its potential to aid conservators and consultants in conducting historical research in accordance with established guidelines, thereby facilitating their work in the field of conservation. The provision of sufficient guidance can facilitate the efforts of the conservator and consultant in the initiation of the project, resulting in a more organized outcome, as the guidance will offer appropriate support. This study offers potential benefits to stakeholders by presenting an opportunity to develop novel conservation information tools that may enhance the current state of situation.

### **Conclusion**

As a result, there are many components of a heritage building that must be evaluated and taken into consideration during the conduct of historical study. Identifying these attributes may assist in deciding the best approach for conserving the building. As part of the preliminary research, all relevant parties must consider the requirements for historical study, and it is

recommended to develop adequate guidelines, a framework, and even specific documentations for historical study. They will aid in guiding the entire conservation process and serve as comprehensive evidence that will not only be useful during the conservation process but also for future use. Furthermore, this report is an effort to support the development of a proper framework that may be used as a guideline for historical research in the conservation sector.

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