

Valuing Cultural Landscape Heritage in Historic Areas: Proposed Assessment Criteria from Thailand



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ABSTRACT

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A historic area is a valuable cultural heritage site. A historic community's landscape is no less valuable than the historic buildings. In Thailand, conservation organisations only preserve and value buildings with high archaeological importance. The appreciation of surrounding landscapes is still lacking. This study aimed to establish criteria for valuing cultural landscape in Thailand. The methodology was by reviewing concepts of cultural heritage, historic area, cultural landscape, and evaluation criteria created by UNESCO and Thai organisations so as to build the new criteria. We then proposed the criteria in four areas: aesthetics, history, science and education, and society, which would correspond to current guidelines to cover cultural landscapes comprehensively.

1. INTRODUCTION

This research paper is part of a project on the assessment and visual impact of buildings in the cultural heritage site of Wat Phra Mahathat Woramahawihan and its surrounding areas. With an aim to create criteria for measuring the cultural landscape, the project began with establishing objective and versatile criteria, which can be applied to various cultural heritage sites in Thailand. An experiment will begin with Wat Phra Mahathat Woramahawihan, Mueang District, Nakhon Si Thammarat Province, Thailand.

According to the Townscape concept, human beings can recognise urban environments by using various elements as a reference point to link the journey, leading to a greater understanding of that environment [1]. The configurations of the old city, such as streets, boundaries, neighbourhoods, and activity centres, can create the perception of an urban landscape [2]. Local people living in a city will see through historical stories, a sense of historical continuity, and the area's uniqueness. Therefore, a visualised urban landscape is essential to perception and as a medium for transmitting the meaning of the environment to people [3].

The United Nations Educational, Scientific and Cultural Organisation (UNESCO) has proposed guidelines on the Historic Urban Landscape (HUL). Conservation and development of the old city must arise on the foundation of holistic work to understand the complexity and diversity of the urban area relating to nature and culture considered tangible and intangible cultural heritage [4].

A UNESCO meeting in India on the topic Visual Integrity of World Heritage Areas [5] concluded that many historical areas and historical-cultural landscapes face problems from urban expansion. Many high-rise buildings were formed around the heritage site and obscure the scenery. It is necessary to protect the vital aspect of the heritage site to preserve its value as a World Heritage site. Understanding an old city and

its surroundings based on the concept of the historical urban landscape creates knowledge about the importance of the old city [6]. Visual perception [7] and visual preferences [8] have drawn more attention in urban landscape studies, leading to the area's planning and management. Landscape change dynamics affect urban management, involving local government; meanwhile, the landscape should be protected by urban policy and planning [9].

Regarding the current conservation of historical cities in Thailand, the responsible organisations still focus on physically preserving the building with high archaeological value. Decisions to conduct conservation work weigh more on individuals than on the systems and the processes [10]. But internationally, conservation concepts have expanded to cover cultural heritage and values and accepted continuous changes in the community area. Those concepts also focus on the heritage site's landscape, surrounding view, and accessibility. Therefore, the study questions how a historic landscape's value can be measured. An investigation should focus on increasing knowledge and creating evaluating criteria for assessing the value of a historical landscape so as to be a standard for agencies and people involved for clarification and decision making to be consistent with the conservation and development of the historic urban community.

2. RESEARCH METHODOLOGY

We collected information on principles, theories and concepts related to cultural heritage, cultural landscape and the criteria for valuing the cultural heritage of the organization at the international level, which is UNESCO, particularly the Burra Charter, and agencies at the national level, including the Fine Arts Department, representing a government agency by focusing on the essence of ancient monument registration, and the Thai Association of Landscape Architects (TALA), a

private organization responsible for promoting the landscape architect profession in Thailand to consider its outstanding landscape architecture design awards. All of these were utilised for a comparative analysis to build criteria for valuing cultural landscapes in historic areas (Figure 1).

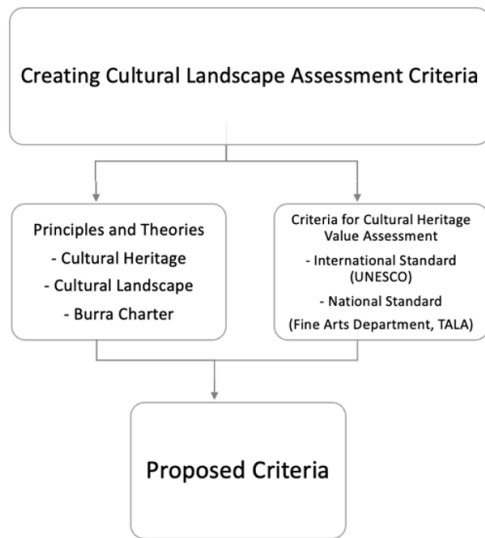


Figure 1. Methodology diagram

3. DEVELOPMENT OF CONCEPTS IN CULTURAL HERITAGE CONSERVATION

Investigating the development of conservation and valuing cultural heritage at the international level, namely UNESCO, which is a principal institution providing directions for conservation globally, and the Fine Arts Department, an official organisation, which is responsible for archaeological sites in Thailand, are as follows:

3.1 Universal conservation from international charters

In the early 1930s, the Athens Charter focused on a modern monument and urban layout. It supported the use of modern materials and construction techniques for conservation and continued use of the building and consideration of the harmony of the architectural environment [11]. World War II left a lot of damage to historic buildings. United Nations established UNESCO in 1946 to preserve the area of historical and cultural significance with an international charter on conservation, restoration of buildings, and historic sites. It began to develop from the Venice Charter in 1964. The charter focused on buildings and extended to cover urban and rural areas with historical significance. It divided historical landmarks into places that were no longer usable (dead monuments) and still functional sites (living monuments). It also emphasised the building authenticity of historical and architectural values. The charter evolved in content and conservation principles to expand the scope of conservation areas from historic buildings to historic communities and urban landscapes. It also developed the concept to cover the social value of cultural heritage [12]. Later, in 1981, the Burra Charter was formed by modifying the idea to match each culture. Heritage sites' values were determined, and further recommendations were made on the conservation of cultural heritage sites [13]. In 1982, the Florence Charter extended the scope of cultural heritage conservation to historical landscape

architecture. It was considered a living inheritance because the physical composition changed over time. In 1987, the Washington Charter was issued for historic cities. It was related to conservation, layout, and historical community management. It stated that conservation should be part of economic and social development policies. The city's conservation and development would be a tool to control urban transformation, and the conservation scope would be more comprehensive, covering more areas. In 1999, the Charter on the Built Vernacular Heritage was announced. The charter gave importance to the indigenous building heritage, emphasising it as a product of society, showing the way of life of people in the present time and the diversity of cultures of each area like a historical record of that community [14]. It has led to an interest in intangible cultural heritage from a socio-cultural foundation. UNESCO [5] introduced the Convention for the Safeguarding of Intangible Cultural Heritage, emphasising the intangible cultural heritage as traditional and living in the present, such as languages, theatrical arts, traditions, rituals, wisdom, and craftsmanship.

3.2 Archaeological conservation in Thailand

Restoring and renovating temples or religious sites in Thailand is a tradition that has been practised for a long time. In the reign of King Rama V (1853-1910), evidence of preserving historic buildings, primarily religious or royal buildings, was shown. The king established the Archaeology Club in 1907 and was the club's president. Later, in the reign of King Rama VI (1881-1925), the conservation of Phra Nakhon Si Ayutthaya, a province in central Thailand, was named a heritage of the land in 1926. Conservation ideas from the western world influenced this period. The Royal Academy was established and responsible for preserving historical sites, archaeology, antiquities, and museums. After 1932, the role changed from an institution under the king's support to a government agency. The Royal Academy moved to be under the Fine Arts Department in 1933. The department was established to oversee the national museum and archaeology work. In 1935, the Ancient Monuments, Antiques, Objects of Art and National Museums Protection Act was announced for the first time. Its purposes were to preserve the value of historical and archaeological sites, including the use of information to support national identity and to be a symbol of political concepts. In 1987, the Thai government joined the World Heritage Convention. Meanwhile, the World Heritage Committee registered the ancient city of Sukhothai and Ayutthaya as the first cultural world heritage site in Thailand [15].

During the reign of King Rama VI, there were organisations and laws responsible directly for the preservation of ancient sites. Traditional preservation approaches started blend in with modern concepts. However, the government and public sector's conservation still emphasise the conventional methods aiming for completeness and grandeur. Because the government still lacks knowledge and understanding of universal conservation principles, the conservation vulnerability from the early age continues to affect today [16]. Building preservation in the past was to extend the monument's longevity. The selection focused on the distinctive and essential buildings, often built by the royal court, government, or influential people [17].

The international and Thai conservation concept has covered the value of cultural heritage, which is significant as

a part of history. However, the Fine Arts Department's conservation action as the government agency that holds the primary responsibility does not cover cultural landscapes in historic areas. The archaeological registration remains only for buildings relating to national archaeological history, and the value of authenticity is the primary concern (Figure 2). Conservation in a historic community area does not cover the natural environment related to archaeological sites or vernacular architecture. As a result, conservation actions in Thailand do not yet protect cultural heritage in other dimensions, such as ecosystems, environments, indigenous building heritage, lifestyles, traditions, and beliefs.



Figure 2. Wat Phra Mahathat Woramahawihan, registered by the Fine Arts Department to preserve the values of authenticity

4. DEVELOPMENT OF THE CULTURAL LANDSCAPE CONCEPT

4.1 Development of the international cultural landscape concept

(1) Based on settlement morphology, the term *cultural landscape* was first used in 1880 by Otto Schlüter to describe settlement patterns and urban development. The scope of the study consists of settlement, land use, and the relationship of cultural elements in different periods of history. The results are summarised by explaining humans' actions, thoughts, and beliefs towards nature [18].

(2) Living landscape is a concept focusing on landscapes related to current lifestyles. Paul Vidal de la Blanche began exploring the idea in rural areas of France in 1920. The study interpreted the meaning and correlating landscape lifestyle patterns and physical features in the social environment and community development. It emphasised the community way of life, which required a natural landscape [19].

Fleure [20] further developed the concept by researching human adaptation and environmental and cultural influences affecting settlement development patterns. His work described the look, settlement model, city name, and building materials related to the physical landscape, climate, activity, and values. The interpretation of the landscape makes it possible to understand the culture through the appearance of the landscape that is unique to the local area.

E.E. Evans compiled the ideas of Fleure, Vidal, and Carl O Sauer by writing *The Personality of Ireland* [21]. The book proposed the concept of the cultural landscape by using the

term regional personality, describing it as the characteristic caused by the relationship between humans and the environment through time.

(3) During the 1920s in America, cultural landscape theory was also explored. Carl O Sauer studied the history of rural landscapes as ordinary landscape related to belief. He defined the word landscape as an area with a clear physical and cultural appearance consisting of the cultural dimension of human beings and understanding cultural landscapes as changing rather than being still, being alive not rubble, and more functional than abandoned. He used a retrospective science method to look into the future [22]. But later, the educational process using retrospective science was criticised [23], arguing that it was a search of the traditional past more than seeing movements or changes in culture and social phenomena.

(4) The idea of postmodernism and post-structuralism in the 1970s by anthropologists and geographers required more in-depth knowledge than what the eyes saw. It focuses on finding the meaning and value of the landscape hidden within by reading and interpreting various landscape symbol systems. It also includes studying issues related to the change in the landscape in a more in-depth way [24]. Later relevant theories looked into cultural dimensions, such as Marxist economic models, feminist theory, etc. Thus, cultural landscape studies focus on the area concerning power structures from different social groups, similar to the study of space, such as political geography, tourism geography, and behavioural geography [21].

(5) Culture heritage concerns the search and conservation of cultural landscape heritage regarding the World Heritage Committee criteria to assess the importance of areas declared as World Heritage Sites in the cultural landscape [25].

Landscape research aims primarily at practitioners, using an international interdisciplinary approach to identify issues, directions, and future community developments [26]. With its focus on sustainability and multidisciplinary approaches, the creation and application of conceptual and methodological bases in this field have received particular attention [27].

The concept of the cultural landscape in an international context has the common characteristics that a study of landscape patterns occurs by explaining the relationship in economic, social, and cultural dimensions. The study results show variations in the visual landscape with culture as the doer and nature as the medium. And the cultural landscape is the result of that action. The methodology focuses mainly on the interpretation and value of the cultural landscape.

4.2 Development of the Thai cultural landscape concept

In Thailand, it is unclear when the term cultural landscape was used. After the introduction of the 1992 World Heritage Convention, more research in cultural heritage conservation, urban planning, urban design vernacular, architecture, and landscape architecture has been conducted. The concept has been explored as follows:

(1) Cultural ecology studies the relationship between living things through cultural behaviour and non-living things through environmental phenomena. Human beings can live in various environments because it uses culture as a tool to adjust [28].

(2) According to Valipodom [29], the cultural landscape is the relationship between environment and culture. It refers to the geographical features of the landscape, relating to the settlement of local people and the names of places. A myth

may be created to explain the meaning of historical, social, economic, and cultural significance of that place or local area. Therefore, the study of cultural landscapes consists of essential elements, which are geography critical to the settlement, cultural ecology, and way of life.

(3) Kirdsiri [30] suggests that cultural landscapes concern the environment created by human management so that humans can live everyday life in a limited environment by using technology with the influence of religious beliefs. As a result, humans can only change the environment to a certain extent and with natural limitations to accommodate the changes.

Reviewing the meaning of theoretical cultural landscape from national and international concepts, we found that generally, they are the same conceptual framework, describing the relationship between economic, social, and cultural and the local natural environment. However, differences in the concept of the cultural landscape within Thailand are due to cultural differences. The study process in Thailand focuses on the dimensions of beliefs more than in other countries, such as beliefs, legends, and stories in each locality.

5. THE CULTURAL LANDSCAPE IN HISTORICAL AREAS

Cultural landscapes and *historical places* are part of *cultural heritage*, representing the unique culture of each locality. In this regard, the definitions are as follows:

5.1 Cultural heritage

UNESCO [31] defines cultural heritage as the creative works of a nation that are valuable cultural assets inherited from the previous generation. It bears witness to the historical developments, including the man-made environment and ecosystems, which are valuable, irreplaceable resources. It is a mark that reflects the achievements of the people in the past, showing the distinctive culture. The area's identity has been passed down from the past to the present and should be carried on in the future. It is divided into two categories: tangible and intangible culture. Cultural heritage has no clear boundaries and is an integral part of people in communities and natural environments by considering the geography and boundaries of the city [32]. It is a mix of history, science, social significance, and the building itself [33].

5.2 The cultural landscape in a historic place

Individual scholars [34, 35] have suggested cultural landscape types. However, we would like to follow UNESCO's (2021) [31] classifications, which divide it into three categories: (1) landscapes designed and created by humans, (2) landscapes that have evolved naturally, (3) landscapes related to society, economy, government, religion, and beliefs or natural elements.

Landscape in a historical place is considered part of the cultural heritage, representing the unique local culture inherited from the previous generation. It is a testimony to historical developments, including the man-made environment (intangible culture) [36].

The concept of HUL to promote the quality of lifestyle has principles and goals corresponding to dynamics and development and shall respect the inherited urban landscape.

Applying the historical landscape approach to develop an old city, one must consider the environment and the unique context of that city. This will result in each city having a different approach [4].

Considering environmental issues, the context of topography, geomorphology, hydrology, distinctive natural features of the area, and the environment created both in the past and the contemporary context must be considered to integrate with social and cultural dimensions, values and meaning, economic processes, and cultural diversity [4]. Understanding historic areas and their contexts based on the concept of historic urban landscapes makes it possible to build knowledge about the value and importance of the old city. This will lead to a dynamic city layout, planning, and management [6].

The principles and concepts above show that the definition of a cultural landscape is not just a landscape in a rural community but covers the landscape in urban areas, especially in areas declared as historical areas. The cultural landscape of the historic site is considered a valuable cultural heritage and significant in the study to understand the historical area, environment, and culture. Also, the factors affecting the change of the area determine the value and importance of each element in the area.

The cultural landscape of historical areas is different from the rural vernacular cultural landscape. Rural vernacular cultural landscapes are linked to settlement history and influenced by factors relating to the environment, resources, beliefs, and culture of ethnic groups. It does not involve a lot of buildings. Humans live close to the environment and respect the sacred supernatural without interference from any material prosperity. This is often found in rural areas, farmland areas, and areas with houses or huts in rice fields. There are few original natural conditions left in the areas with dense construction or buildings. The cultural landscape of the historical area represents the development of the community, way of life, inherited community culture, and historical figures. Examples of sites in this group are battlefields, palaces, important person's houses, and local architecture.

6. CONSERVATION AND DEVELOPMENT APPROACH FOR HISTORICAL CITY

The Washington Charter explains that the features should include the traditional city plan that could see the area boundaries, relations between buildings and open spaces, outside and inside aspects of buildings, linkages between urban communities and natural atmosphere and activities of urban community traditions and norms [37]. Culture or social norm is considered one of the qualities of life of human beings, including community development. Equality creation must relate to the diversity of culture, considered a part of the process [38].

UNESCO proposes the Culture for Sustainable Urban Development Initiative, suggesting culture as a critical driver for international development in the future. This includes numerous perspectives from cultural heritage to the creative industry, including cultural tourism, as a tool to drive sustainable development [6].

Applying historical preservation and development of the city landscape from all perspectives, including natural and cultural resources, requires the participation of stakeholders in all processes. This also includes discussing with experts for

value study and protection, assessing the sensitivity of city components based on social and economic factors and conducting an impact study. By considering the sensitivity status of city components and integrating city heritage values, guidelines can be formulated to conserve and develop unique, old cities [6].

Besides international heritage value and heritage object conservation for economic development, the approach for managing cultural heritage landscape shall include local heritage and have a broad conservation policy [39]. The process of managing cultural heritage landscape helps conservation in Thailand. The conservation approach should accept changes in historical areas, which requires complicated processing, including identifying heritage conservation and management. Landscape management goals must be part of a sustainable development strategy [40]. Protection of city and historical communities must combine with economic, social, and cultural development, including city policy, to connect historical communities and nearby areas [41]. Today, landscape research and science need multidisciplinary support [42].

For this study, we would like to emphasise that today's cultural landscape approach and historical community conservation must cover the environment and culture of each area to acknowledge the historical value and cultural heritage - tangible or intangible and national or international. Importantly, changes in the area are acceptable. These are applied to determine the historic area's cultural landscape value assessment criteria.

7. CRITERIA FOR CULTURAL HERITAGE VALUE ASSESSMENT

Nowadays, conservation approaches have been extended to recognise the importance of cultural landscape, which is a part of cultural heritage. The scientific value assessment allows logical methods to identify values, including choosing conservation techniques for buildings [43]. However, Thai authorities' current cultural landscape value assessment lacks some cultural landscape values. Therefore, we study the standard criteria for value assessment from international organisations - UNESCO and national organisations - the Fine Arts Department and TALA, to compare four types of cultural heritage values provided by UNESCO according to the Burra Charter. This aims at creating a particular value assessment for the cultural landscape in historic areas.

The Burra Charter concerns cultural heritage management in Australia. Four categories of cultural heritage value are:

(1) Aesthetic value refers to the value that all senses can feel, such as shape, colour, texture, object, smell and sound of the place or usage of the location.

(2) Historical value is the foundation of all values from any historical moment and person.

(3) Scientific value refers to research value related to the area, rarity, and beneficial information for future use.

(4) Social value is a value of a place where it is a centre for the soul, belief, politics, race, or culture of a minority [13].

Regarding cultural heritage, Feilden [44] states that the heart of conservation is to conserve the value of cultural heritage to continue. Important historical building values could be identified in three categories:

(1) Emotional value shows the identity of historical and cultural continuation. Memory and belief are the roots of

ownership and conservation.

(2) Use value shows the relationship of the social economy in terms of benefits and better quality of life for related stakeholders.

(3) Cultural value shows historical evidence, technology, antiquity, rarity, beauty, architecture and symbol of the city landscape.

Jokilehto [43] argues that architectural heritage belongs to the ancestors of the past, so we have no right to change and must protect the people in the next generations to learn from the undistorted historical evidence. For Li [45], heritage value is perceived as a valuable combination of science and history, art, age, and use values. It could be claimed that cultural heritage contains social and historical data, cultural and art data, technical data, and regional and environmental data. Data dynamics about change and other ancient data could produce the basis of all cultural heritage data [46]. Heritage values can be categorised into three types: historical, technological, and cultural values [47].

UNESCO has the World Heritage Convention for Outstanding Universal Value (OUV), which could identify the heritage as buildings, cultural sites, and landscapes. The heritage site must pass criteria on completeness and authenticity regarding shape and style, including material, content, usage, tradition, technique, management system, location, atmosphere, language, abstract heritage format, soul and feeling, including good protection system and risk management. The criteria are as follows:

(i) represent a masterpiece of human creative genius;

(ii) exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;

(iii) bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared;

(iv) be an outstanding example of a type of building, architectural or technological ensemble or landscape that illustrates (a) significant stage(s) in human history;

(v) be an outstanding example of a traditional human settlement, land-use or sea-use, which is representative a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;

(vi) be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used with other criteria) [31];

The Fine Arts Department [15] sets standards for building and historical site value assessment for archaeological and environmental sites in four categories:

(1) Aesthetic value is the beauty of architecture, landscape architecture, planning, or decorative arts that are exquisite, including the excellence of artisan craftsmanship.

(2) Historical and archaeological value refers to archaeological traits serving as significant evidence related to events, influential people in history or any period envisaging economic and social conditions of each period, including art history, architecture, landscape architecture, and planning.

(3) Scientific and educational value refers to educational benefits meaning authenticity and originality representing the source's credibility. A rare example provides an understandable interpretation of the source, uniqueness and

representation of a particular time, place, or form.

(4) Social values are the inheritance from local ties and social recognition from the nature of construction. A panel of experts will evaluate this within the Fine Arts Department and then determine the value of the building to propose registration as an archaeological site and declare its surroundings.

TALA is a private sector organising a competition called TALA Professional Awards to publicise the work of outstanding Thai landscape architects in creating landscape architecture designs. The criteria for the award are as follows:

(1) The design indicates quality and creativity.

(2) Contextual planning and design are universal to all groups of people. The relationship between people and surrounding areas is considered appropriate that positively contributes to the areas and surrounding residents.

(3) The work represents a sustainable design and environmental responsibility.

(4) The work can be an inspiration to society and landscape architects.

(5) Innovation, such as the new design and planning process, is incorporated for opportunities to utilise new technologies and a new way of work for landscape architects and create a new role for a landscape architect [48].

It can be seen that UNESCO's World Cultural Heritage Criteria covers cultural heritage at different levels, namely, individual buildings, heritage sites, and cultural landscapes. Most of the criteria involve the relationship with abstract concepts to elaborate historical events, political leaders, conflicts, ideas on city planning, and structural innovation. Although the World Cultural Heritage criteria are not unanimous with the Burra Charter, they are substantially consistent in providing common values.

The Fine Arts Department's archaeological criteria align with the Burra Charter's cultural heritage values and are consistent with the four UNESCO World Heritage Criteria. The assessment shows that the problem is an emphasis on buildings of high archaeological value and buildings with authenticity. They do not cover the current international conservation principles that protect the cultural landscape and valuation of cultural heritage at the global and local levels, including the acceptance of changes in cultural heritage sites.

TALA's criteria focus primarily on the urban cultural landscape resulting from the design of the new area. The assessment criteria are inconsistent with the Burra Charter regarding creative aesthetics, science and education involving sustainable design concepts, and social aspects from the universal accessibility of all groups and the impact on space utilisation.

8. THE PROPOSED CRITERIA FOR VALUING CULTURAL LANDSCAPE HERITAGE IN HISTORIC AREAS

Studying the criteria of international and national agencies, we realised that they cover the architectural heritage of individual buildings, group buildings, heritage sites, and cultural landscapes. Therefore, we applied the concept of cultural heritage values of the Burra Charter in all four aspects, which are consistent with the criteria for considering the ancient monuments of the Fine Arts Department and related research to suggest guidelines or to create standards for valuing cultural landscapes in historic areas. We also adopted the essence of the World Cultural Heritage Criteria to cover

the international and local cultural heritage of historic areas.

(1) **Aesthetic value** refers to an area with buildings and beautiful surroundings formed by its utility or beliefs of ethnic groups. It is exquisitely created by royal craftsmanship or village artisans from inherited wisdom inharmonious with the environment indicating unity. This shows the styles of art, architecture, area planning, community planning with four crucial aspects to be considered:

- Fine arts refer to details of patterns or decorative parts both outside and inside the buildings made from local materials, decorated with beautiful local or folk craftsmanship.

- Architecture is a building or group of them created by villagers. Buildings' formation is from the utility or beliefs of ethnic groups having a relationship with the surrounding environment, resources, the origin of work reflected through building patterns, structures, technologies, construction methods, materials, beliefs, and building utilisation plans.

- Layout plan suggests the surrounding environment of the building, which can consist of open space, trees, vegetation, and water sources that are all related to building formations and activities.

- Community plan means the area within the community and the environment related to the establishment of the community. This includes rivers, resources, vegetation, transportation routes, landmarks, including united buildings, which may not have harmonious styles but can promote the landscape of the historic area.

These attributes contribute to the image of the site added up to the visual ideas of people, which can raise their awareness and affect their judgement of the place [49].

(2) **Historical value** considers an area with buildings and the environment that serve as historical evidence of the community with antiquity. The site held important events at specific points in history. The value is characterised by the environmental style and the architecture, indicating community establishment or the community's cultural originality. There are three aspects to consider:

- Historical evidence indicates a connection with important people or historical events of the community, settlement, and community evolution, reflecting the economy, society, culture, politics, and governance of the community in the past.

- Agedness is the length of time lasting for more than 50 years. The area should indicate historical periods or the community's evolution.

- Completeness of evidence means historical evidence of the area that is clear and complete in detail.

- Indication of settlement defines the relationship between the environment and the community's establishment, biodiversity, different ethnic communities in the same area, ways of life, establishment of coexistence, and creation of traditions and beliefs in the same area.

(3) **Scientific and educational value** deals with the idea of originality, rarity, and uniqueness of the building and environment. It can indicate a turning point or change in space utilisation from factors such as beliefs and wisdom in construction and planning. The area itself conveys meaningful context. There are five issues to be considered.

- Authenticity means the completeness of buildings or their components in the area, showing resources and meanings in style, art, architecture, area planning, technology, materials, and usability.

- Wisdom refers to the knowledge of local people or artisans whose wisdom was inherited from ancestors or people with local knowledge regarding the use of the area or community

establishment.

- Uniqueness involves a specific characteristic of an area with the environment or group of buildings sharing the features of architecture, materials, vegetation, and functionality that can represent cultures of an era or area.

- Rarity means the environment or group of buildings with only one or very few left in the area. It is a building or plant indigenous to the site and cannot be found in other localities.

- Changing of forms refers to a change of concepts, shapes, and utilisation from factors on technology, beliefs, society, culture, economy, and politics.

(4) **Social value** concerns areas and surroundings associated with the community's traditions, ceremonies, beliefs, stories, or myths. The emphasis is on continuous local benefits and influence on economic impacts. The social value involves four issues.

- Tradition is the first element to indicate that the area is based on a costume, belief, fine art, literature, story, or myth.

- Local community tie shows that local people have an emotional connection to the area, or the society widely recognises the site.

- Continuous usage refers to the fact that the area has been used for activities reflected in the building or its layout plan.

- Economic impact is the community's returns and well-being of people in the area due to the building and surroundings.

The four aspects of the cultural landscape evaluation criteria are aesthetic, historical, scientific and educational, and social values. These values are identical to the cultural inheritance of the Burra Charter and the Fine Arts Department, adding the consideration of UNESCO to evaluate the cultural inheritance, which recognises the importance of both local and international levels. These criteria correspond to Mason and Avrami's [50] objectives of cultural evaluation, which are (1) to identify all the fundamental cultural inheritance values, (2) to explain each value of cultural heritage, and (3) to evaluate thoroughly and differentiate the values of historical heritage and scientific evaluation criteria [51]. Loures et al. [52] confirm that design strategies elevate aesthetic landscape and enhance economic, social and environmental aspects. For this study, we have proposed the evaluation of values in different aspects to cover both the historical areas and cultural landscape concretely.

9. CONCLUSION

Today, the concept of conservation has expanded to include cultural heritage and historical areas, including tangible and intangible properties. However, government agencies responsible for historical conservation in Thailand pay more attention to preserving and controlling the landscape of ancient monuments and their components only. In fact, historical areas also include vernacular architecture and cultural landscapes that are still important as part of the historic site.

Studying the development and conceptual framework regarding cultural landscape, we have discovered that the landscape can indicate the relationship between economic, social, and cultural dimensions. The result showed visible landscape styles with culture as an initiator and nature as a mediator. The cultural landscape in the historical area has an interconnection with the creation of community through social factors and politics in the past. The area with dense constructions and buildings may have less original natural

elements. The cultural landscape in the historical area also shows the development of society and ways of life through the passing of concepts from generation to generation. To preserve all of these, one has to understand the environment and culture of the specific area and the importance of cultural landscape values both internationally and domestically, along with future changes.

From the analysis of the cultural inheritance of the Burra Charter and the standard evaluation criteria associated with international preservation by UNESCO's World Cultural Heritage, the registration of historic sites by the Fine Arts Department, and the consideration criteria of the landscaper architectural award by TALA, we have set specific criteria to assess the cultural landscape in the historic areas in four dimensions, covering the aesthetic, historical, scientific and educational, and social values. These criteria are consistent with the values of cultural heritage in the Burra Charter and the Fine Arts Department's criteria for registration of historic sites. More importantly, they cover the value of vernacular architecture belonging to ordinary people and their way of life, which is part of the landscape that shows the development of the historic area as well.

These cultural landscape evaluation criteria in the historical area can be critical tools to help us understand the value and prioritise various landscapes based on their importance. They are going to be applied to the area of Wat Phra Mahathat Woramahawihan, Nakhon Si Thammarat, proposed to be on UNESCO World Heritage Tentative List, as a case study. It is also believed that such criteria will assist us in continuously encouraging and developing historical areas - the building including the landscape - with full attention.

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REFERENCES

- [1] Cullen, G. (2012). *Concise Townscape*. Routledge.
- [2] Lynch, K. (2005). *The Image of the City* (Nachdr.). MIT Press.
- [3] Green, R. (1999). Meaning and form in community perception of town character. *Journal of Environmental Psychology*, 19(4): 311-329. <https://doi.org/10.1006/jevp.1999.0143>
- [4] UNESCO. (2011). Recommendation on the Historic Urban Landscape. <https://whc.unesco.org/uploads/activities/documents/activity-638-98.pdf>.
- [5] UNESCO. (2013). International world heritage expert meeting on visual integrity, Agra, India. <https://whc.unesco.org/uploads/uploads/events/documents/event-922-12.pdf>.
- [6] UNESCO. (2015). Culture for Sustainable Development Initiative. <http://www.unesco.org/new/en/culture/themes/culture-and-development/culture-for-sustainable-urban-development/>.
- [7] Menatti, L., Subiza-Pérez, M., Villalpando-Flores, A., Vozmediano, L., San Juan, C. (2019). Place attachment and identification as predictors of expected landscape

- restorativeness. *Journal of Environmental Psychology*, 63: 36-43. <https://doi.org/10.1016/j.jenvp.2019.03.005>
- [8] Ebenberger, M., Arnberger, A. (2019). Exploring visual preferences for structural attributes of urban forest stands for restoration and heat relief. *Urban Forestry & Urban Green*, 41: 272-282. <https://doi.org/10.1016/j.ufug.2019.04.011>
- [9] Melo, C. (2020). l'Horta De València: Past and present dynamics in landscape change and planning. *International Journal of Sustainable Development and Planning*, 15(1): 28-44. <https://doi.org/10.2495/SDP-V15-N1-28-44>
- [10] Iamanan, P. (1998). Nāothāng kānkamnot mātrathān khunnaphāp klumngān dān sathāpattayakam Thai læ kānbūrana patisangkḥōn [Guidelines for setting quality standards for Thai architecture and restoration]. Department of Fine Arts.
- [11] ICOMOS. (2011). The Athens charter for the Restoration of Historic Monuments - 1931. The International Council on Monuments and Sites. <https://www.icomos.org/en/167-the-athens-charter-for-the-restoration-of-historic-monuments>.
- [12] ICOMOS. (1964). International Charter for the Conservation and Restoration of Monuments and Sites (The Venice Charter 1964). https://www.icomos.org/charters/venice_e.pdf.
- [13] The Australia ICOMOS. (2013). The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance. <http://openarchive.icomos.org/id/eprint/2145/>.
- [14] ICOMOS. (1999). Charter on the Built Vernacular Heritage (1999). https://www.icomos.org/charters/vernacular_e.pdf.
- [15] Fine Arts Department. (2005). Nāothāng patibat nai kān sangūan raksā bōrānnasathān [Regulations on Historic Site Preservation]. 2nd edition. Ruengsilkanpim Company.
- [16] Chungsiriarak, S. (2012). Khwām chūa læ nāokhit nai kān'anurak bōrānnasathān khōng Thai čhāk 'adīt sū patčhuban [Thai's attitude and concept in conservation of historic structures from past to present]. *Najua: History of Architecture and Thai Architecture*. 8: 107-127.
- [17] Riegl, A. (1982). *The Modern Cult of Monument: Its Character and Its Origin*. (K. W. Foster & D. Ghirardo, Trans.), *Oppositions*, 25: 21-51.
- [18] Whiteland, J.W.R. (1981). *The Urban Landscape: Historical Development and Management*. Academic Press.
- [19] Buttimer, A. (1978). *Charism and Context: The Challenge of La Geographie Humaine*. Maroufa Press.
- [20] Fleure, H.J. (1970). *A Natural History of Man in Britain: Conceived as a Study of Changing Relation Between Men and Environment*. Collins.
- [21] O' Here, D.J. (1997). *Tourism and Small Coastal settlements: A Cultural Landscape Approach for Urban Design*. Doctoral thesis, Joint Centre for Urban Design, Oxford Brookes University. <https://espace.library.uq.edu.au/view/UQ:274979>.
- [22] Sauer, C.O. (1967). *Land and Life: A Selection of the Writing of Carl Ortwin Sauer*. University of California Press.
- [23] Jackson, P. (1989). *Maps of Meaning: An Introduction to Cultural Geography*. Routledge.
- [24] Cosgrove, D. (1992). Orders and a new world: Cultural geography 1990-91. *Progress in Human Geography*, 16(2): 272-280. <https://doi.org/10.1177/030913259201600209>
- [25] Taylor, K. (1989). Conservation and interpretation study of the rural heritage landscape of the Lanyon-Lambrigg area, ACT. *The Historic Environment*, 7(2): 16-23.
- [26] Vicenzotti, V., Jorgensen, A., Qviström, M., Swaffield, S. (2016). Forty years of landscape research. *Landscape Research*. 41(4): 388-407. <https://doi.org/10.1080/01426397.2016.1156070>
- [27] Knierim, A., Bieling, C., Zander, P. (2021). How researchers shape the construction of landscape change - insights from a scenario study. *Landscape Research*. 46(8): 1057-1070. <https://doi.org/10.1080/01426397.2021.1940116>
- [28] Wongvipak, C. (1989). *Niwētwiththayā watthanatham (Cultural Ecology)*. Silpakorn University.
- [29] Valipodom, S. (2011). *Kānsuksā sangkhom Thai phān phūmthat watthanatham (The study of Thai society through cultural landscape)*. Lek-Prapai Viriyaphant Foundation. <https://lek-prapai.org/home/view.php?id=84>.
- [30] Kirdsiri, K. (2008). *Chumchon kap phūmithat watthanatham (Community and Cultural Landscape)*. Usākhanē.
- [31] UNESCO. (2021). *Operational Guidelines for the Implementation of the World Heritage Convention*. <https://whc.unesco.org/en/guidelines/>.
- [32] Rodwell, D. (2018). The historic urban landscape and the geography of urban heritage. *The Historic Environment: Policy & Practice*, 9(3-4): 180-206. <https://doi.org/10.1080/17567505.2018.1517140>
- [33] Goodwin, C., Tonks, G., Ingham, J. (2009). Identifying heritage value in URM buildings. *SESOC Journal*, 22(2): 16-28. <https://doi.org/10.3316/informit.916958539128340>
- [34] Hackett, B. (1980). *Landscape Conversation*. Packaed Publishing Ltd.
- [35] Lucas, P.H.C. (1992). *Protected Landscape: A Guide for Policy-Makers and Planers*. Chapman and Hall.
- [36] UNESCO. (2008). *World Heritage Information Kit*. http://whc.unesco.org/documents/publi_infokit_en.pdf.
- [37] ICOMOS. (1987). *Charter for the conservation of historic towns and urban areas (Washington Charter 1987)*. In 8th General Assembly (October 1987), Washington, DC. https://www.icomos.org/charters/towns_e.pdf.
- [38] Duxbury, N., Hosagrahar, J., Pascual, J. (2016). Why must culture be at the heart of sustainable urban development? *Agenda 21 for Culture*.
- [39] Ginzarly, M., Houbart, C., Teller, J. (2019). The historic urban landscape approach to urban management: A systematic review. *International Journal of Heritage Studies*, 25(10): 999-1019. <https://doi.org/10.1080/13527258.2018.1552615>
- [40] Issarathumnoon, W. (2020). Applying the historic urban landscape approach to the identification of urban heritage attributes of bangkok old town. *Nakhara: Journal of Environmental Design and Planning*, 19: 25-38. <https://doi.org/10.54028/NJ2020192538>
- [41] Peerapun, W., Sereerat, S., Sanit, P., Vichienpradit, P. (2020). *Master Planning for conservation and development of Krung Rattanakosin 2032*. Nakhara:

- Journal of Environmental Design and Planning, 19: 39-58. <https://doi.org/10.54028/NJ2020193958>
- [42] Qviström, M., Vicenzotti, V. (2016). Landscape research in landscape research: Reflections on a changing field. *Landscape Research*, 41(4): 385-387. <https://doi.org/10.1080/01426397.2016.1165409>
- [43] Jokilehto, J. (1999). *History of Architectural Conservation*. Butterworth-Heinemann.
- [44] Feilden, B. (2003). *Conservation of Historic Buildings*. Routledge.
- [45] Li, J. (2006). *Cultural evolution and value collision in urban historic heritage conservation: Tension among aesthetic modernity, instrumental reason and tradition*. Doctoral Thesis, Tongji University.
- [46] Xu, Y., Rollo, J., Esteban, Y., Tong, H., Yin, X. (2021). Developing a comprehensive assessment model of social value with respect to heritage value for sustainable heritage management. *Sustainability*, 13(23): 13373. <https://doi.org/10.3390/su132313373>
- [47] Gao, Q. (2015). *World Heritage, Archaeological Tourism and Social Value in China*. Doctoral Thesis, Barcelona University. <https://tinyurl.com/2p84a9pp>.
- [48] Thai Association of Landscape Architects (TALA). (2021). *TALA Professional Awards 2021*. <https://tinyurl.com/54xyks79>.
- [49] Al-Saadi, S.M., Karbol, H.A., Almajidi, B.H. (2022). The role of images in enriching the aesthetic taste. *International Journal of Design & Nature and Ecodynamics*, 17(1): 69-78. <https://doi.org/10.18280/ijdne.170109>
- [50] Mason, R., Avrami, E. (2002). Heritage values and challenges of conservation planning. *Management Planning for Archaeological Sites*, 13-26.
- [51] Munkong, C. (2011). Changes of Assumption in Architectural Conservation. *Najua: History of Architecture and Thai Architecture*, 8: 129-145.
- [52] Loures, L., Vargues, P., Horta, D. (2008). Landscape aesthetic and visual analysis facing the challenge of development of sustainable landscapes - a case study of the post-industrial area to the left margin of the Arade River. *International Journal of Design & Nature and Ecodynamics*, 3(1): 65-74. <https://doi.org/10.2495/D&NE-V3-N1-65-74>