The Potential for Local Resources Management and Valuation of the Historic Environment

Natapon Anusorntharangkul and Rugwongwan

Abstract—The objective of this paper is to study local identity and explore the potential for local resources management and valuation of the historic environment a case study of the north-eastern provinces of Thailand, for guiding the tourism environmental design elements. The point of view has the goal of creative integrate tourism model and product development from local identity embedded localism. This concept advocates the philosophy that tourism businesses must develop products and marketing strategies that not only address the needs of consumers but also safeguard the local identity. Especially noteworthy is explaining the importance of local identity linked to society and way of life in the past. That is a heritage of faith reflected in the plan which can transfer to the design process and pattern to coordinate sustainable development causing the key of the tourism development.

Index Terms—Sustainable living, cultural heritage management, local socio-cultural identity, interior environmental design.

I. INTRODUCTION

The importance of Thai cultural heritage management is an intellect that combines the architecture conservation, community conservation, heritage, tradition and culture. All focus on the knowledge integration of inheritance and preservation to improve the position and capability of the people in the country. It also creates a valuable knowledge base which can be applied and develop the appropriate technology into various areas of the country. In particular, how to learning and enhancement of the local wisdom of the people in that area that become the commercial and public benefit. Including, development of quality of life wherewith using resources and local area networks effectively [1]. All that said is the ability to develop the economy including the development of knowledge and local wisdom to be the basis for community economic development. It also focuses on the development of industrial productivity and service. It covers tourism by developing sustainable tourism resources, eco-tourism and creative tourism. It based on the philosophy of Sufficiency Economy that is balanced and sustainable development. Thailand has an environment with the various natural attractions and abundant history. For instance, Ban Chiang community in Nong Han district, Udon Thani Province, northeastern Thailand which town is UNESCO registered as a World Heritage. The archaeological site of Ban Chiang has been a world heritage site since 1992. It

Manuscript received November 12, 2018; revised January 5, 2019.
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settled from the Neolithic to the Iron Age. It is most famous for its red painted pottery, shown in "Fig. 1" and "Fig. 2". Many places in Thailand are an ancient civilisation of the community in the ASEAN neighbourhood. The environment also has the resources of religion, art, culture, and tradition that make the unique of place or community. The result is more spatial tourism in Thailand and effects the economic development of the community as well.



Fig. 1. Avocation of Nong Han native.



Fig. 2. Patterns identity on Ban Chiang pottery.

However, from such development is found that there are problems and obstacles in the concept development of the identity of the place where tourism developed within the local community. Probably from changes of the living way is unbalanced that be the cause of cultural and social changes of people in the community. As a result, the social model is changing; both are objects and not objects [2]. In other words, can call a lack of Local Socio-cultural identity. These things affect the process of understanding and how to convey the importance of culture to the public. Concerning expressing meaning to represent the value of what is local identity and it also needs to fulfil the needs of users. Both roles may have conflicts with each other. It is, therefore, necessary to find a

balanced approach between the different parts of the two objectives. This concept integrates multifaceted aspects of design and Local Socio-Cultural Identity contributing the quality and identity of the community. Design management efforts involve long-term work in the background and involve different Environmental Design Conveying Socio-Cultural Identity as one of the significant competitive priorities for increasing the value and get a better image, and support the community image attaining. From a quality management perspective, the speed of design and the Interior Environmental Design indicates the importance of designing quality into inheritance and conservation issues. Because of design efforts often have inherent drivers for people's perception through an optimizing design [3].

II. METHODOLOGY

A. Theoretical Background

Derived from the literature review, theoretical basis as a foundation of the research framework found the social context, sociocultural context, social environment, refers to the physical and social setting in which live or in which something happens or develops. That is including the culture that the individual was lives in and interact with each other through communication media that the meaning of many built environments generated through personalization which is inherited. Aside from these, there are more methods of study people concerning the built environment. In architecture, the built environment understood to mean a human-made landscape, as distinguished from the natural environment; for example, traditional housing is a built environment that has a symbolic meaning [4]. This context is one of these environmental factors that influence lifestyles as an element in the physical environment that has been created by humans, for example, material, style and orientation. The literature demonstrates that these can facilitate lifestyles [5]. The study of people relating and reacting to their physical environments (i.e., Interior Environmental Design) expressing the Local Socio-cultural Identity is a focus of this research. There are many methods to study. Including observation, interviews and questionnaires, analyzing historical, cross-cultural examples and tracing patterns, regularities and consistencies in human social behavior. The types of physical environments affect behavior or social as well as objective (actual) or subjective (perceived). The environment can be a particularly strong behavioral determinant for behaviors that directly shaped by environmental constraints and supports. Therefore, designers are in a dominant position to affect the physical environmental aspects of the physical environments they design. Design that considers the environment is necessary to sustain life. In traditional architecture, the constructors and users share the same culture, and they make designs that are coherent with this culture to create structures that are respectful of people and the environment [6].

So that create Local Socio-cultural Identity to the interior environment, studies on architectural design need to take into account some crucial elements of the context of social, cultural and physical environment and should also truly understand the Local Socio-cultural Identity in that region.

From the past, the issue of cultural identity in a contemporary interior environment has had a pivotal role in creating own and local characteristics in a competitive environment at the global level. Many countries have begun to check the unique culture by studying the traditional rules and values [7]. This process has had the impact on the work of contemporary interior environmental design. Interior environment in each region gives us precious lessons of the perception, behavior and specific solutions to the natural environment which formed the regional specific culture [8].

B. Research Questions

Many countries have begun to check the unique culture by studying the traditional rules and values. This process has had the impact on the work of contemporary interior environmental design. Interior environment in each region gives us precious lessons of the perception, behavior and specific solutions to the natural environment which formed the regional specific culture. Local Socio-cultural Identity is essential which can express through the accumulated wisdom of the ancestors. If it can be conveyed through the interior design process to get more people to know about these invaluable assets, it may bring sustainability benefits concerning social, economic and cultural of those communities.

Giving the importance of the notion of design details is decide to the inquiry on the issue of what attributes of the interior environment designs influence to subjective impressions of the native and outsider 's perception. Four specific questions posed for examination:

- (1) What are the Local Socio-cultural Identity elements effect on behavioral culture?
- (2) What is the Local Socio-cultural Identity of the community expresses through the interior environmental designs process?
- (3) What environment are elements affecting economic and ecological design?
- (4) Can the native and outsider recognize the Local Socio-cultural Identity expresses through the interior environment linked to sustainable living?

C. The Purpose of the Research

The purpose of this paper is to study local identity and explore the potential for regional resources management and valuation of the historic environment a case study of the north-eastern provinces of Thailand, for guiding the tourism environmental design elements. The point of view has the goal creative integrate tourism model and product development from local identity embedded localism. This concept advocates the philosophy that tourism businesses must develop products and marketing strategies that not only address the needs of consumers but also safeguard the local identity. The conceptual framework of this research is shown in "Fig. 3".

D. Research Methodology

This study aims to evaluate the interior environment expressing the Local Socio-cultural Identity effect on the mutual perception of the native and outsider. Its primary objective is to propose contemporary design alternatives for the interior environment expressing the Local Socio-cultural Identity. This proposal demonstrates how the elements of the Local Socio-cultural Identity would be applied to design process the interior environment attributes where communicates ideas about the Local Socio-cultural Identity to native and outsider of community.

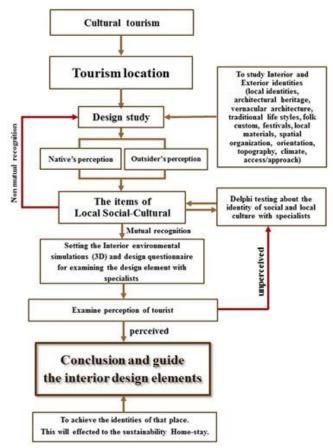


Fig. 3. Conceptual framework of the research.

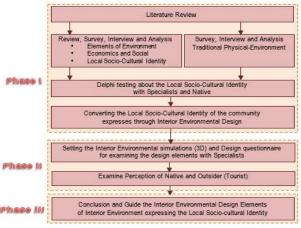


Fig. 4. Research procedure.

From the research procedure of "Fig. 4", this research selects Ban Chiang community for study. Ban Chiang community in Nong Han district Udon Thani Province which town is UNESCO registered as a World Heritage where with a precious heritage from prehistoric times. However, Ban Chiang homestay cannot represent the greatness of art and culture has come to long.

Method 1: Preliminary data collection by the literature to

study of research papers, review concepts, and related research. For general information of community areas, travel plans information, tourism resources of Ban Chiang, Amphoe Nong Han, Udon Thani which is all about the study area. To identify variables and how to data analysis. (Literature Review)

Method 2: The observation and interviews general information with the community leader, folk, and tourist about gender, education, age, income, resident, the ancient monument, local cultural tools, tradition, relationship conditions of behavioral and lifestyle. (Site information)

Method 3: To analyze the data to create the instrument for the test to the native and tourist.

Method 4: The instrument and results are in the Delphi technique testing with the Socio-Cultural Specialists.

Method 5: Two types of instruments used in the testing perception of socio-cultural interaction between native and tourist.

- 1. Applying the Gibson's affordance theory of finding the affordance of material culture by building the interior environment mock-up. Researcher, hosts, and guests to use in that space for talking about the attitudes, culture, beliefs, tradition or some photos and material to be presented. Researcher to record, observe and collect data about the reasons for like or unlike, agree or disagree while talking together [9].
- 2. Kevin Lynch's five elements to test the understanding of spatial relationships in homestay space [10]. Using the 3D stimuli shown about homestay layout and interior design to examine the perception, inquiry about the link and dividing the area for usage, comfortable, security, relaxation and warm feeling [11], can be communicated to the Socio-Cultural Identity. Maybe a type of questionnaire are Likert scale, and semantic differential scale test used for this research.

III. RESULTS AND DISCUSSION

Ban Chiang community, Nong Han district, Udon Thani is an essential historical area in northeastern Thailand and Southeast Asia. It has the longest evolutionary and cultural stages. Most of the place is cultural and historical resources. It can develop into a tourist attraction that is unique and attractive. There are efforts to push the village as a homestay tourist village to promote the festival; the Ban Chiang World Heritage festival. The community has its own culture and identity. It was chosen as an OTOP village and was home-stay standard from the Thai Ministry of Tourism. By assessing the potential for local resource management as a tourism resource found that the community is consistent with the values of 3S; Security, Sanitation, Satisfaction. Because the tourism model of the community needs to develop the integration of tourist elements, including tourist attractions, tourism activities, travel services. All of these factors are consistent with the 3S values. The results of the analysis and evaluation can use as a design guideline to develop a tourism model. In spatial form to promote the tourism of Ban Chiang. Udon Thani by the unique identity of Ban Chiang and design from the wisdom of the villagers.

We study design patterns and concepts reflects the local

identity of Ban Chiang community that is Baan Chiang pottery. Baan Chiang pottery pattern is scratches, polished and reddish writing style. The pottery of Ban Chiang has become a prominent feature of Udon Thani. From the In-depth inquiry interview, Thai Puan is also another cultural resource that can convey the identity of Ban Chiang community. We used the results of the analysis and evaluation to summarize the design of the tourism development. By using the unique identity of Ban Chiang designed and developed to decorate homestay where be able to convey emotions, unique atmosphere and local culture. We use the In-depth interview with 55 community leaders, sub-district administration organization and native in the area and 21 tourists to search of the identity, physical characteristics of the physical community and the environment at the level of the community. The conclusions for design development, the spatial patterns of Ban Chiang community, Nong Han district, Udon Thani province are as follows.

- 1) To preservation of the Ban Chiang home ecotourism style.
- 2) To development and introduction of products with a distinct local identity.

We design patterns and concepts reflect the local identity of the Ban Chiang community. A case study of the Ban Chiang ecotourism homestay has the most idea and origin from the community identity and be models of spatial pattern. The tools used in the study included interview form and spatial modelling for tourism (Simulation 3D) to find the level of satisfaction of the value, beauty, utility of life and the identity of the local by using interviews and Simulation 3D models simultaneously (Examples can be seen below in "Fig. 5" and "Fig. 6"). Then we use the In-depth interview with two groups; 42 natives and 50 tourists to study perception issues and satisfaction.

The results of the analysis of sample's perception and satisfaction on the physical environment in the atmosphere (Ambient) classified by the colour factor, material factor, decorative items and comfort factor. The details of the analysis are as follows:

- 1) Colours: The pattern of colour tone used in decoration has to choose cool colours because it perceived more live. However, the warm tones are more beautiful. Also, the colour shade should be darker because it looks gorgeous and useful.
- 2) Materials: The selection of materials used in the interior decoration of the Ban Chiang homestay is natural wood furniture. Due to the materials and the colour of the furniture will make sense of the value, benefit, and livability.
- 3) Decorative items (Prop): The use of decorative items should bring unique local products to the community, such as wall paintings and vases, as used as a component in the management of Ban Chiang homestay. Decorative items can give a perception of the value, beauty, usability, and livability. It can also strengthen the community's tourism management as a cultural ambassador.
- 4) Design: A decorative style should preserve that the traditional style of Ban Chiang home-stay. Traditional decorations can show the value.
- 5) Facilities: Tourist facilities should already prepare because they affect perceived value and livability.



Fig. 5. Simulation 3D of Ban Chiang home-stay.



Fig. 6. Simulation 3D of Ban Chiang home-stay.

Design Conveying Local Socio-cultural Identity explains the importance of local identity linked to society and way of life in the past which is a heritage of remaining faith. Conservation and enhancement of the historic environment viewed as a desirable undertaking. Preservation and study of such resources contribute to overall social wellbeing through understanding and appreciation of the past within a social context and environment. By mean of the organization of the space, time, interaction, communication, and cue. Especially noteworthy is explaining the importance of local identity linked to society and way of life in the past which is a heritage of faith reflected in the plan which transferred to the design process and pattern. That resulted in a partnership between government and private sectors have involved in establishing systems and methods to coordinate sustainable development causing the key to the tourism development. This concept advocates the philosophy that tourism businesses must develop products and marketing strategies that not only address the needs of consumers but also safeguard the local identity.

ACKNOWLEDGMENT

We sincere thanks go to the advisor, Assistant Professor Dr Yanin Rugwongwan, for the support of study and related research. His guidance helped during all the time of research.

REFERENCES

- K. Taylor, Managing Cultural Landscape, Culture Publishing House, 2009.
- [2] H. M. Nguyen, "Cultural behavior: Climatic adaptive approaches of traditional housing in Vietnam Northern lowland area," *Procedia - Social and Behavioral Science*, vol. 85, pp. 368-578, March 2013.

- [3] P. Krukaset and Sahachaisaeree, "Design elements communicate on issues of the environmental conscious concept," *Procedia Social and Behavioral Sciences*, vol. 5, pp. 1262-1266, December 2010.
- [4] A. Rapoport, "Theory, culture and housing," *Housing Theory, and Societ*, no. 7, pp. 145-165, November 2010.
- [5] A. Rapoport, "Symbolism and environmental design," *International Journal of Symbology*, vol. 1, no. 3, pp. 1-9, 1970.
- [6] C. Q. Tru, Traditional Housing Design, Culture Publishing House, 1994.
- [7] M. Naume and K. Saso, "Tourism in Macedonia in changing environment," *Procedia - Social and Behavioral Sciences*, vol. 14, pp. 19-31, December 2012.
- [8] P. Gourou, *Tonkin Delta Farmers (Translation)*, Ho Chi Minh City: Youth Publishing House, 2002.
- [9] L. Groat and D. Wang, Architectural Research Methods, New York: John Wiley and Sons, 2002.
- [10] P. Krukaset, "Packaging design express the identity of environmental conscious concept," in *Proc. Conf. on Education*, Russia: Christian University, June 26-28, 2015.
- [11] P. Krukaset, "Floor plan-analysis, lighting and physical environment of classroom design," in *Proc. International Proceedings of Education* Social Sciences and Humanities Research, Hiromi Ban, 2018, pp. 84-90



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