

The Vernacular Architecture Drawing a Line of Tai-Yuan House, Thailand

Thongtep Sirisoda¹, Rawinan Loymek², ¹Rajamangala University of Technology Thanyaburi, Pathum Thani, Thailand, ²King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand, Email: ¹Thongtep_S@rmutt.ac.th

The study of vernacular architectural styles will represent the living conditions of people in the past who lived their way of life within the context of their habitat environment. With the passage of time, urban culture expands into rural society and architectural styles are changed. The vernacular architecture of Thailand's central region is distinctive. A wide range of knowledge also obscures the physical characteristics of vernacular architecture. Collecting the actual data in the area uses basic techniques such as working with hands and pencils. But it can produce high-quality results, such as drawing detailed and realistic building lines in all aspects, for example, dimensions, light, shadows, proportions, and are easily understood by the public. As a result, it is the source of this research that the study of Tai-Yuan vernacular architectural is through the process of drawing a line for spatial identity in Sao Hai District, Saraburi Province, Thailand. The qualitative research methodology is used in the study. The results of the research were as follows: The study of vernacular architecture's styles through a drawing line process, it consisted of two pictures that showed the identity architectural style of Tai-Yuan vernacular architecture, Sao Hai District, Saraburi Province, Thailand.

Key words: *house, vernacular architectural Tai-Yuan, Saraburi*

1. Introduction

A house or place of residence is classified as vernacular architecture (Tamiphon, 2010). It is the architecture that villagers and local craftsmen have created without the assistance of architects, based on the characteristics of the environment, climate, terrain, and resources localities which are important factors in determining the style of a house in each community, such as the houses we see in each area of Thailand, which will have a variety of architectural styles. Thai houses were not constructed solely to provide shelter from the sun and rain. However, Thai craftsmanship's forefathers meticulously crafted elegance in accordance with

high ideals. The craftsmanship in the creation is outstanding. It is completely fitted with techniques and methods that are specifically appropriate for materials and functions such as wooden dowels, structural balance, weight shifting, and the proper use of elements in accordance with Thai people's way of life at the time. In certain ways, it also reflects the ethnicity of the community (Vallipodom, 2009).

Saraburi has a province with a long history and culture since the Dvaravati era. There are a variety of nationalities represented in the population, including Tai-Yuan, Tai-Phuan, and Laos etc. It is a group of people who immigrated from Luang Prabang, Vientiane city and Chiang Saen as a result of the war that lasted from the Thonburi period to King Rama IV of Rattanakosin's reign, causing Saraburi to be inhabited by people (Supha, 2009).

Tai-Yuan in Saraburi province descended from the Yonok sub-district in Chiang Saen district of the Lanna Kingdom migrated from the war defeated region caused by the Burmese army, then was evacuated to Bangkok, and moved to settle down around Pa Sak river's plains in Saraburi province. At the present, Tai-Yuan spread out around Saraburi districts in total 11 major districts and the most found are 3 districts and 17 Sub-districts. The most found is Sao Hai district as follows: 1) Sao Hai sub-district consists of Sao Hai sub-district, Mueang Kao sub-district, Reng rang sub-district, Ban Yang sub-district, Ngio Ngam sub-district, Suan Dok Mai sub-district, Tha Chang sub-district, Phraya Thot sub-district, Muang Ngam sub-district, Sala Ri Thai sub-district, Hua Pluak sub-district and Ton Tan sub-district, 2) Chaloe Phra Kiat district, consists of Ban Kaeng sub-district and Chalerm Phrakiat sub-district, and 3) Mueang Saraburi district consists of Nong No sub-district, Nong Yao sub-district, Nong Khwai So sub-district (Parmotmuang, Chantaree & Sriruksa, 2020). Sao Hai is a district in the province of Saraburi. It is close to the city of Saraburi. Originally, the district was Saraburi city, and is an area of "Tai Yuan," one of Northern Thailand's major national groups, which is the most common population in this area until is called "urban people".

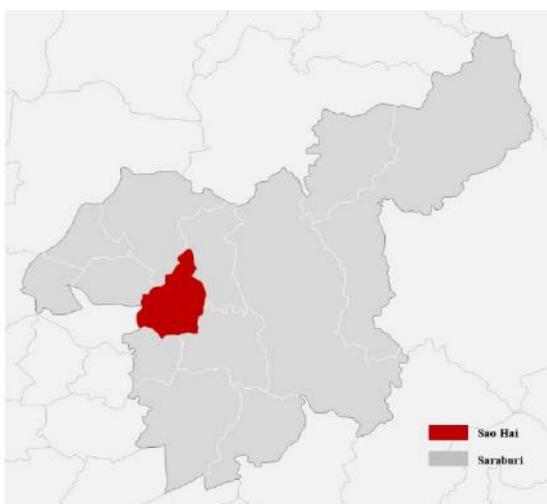


Figure 1: The area of Sao Hai District Saraburi Province, Thailand

Source: Thongtep Sirisoda, 2021



Tai-Yuan Folk Culture Center, Saraburi Province has been inspired by the professor Songchai Wannakul, who was interested in preserving the cultural heritages of the Tai-Yuan National group; since 1969 both the places and the objects have been collected, such as Saraburi Governor's House, Major Luang Jop Kra-Buan Yut's House (Father of milady Jongkon Kittikachorn) and Suae Khong Jon's House that were famous in the past in Suphanburi province. The professor aims to be a source of local wisdom and a learning centre about the culture of the Tai-Yuan national community, Saraburi Province, by including traditional textiles and more than 20 local boats that are used in the Pasak River and the Central Region under the name "**Pasak River Boat Museum.**" This is a group of Lanna people who were forcibly evicted from Chiang Saen around 200 years ago. They have organised cultural events. Tourists can stay in a homestay and eat local food while watching Lanna-style cultural show and local games performance from adults in the community to cultivate children to continue this good culture in 1993. Professor Songchai Wannakul has established the Tai-Yuan Saraburi club. To jointly preserve and inherit the identity of the Thai people such as language or culture, the dress and eating is Khantoke. Later in 1996, there was a project of Thing Earth by Siam Motors Company. To support the establishment of a Thai folk culture continuing until 2008, there is a project to be established as an integrated learning centre about Tai-Yuan folk culture in the future.

In the middle of urban social transformation, this led to unavoidable changes in local architecture, such as the lack of conservation awareness among the local people. They did not recognise the importance of vernacular architecture. The hegemony of art and materialism in society (Srisuro, 2000). The researchers are aware of the problem and recognised the significance of conservation and the preservation of Thailand's heritage. As a result, the researcher has the concept of learning and researching about the Thai-Yuan vernacular architecture as one of the national groups that exist in the North of Thailand. It is the region's largest national group. It was centred in Chiang Saen (in the past). And they were called urban people. The distribution is both natural migration and immigration because they were forcefully taken away because of war, such as Tai-Yuan Saraburi, called according to each local that they migrated to settle in. Tai-Yuan people who live in Saraburi migrated to Saraburi Province. During the reign of King Rama I, they settled on the Pasak River, the area of Sao Hai District, Saraburi Province, which is a fertile area suitable for agriculture and building houses based on the traditional styles that had been developed from their ancestors. Therefore, the Ton Tan-Phraya Thot Sub-District, Sao Hai District, Saraburi Province, was chosen as the research area. This is due to the fact that the majority of the people in the region are Tai-Yuan descendants, who have immigrated to the region and maintain a deep Tai-Yuan culture for living vernacular architecture in the area; it is considered as an architecture that is unique and distinct from architecture in other regions. The feature of vernacular architecture is based on the needs of the people in each community in relation to the surrounding area. In addition, a broad variety of information, such as beliefs and ways of life, as well as many local wisdoms, is concealed behind the physical features of vernacular architecture. Vernacular architecture, which incorporates a great deal of local wisdom, serves as a connection between past and present



knowledge of people. This demonstrates that vernacular architecture is more than just a place to live and sleep; it is an integral part of people's lives. They have a wisdom of local natural materials that are hidden with self-contained information and knowledge (Loisakdiwong, 2004). By concentrating on the actual data collection in the field using simple techniques such as using a pencil, high quality results can be achieved, or drawing a building line and local landscape that are detailed and realistic in all elements such as dimensions, light, shadows, proportions of buildings, including signs of decay to achieve accuracy, realism, and easy to be understood by the public.

2. Purposes

2.1 Studying the tai-yuan architecture style through the process of drawing a line that is unique to the area.

3. Method

3.1 Research Methodology

The research method uses qualitative research. The building survey includes interviews with residents and participatory observation. When the target group is reached, the physical characteristics of the building will be studied. Then two experts will be invited to draw conclusions in the research.

3.2 Respondents

3.2.1 The number of 15 villagers

3.2.2 The number of 2 qualified person

3.3 Research tools

The main tools used for data collection were line drawing, photography, sketching and interviewing people in the Tai-Yuan Saraburi community.

3.4 Collecting Data

The researcher categorised the data collection into 2 parts:

3.4.1 Collection of documentary data (Review Data)

Secondary data is studied from textbooks, documents, articles, theories, principles and related research, to define the scope of research and create research tools to cover research objectives.



Primary Data: Learn how to create interview questions from research papers to determine the scope and content so that they can be clear according to the research objectives.

3.4.2 Field Data Collection

In entering the data collection area, researchers has brainstormed before going to the area. The samples were studied and the appropriate methodology of each data was studied for what type of data recording should be used. And then enter the data was collected manually. The method for data collection was in-depth interviews to reveal the attitude, motivation and beliefs of the respondent. There were semi-structured questions for interviewing. Data collection was based on observation in which researchers used a non-participant observation method in order to obtain quality data and collect data from questionnaires. Finally, there was distributing questionnaires that are closed-ended questions and collected at one time.

3.5 Data Analyzation

The research was divided into 3 parts:

3.5.1 Document and research data analysis using theoretical principles and rationale presented in a narrative format to review all relevant knowledge and filter the information more clearly into the database before entering the area

3.5.2 Analysis of data from the survey site observation of architectural elements

3.5.3 Analysis of data from interviews with residents and experts related to residential buildings to analyse and summarise architectural drawings showing the unique architectural style of Thai-Yuan local architecture of Saraburi.



Figure 2: the drawing a line vernacular architecture Tai-Yuan House Saraburi.
Source: Thongtep Sirisoda, 2019



Figure 3: the drawing a line vernacular architecture Tai-Yuan House Saraburi.
Source: Thongtep Sirisoda, 2019



Figure 4: the drawing a line vernacular architecture Tai-Yuan House Saraburi
Source: Thongtep Sirisoda, 2019



Figure 5: the drawing a line vernacular architecture Tai-Yuan House Saraburi.
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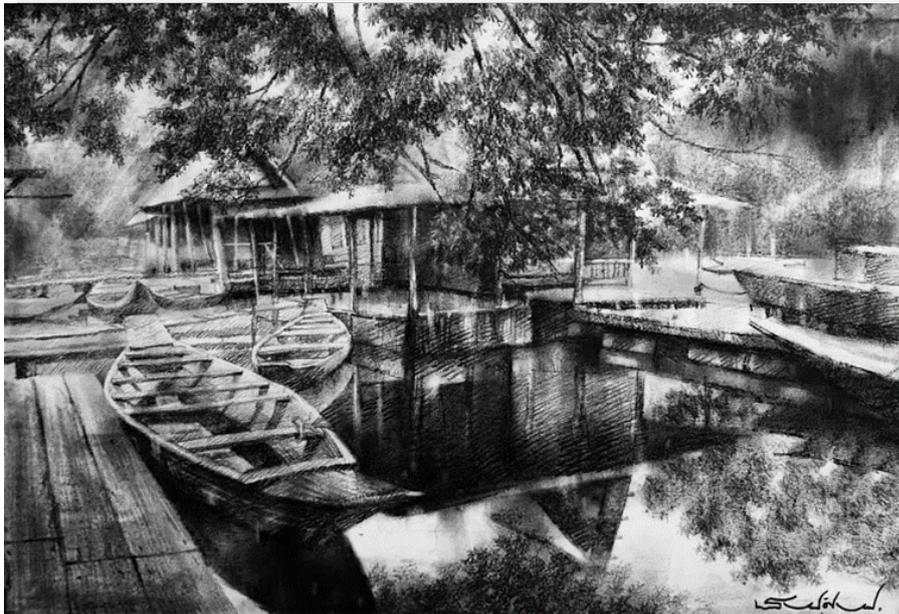


Figure 6: the drawing a line vernacular architecture Tai-Yuan House Saraburi.

Source: Thongtep Sirisoda, 2019

4. Results

Drawing and sketching vernacular architecture and landscape depict architectural styles, dimensions, shadows, and proportions of the buildings, from the study of drawing an architectural line. The results of the study showed the resident interview and participant observation. There was a target group of 15 people. Afterwards, two experts were invited to draw study conclusions. The study of the characteristic styles of vernacular architecture through the method of drawing a total of 5 drawings showed that there were two drawings of vernacular architecture, according to the findings. This demonstrates the identity architectural style of Tai-Yuan vernacular architecture of Saraburi. It is the architectural style and materials used in house construction. There are two styles of houses: bamboo houses and real wood houses. For a real wood house, it is commonly referred to as the Galae house style. They have distinct detail and a subtlety of mechanics. However, within the real wood house community, there is another design that combines the house style and the real wood house, with both a single and twin house. The Taiyuan house has a basic element the same, which is a high-stilt house. The ground floor is open and can be used for a variety of purposes. There are stairs to the house. If it is a bamboo house and real wood house like the villagers influenced by the Galae house, there will be a stairway up under the eaves to the front house and followed by an open area with a wall on one side. Moreover, it was found that the behaviour and activities of the public space were greater than the private space, since the Tai-Yuan house focuses on semi-open space. It can be seen from the house's walls, open to the wind around the house, and can be connected to the outside.



5. Conclusions

Vernacular architecture has a distinct identity hidden by creative wisdom and is in harmony with the landscape and way of life; is a historical and culturally significant architectural legacy that still exists today. As a result, it must be preserved, with architectural styles associated with identity localities (Phanraleuk, 2015). According to the study of the conservation of Taiyuan vernacular architecture, it reflects value through the process of drawing lines. The objective of this research is to study and survey the characteristics of a house or residence. It is classified as the original indigenous architecture in the local communities in Saraburi Province that remains today as an example of the valuable use of wood in the construction of Thai houses in the past.

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