

Reflecting Spatial Identity and Values through Local Architecture: The Thai-Yuan House in the Saraburi Province, Thailand

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Abstract

This research examines how the spatial identity and values are reflected in the local architecture of the Thai-Yuan house, in the Saraburi province, Thailand. It explores the old residential architecture that reflects the culture of living of the people in the past who lived in conformity with the context of their habitat and the environment. As time has changed, the influence of modern culture has spread into these rural settings. This has affected the building styles, and architecture has begun to fade and change. This leads to the research questions: how does architecture reflect the culture today in this changing environment and how has it changed in Saraburi, Thailand.

The paper employs a qualitative approach to examine the case of the Thai-Yuan house in Saraburi and its transformations. It uses a survey, participatory observation as well as interviews of the residents to look at the transformations of the built forms, the activities, and culture.

The findings show the changing physical characteristics of the dwellings. The study confirms that they are similar to the Thai-Yuan house in the North. However, the houses have responded to the different terrain. The location close to the river divulges the relationship of the different environmental contexts that have affected the adaptation of the Thai-Yuan people. The paper concludes that the central region also being a cultural tourist attraction in terms of local architecture, it is necessary to recognize the values of the existing cultural heritage. It thus recommends that the preservation of these cultural heritage should be initiated to help continue the traditions.

Keywords: vernacular house, Tai-Yuan vernacular architecture, Saraburi, transformations, Thailand

Introduction

During the early Rattanakosin period, conflicts led to the migration of various ethnic groups from the North to the central region. This movement helped establish distinct cultures in other regions (Sanguan, 2018). Environmental constraints played a significant role in shaping the lifestyle of these communities.

As a result of the conflicts, war captives, including Thai Yuan, Thai Puan, and Lao ethnic groups, were relocated to different provinces, such as Saraburi. This province has a rich history and culture dating back to the Dvaravati era. Many of these migrants came from places like Luang Prabang, Vientiane, and Chiang Saen. The influx of diverse groups of people during the

reigns of King Rama I through King Rama IV of the Rattanakosin period contributed to making Saraburi a prosperous and inhabitable city (Supa, 2009).

Social diversity, traditions, culture, beliefs, rituals, and way of life in Thailand are shaped by race and ethnicity, with each area's context fostering wisdom and identity passed down through generations. Thai culture is the foundation for indicators of societal importance, exemplified by houses and the dwellings. As a tangible cultural heritage, local culture allows people to harness cultural capital to benefit their communities. As defined by Rapoport (1969) Oliver (1987) and Taameephan (2010), vernacular architecture is the product of villagers and artisans working independently of professional architects. Consequently, each locality and community creates a distinct architectural style reflecting its unique heritage and context.

Environmental factors, including climate, terrain, and local resources, play pivotal roles in shaping housing styles within each community. Across Thailand, various regions showcase unique types and styles of houses, all initially constructed to shield inhabitants from the sun and rain. Thai artisans, however, have also designed homes with aesthetics and more profound meaning in mind, inspired by their noble ideals. Exceptional construction craftsmanship is supported by techniques and methods tailored to the materials employed, such as wood doweling. Artisans simultaneously balance loads and adeptly distribute structural weight. The compositions of these houses embody and reflect the Thai people's culture and way of life, as well as the identities of particular ethnic groups or communities (Wanliphodom, 2009).

The historic houses in this region result from various economic, social, political, and cultural factors. These dwellings are sustainable and reflect the unique aspects of their time and place (Chavan & Chandar, 2022). However, due to ongoing changes, the architectural style has begun to transform, potentially losing the distinctive Tai-Yuan identity. It is crucial to document and preserve the knowledge of these traditional houses to maintain the cultural heritage and architectural legacy for future generations. Consequently, this paper presents a research study on Thai-Yuan housing to comprehend the identity expressed in Thai-Yuan houses. The study focuses on understanding the characteristics of residential buildings produced by the Thai-Yuan group in the Saraburi province. Analyzing these structures will provide a more comprehensive understanding of how social, economic, political, and cultural features have developed and evolved.

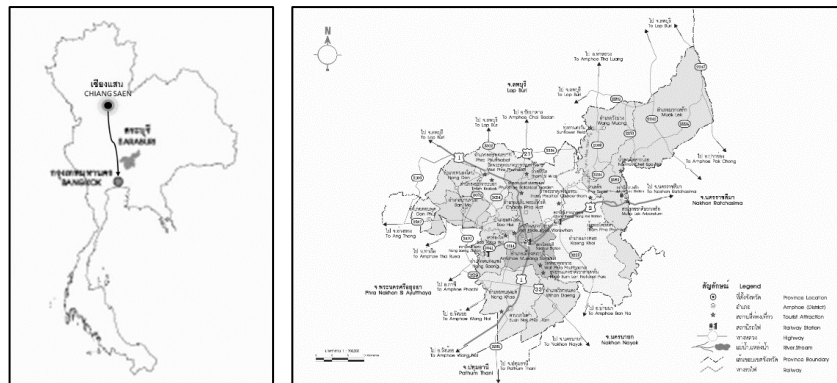


Fig. 1: The movement swept prisoners of war from the North to the central region.
Source: Sirisoda, 2022



Fig. 2: Tai-Yuan people of the past
Source: Sirisoda, 2022

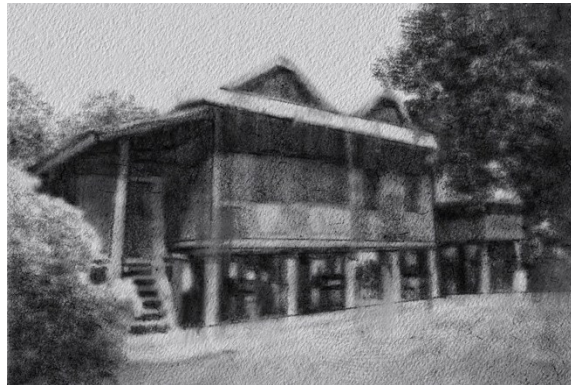
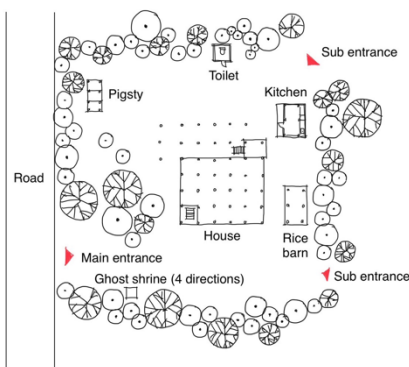


Fig. 3: Area plan and perspective line drawing of Baan Thai Yuan, Northern Region
Source: Sirisoda, 2023



Fig. 4: Perspective line drawing of Baan Thai Yuan, Northern Region
Source: Thongtep Sirisoda, 2023

The Theoretical Basis: Vernacular Architecture

The definition or classification of vernacular architecture has been the subject of considerable debate. Vernacular architecture consists of residential structures and other types of buildings constructed in response to the environment using readily available materials. They are created and owned by the communities or their creators. They employ traditional methods to support the values, economy, lifestyle, and culture of the people who created architecture (Oliver, 1997). Typically, the vernacular architecture of a region has a distinct design and is commonly employed by the local populace in specific locations and time periods. In other words, no structure is vernacular architecture if it has no relationship to its place and time. (Mercer, 1975). Vernacular architecture is constructed on purpose, not temporarily, with the inspiration of tradition, not the education system, to accommodate the straightforward daily lives of ordinary people on farms and in factories. It has ties to the neighborhood and utilizes local building materials. It reflects the culture and philosophy of the collective existence of the people. Vernacular structures are designed and constructed according to a principle that combines thought and sentiment as opposed to functionality alone (Brunskill, 1981).

Vernacular architecture is a distinct style created by a community based on their traditions, beliefs, and interpretations of the local climate and geographical context, utilizing available materials and technologies. This form of architecture stands apart from other regional architectural works. The characteristics of vernacular architecture stem from the need to adapt to the lifestyle and environment of each locality, incorporating various knowledge bases such as beliefs, ways of life, and local wisdom. Local architecture connects generations of knowledge as a bridge between the past and the present. Vernacular architecture goes beyond providing shelter for living and sleeping; it is an integral part of the people's lives, embodying knowledge and wisdom (Loisakdiwong, 2004).

Local architecture is crafted by artisans native to each region, primarily focusing on residential buildings that reflect cultural distinctions. Diverse environments and weather conditions greatly influence these structures. Vernacular architecture is purpose-driven, rooted in tradition rather than formal education, and aims to fulfill the basic daily needs of people living in agricultural communities. Consequently, it maintains a strong connection with the community and utilizes locally sourced construction materials. Vernacular architecture embodies the culture and philosophy of a collective way of life. As Brunskill (1981) has points out, these buildings are designed and constructed using a combination of concepts and functions, seamlessly blending practicality with cultural expression.

Thailand's vernacular architecture originates from the local wisdom of rural communities. The unique influences of local builders in each area result in distinct creations that respond to their specific environments. The primary focus of these creations is functionality rather than aesthetics (Srisuro, 2000). Houses and communities generate a harmonious living atmosphere, reflecting cultural conditions and unique local characteristics (Panin, 1999). Vernacular buildings consistently embody the culture of the people and share similarities within each locality. As they are not products of an architect's vision, these structures represent the collective characteristics of a society, drawing upon generations of accumulated knowledge, experience, and expertise and passing them down to future generations (Temiyaphan, 2000).

Ethnic and Social Groups, Culture and Society

Indeed, human beings have always been social creatures, but how they engage with others has evolved. In today's world, the struggle between prioritizing individual growth and promoting the common good is ever-present. As a result, culture is continuously born, practiced and modified. Everything in the world is in a constant flux, with nothing remaining completely stable.

Society and culture share these characteristics; no community or culture remains static. Instead, changes continuously emerge and dissipate. Social patterns constantly transform, and natural changes inevitably occur within the human societies. Consequently, culture is not

merely static or fixed; it is dynamic, with movements adapting to various contexts and environments throughout time.

The Thai Yuan, or Yonok ethnic group, is a group that has managed to retain its identity and ethnicity amidst rapid social changes and prosperity. Originally from Chiang Saen, a city in the north of Thailand and an essential part of the Lanna Kingdom for over 200 years, this ethnic group has a rich history.

In 2101, King Burinnaung and the Burmese army attacked the northern city, leading King Buddha Yodfa Chulalok Maharaj to order the royal army to counter the invasion and liberate Chiang Saen. After defeating the Burmese forces, the city was destroyed. The people of Chiang Saen, numbering 23,000, were divided into five groups and relocated to cities such as Chiang Mai, Lampang, Nan, Vientiane, and Saraburi.

Baan Ton Tan is a Thai-Yuan community from "Mueang Chiang Saen," an area now known as the Chiang Saen District in the Chiang Rai Province. Historically referred to as the "Yonok Nakhon Region" or "Yonok Nakphan," the community emerged at the end of the Nine Armies War in 2347 B.E. (1804 A.D.) during the reign of King Rama I. The Thai-Yuan people were forcibly relocated to the capital. Some settled in the Pa Sak River Basin area, which is currently part of Saraburi's lower town in the Sao Hai District and the Suan Dokmai sub-district.

Some notable features of the Thai-Yuan community include beautiful Thai pavilions, termite head structures, and rubber houses. The community is also home to many sugar palm trees, which contributed to naming the village "Ton Tan," which translates to "palm tree village."

The Thai Yuan Ethnic Group

The Thai Yuan, a significant ethnic group in northern Thailand, has its roots in the Lanna Kingdom. They can trace their ancestry to the Ionian region and the Tai people who migrated from Yunnan in southern China. The unique characteristics of the Thai Yuan culture are deeply connected to the traditions and customs of the Lanna Kingdom.

Historically, the migration of the Thai Yuan people was driven by wars and conflicts during the Thonburi and early Rattanakosin periods. As wars produced asylum seekers and refugees, many Thai Yuan people moved to avoid being taken as prisoners of war. Additionally, prisoners of war were often forcibly relocated, further contributing to the migration of the Thai Yuan people.

As a result, the Thai Yuan people migrated to the central region of Thailand, where they adapted their settlements and way of life to the new natural environment. Using the river plains and hilly terrains, they created harmonious relationships with the surrounding landscape while preserving their unique cultural heritage.

Adaptation to social patterns and the environment is crucial for communities that undergo migration. As they relocate and settle in the new areas, these communities must adapt their way of life, belief systems, and behaviors. In Thailand, the vernacular architecture of newly settled communities often began with simple binder houses or chopping houses. Built using locally available materials like bamboo and rattan, these houses featured lattice covers and were heavily influenced by the central Thai style from the Thonburi period.

During the Thonburi period, the development of local architecture was influenced by the central Thai style of the Ayutthaya period. However, most craftsmanship evolved according to the ideas and interpretations of local artisans, leading to unique regional styles and variations in form and detail. As a result, the appearance of houses differed across regions, reflecting the local environment, beliefs, construction materials, and cultural practices.

The adaptation process eventually gave rise to the distinct identity of Ruen Thai Yuan architecture. This unique style embodies the Thai Yuan community's ability to adapt their traditional architectural practices to new environments and cultural influences while maintaining their identity.

The Thai-Yuan community in Saraburi, originally from northern Thailand, has retained some of its Lanna identity despite relocating to the central region. This can be attributed to several factors:

- Cultural preservation: The community has actively preserved its unique cultural practices, beliefs, and rituals, passing them down through generations. This includes traditional celebrations, ceremonies, and other customs distinct from the Lanna culture.
- Vernacular architecture: The Thai-Yuan community has maintained its distinct architectural style, incorporating traditional Lanna elements in the design and construction of their houses and public buildings. This has helped to preserve the visual identity of the community.
- Language and communication: The Thai-Yuan people continue to speak their native language, closely related to the Lanna dialect, thereby preserving their linguistic heritage.
- Arts and crafts: Traditional Lanna arts and crafts, such as weaving, pottery, and woodcarving, continue to be practiced in the Thai-Yuan community, ensuring these skills and techniques are passed down through generations.
- Cuisine: The community has maintained its unique Lanna culinary traditions, with dishes featuring distinct flavors and ingredients typical of northern Thailand.
- Social organization: The Thai-Yuan community has preserved its traditional social structures, such as the roles of village elders and the importance of community cooperation, which are essential components of the Lanna way of life.
- By retaining these elements of their Lanna identity, the Thai-Yuan community in Saraburi has managed to maintain a distinct cultural heritage even after relocating to a different region of Thailand.

Research Methods

This qualitative research aimed to understand the unique architectural and cultural aspects of the study area, Saraburi, by combining document research and fieldwork. The research methodology involved an observational study in surveying and collecting data on the physical and architectural aspects.

A case study approach focused on areas with a rich and distinct culture. The research involved studying, comparing, and analyzing the architectural forms and physical characteristics to understand better the cultural aspects that shaped them.

In addition to the primary data collection methods, secondary sources were utilized to inform the research. Concepts, theories, and research-related ideas were gathered from books, research papers, theses, and articles. This theoretical basis was then used to analyze the data.

Research tools and techniques

This research employed two primary data collection techniques to gather information about the architectural identity of Ruan Tai-Yuan in Saraburi Province, Thailand:

- Line Drawings: This method involved creating detailed line drawings to document and explore the physical characteristics of Ruan Tai-Yuan architecture in the study area. Researchers could better analyze and understand the unique architectural features and cultural aspects influencing the design by visually representing the structures.
- Drafting: This tool allowed researchers to create technical drawings and plans of the architectural features observed in the study area. Drafting helped researchers to systematically document the structures, providing a visual representation that could be used for further analysis.
- Participatory Observation: This technique involved engaging with Thai-Yuan homeowners and community members to gain first-hand insight into their perspectives and experiences related to the architectural identity of Ruan Tai-Yuan. By directly observing and interacting with the local community, researchers were able to gather valuable information and gain a deeper understanding of the cultural and social factors that have shaped the architectural identity.

Combining these two data collection methods allowed for a comprehensive analysis of the architectural identity of Ruan Tai-Yuan in Saraburi Province, Thailand, and facilitated a better understanding of the unique cultural aspects that have influenced its development.

Findings and the Discussion

The physical characteristics of community planning in the Thai Yuan community of Saraburi Province, Thailand, bear similarities to the traditional Tai Yuan houses in the northern region. Key elements of community planning include:

1. The placement of temples and communities is interconnected, with the houses acting as a linking factor, similar to the traditional Lanna style.
2. City shirt tower: The community layout includes a city shirt tower, an essential element in Lanna-style community planning.
3. Terrain considerations: Although the terrain in Saraburi Province lacks mountains compared to the northern region, the community still follows the traditional pattern of housing orientation, which does not turn along the temple's axis. The community is also situated near a water source, the Pa Sak River, which is essential to the community planning process.
4. The division of the ground plane within the Thai Yuan community in Saraburi reflects the characteristics of traditional Lanna-style Tai Yuan houses. This division typically consists of various functional spaces for living and socializing, with a harmonious balance between public and private areas.
5. In the traditional Lanna Thai style houses, the ground floor may not be raised very high off the ground. However, in the case of Ban Thai Yuan Saraburi, the houses have been adapted by raising the floor level higher, creating a versatile open space beneath the house. This adaptation offers several benefits and uses for the occupants, such as

- Storage: The raised open space under the house provides an area for storing various items, tools, and equipment that may not be used regularly or need protection from the elements.
- Workspace: The open space beneath the house can also serve as a workspace for various activities like crafts, carpentry, or other livelihood tasks, keeping the mess and noise away from the living quarters.
- Social gathering place: The open area under the house can act as a communal space for social gatherings, where neighbors and community members can come together for meetings, discussions, or leisure activities.
- Flood protection: Raising the floor level of the house higher off the ground offers protection from potential flooding, particularly in areas prone to heavy rainfall or located near bodies of water.

This adaptation of the traditional Lanna Thai style house in Ban Thai Yuan Saraburi highlights the community's ingenuity and resilience in adjusting to their local environment while preserving their cultural identity. Despite the geographical differences between the northern region and Saraburi Province, the Thai Yuan community in Saraburi has maintained essential aspects of traditional Lanna-style community planning and architectural features. This demonstrates the strong connection between the community's architectural identity and cultural heritage, even in a different environmental context.

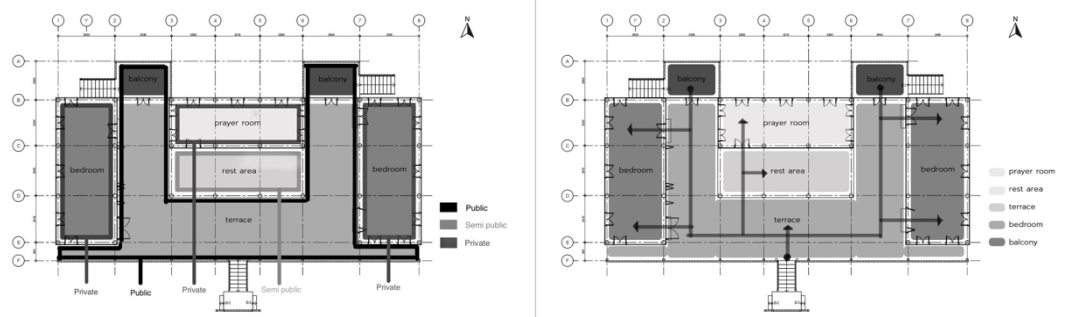


Fig. 5: The architectural plan of a Tai Yuan House in Saraburi province.
Source: Thongtup Sirisoda, 2023

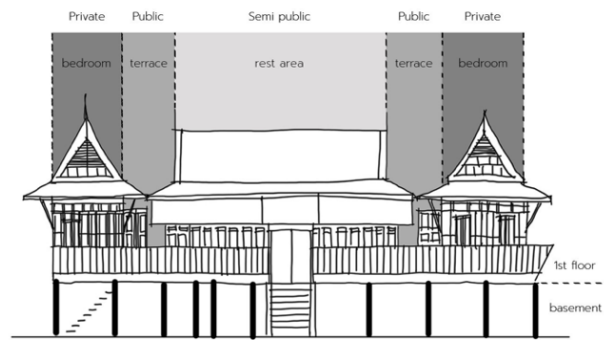


Fig. 6: Ban Tai Yuan building plan
Source: Thongtep Sirisoda, 2023



Fig 7: The physical features of the Taiyuan houses
Source: Sirisoda, 2019



Fig 8: The Pa Sak River, flowing through Sao Hai District
Source: Sirisoda, 2019



Fig 9: The river

Source: Sirisoda, 2019



Fig 10: Twin houses in the Tai Yuan community

Source: Sirisoda, 2023

The plan of the sample house demonstrates a well-thought-out arrangement of zones and passageways that cater to the occupants' needs while maintaining a solid connection to the traditional Lanna style and the community's cultural heritage. The building plan is rectangular. Upstairs are three houses, placed in a U-shaped shape, facing the houses toward the river. There is a central staircase as the main staircase. The abstract elements of Taiyuan culture emphasize a strong sense of community, preservation of cultural heritage, adaptability, and the importance of spirituality and religious beliefs. In summary, the physical features of Taiyuan houses and villages reflect the community's connection with nature, traditional architecture, and balanced space division.

The Pa Sak River, flowing through Sao Hai District in Saraburi Province, Thailand, has cultural and historical significance for the local community. The river serves as a crucial water source for various ceremonies and rituals, which help preserve local traditions and foster a sense of unity and cultural identity within the community. Often, there are twin houses in the Tai Yuan community which share standard architectural features inspired by the traditional Lanna style. Moreover, the ground floor of Tai Yuan houses is usually open and multipurpose, allowing for various uses such as storage, workspace, or a social gathering place. This adaptable design enables the occupants to maximize the functionality of their living space.



Fig 11: The ground floor of a Tai Yuan house
Source: Sirisoda, 2023

Conclusions

In summary, the Thai Yuan community in Saraburi Province has successfully adapted traditional Lanna-style houses and Tai Yuan houses to their local environment while preserving essential cultural and architectural elements. The key features of this adaptation include the following:

1. Temple and community layout: Following the traditional Lanna style, the community layout has interconnected temples and houses and a town tower.
2. Terrain and location: Despite the absence of mountains in Saraburi Province, the community adheres to traditional housing orientation and is near a water source, the Pa Sak River.
3. Level division: The layout reflects the characteristics of traditional Lanna Tai Yuan houses, with a harmonious balance between public and private spaces.
4. Adaptation to the environment: The community has made various environmental adjustments, such as compacting sand in the basement and surrounding areas for better water absorption during the rainy season and planting large trees for shade.
5. Building shape and internal layout: The positioning of the kitchen on the west/north side of the house allows for better lighting, and slatted walls are constructed for improved airflow.
6. Use of space: Public spaces take precedence over private rooms in the community, emphasizing semi-public areas. The house walls can be opened for better ventilation, and the layout allows for easy connection to external sites.

Oranratmanee, Sookkree, and Srisawat (2016) has found that although there are differences in factors affecting housing styles, they change gradually, with the core being the organization of the area according to the social beliefs and the lifestyles. It was discovered through observation and conversations with villagers that these local houses are comfortable and closely related to their way of life. They can be modified for cost-effective space usage and foster good relationships between families and neighbors. The Thai Yuan houses have flexible living areas for various activities and feature gradual transitions between interconnected spaces.

These characteristics of Thai Yuan houses can be applied to modern architectural designs in various ways. The Thai Yuan community in Saraburi Province highlights the significance of adapting traditional architectural styles and community planning to suit the local environment while preserving cultural identity and heritage.

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