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An Exploration of Traditional Houses and Belief Systems of the White Hmong: A Case Study of Kong Kham Village, Houaphanh Province, Lao PDR

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Abstract

This study investigates house-building beliefs among the White Hmong in Kongkham Village, Xiengkhor District, Houaphanh Province, Lao PDR. The study aims to: (1) examine the house construction process among the White Hmong in Kongkham Village; and (2) investigate their traditional beliefs associated with house construction. The study involved five villagers from Kongkham Village, Xiengkhor District, Houaphanh Province. Data were collected through interviews and field investigations, supplemented by relevant literature and oral histories. The study analyzed the house construction procedures and traditional beliefs of the White Hmong to explain the construction process and the internal and external structures of their houses.

The findings reveal that the house construction process among the White Hmong consists of several stages: preparing building materials, selecting a house site, beginning construction, dividing interior spaces, and constructing exterior structures. The building materials are derived from natural resources. The division of interior spaces is guided by traditional beliefs, while the exterior structures vary according to the surrounding natural environment. The interior structure, in particular, is closely associated with various traditional beliefs.

House-building beliefs are observed throughout the construction process, including the preparation of building materials, the selection and preparation of the building site, the determination of auspicious dates and times, and the commencement of construction. Each White Hmong house incorporates beliefs associated with its interior structure. *Sue Kha* is regarded as the household spirit and the spiritual protector of the male head of the household. The spirit associated with the spirit door is believed to protect the female head of the household. The central pillar spirit is associated with the main pillar of the house, while ancestral spirits include both paternal and maternal ancestral spirits. These beliefs reflect the spiritual significance of the house and the relationship between its physical structure, household members, and ancestral traditions.

Keywords: Houaphanh Province Lao PDR; White Hmong; house-building customs; belief systems; spatial symbolism.

1. Introduction

A house is one of the fundamental necessities of human life, providing shelter, safety, and a place for family activities. Beyond its physical function, a house also represents social relationships, cultural identity, and spiritual values. In many traditional societies, the construction and organization of a house are influenced by beliefs concerning ancestors, supernatural beings, building materials, site selection, and the arrangement of interior spaces. Consequently, vernacular architecture should be understood not only as a form of shelter but also as a cultural expression shaped by the interaction between human experience, the natural environment, and traditional belief systems (Anolac, 2013; Oikawa et al., 2010).

In Lao People's Democratic Republic (Lao PDR), ethnic diversity has contributed to the development of

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distinctive architectural traditions, construction techniques, and domestic spatial arrangements. Differences in geographical conditions, local resources, lifestyles, and cultural practices influence the forms and functions of traditional houses. Anolac (2013) explains that vernacular dwellings in Laos vary according to settlement geography and environmental conditions, with upland and highland houses displaying characteristics that differ from those of lowland dwellings. Similarly, Oikawa et al. (2010) compared the dwelling cultures of different ethnic groups in Laos and demonstrated that architectural features, including roof forms, floor arrangements, terraces, and room divisions, can help distinguish ethnic housing traditions. These findings highlight the importance of studying traditional houses within their specific geographical and cultural contexts.

Previous research has also demonstrated that traditional houses in Laos reflect the relationship between architectural design and cultural beliefs. For example, Weerataweemat et al. (2013) investigated Phutai vernacular houses in Maung Phin, Savannakhet Province, and documented the relationship between house types, household organization, construction materials, and domestic spiritual spaces. Their study showed that different rooms and architectural elements serve both practical and culturally significant functions. In another study, Anolac (2017), published in Souphanouvong University Journal Multidisciplinary Research and Development, examined traditional Lue house plans in northern Laos and identified differences in the positioning of male and female pillars between two Lue house-plan types. These findings indicate that the spatial organization of traditional houses may embody culturally meaningful distinctions rather than being determined exclusively by structural requirements.

Among the ethnic groups of Lao PDR, the Hmong maintain distinctive cultural traditions and belief systems that influence their settlement patterns and domestic life. Hmong communities have historically established settlements in mountainous and upland environments, where the surrounding landscape and available natural resources influence housing practices. Thao and Kirdsiri (2016), in their study of Hmong settlements in Baan Nam Pong and Baan Huai Hai villages in Houaphanh Province, examined how traditional beliefs concerning ancestors, supernatural beings, and spirits associated with the natural environment influence settlement patterns, agricultural areas, water resources, and house construction. Their research demonstrates that traditional beliefs remain important in understanding Hmong cultural landscapes and residential practices.

More specifically, Shinozaki et al. (2017) investigated the relationship between Hmong dwellings and their surrounding natural topography at Keo Patu Village in northern Laos. Their study of 81 dwellings identified the importance of the spatial relationship between the ancestral altar, the main entrance, and the surrounding landscape. The researchers found that the principle of positioning the ancestral altar upward and the main entrance downward remained influential in the spatial organization of many dwellings. This research provides an important foundation for examining how Hmong spiritual beliefs influence house orientation, interior arrangements, and relationships between dwellings and their natural surroundings. However, because Hmong communities may differ in their cultural practices and local traditions, these findings should not automatically be generalized to every Hmong subgroup or settlement.

Traditional beliefs can also contribute to the preservation of ethnic architectural identity. Jinwuth (2017), in a study of Lahu vernacular houses in Doi Muser, Thailand, found that traditional beliefs influenced the preservation of architectural forms, settlement planning, and the functional organization of domestic space. They suggests that beliefs may help sustain traditional housing practices even when modern construction materials and techniques become increasingly available. Nevertheless, traditional architecture also changes in response to broader social and economic developments. Stolz (2021), studying house construction among the Khmu in northwestern Laos, demonstrated that the introduction of concrete houses reflected local aspirations, individual decisions, and experimentation with new construction techniques. Similarly, Zuckerman and Enfield (2022) examined house construction and ethnolinguistic transformation among Kri communities in upland Laos, showing that changes in housing practices can be connected to broader questions of cultural identity and the continuation of traditional practices. Together, these studies indicate that traditional housing should be examined as a dynamic cultural practice rather than a fixed architectural form.

The White Hmong, also known as Hmong Khao, constitute one of the Hmong subgroups found in Lao PDR. They maintain distinctive cultural practices, traditional customs, and beliefs that are transmitted across generations. These traditions include beliefs concerning ancestral spirits, household spirits, and supernatural forces associated with domestic life. Such beliefs may influence decisions about where to build a house, which materials to use, when construction should begin, and how different parts of the house should be arranged. Although previous research has examined Hmong settlement patterns, spatial orientation, and traditional beliefs in northern Laos, further investigation is needed to document the specific construction procedures and house-building beliefs of White Hmong communities in individual local contexts.

Daravong et al. (2023) investigated Lao Phuan vernacular houses in Ngan Area, Khoun District, Xieng Khouang Province. Their findings indicate that traditional house forms, construction materials, interior arrangements, and building practices are adapted to local environmental conditions, household activities, and longstanding cultural traditions. The study also emphasizes that house construction continues to be associated with traditional beliefs. Although the Lao Phuan and White Hmong have distinct cultural identities, this research provides a useful comparative framework for understanding how ethnic traditions, environmental adaptation, and local knowledge influence traditional housing in Lao PDR.

Despite the contributions of these previous studies, detailed documentation of the traditional house construction process and associated beliefs among the White Hmong in Kong Kham Village, Xieng Khor District, Houaphanh Province, remains important. In particular, further attention is needed to understand how beliefs influence the selection of building materials, evaluation of construction sites, determination of auspicious dates, erection of house posts, and organization of interior spaces. Documenting these practices can contribute to a broader understanding of the relationship between vernacular architecture, spiritual beliefs, and cultural identity among ethnic communities in Lao PDR.

Therefore, this study aims to (1) examine the traditional house construction process of the White Hmong in Kong Kham Village, Xieng Khor District, Houaphanh Province, Lao PDR, and (2) investigate the traditional beliefs associated with house construction in this community. By documenting construction techniques and associated cultural practices, the study seeks to contribute to the preservation of White Hmong architectural knowledge and provide a basis for future comparative research on traditional houses and belief systems among ethnic groups in Laos.

2. Methodology

This study employs an interview-based qualitative research approach, supported by field investigations, direct observation, and targeted interviews with individuals who are familiar with traditional house construction procedures and related beliefs. These methods are used to establish a systematic descriptive account of the house-building practices and belief systems of the White Hmong.

2.1 Target Group

The target group of this research consists of five informants who are knowledgeable about traditional house construction and associated beliefs: one village chief, one village elder, one person with knowledge of traditional beliefs, one carpenter, and one homeowner.

2.2 Intrument

The instruments consisted of interview forms and direct observation of the villagers' daily lives. The interview questions were developed by the researchers and then submitted to three professors for evaluation to determine their relevance to the research objectives. The average Index of Item-Objective Congruence (IOC) scores for the questions ranged from 0.66 to 1.00.

2.3 Data collection

The researchers spent one month in the village in July 2025 to collect data. During this period, we spended time to live in the village to observe the villagers' daily lives process of traditional house construction. The researchers also held informal conversations and conducted interviews with the village head, elderly residents, villagers, and heads of households who had extensive knowledge of the house construction process. All data were collected over the course of one month. Some data were obtained through direct observation and firsthand experience, while other information was gathered from the villagers' accounts and descriptions.

2.4 Data Analysis

This research data were analyzed using descriptive analysis. The traditional house construction process was described step by step and illustrated with Figure to provide a clear and detailed explanation of each stage.

3. Result

3.1 House Construction Process

Field data and interview findings indicate that most White Hmong houses in Kongkham Village, Xiengkhor District, Houaphanh Province, Lao PDR, retain their traditional architectural features. These traditional houses generally have thatched roofs, earthen floors, and walls made of wooden planks or bamboo panels. However, some

houses have undergone modernization, with tiled or corrugated metal roofs, cement floors, and walls constructed from earth blocks or brick and stone masonry.

The construction of a house generally involves several stages, from the initial preparation and planning to the completion of the building. The following section describes the main steps involved in traditional White Hmong house construction in the study area.

3.1.1 Preparation of Building Materials

According to an interview with villager Nengjao lro conducted at 5:00 p.m. on August 8, 2025, the White Hmong generally prepare building materials during the dry season, from November to January. During this period, timber is less susceptible to decay and insect damage. Commonly used building materials include timber, bamboo, thatch, and rattan. Both hardwood and softwood are used, with different types of wood selected according to the structural requirements of each part of the house. For example, hardwood is used for posts, beams, rafters, and purlins. Most of these building materials are obtained from natural resources.

When selecting timber, the builders generally prefer tall trees with straight trunks to minimize the need for joints and splicing. Common timber components include wood for posts, beams, and purlins, which are selected according to their intended structural functions.

3.1.2 Site Selection

After preparing the building materials, the next step is to select a suitable site for house construction. To ensure the peace, well-being, and happiness of the family, the site should be flat, free of obstacles, and well drained. It should not be prone to waterlogging or flooding during the rainy season. In addition, the White Hmong traditionally avoid building houses on land that was previously used as a battlefield or as a site for funerals and other burial-related rituals.

3.1.2 Measurement Methods in the House Construction Process

According to an interview with Mr. Yeaher Pashao, aged 33, conducted from 3:11 p.m. to 4:09 p.m. on July 23, 2025, the main tools used for house measurement include rope, wooden stakes, a handmade wooden knife, a shovel, and a wooden mallet. The measurement process is as follows. First, wooden stakes are placed at the four corners of the proposed building site. The dimensions of the house are then determined according to the family's needs, depending on whether a large or small house is to be built. According to the traditional Hmong measurement system, a large house is approximately 8 wa long and 4 wa wide. One wa is equivalent to 1.6 meters; therefore, a large house measures approximately 12.8 meters in length and 6.4 meters in width. A small house is approximately 6 wa long and 4 wa wide, equivalent to 9.6 meters in length and 6.4 meters in width. After determining the length and width of the house, the rope is pulled taut to ensure consistent measurements. The positions of the house posts and the central pillar are then marked according to the measured dimensions and designated corners (Figure 01).

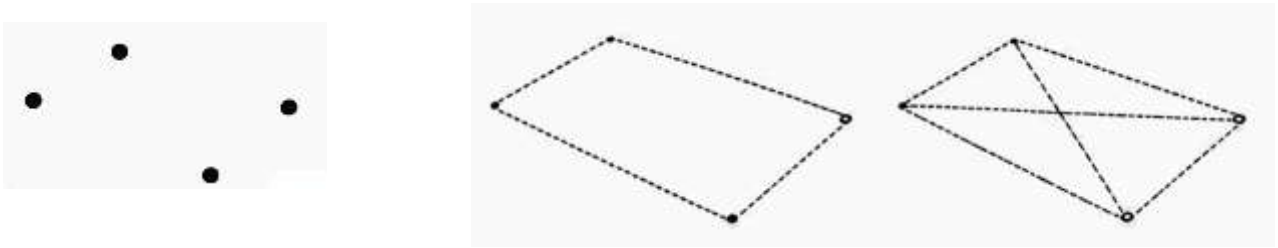


Figure 01：Methods for Leveling the Ground and Measuring the Foundation
Source: Created by the Researchers

In the past, measurements of different parts of a house were not taken using a measuring tape. Instead, builders used body-based measurement methods, in which parts of the human body served as units of measurement. These traditional measurements were as follows:

- 2 cm: The approximate width of a bent finger or the shape of a partially closed fist.
- 9 cm: The approximate width of a fully clenched fist.
- 18 cm: The distance from the tip of the thumb to the tip of the index finger when the hand is fully extended.
- 20 cm: The distance from the tip of the thumb to the tip of the middle finger when the hand is fully extended.
- 40 cm: The length of the forearm, from the wrist to the elbow.
- 60 cm: The length of one arm, from the shoulder to the fingertips.
- 80 cm: The extended measurement from the shoulder area through the arm, incorporating part of the torso.
- 160 cm: The total span of both arms when extended horizontally to either side of the body.

These body-based measurement methods represent a traditional system of measurement used in house construction before standardized measuring tools became common. The stated centimeter equivalents should be understood as approximate values, as actual measurements may vary among individuals (Figure 02).

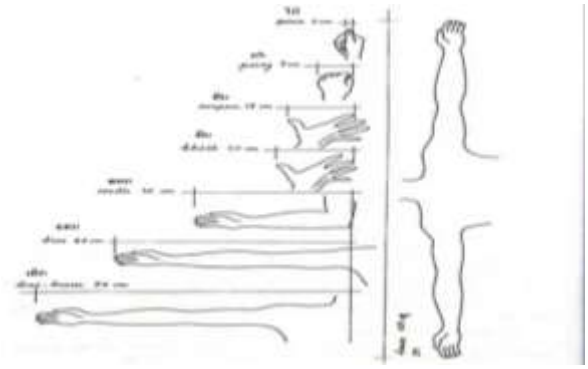


Figure 02: Body-Based Units of Measurement Used by the White Hmong

Source: Lao Houses, First Edition.

3.1.3 Excavation of Post Holes

After selecting the house construction site, the next step is to level the ground and excavate the post holes. Since traditional White Hmong houses are usually built on hillsides, ground leveling generally takes approximately two to three days to complete. The work is mainly carried out by family members, with assistance from nearby neighbors.

The post holes are excavated according to the points marked during the earlier foundation measurement process. The depth of each hole is generally measured using a wooden stick, with each hole typically measuring approximately 50–60 cm deep (Figure 03).

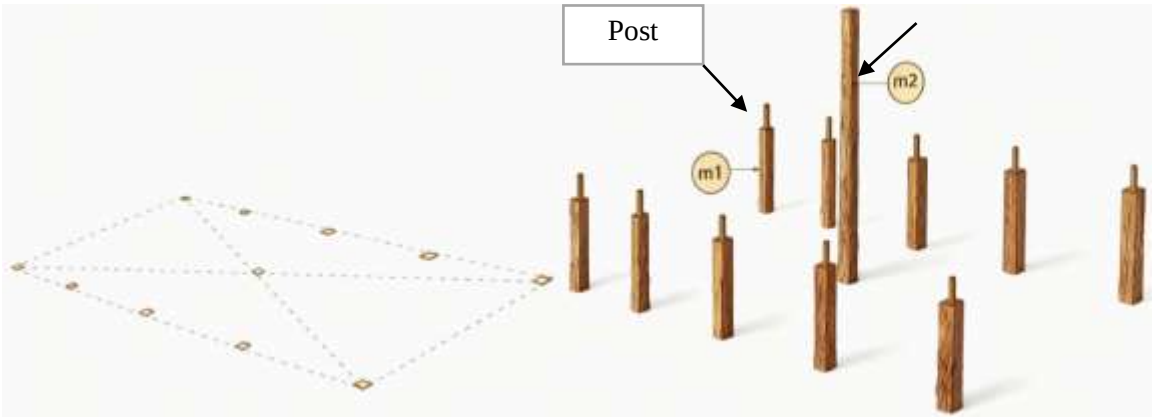


Figure 03: Step 1: Stages of the House Construction Process

Source: Created by the Researchers.

3.1.4 Erecting the House Posts

The process of erecting the house posts usually begins with the first post at a corner of the house. This post serves as a reference point for checking and aligning the positions and heights of the other posts. Once all the posts have been erected vertically and securely fixed in place, the beams are lifted and installed on top of the posts. Beams are then used to connect and secure the posts along both sides, linking the structural components and stabilizing the overall house frame (Figure 04).

3.1.5 Installation of Diagonal Braces and the Ridge Beam

Each pair of diagonal braces is connected to the rafters and horizontal beams to improve the overall stability of the roof structure. During installation, the diagonal braces must fit tightly against the rafters and beams and be securely fastened with nails or bolts. After the diagonal braces have been installed, the ridge beam is placed on top of them, ensuring that its centerline aligns with the ridge line of the house. The ridge beam is then secured with wire ties or nails (Figure 05 and Figure 6).

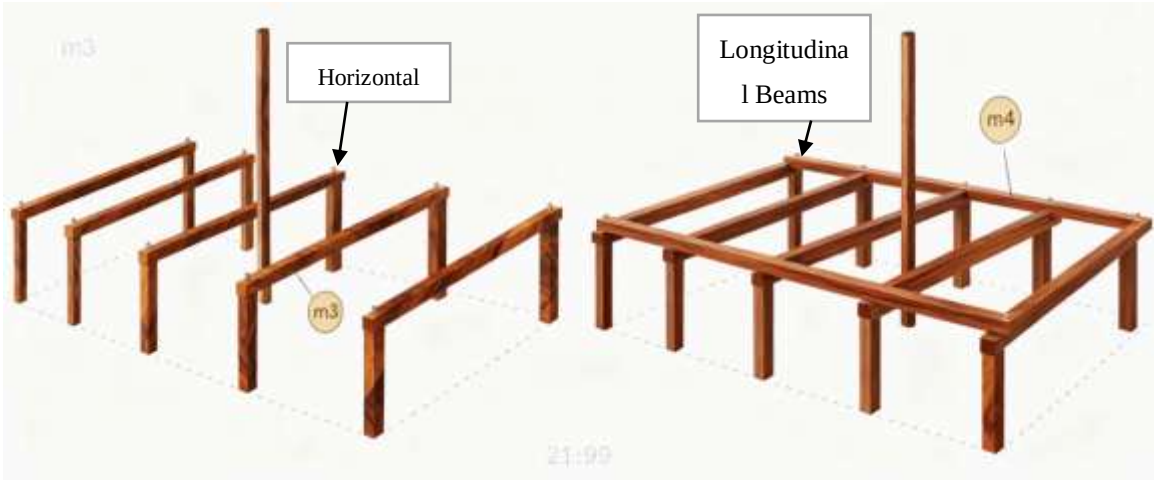


Figure 04： Stages of the House Construction Process
Source: Created by the Researchers.

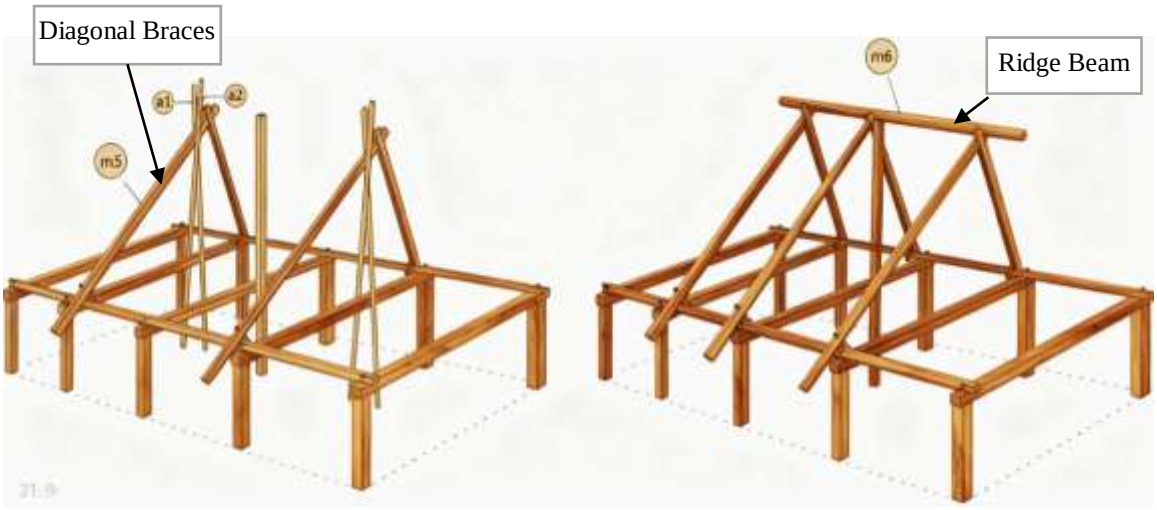


Figure 05：Stages of the House Construction Process
Source: Created by the Researchers



Figure 06：White Hmong Houses in Kongkham Village, Xiengkhor District, Houaphanh Province, Lao PDR
Source: Photograph taken by the Researchers.

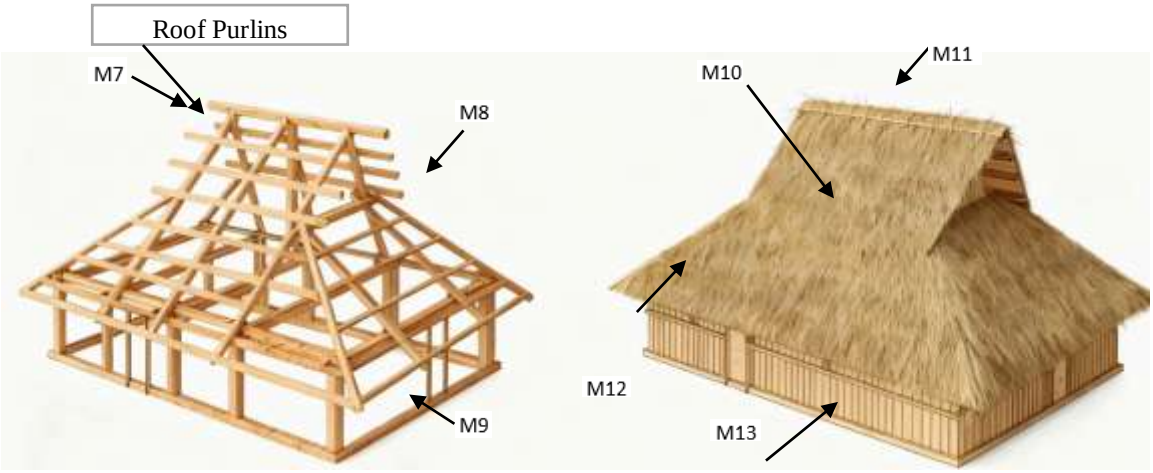
The installation of diagonal braces, which reinforce the roof frame and improve its resistance to lateral forces, together with the ridge beam, the main structural timber at the highest point of the roof that helps support and stabilize the roof structure, represents a distinctive feature of traditional Hmong residential construction techniques (Figure 07).

3.1.5 Installation of Roof Purlins

According to an interview with Mr. PaoYang YaePaoLor, aged 55, conducted from 10:21 a.m. to 11:39 a.m. on August 2, 2025. When installing roof purlins, the timber or bamboo is first cut to the required lengths and shapes according to the house dimensions, design requirements, and roof pitch, which is approximately 35°–40°. The purlins are generally made of solid timber, although treated bamboo may also be used.

During installation, the purlins are positioned according to the roof design and securely fastened to the roof frame. Care is taken to ensure that they are firmly connected to the supporting structural members and that the roof slope conforms to the intended pitch. After the purlins have been installed, thatch or palm leaves are laid over them as the roof covering. The roof edges are then

finished with wooden planks or bamboo strips to improve weather resistance and enhance the overall stability of the roof structure (Figure 08 and Figure 07).



Figer 07：Stages of the House Construction Process

Source: Created by the Researchers



Figure 08：Traditional White Hmong House

Source: Photograph taken by the Researchers.

3.2 Traditional Beliefs Regarding the Selection of Timber for House Construction

According to an interview with Mr. Na Mua Yongpao, a 65-year-old informant, conducted on August 6, 2025, from 2:11 p.m. to 3:41 p.m., the homeowner should consult a skilled craftsman before beginning house construction. The preparation of timber may take one to two years because house construction is a gradual process, and timber is collected over time until the required quantity is obtained.

Selecting suitable timber is one of the most important stages in traditional house construction. Choosing high-quality wood is essential not only for ensuring the stability and comfort of the house but also for promoting the happiness and well-being of its occupants. According to local traditional beliefs, timber should be carefully selected, giving priority to wood that is free from defects and stains. The trees should not have been struck by lightning, rotted, or fallen naturally. Such trees are traditionally believed to grow in fertile, moist environments. Timber selected according to these beliefs is thought to contribute to a warm and pleasant home environment and to maintain harmony and happiness among family members. In contrast, choosing unsuitable timber is believed to create an uncomfortable atmosphere within the household and may even cause feelings of uneasiness and anxiety among its occupants.

Therefore, the selection of timber is not merely a technical matter but is also closely associated with the health and happiness of family members. This belief is deeply rooted in the local community and has become an important part of their traditional way of life. When constructing traditional houses, the White Hmong people typically use the following types of wood and building materials:

Teak: Old teak, in particular, is regarded as high-quality timber for house construction. It is hard, resistant to decay and insect damage, and helps ensure that the house structure remains strong and durable. It is commonly used for roof beams and other key structural components, symbolizing the hope that the family home will endure for generations.

Rosewood: This timber is commonly used for house posts. The wood should be straight and free from knots, symbolizing a solid family foundation and a smooth path to prosperity.

Boxwood: With its fine texture and ease of carving, boxwood is suitable for decorative components, such as eaves. Its use reflects the aspiration for a refined and beautiful life.

Fir: Fir is suitable for making door and window frames. In addition to its practical function, it carries the symbolic meaning of openness and brightness, expressing the hope that family life will be filled with light and vitality.

Terminalia wood (Khan wood): This timber is resistant to decay and easy to work with. It is commonly used for wall panels, helping create a comfortable living environment.

Bamboo-slat wall panels: Locally grown arrow bamboo or Phyllostachys edulis (Moso bamboo) is often selected for this purpose. After harvesting, the bamboo is split into thin strips and dried before being secured to a wooden frame using traditional weaving or joining techniques. Bamboo-slat wall panels provide good ventilation and are well suited to hot and humid climates, helping keep the interior of the house dry. In addition, bamboo symbolizes continuous growth and upward progress in traditional culture, reflecting the family's hopes for increasing prosperity and good fortune.

At the same time, the White Hmong people strictly avoid using timber from trees that have been struck by lightning, died while standing, fallen naturally, grown in cemeteries, or developed crooked trunks. Such timber is traditionally believed to bring misfortune and conflict to the household, potentially affecting the family's happiness and future development.

3.2.1 Traditional Beliefs Regarding the Selection of House-Building Sites

The main factor influencing the White Hmong people's selection of house-building sites is their traditional religious beliefs, which have been passed down from generation to generation. They carefully consider the characteristics and history of a proposed building site to determine whether it is suitable for house construction.

The White Hmong people observe several taboos when selecting a house-building site. For example, they avoid building houses in places where water flows during the rainy season, locations where various sacrificial or religious ceremonies have previously been held, cemeteries, and sites where houses once stood. Before constructing a house at any location, they must first consult a shaman to perform a divination ritual to determine whether the site is auspicious and suitable for building a house. The divination process is conducted as follows:

First, a small hole is dug in the ground. Rice grains equal in number to the household members are then collected, along with three additional grains representing the family's livestock and agricultural crops. These rice grains are placed in the center of the hole, with the pointed end of each grain facing inward. The hole is then covered with a winnowing tray, and incense is burned as an offering to the guardian spirits of the land to seek their permission.

The site is left undisturbed overnight. Early the following morning, the shaman removes the winnowing tray and examines the condition of the rice grains. If all the grains remain intact, white, and clean, the site is considered suitable for house construction and is believed to provide an auspicious and peaceful home. However, if ants or small insects have damaged the grains, other animals have crawled over them, or some grains are missing, the site is considered unsuitable for building a house.

According to this traditional belief, building a house on an unsuitable site despite these warning signs may bring unrest to the household, resulting in losses and misfortune for the family (Figure 09).



Figure 09：Traditional Beliefs of the White Hmong People Regarding the Selection of House-Building Sites
Source: Touk's Thesis

The White Hmong people hold traditional beliefs regarding house layout, particularly the placement of the household altar and the spirit gate. The household altar is positioned in an elevated area in the northeastern part of the house, while the spirit gate (rear door) is located at a lower level in the southwestern part. They strictly prohibit the household altars of different houses from facing directly toward one another. According to White Hmong beliefs, the household altar is a sacred space associated with deities and must be respected and worshipped. Therefore, the altar must be placed at the highest position inside the house, while the spirit gate occupies the lowest position. These principles serve as traditional guidelines for house construction, ensuring appropriate spatial relationships among different parts of the building.

The house has two entrances. The main entrance is located on the southern side and is used for everyday access, while the spirit gate is situated at a lower level in the

southwestern part of the house. It serves as a passage symbolically associated with yin energy and is not opened casually. This arrangement meets the practical needs of daily life while adhering to the traditional White Hmong beliefs concerning the sacred status of the household altar and the special significance of the spirit gate. These cultural principles are integrated with the functional organization of the house, including the arrangement of living spaces and cooking and dining areas, creating a unity between practical use and cultural meaning.

3.2.2 Traditional Beliefs Regarding Land Leveling and the Erection of House Posts

When preparing the land for house construction, the White Hmong people do not specifically select an auspicious date for leveling the ground. Instead, the work is scheduled according to the availability of labor. However, several taboos must be observed after the land has been leveled. Cattle, water buffalo, pigs, and other livestock are prohibited from entering and trampling the proposed building site. This restriction is based on the traditional belief that animals trampling the site may bring misfortune to the family and disrupt household harmony.

Regarding the erection of house posts, an auspicious date must be selected during the waxing phase of the lunar month, specifically on an even-numbered day, such as the 2nd, 4th, 6th, or 8th day of the lunar month. The White Hmong people regard a house as one of the most important assets in life and believe that erecting the house posts on an even-numbered day will bring good fortune and happiness to the family.

Several taboos must also be observed when erecting house posts. These include prohibitions against erecting posts on odd-numbered days, on the death anniversaries of ancestors or family members, and on days when an unfortunate event occurs in the village, such as the death of a villager reported by (Mr. Paolee Her, conducted on August 7, 2025, from 2:00 p.m. to 3:49 p.m).

4. Discussion

4.1. The Relationship Between Traditional Beliefs and House Construction

The findings of this study demonstrate that traditional house construction among the White Hmong in Kong Kham Village, Xieng Khor District, Houaphanh Province, Lao PDR, is not merely a technical process of assembling building materials. Instead, it is a culturally meaningful activity in which practical knowledge, spiritual beliefs, and family well-being are closely interconnected. The selection of timber, evaluation of building sites, determination of auspicious dates, and erection of house posts are influenced by beliefs concerning protection, prosperity, and the avoidance of misfortune. These findings indicate that traditional beliefs function as an important framework guiding decisions throughout the construction process. This result is consistent with Oranratmanee's (2014) discussion of vernacular architecture in Southeast Asia, which explains that spiritual beliefs and architectural forms have a reciprocal relationship: beliefs influence the formation of houses, while architectural arrangements communicate and reproduce cultural beliefs. Similarly, Jinwuth (2017) found that traditional beliefs play a significant role in maintaining Lahu vernacular architecture and influence both settlement planning and the functional organization of domestic space. These studies support the present finding that house construction should be understood as a cultural practice rather than solely as a technical activity.

Research by Shinozaki et al. (2017) further demonstrates the importance of spiritual beliefs in Hmong domestic architecture. Their investigation of Hmong dwellings in northern Laos identified a spatial principle in which the ancestral altar is positioned upward relative to the main entrance, reflecting culturally meaningful relationships between the house and its surrounding topography. This corresponds with the present study, in which the household altar is located in an elevated position and the spirit door occupies a lower position. Both studies suggest that traditional beliefs influence the organization of architectural elements and the symbolic relationships between different parts of a house.

4.2. Spiritual Significance and the Organization of Interior Space

A second major finding is that the interior arrangement of White Hmong houses reflects a culturally defined hierarchy of spaces. The main hall, household altar, central pillar, hearths, bedrooms, and spirit door have distinct functions and meanings. In particular, the household altar and central pillar are associated with household protection and ancestral relationships, while the spirit door is reserved for particular spiritual ceremonies. The division of bedrooms according to family roles also demonstrates that the internal organization of the house reflects social relationships and cultural expectations. These findings closely correspond with Shinozaki et al.

(2017), who examined the relationship between the ancestral altar, main entrance, and surrounding landscape in Hmong dwellings. Their research emphasizes the importance of a principal spatial axis that helps organize the dwelling in relation to its physical and cultural environment. Likewise, Chiranthanut (2020), in a comparative study of vernacular houses among Tai-speaking ethnic groups in Southeast Asia, emphasizes the role of sacred domestic spaces in organizing household relationships and spatial hierarchies. Pearce's (2011) study of Thai spirit houses also provides a useful interpretive perspective. Pearce explains that spirit shrines contribute to the creation of meaningful places through relationships between people, spirits, and their surroundings. Although Thai spirit houses differ in form and function from the household altar in White Hmong dwellings, both examples illustrate how spiritual beliefs give domestic spaces significance beyond their immediate practical purposes.

The findings therefore suggest that the White Hmong house operates simultaneously as a physical dwelling, a social environment, and a spiritual setting. The organization of interior space helps maintain distinctions between ordinary activities and sacred practices while expressing relationships among household members, ancestors, and spiritual beings. This interpretation is consistent with Oranratmanee's (2014) argument that vernacular architecture both reflects and reproduces cultural beliefs.

4.3. Building Materials, Environmental Adaptation, and Traditional Knowledge

The findings also reveal a close relationship between construction techniques, locally available materials, and environmental conditions. White Hmong builders traditionally use timber, bamboo, rattan, and thatching materials obtained from natural resources. Timber is selected according to its structural function, while bamboo panels and plant-based roofing materials provide practical solutions for enclosing and protecting the house. The preference for straight, durable timber reflects accumulated knowledge concerning material quality and building performance. Anolac (2013), in a study of vernacular dwellings in Lao PDR, explains that traditional housing forms are influenced by geographical conditions, climate, available materials, and sociocultural practices. The study identifies differences between lowland, upland, and highland dwellings, demonstrating that architectural forms respond to their respective environments. This supports the present findings concerning the use of natural materials and the adaptation of construction techniques to the mountainous environment of Kong Kham Village. Similarly, Vongvilay et al. (2015) argue that Lao vernacular dwellings reflect the interaction of cultural traditions, beliefs, lifestyles, indigenous knowledge, and physical environmental conditions. Their comparative approach reinforces the importance of considering both material and cultural factors when explaining traditional housing forms. Naing and Hadi (2020), in their study of Buginese vernacular architecture, similarly examine the relationship between traditional construction knowledge, human-based measurement, and cultural understandings of building design. Their findings provide a useful comparison with the body-based measurement practices documented in the present study, in which builders historically used parts of the human body as approximate units of measurement. Both cases illustrate how architectural knowledge can develop through practical experience and be transmitted through cultural practice rather than depending exclusively on standardized instruments.

4.4. Site Selection, Spatial Orientation, and the Natural Environment

Another important finding concerns the relationship between site selection, environmental suitability, and spiritual beliefs. In Kong Kham Village, suitable building sites are expected to be relatively flat, well drained, and protected from seasonal flooding. At the same time, locations associated with burial activities, previous religious ceremonies, or other culturally unsuitable uses may be avoided. The rice-grain divination practice described by informants further demonstrates that site suitability is evaluated through both environmental observation and spiritual consultation. The findings are consistent with Shinozaki et al. (2017), whose study of 81 Hmong dwellings at Keo Patu Village in northern Laos examined the relationship between house orientation, ancestral altars, main entrances, and surrounding topography. Their results showed that many dwellings followed the principle of positioning the ancestral altar upward and the main entrance downward in relation to the landscape. This comparison suggests that the relationship between domestic architecture and the natural environment is not determined by terrain alone; it can also be interpreted

through culturally established spatial principles. Anolac (2013) similarly demonstrates that the physical characteristics of vernacular dwellings in Laos correspond to environmental conditions and settlement geography. However, the present study adds a more detailed account of the procedures through which the White Hmong evaluate a particular building site, including the use of divination to determine whether the location is auspicious. Oranratmanee (2014) provides a broader explanation for this relationship by showing that spiritual beliefs can shape the formation and identity of vernacular architecture in Southeast Asia. From this perspective, the White Hmong practice of consulting a shaman before construction can be interpreted as a way of establishing an appropriate relationship among the household, the land, and the spiritual world.

4.5. Traditional Architecture, Cultural Identity, and Change

The present study found that traditional White Hmong houses retain characteristic architectural features, including natural building materials, clearly differentiated interior spaces, and culturally meaningful household arrangements. However, some houses have adopted modern materials such as corrugated metal roofing, cement flooring, and brick or masonry walls. These changes indicate that traditional architecture is not completely static but responds to changing material availability, construction practices, and household requirements.

This finding is consistent with Stolz's (2021) research among the Khmu in northwestern Laos. Stolz demonstrates that the construction of concrete houses can represent a deliberate orientation toward the future rather than simply the abandonment of traditional culture. The adoption of new architectural forms may express changing aspirations, craftsmanship, and ideas about social progress. This perspective is useful for interpreting the modernization of White Hmong houses: the use of modern materials does not necessarily mean that all traditional beliefs and practices have disappeared. In a later study, Stolz (2023) examined the changing life cycle of Khmu houses in northern Laos, highlighting the increasing use of timber and concrete alongside the decline of bamboo housing. This research illustrates how building materials and domestic practices change over time, while particular materials may continue to be used for specific purposes.

Zuckerman and Enfield (2022) also examined the relationship between house construction and ethnolinguistic identity among the Kri in upland Laos. Their research demonstrates that decisions about house construction and the treatment of houses following a death can become connected to competing understandings of ethnic identity and cultural continuity. Although the Kri practices described in their study differ from those of the White Hmong, the comparison illustrates a broader point: housing practices can be important expressions of belonging, tradition, and community identity.

Vellinga (2020) likewise emphasizes the need to understand vernacular architecture as a living and evolving cultural practice. Rather than defining vernacular houses solely by their traditional appearance or original materials, this perspective draws attention to the relationships among buildings, people, cultural meanings, and changing circumstances.

Future research could therefore examine variations in house-building beliefs across White Hmong settlements, investigate the transmission of construction knowledge between generations, and assess how changes in materials and building technologies influence ritual practices. Such research would help distinguish widely shared cultural principles from practices specific to individual villages or households.

5. Conclusion

5.1 The Traditional House Construction Process of the White Hmong People

Based on the study of house-building beliefs among the White Hmong people in Kongkham Village, Xiengkhor District, Houaphanh Province, Lao PDR, this research has two main objectives: (1) to investigate the traditional house construction process of the White Hmong people and (2) to examine the beliefs associated with house construction in Kongkham Village. The research findings are summarized as follows.

The traditional house construction process of the White Hmong people consists of several stages.

The first stage is material preparation, which involves collecting the materials needed for house construction. The main materials are timber, including posts, beams, rafters, floorboards, doorframes, wooden planks, and bamboo fencing. Other materials, such as thatch and palm leaves, are also prepared for roofing. The tools used during construction include axes, saws, chisels, knives, hammers, drills, levels, ropes, and crowbars.

The second stage is site selection. The White Hmong people prefer flat ground without depressions or standing water and avoid locations that are likely to be flooded during the rainy season. They carefully assess whether a site is suitable for house construction. In addition, they use traditional local divination methods to determine whether the proposed site and its different areas are appropriate. These practices are commonly observed in White Hmong folk traditions.

The third stage involves excavating and leveling the ground. Since White Hmong traditional houses are built directly on ground-level foundations, the construction site must be prepared before the structural work begins.

The fourth stage is digging holes and erecting the house posts. The holes are dug according to the dimensions marked on the ground, with a depth of approximately 50–60 centimeters. The corner posts are erected first and serve as reference points for positioning the remaining posts. The beams are then installed to form the house frame. After this stage, a rope is placed across the tops of the posts to check and ensure that they are at a consistent height.

The fifth stage is installing the rafters, which connect and support the structural components, helping to strengthen and stabilize the house frame. Next, the purlins are installed and secured in position in coordination with the beams. The roof beams are then placed above the purlins and fastened securely.

The sixth stage involves installing the floorboards and constructing the roof. The floorboards are laid and secured, followed by the installation of the roof ridge. The roof is then covered with thatch or palm leaves to provide protection from the weather.

The seventh stage is constructing the walls. After the roof has been completed, the walls are installed. The White Hmong people commonly use wooden plank walls, woven bamboo walls, or wooden slat walls, depending on the materials available and local construction practices.

After the house has been completed, the interior space is divided according to household functions. The main living area and kitchen are arranged separately. The kitchen contains large and small cooking stoves, water jars, storage areas for kitchen utensils, and food preparation spaces. The bedrooms include separate rooms for parents, daughters, sons, and guests.

Finally, the external areas and supporting structures are arranged around the house. These commonly include a courtyard, livestock shelters, a granary, and a firewood storage shed. Together, these spaces support the daily activities and traditional way of life of the White Hmong household.

5.2 Traditional Beliefs of the White Hmong People Regarding House Construction

The study of traditional house-building beliefs among the White Hmong people reveals that house construction is closely intertwined with their religious beliefs and cultural practices. Numerous customs and restrictions apply from the initial stage of selecting timber for house construction. These include beliefs regarding the selection of building sites, the selection of timber, land excavation and leveling, the erection of house posts, the arrangement of parents' and children's bedrooms, house-completion and house-entry rituals, and the worship of household spirits.

The most significant aspect is the internal structure of the house, as the White Hmong people strongly believe in the presence of household spirits. They believe that various spirits inhabit different parts of the house. Among these, the household spirit is particularly important and is worshipped as the guardian spirit of every family. The central pillar spirit is also highly revered and is regarded as an ancestral spirit that protects the family continuously. Consequently, the White Hmong people demonstrate greater reverence for these spirits than for other spiritual beings. They also believe in the presence of various other spirits within the house, including the hearth spirit, door spirit, and central pillar spirit, all of which hold important positions within their traditional belief system.

In conclusion, every White Hmong house requires careful attention and respect, both materially and spiritually. The White Hmong people firmly believe that a house is one of the most important elements of life, serving as a shelter and a place of protection for human beings. Failure to respect the house and observe its associated traditions is believed to bring misfortune to the family.

For the White Hmong people, every house carries profound spiritual and cultural significance. Without this connection to traditional beliefs, a house would be reduced to a mere physical structure without deeper meaning. Therefore, studying the traditional house-building beliefs of the White Hmong people reveals important aspects of their worldview, cultural identity, and spiritual values, all of which are reflected in the design, construction, and use of their houses. For them, a house is not merely a physical

structure called a home; it is also a vessel that embodies faith, hope, reverence, and spiritual well-being.

6. Conflict of Interest

We certify that there is no conflict of interest with any financial organization regarding the material discussed in the manuscript.

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