

Traditional Design in an Ancient Village of Tanintharyi

Winn Myintzu^a / Soe Thainkha^b / Elizabeth Moore^c

^a Department of English, National Management Degree College, Myanmar
Corresponding author: winnmyintzu@gmail.com

^b Department of Language, Dawei University, Myanmar

^c School of Arts, University of London, UK

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ABSTRACT

The ancient village of Thagara is located *circa* ten kilometres north of Dawei, Tanintharyi Region of Lower Myanmar. While Thagara's archaeology and the domestic religious architecture such as the pagodas and monasteries have been well documented, this article is the first to classify the main elements of the domestic dwellings. Five key components of the vernacular architecture are identified: the style of the house facade, the building materials, the hearth, the rice barn and the shrine. Constructed with local materials, the facades and roofs were designed to meet the challenges of the monsoonal climate and the hearth and rice barn adapted to the preferences of individual house dwellers and rice yields. The Buddhist and animistic shrines reflect the importance of spiritual activities in the traditional way of life. Using data from a systematic survey, the variations are defined in this article to illustrate aspects of the social, economic and religious daily life in the villages of Lower Myanmar.

Keywords: *Thagara, Dawei, archaeology, intangible heritage, vernacular architecture*

INTRODUCTION

This article reviews the results of a survey of traditional designs of the domestic architecture in the village of Thagara located *circa* ten kilometres north of Dawei, Tanintharyi Region of Lower Myanmar. The village is located on an elevated oval-shaped mound (*circa* 1600 x 1100 meters) surrounded by multiple walls and moats that protect the village from flooding during the high-rainfall months of the

monsoonal climate. The remains of ancient gates can be seen in gaps in the walls on the north, west and south. Inner quadrangular walls surround the principal pagoda on the summit of a small hill on the northeast, Shin Zalun Zeidi. Also within the inner walls, the excavated remains of palace structure, site SGR2 (*circa* 7.45 x 6.40 meters) is located at the centre of the mound. Two habitation layers of the palace structure demonstrate continued habitation spanning the first and second millennium CE. There

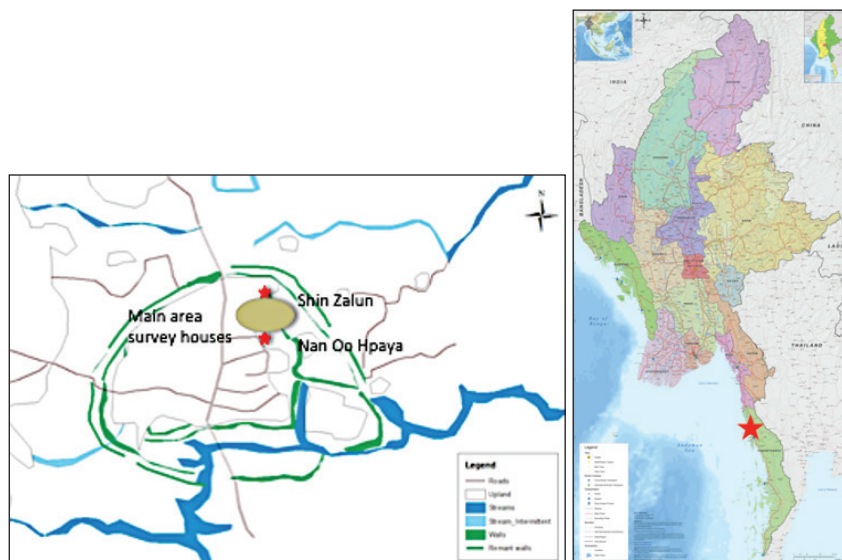


Figure 1: Map of Thagara showing survey area between Shin Zalun and Nan Oo Hpaya pagodas (Credit E.Moore) and map of Myanmar showing its location on the southern peninsula (MIMU 2019).

have been many studies on this site; for instance: artefacts from 1999-2000 and 2016 excavations conducted by the Department of Archaeology, Ministry of Religious Affairs and Culture support of the traditional founding of Thagara in circa 751-908 CE and its sustenance from the 15th to 17th century CE to the present day (Moore and Soe Thainkha 2019, p. 153). As these details of the tangible heritage demonstrate, the ancient site of Thagara has been well researched and thoroughly published. Likewise, domestic religious architecture such as the elements of the stupas and temples, commonly called pagodas, and monastery types and buildings have been documented (Fraser-Lu 2001, Moore 1996, Than Swe 1996/2004).

HERITAGE MANAGEMENT AND VERNACULAR ARCHITECTURE

Thagara is the first site in Tanintharyi Region to be included on the national list of forty-six Notified Zones of Cultural Heritage Regions and Buildings maintained by the Ministry of Culture, Department of Archaeology. As a result, a field office of the Department of Archaeology has been opened at Thagara, which allows changes to the tangible heritage of ancient site to be monitored and artefacts stored. In addition, the then-Ministry of Culture

opened a new museum in 2015 which houses ancient artefacts and exhibits on local festivals. This complements the family collection housed at Hpaya Gyi pagoda since 1975 curated by U Htay Lwin Kyaw, son of Dawei Kyaw Min. Dawei Kyaw Min's book, *Dawei Culture* (1962) was the very first to profile the heritage of this area. Dawei Kyaw Min was in turn the son of U Kyaw Yin, a balloonist who flew over the region in the 1920s. Dawei Kyaw Min, the historian U Than Swe (Dawei) and one of the co-authors Winn Myintzu have provided valuable documentation of Dawei customs and social heritage (Aye Sandi 1999, Kyaw Min, Ratana (Dawei) 2007; Shwe Wei Aye 1974, Than Swe 1996, Winn Myintzu 2011). From all of these records, the rural dwellings of villages like Thagara or the houses of towns like Dawei are absent. This distinction between rural and town architecture, particularly in building materials, has been made in many studies of the region. For example, town architecture of the northern Thai town of Phrae examined how the earliest vernacular town architecture was bamboo. Wood became popular there only about a hundred years ago with the rise of teak exports in the late nineteenth century (Abhakorn 2011, P. 10). In addition, the more perishable bamboo and wood preceded the use of brick and stone for rural and town architecture in most parts of Southeast Asia. This is illustrated well in the Austronesian architecture of predominantly island Southeast Asia (Waterson, R. 1990).

Thus the typology, and the associated intangible knowledge and customs of vernacular architecture from our preliminary census, reveal new information on little-recorded and rapidly disappearing heritage. The high ethno-archaeological value of vernacular architecture has in recent years begun to be recognized at a national level through cooperative undertakings with international organizations. For example, in the 2014 nomination dossier leading to the inscription of the Pyu Ancient Cities as the first Myanmar site listed in the UNESCO World Heritage List, the vernacular architecture of a traditional village at Beikthano, one of the Pyu cities, is praised for being “exceptionally well sustained, adding to the interpretation of the ancient agricultural way of life” (UNESCO 2014, p. 205). Prompted by one of the co-authors whose father is a traditional architect, the modest aim of this article is to disseminate the results of a pioneering (but to the authors’ knowledge not previously recorded) survey of Thagara. As our preliminary survey described below showed, the traditional houses consist of multiple elements each serving a particular function. We describe our census methodology profile the types of houses and roofs, followed by sections on the hearths, shrines and rice barns. The article concludes with comparative examples and comments on wider issues.

THAGARA VILLAGE

Thagara village has two aspects which prompted this article. Firstly, as noted earlier, the habitation areas of ancient Thagara are little studied. The area inside the walls is densely populated while the perimeter outside the walls is cultivated, primarily rice fields. There are two main pagodas within the walled area called Shin Zalun and Nan-Oo Zeidi or pagoda in front of the palace area (SGR) noted above. There are traditionally four monasteries at Thagara but today only three are known: on the north adjacent to the Shin Zalun pagoda, on the east adjacent to Nan-Oo Zeidi and on the west near the traditional city gate on this side, the largest, called the Rakhine Zeidi. The architecture of all of these is recent, with the buildings of the Shin Zalun and Rakhine monasteries at least in part, made of wood. The Nan Oo Zeidi is linked to an active monastery and adjacent rectangular ordination hall. Our survey of domestic architecture was carried out primarily in the area between Shin Zalun and the Nan-Oo Zeidi. Secondly, at least until recently, the modernization of domestic life seen for example in urban Dawei

has been absent in rural types found at Thagara. In particular, the traditional hearths and rice barns of the Thagara houses were built and occupied in tandem with the agricultural way of life seen in southern Myanmar. To the south of the survey area on the southeast sector of the walled site, garden farming is carried out with rice cultivation in the fields around the outside of the walls. In short, the local inhabitants, living in modest dwellings, support the Buddhist monks who occupy the pagodas and monasteries through offerings of food and goods. This shows the relationship between Thagara monuments and the adjacency to the garden and rice-farming areas of economic importance. The annual cycle of months and associated celebrations of monastic donations and tasks of the farming cycle go hand-in-hand illustrating the inseparability of tangible and intangible aspects of the village. In relation to the built elements of the traditional dwellings of our survey, these traditions of producing and giving are further illustrated by the hearths where meals for families and monastic communities as well as snacks for festivals, and the rice barns where the harvest then redistributed through local consumption and sale of any surplus. In addition to these community undertakings are the individual shrines that we documented on both the interior and exterior of dwellings. As noted in our survey record below, an increasing number of houses, however, have been modernized using income from family members who have returned from periods of work abroad. This has in turn affected the rural way of life, from the farming to the patterns of support for religious structures. For example, a recent renovation of the platform of the Shin Zalun pagoda was undertaken by the owner of a gold shop in the town of Dawei (Moore and Soe Thainkha, 2019, p. 160). These observations on the relationship of the tangible and intangible heritage associated with vernacular architecture underpin our census of the houses, hearths, shrines and rice barns in Thagara village.

Census methodology

After deciding to attempt a survey of the village household of Thagara, we formed an inventory team to carry out a census of Thagara village architecture. The group divided the village into quadrants and photographed each house and if present, the household rice barn. We split the walled village area of Thagara into two parts, east and west, as this follows the traditional grid of road. We

then gave street and lane names to the east-west roads and the north-south by-roads, respectively. As the main entry to the village is on the south, our numbering started on the south of the site and moves north within the area enclosed by walls, the green curvilinear outline of the map figure above. We used census forms to descriptively record the architectural elements and key participant interviews with relevant villagers.

Villagers were interviewed to collect information and photograph traditional crafts and social and spiritual customs from Buddhism to the animistic figures or *nats*. These included a shrine to U Shin Gyi, a *nat* or spirit popular in the coastal regions of Myanmar. He is also referred as 'Yay Ngan Paing U Shin Gyi', the one who owns the sea with 'yay ngan' meaning 'sea water' and 'paing' meaning 'to own'. In Dawei (Tavoy), being a coastal region, U Shin Gyi is worshiped by all the local Tavoyan families, especially those who have fishing vessels or other sea-related businesses. Other customs were varied, such as mat making, production of toddy juice and welding to make knives and other goods. Initially we planned to survey the making of traditional snacks, as many of those at Thagara and Dawei are similar to Thai snacks. However, even at the morning market near the main stupa of Thagara, Shin Zalun, modern commercial snacks such as potato chips are now the main snack being sold. This again highlighted the need to document the tangible and intangible aspects as they are rapidly disappearing.

In our survey, not all information was available. For example, the house number and census number of some houses could not be found. One reason was that some houses had recently been rebuilt. An example is seen with house No.5 of U San Nyunt and Daw Mu Mu Aye that was newly renovated at the time of our survey. In addition, some house owners that we interviewed had simply forgotten the numbers.

Built Forms and Way of Life

We recorded data for nine houses, one snack shop and one exterior shrine seen in the Appendix of pictures and annotations at the end of our paper. The examples were selected to show the variety of the village rural architecture. None are located on the two main roads of Thagara, with most situated

along small lanes in the northeast quadrant between the two documented ancient temples of the site, Nan Oo Zeidi and Shin Zalun. Within the village, trees and shrubs lining fields and small lanes of the quadrant. Some houses have livestock areas, with an oxen or pig and often chickens. The dwellings are closely placed with many others of this quadrant not included in our survey due to limitations of time, and availability of house owners. Most of the owners in this survey are farmers who spend their days tending rice fields outside the ancient city walls. In contrast to the inundation of the field areas during the rainy season, the ancient walls and moats were built not only for defence but to protect the inner village from flood. They continue to serve the latter function today. The road from Dawei to Thagara has been renovated in recent years, raising it to avoid flood, but during our June 2016 visit, parts were covered in several inches of water. Inside the walls, despite the rain and mud, however, there was no flooding. While archaeological coring has not been undertaken to establish the pattern of siltation within the ancient walls, the contrast between the walled and field areas would seem to have been sustained for many generations.

Marriage and Other Customs of Interior Space

During the survey, we found no hierarchic separation by age or gender in the use of room space in the smaller houses. However, in most dwellings, there is a clear separation between the cooking space and the main space or *eain ma* (the area used for living and sleeping). We have at times used the word 'room' but with rare exceptions, the interior areas of the house are not separated by walls. The members of the household all usually sleep together in the main room (*ein ma*) although some women often sleep in the cooking room (*bu htut*). When they take a short nap in the afternoon, they either sleep in the porch or on the platform (*cook pyit*) under the house.

During the course of our survey, we also documented the seasonal making of sticky rice that comes from the neighbouring village of Taung Myin Pyaung. This specialised production in Thagara is possibly due to the marriage of women from Taung Myin Pyaung to men from Thagara, touching on the wider issue of migration, marriage and the rise of hybrid cultural traditions.

Building materials and house posts

The building materials are all found locally, with hard woods used for the pillars, beams and floorboards, and various types of matting and thatch used for the roof. In Dawei, there are a number of local hard woods such as *pyin-ga-dou* or ironwood that are preferred for building. In our survey of the Thagara rural architecture, one house (No.11 of U Than Htun and Daw Oun Nwet) had a bamboo floor and frame and palm-slats wrapped around bamboo poles or stitched *nipa* palm leaf flaps used for walls. The most common type of wood used was ironwood (*Xylia dolabriformis*) with one house (No. 7 U Thee Phoe) constructed of the local evergreen tree (*Sideroxylon tomen tosum*) and another (No.1 U Aung Kyi and Dawe Khin Mya Kyi) having a floor of the rock dammar tree (*Hopea odorata*).

Dawei houses traditionally were always on posts creating an undercroft, an area mainly for storage in both rural and urban areas. As discussed above, most houses do not have formal rooms of the sort seen in European houses, although the areas in the house are designated for particular activities. This is also the case for the space created under the house by the use of stilts although this space has a number of uses.

A few traditional houses in urban areas of Dawei use this area for storage and as a kitchen, or for small pets like a dog, hens, or birds. In rural areas, however, the undercroft space is used not only for animals and storage but also for socializing or taking a nap or other activities in the daytime. In recent times, these customs are changing in many urban areas. When the family members increase, or a son grows up, they renovate the area by adding four walls and covering the earthen floor of the undercroft space to make a new room. Moreover, some house owners, especially those whose houses are on main roads in Dawei, rent this area to others for economic purposes such as to open a grocery, a tea shop, a store, a snack shop, a beauty salon or other commercial activity. In Thagara, the houses on the main road that have businesses are occupied the property owners.

Types of houses

There are mainly two types of traditional houses (without including other types of modern brick buildings) in Thagara. These houses (*ein*) are called (1) *Ein Taw Yar* (a type of house built on low posts

with a deck extended from one side and a gable roof) and (2) *Ein Wine* (a type of house built on high posts with a typical Dutch roof).

The *Ein Taw Yar* is the most common type of house, usually built with a rectangular plan and simple gable roof or *ein khaung moe*. Sometimes, a lean-to is attached to the house, either at the side of the house or at the back for the purpose of cooking, keeping vehicles, making a cowshed, or other domestic functions including at times the rice barn. Teacher Daw Saw Thee's house (No. 3) is a good example of *Ein Taw Yar*. The *Ein Wine* has a slightly rounded layout with higher posts and a Dutch roof. Sometimes, instead of using a Dutch gabled roof, the *Ein Wine* is constructed with a hipped end at the front of the house, also called a mansard roof. House No.6, Daw Aye Mi San's house is the only *Ein Wine* among the eleven houses we surveyed. The functional reasons for the hipped roof are not recorded, although the layered roof construction may have assisted wind flow. Of the two types of houses, the *Ein Wine* is considered the more ancient.

Types of roofs and building material preferences

None of the houses in our survey uses thatch for roofing. Instead, the most common use is stitched *nipa* palm leaf flaps and for some, galvanized corrugated steel sheets for roofing. The making of the *nipa* palm flaps is a time-consuming operation with the roof needing periodic repair. Many buy the *nipa* palm flaps, including house No.7 of U Thee Phoe. The longevity of the roof depends on how closely the *nipa* palm flaps are spaced, with a tightly spaced roof lasting three years before requiring repair. Thus, while the steel sheet roofing is noisier in the rainy season and hotter in the summer months, the maintenance is lower.

The popular sentiment is that most people prefer new brick houses to their traditional houses. The reason why they are still using traditional houses is simply that they cannot afford to build new brick houses. There is no particular pride taken in sustaining the traditional forms given the matter-of-fact outlook of the villagers. During our June 2015 survey, however, we found a number of house owners responded at length to our questions on their houses and the surroundings. Thus, it seems that there is an underlying pride in the heritage of house-making in the village after all.

Types of hearths

There are two types of hearth found in the houses we have surveyed at Thagara. One type is built in a higher position and used in a standing position while cooking. The other type is built in a lower position meant to be used while sitting. Both types of hearth are called '*mi hpou*'. We mainly found the former high positioned type of hearth in the houses we have surveyed.

The *mi hpou* is a fireplace or a hearth. It is not only a Burmese name but also a Tavoyan name. The *bu htut*, a back room, is a room in which a *mi hpou* is located. Sometimes, the *mi hpou* is located in the kitchen or *mi hpou khan* where 'khan' means room as in U Meh Yin and Daw Phwa Kyi's house (No.9) and Daw Aye Mi San's house (No.6).

Each house has a traditional hearth located inside the house while the washing-up area is outside. This is often seen at Thagara but is now unusual in Dawei. Interestingly, the *mi hpou* in U Hsan Oo and Daw Win Htay's house (No.4) is in the washing up area (*ye-kan-sin*). Some houses in our study used the back room (*bu htut*) as a kitchen with a fireplace as in Daw Khin Mya Kyi's house (No.1), U San Nyunt and Daw Mu Mu Aye's house (No.5) and U Thee Poe and Daw Ma Myint's house (No.7).

Types of shrines

All the houses have interior shrines. Some are attached to the wall while others use a table or showcase. The location of the shrine depends on the orientation of the house. If, for example, the house faces to the north or south, the shrine room should be on the east. But if the house faces west or east, the shrine is on the south. Within the orientation of the house, the shrine is usually on the southeast. Most of the wall and inset shrines in our survey had an upper and lower tier, with three vases (*nyaung ye oh*) in which water and flowers are placed as a religious offering representing the Triple Gems on the upper shelf.

In addition to the interior shrines, talso ve.

One exterior shrine (No. 10 Daw Than Htay) is dedicated to the *nat* U Shin Gyi. The other exterior shrine (No. 9 U MehYin) is dedicated to *Phoe Thu Daw*, a white-robe acolyte.

Types of rice barns

There are three types of rice barns found in Thagara village. First, the *pu*, is the smallest type of rice barn. It is constructed using a circle shaped bamboo matting with a mixture of clay and straw covering both its interior and exterior surfaces. Both wood and bamboo are used for its floor and the floor is also covered with a mixture of clay and straw. The rice barn at Daw Khin Mya Kyi's house (No. 1) is a *pu*. Of all the rice barns that we surveyed, this example was the only one where the rice was stored loose; the rice was stored in bags in the other barns. The villagers said the bags were used to protect against moisture from the damp floors of the *bar kup* and *bar ham*.

The second type is the *bar kup*, a medium sized rice barn. The walls are made with bamboo slats and then stitched *nipa* palm leaf flaps are firmly attached to the bamboo slats. Both wood and bamboo are used for the floor with additional surface covering of a mixture of clay and straw. Instead of using a mixture of clay and straw, waterproof canvases are sometimes used. The rice barns at U Thee Po and Daw Ma Myint's house (No. 7), U Hsan Oo and Daw Win Htay's house (No. 4) and U Ba Moe and Daw Kyu Meh's house (No. 8) are this type.

The third type is the *bar ham*. It is the largest type of rice barn that is commonly built separately from the house. Wood is found usually as the principal material for the floor and the wall. Galvanized steel sheets are sometimes added for the wall. The rice barns at teacher Daw Saw Thee's house (No. 3) and Daw Aye Mi San's houses (No. 6) are examples of *bar ham*.

The size of the rice barn is described according to storage capacity, the number of *tin*: a basket that holds sixteen *pyi*, a unit equivalent to eight cans, about one bushel. A large *bar ham* may hold 700 *tin* while a *pu* may hold only 100 *tin*.

We also documented cow sheds attached to houses that are called *nwa gauk*. They are distinct; not to be confused with the rice barns or *pu*. There is no classification between types of cowshed.

Comparison and wider issues on vernacular architecture

Our initial census study of this rural domestic architecture is the first to be undertaken to our knowledge. Our attention to the vernacular architecture may be usefully compared to other areas. For example, a recent study comparing Bhutan and Burma considered primarily the religious vernacular architecture (Lim 2014, Zetter and Watson 2006). Of interest for our present study, however, was the author's graphic placement of the role of vernacular architecture within centre of the wider cultural dynamics of religion, ecology, politics, economy and family structure and kinship and gender roles (Lim 2006, p. 32). Lim ends her article on an idealistic note on the vernacular architecture as an expression of local community living and cooperation.

Vernacular architecture has been called the 'real subject of the mainstream' in any discussion of tangible and intangible cultural heritage (Murphy 1995, p.372). The houses themselves are physical but the techniques used to construct, and the corollary social cooperation, are endangered by the sharp rise in Lower Myanmar of brick architecture. For example, as noted earlier, the father of one of the co-authors, Soe Thainkha, is a traditional architect. He learned the craft as a young man and explained the two types of houses in Thagara to our team. He no longer receives commissions for wooden houses, as it is more economical to use steel pillars instead of wooden ones. His son has recorded some information but is not apprenticed to learn the trade. The reconstruction of wooden palaces in Mandalay, Shwebo and Bago under the guidance of traditional architect U Win Maung (Tampawaddy) has been criticized for designs based on manuscripts but the commissions enabled him in the past to employ and train seventy apprentices in this endangered tradition (U Win Maung (Tampawaddy), pers. comm. 06.2015).

As Lim argues, the rural domestic houses of Thagara are at the centre of the site's ancient role and its present-day survival. However, as we have noted, whenever possible, bamboo and wood are being replaced with brick. We hope in our documentation of the houses of Thagara presented in the above pages and the Appendix of the House Survey to widen understanding and documentation of a small but densely populated ancient village in a rapidly changing region.

APPENDIX HOUSE SURVEY

The census survey team was led by one of the authors, Winn Myintzu, then a teacher in the Department of English at Dawei University. The team members were her students: Htet Paing Hein, Zin Maung Maung, Ye Lwin Lwin, Thet Paing Oo, Min Paing Soe, Wai Yan Naing, Yi Yi Lwin, Ywun Nadi Oo, and Soe Thainkha. Two additional staff, Htet Myat Thu and Yan Naing Ko, were from Thagara office of the Department of Archaeology, Ministry of Religious Affairs and Culture.

Example 1

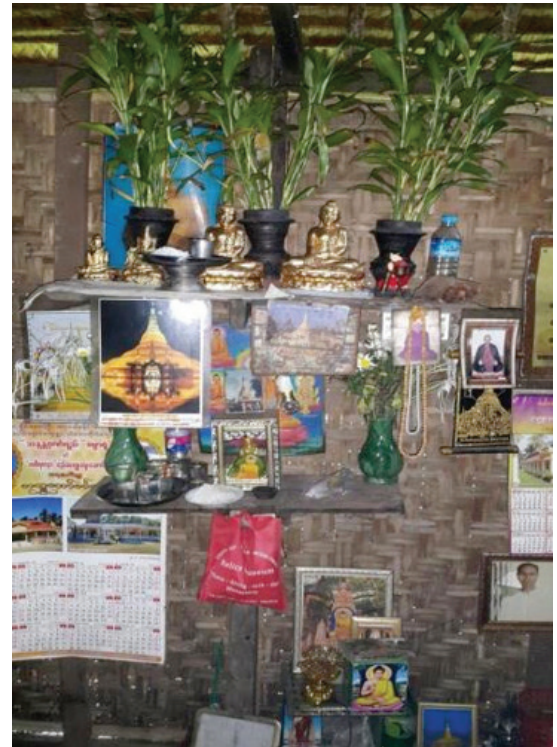


Figure 4:
House No.1 Shrine (interior)
(Credit Thagara Survey Team)



Figure 2:
House No.1 facade and back (Credit Thagara Survey Team)



Figure 3:
House No.1 Hearth (standing type) and Rice barn (pu) (Credit Thagara Survey Team)

Owner	- U Aung Kyi and Daw Khin Mya Kyi
Present residents	- U Aung Kyi, Daw Khin Mya Kyi, Maung Taing Kyaw, Ma Muya Soe
Family occupation	- farming and orchard or plantation lands
Location	- N 14°10.472', E 98°10.073'
House number	- 117
Census	- 3/11
Constructed	- 1997
Type of house	- <i>Ein Taw Yar</i>
Type of wood for house	- ironwood and the rock dammar tree
Type of roof	- gable roof
Type of material for roof	- wood, bamboo and stitched <i>nipa</i> palm leaf flaps
Type of wall	- bamboo matting
Type of hearth	- standing type
Shrine	- interior, our images of the Buddha and <i>Arhat</i> (<i>Yahan Da</i>) on upper shelf with <i>Nyaung Ye Oh</i>
Type of rice barn	- <i>pu</i> (the smallest type)

Note: The posts are 4 feet 6 inches high.

Areas in house

The house has a traditional hearth, inside the house, while the washing-up area is outside. There is a staircase at the front, although the traditional Dawei house if larger has three staircases, each in the front, middle and back.

Example 2



Figure 5:
Snack House No.2 and Facade and Hearth (standing type) (Credit Thagara Survey Team)

Owner	- Daw Hla Kyi
Present residents	- Daw Hla Kyi
Family occupation	- snack house
Location	- N 14°10.526', E 98°10.098'
House number	- not available (as it is just a small shop)
Census	- not available
Constructed	- 2015 (reconstructed once a year)
Type of house	- open shack
Type of wood for house	- bamboo
Type of roof	- open gable roof
Type of material for roof	- bamboo and stitched nipa palm leaf flaps
Type of wall	- no wall
Shrine	- none as it is a shop
Type of hearth	- no hearth
Type of rice barn	- no rice barn

Note: This simple structure is located across the street from the school and it remains popular because it is easy to build.

Example 3



Figure 6:
House No. 3 Facade and Hearth (sitting type) (Credit Thagara Survey Team)



Figure 7:
Rice barn (bar ham) and Shrine (interior table) (Credit Thagara Survey Team)

Owner	- Daw Paw Kyi (eldest), Daw Saw Thee, Daw Tin Thee (three sisters)
Present residents	- Daw Saw Thee, Daw Tin Thee
Family occupation	- the owner is a teacher and the family business is farming
Location	- N 14°10.523', E 98°10.042'
House number	- they have forgotten (perhaps 116)
Census	- 3/10

Constructed	- 2011
Type of house	- <i>Ein Taw Yar</i>
Type of wood for house	- ironwood (<i>pyin ga dou</i>)
Type of roof	- Two-step gable roof
Type of material for roof	- wood and galvanized iron sheets
Type of wall	- wood (vertical position)
Shrine	- on a table; four images of the Buddha and <i>Arhat</i> (<i>Yahan Da</i>) with one <i>Nyaung Ye Oh</i> and two vases of flowers
Type of hearth (fireplace)	- on the ground (sitting type)
Type of rice barn	- <i>bar ham</i> (wooden floor; wood, bamboo and stitched nipa palm leaf flaps for roof; galvanized iron sheets on both sides of the wall and wood for front and back walls)

Note: There is no stove in the cooking room (*bu htut*). The fireplace is on the ground under the house. Nothing is used for covering the wooden floor of 'bar ham'. Also, paddy is stored directly on the wooden floor. Although Daw Paw Kyi lives in another house, she is considered the actual owner of the house because she is the eldest of the three sisters, their parents having passed away.

Structures

The house is set on wooden pillars and has a staircase on the front. There is a rice barn separate from the house but located adjacent to it that measures 9'11" in width, 14'9" in length, and is 12' high. The rice barn is a freestanding walled structure set on low wooden posts.

Areas in house

There are three areas in the house:

- (1) Main room (*ein-khan, ein-ma*)
- (2) Porch or balcony (*byin-zauk*)
- (3) Back room used for cooking (*bu-htut*)

Example 4



Figure 8:
No.4 Facade and Heath (standing type) (Credit Thagara Survey Team)



Figure 9:
No.4 Rice barn (*bar kup*) and Shrine (*interior*) (Credit Thagara Survey Team)

Owner	- U Hsan Oo and Daw Win Htay
Present residents	- U Hsan Oo, Daw Win Htay, Ma Aye Myat Mon, Mg Min Myat Thu and Mg Htet Wei Yan
Family occupation	- the family business is farming
Location	- N 14°10.462', E 98°10.037'
House number	- 130
Census	- 3/30
Constructed	- 2007
Type of house	- <i>Ein Taw Yar</i>
Type of wood for house	- unknown
Type of roof	- Two-step gable roof
Type of material for roof	- wood and galvanized iron sheets
Type of wall	- wood (vertical position)
Shrine	- interior; four images of Buddha, an image of <i>Arhat (Yahan Da)</i> and a replica of the renowned Kyaik Htee Yo pagoda on the shrine.
Type of hearth	- standing type
Type of rice barn	- <i>bar kup</i> (medium size type)

Structures

The house has a staircase on the east. The shrine is set into the wall in the main room. The kitchen is on the interior, with the wash area outside.

Areas in house

The house has 4 areas:

- (1) Main room (*ein-ma-khan*)
- (2) *Cooking area (bu-htut)*. The hearth is in the washing up area.
- (3) *Porch or balcony (byin-zauk)*
- (4) Washing-up area (*ye-kan-sin*)

There is also a room on the ground under the house with a large platform made of wooden slats on a low stand used for socialising or sleeping (*cook-pyit*). The rice barn on the side of the house measures 5'5" in width, 8'7" in length, and is 7'4" high.

Example 5



Figure 10:
No.5 Facade and Hearth (standing type) (Credit Thagara Survey Team)



Figure 11:
No.5 Shrine (interior) (Credit Thagara Survey Team)

Owners

Present residents
Family occupation
Location

- U San Nyunt and Daw Mu Mu Aye

- U San Nyunt, Daw Mu Mu Aye, Mg Naing Linn Htet and Mg Ye Linn Htet
- The occupation of the owners is farming.
- N14°10.504', E 98°10.101'

House number	- not available (because it has just been rebuilt)
Census	- 3/104
Constructed	- 2015
Type of house	- Modern brick house
Type of wood for house	- ironwood
Type of roof	- simple gable roof
Type of material for roof	- coconut palm (used instead of wood), bamboo and stitched <i>nipa</i> palm leaf flaps
Type of wall	- brick for the ground floor and bamboo matting for the upper story
Shrine	- interior; three vases of flowers and single image of the Buddha in display box
Type of hearth	- standing type
Type of rice barn	- no rice barn

U San Nyunt and Daw Mu Mu Aye's house (old house)

Constructed	- 2005
Type of house	- Ein Taw Yar
Type of wood for house	- ironwood for posts, bamboo for the floor
Type of roof	- simple gable roof
Type of material for roof	- bamboo and stitched <i>nipa</i> palm leaf flaps
Type of wall	- bamboo matting
Type of hearth	- standing type
Type of rice barn	- no rice barn

Note: The house has been rebuilt as the previous house was used only for temporary stays.

Example 6



Figure 12:
No.6 Facade (Ein wine) (Credit Thagara Survey Team)



Figure 13:
No.6 Shrine (interior) (Credit Thagara Survey Team)



Figure 14:
No.6 Hearth (standing type) and Rice barn (bar ham) (Credit Thagara Survey Team)

Owner	- Daw Aye Mi San
Present residents	- Daw Aye Mi San, Daw Ni Ni Swe, Ma Phyo Aung Mar and Ma Chaw Mou Mou Aung
Family occupation	- The occupation of the owners is farming.
Location	- N 14°10.523', E 98°10.042'.
House number	- 296
Census	- 3/127
Constructed	- 1980
Type of house	- <i>Ein Wine</i>
Type of wood for house	- ironwood (<i>pyin ga dou</i>)
Type of roof	- Dutch roof
Type of material for roof	- wood and stitched <i>nipa</i> palm leaf flaps
Type of wall	- wood (vertical position) in the main room and horizontal position in the cooking room
Shrine	- interior, set into wall with two tiers and numerous images, three vases of flowers
Type of hearth	- standing type
Type of rice barn	- <i>bar ham</i> (the largest type)

Note: The house's ironwood posts, 7' high, are set up on 6" concrete post shoes. The separate bedroom is mainly used either by a family member when he or she grows up or by a newly married couple.

Structures

The house has a staircase on the east and on the west. The rice barn is 14' high, 9' wide and 11' 11" long.

Areas in the house

It has a traditional hearth with the washing area on the porch.

There are six areas in the house:

- (1) Main room (*ein-ma*)
- (2) Back room (*bu-htut*)
- (3) Porch or balcony (*byin-zauk*)
- (4) Washing-up area (*ye-kan-sin*)
- (5) Cooking area (*Mi-poe-khan*)
- (6) Bedroom (*Thi:-thant-ein-khan:*).

Most traditional houses in the region do not have a separate bedroom so this example is unusual with its listing of (6) Bedroom (*thi:-thant-ein-khan:*).

Example 7



Figure 15:
No.7 Facade and Hearth (standing type) (Credit Thagara Survey Team)



Figure 16:
No.7 Rice barn (bar kup) and Shrine (interior) (Credit Thagara Survey Team)

Owners

- U Thee Poe and Daw Ma Myint

Present residents

- U Thee Poe, Daw Ma Myint, Ma Khin Myat Myat Su, Mg Aung Ye Zaw and Mg Aung Zaw Htwe

Family occupation

- The occupation of the owners is farming.

Location

- N14°10.472', E 98°10.073'

House number

- 127

Census

- 3/96

Constructed

- 2002

Type of house

- Ein Taw Yar

Type of wood for house

- ironwood

Type of roof

- Two-step gable roof

Type of material for roof	- wood, bamboo and stitched <i>nipa</i> palm leaf flaps
Type of wall	- wood (vertical position) and bamboo matting
Shrine	- interior; affixed to wall with two tiers having a single image of the Buddha in a display box, two <i>Arhats</i> (<i>Yahan Da</i>) with three <i>Nyaung Ye Oh</i> on the upper tier
Type of hearth	- standing type
Type of rice barn	- <i>bar kup</i> (medium size type)

Note: The hearth is in the back room. The platform under the house measures 5' wide, 11' long and 2'6" high.

Structures

It has one staircase on the east and a simple traditional hearth on the upper story. The rice barn is located under the house, rather than being separate or attached to one side. It is a freestanding structure measuring 6'6" wide, 11' long and 6'6" high.

Areas in the house

There are four areas in the house:

- (1) Main room
- (2) Back room (*bu-htut*)
- (3) Porch or balcony (*byin-zauk* or *ein-plan-khan*)
- (4) Washing up area (*ye-kan-sin*)

There is a large platform made of wooden slats on a low stand used for socializing or sleeping (*cook-pyit*) under the house. Platforms of this type are commonly seen under the house or in front of the house. In Upper Myanmar it is always put in front of the house and usually under a tree, especially under a tamarind tree.

Example 8



Figure 17:
No.8 Facade and Rice barn (*bar kup*) (Credit Thagara Survey Team)

Owners

	- U Ba Moe and Daw Kyu Meh
Present residents	- There are no residents currently living in the house
Family occupation	- The occupation of the owners is farming.
Location	- N14°10.416', E 98°10.076'.
House number	- not available
Census	- 3/61
Constructed	- 2005
Type of house	- <i>Ein Taw Yar</i>
Type of wood for house	- ironwood (<i>pyin ga dou</i>)
Type of roof	- Two-step gable roof
Type of material for roof	- wood and galvanized iron sheets
Type of wall	- bamboo matting
Type of hearth	- standing type
Shrine	- not available
Type of rice barn	- <i>bar kup</i> (medium sized type)

Structures

It has one staircase on the east and a simple traditional hearth that is 'up' on the upper story. There was previously a thatched shelter attached to the house under which the tractor was kept and sometimes clothes were hung. It has now been removed because there is no vehicle since no one is residing in the house.

We include it as an example of the periodic change and ease with which the structure can be modified given the building materials. The rice barn is attached to the house, and is 5'2" wide, 7'4" long and 6'8" high.

Example 9



Figure 18:
No. 9 Façade and Hearth (sitting type) (Credit Thagara Survey Team)



Figure19:
No. 9 Shrine (interior) and Shrine (exterior – for white-robed acolyte) (Credit Thagara Survey Team)

Owner

Present residents

Family occupation

Location

House number

Census

Constructed

Type of house

Type of wood for house

Type of roof

Type of material for roof

Type of rice barn

Type of wall

Type of hearth

Shrine

- **U Meh Yin and Daw Phwa Kyi,**

- U Meh Yin, Daw Phwa Kyi and U Soe Myint (others in Thailand)

- fresh water fishing in ponds and streams (not the sea) and farming.

- N14°10.307', E98°10.312'.

- 339

- 3/105

- 2002

- *Ein Taw Yar*

- ironwood

- Two-step gable roof

- wood and galvanized iron sheets

- no rice barn

- wood (vertical position for the main room and horizontal position for the back room) and bamboo matting for the kitchen room

- sitting type.

- Interior Buddhist shrine with two tiers and, several images of the Buddha and *Arhat* (*Yahan Da*) on lower shelf with three *Nyaung Ye Oh* on the upper tier. There is an exterior shrine for the white-robed acolyte.

Structures

The house has one staircase on the front with wooden posts (7' high) set up on 6" concrete post shoes.

The roughly built white-robed acolyte (*Phoe-thu-daw*) shrine (2'9" wide and 2'8" long) is set on 5' high wooden posts. It is unpainted with a galvanized iron roof. The owners of the house believe that this figure protects and brings good luck for them.

There is no rice barn. The owner keeps his hand-made cane fish traps (*circa* 3' long) in front of the house.

Areas in the house

There are 4 rooms:

- (1) Main room (*ein-oo-khan*)
- (2) Back room (*bu-htut*)
- (3) Porch or balcony (*byin-zauk*)
- (4) Washing up area (*ye-kan-sin*)

Example 10



Figure 20:
No. 10 Shrine (interior) and Shrine (exterior U Shin Gyi) (Credit Thagara Survey Team)



Figure 21:
No. 10 Facade and Hearth (standing type) (Credit Thagara Survey Team)

This example was chosen due to a nat shrine at Daw Than Htay's house that she inherited from her mother Daw Tin Nyunt. Her house is very similar to U Hsan Oo and Daw Win Htay's house (No. 4).

Owner	- Daw Than Htay
Constructed	- 2013
Location	- N14°10.430', E98°10.052'
House number	- 132
Census number	- 3/32
Type of wood for the shrine	- ironwood (<i>pyin ga dou</i>)
Type of material for the roof of shrine	- wood and galvanized iron sheets
Type of wall of the shrine	- plywood (only at the back)
Shrine	- Interior recessed Buddhist shrine and exterior <i>nat</i> or spirit shrine to U Shin Gyi, a local spirit

Note: Certain facts such as the present residents, house number, census number, etc. are left out from the list because these facts are not relevant to the *nat* shrine. The shrine is painted blue because according to the owner, this colour is pleasing to the eye.

Structure

The *nat* shrine is 6' high and 1'6" wide. Like most *nat* shrines in Dawei, this one is dedicated to U Shin Gyi is associated with good luck and prosperity.

Example 11



Figure 22:
No. 11 Facade and Hearth (standing type) (Credit Thagara Survey Team)

Owners	- U Than Htun and Daw Oun Nwe
Present residents	- U Than Htun, Daw Oun Nwe, Maung Zin Thu, Ma Eigari Hpu, Ma Hsaung Kyipyar Let
Family occupation	- There are presently five people living in the house, with the occupation of the owners being farming and making toddy palm structures, as well as making and selling toddy juice in their shop (<i>htan-yay-hsaing</i>).
Location	- N14°10.472', E98°10.073'.
House number	- 338
Census	- 3/104
Constructed	- 2012
Type of house	- <i>Ein Taw Yar</i>
Type of wood for house	- ironwood (<i>pyin ga dou</i>) and other woods
Type of roof	- Simple gable roof
Type of material for roof	- bamboo and stitched <i>nipa</i> palm leaf flaps
Type of wall	- bamboo slats and stitched <i>nipa</i> palm leaf flaps
Shrine	- Interior Buddhist shrine and sacred place (<i>kyaung</i>) for a white-robed acolyte (<i>Phoe-thu-daw</i>), called a <i>Phoe-thu-daw kyaung</i>
Type of hearth	- standing type
Type of rice barn	- no rice barn

Note: The wooden posts of the house are 4 feet high. The floor is made of slit bamboo rather than wood.

The rectangular bin in the cowshed is used for storing cow dung. The kitchen is in the back area of the main room.

During our visit in June 2015, U Maung Kyaing, a local *shaman* brought the talismanic stone he inherited from his mother. The stone reportedly cures ills when placed on the affected part of the body.



Figure 23:
No. 11 Shrine (interior) (Credit Thagara Survey Team)

Areas in the house

The single staircase is on the end of the house and not parallel as in our other examples but at a clockwise angle. The staircase is simply made. There is low hearth, and an elevated structure for cooking rice where the cook is not seated as is usually the case but cooks while standing. There are two areas in the house:

- (1) Main room (*ein-ma*)
- (2) Porch or balcony (*byin-zauk*)

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