

# THE CHARACTERISTICS LINKAGE AMONG AUSTRONESIAN HOUSES: THE TRADITIONAL HOUSES IN LUHAK AGAM, ROKAN, AND MANDAILING

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**Abstrak.** *Hubungan Karakteristik Antara Rumah-Rumah Austronesia: Rumah-Rumah Tradisional di Luhak Agam, Rokan, dan Mandailing.* Rumah Luhak Agam (termasuk Pasaman) yang berada di Sumatra Barat memiliki ciri khas tersendiri yang membedakan dengan Rumah Gadang Minangkabau lainnya yang berada di Luhak Tanah Datar dan Luhak Limapuluh Koto. Lokasi Luhak Agam sangat dekat dengan wilayah Rokan Hulu di Riau dan dengan wilayah Tapanuli Selatan (Mandailing-Natal) di Sumatra Utara. Sepintas, rumah adat mereka terlihat mirip, terutama pada bentuk atapnya. Sangat mungkin, di daerah ini telah terjadi sebuah proses berbagi budaya pada zaman dahulu. Maka dari itu, penelitian ini berusaha untuk mengeksplorasi dan membandingkan karakteristik arsitektur antara ketiga wilayah tersebut. Bagaimana keterkaitan karakteristik rumah antara ketiga wilayah tersebut? Metode penelitian ini adalah metode kualitatif yang memiliki maksud untuk melakukan perbandingan dan menggunakan sumber sejarah dan kebahasaan untuk mendapatkan kesimpulan yang lebih komprehensif. Sehingga penelitian ini dapat menunjukkan keterkaitan antara ketiga wilayah tersebut. Hasil penelitian menunjukkan bahwa terdapat proses berbagi sifat-sifat (traits) dan pengetahuan pada karakteristik antara variasi-variasi budaya austronesia pada masing-masing rumah-rumah mereka.

**Kata Kunci:** *karakteristik arsitektur, rumah tradisional, rumah gadang, rumah godang, rumah bagas godang*

**Abstract.** The Luhak Agam house (including Pasaman) in West Sumatra has its own characteristics that distinguished from other Minangkabau's Rumah Gadang in Luhak Tanah Datar and Luhak Limapuluh Koto. The location of Luhak Agam is very close to the Rokan Hulu area in Riau and South Tapanuli (Mandailing-Natal) in North Sumatra. At a glance, their traditional houses look similar, especially in the shape of the roof. There may have been cultural sharing in this area in ancient times. Therefore, the research tried to explore and compare their architectural characteristics. How is the linkage of the characteristics of the house? The qualitative research method compares and uses historical and linguistic sources to get a more comprehensive conclusion. So this research can show the linkage between them. The results showed a process of traits and knowledge sharing among the Austronesian cultures variations in each of their houses

**Keywords:** *architectural characteristics, traditional house, rumah gadang, rumah godang, rumah bagas godang*

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## 1. Introduction

South Tapanuli is situated in the south of North Sumatra Province, directly adjacent the northern region of Luhak Agam of West Sumatra Province and the northern region of

Rokan Hulu of Riau Province. The region is crossed by the Aek Batang Gadis river from Mandailing Julu area (Muara Sipongi and Huta Nopan) to the Mandailing Godang area

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**Table 1.** Numbers in Minangkabau, Rokan, Mandailing, Toba, and Karo Languages (Source: Khamdevi 2017-2020)

English	Minangkabau	Rokan	Mandailing	Toba	Karo
One	Ciek Aso ( <i>old</i> )	Ciek/ Satu Oso ( <i>old</i> )	Sada	Sada	Sada
Two	Duo	Duo	Dua	Dua	Dua
Three	Tigo ( <i>from "tika" in prakirt</i> ) Telu ( <i>old</i> )	Tigo Telu ( <i>old</i> )	Tolu	Tolu	Telu
Four	(A-)mpek	(O-)mpek	Opat	Opat	Empat
Five	Limo	Limo	Lima	Lima	Lima
Six	(A-)nam	(O-)nam	Onom	Onom	Enem
Seven	Tujuh	Tujuh	Pitu	Pitu	Pitu
Eight	(Sa-)lapan	(Sa-)Lapan	Salapan	Walu/ Oalu	Waloh
Nine	Sambilan	Sambilan	Sambilan	Sia	Siwah
Ten	Sapuluah	Sapuluah	Sapuluh	Sampulu	Sepuluh

(Panyabungan, Siabu, and Natal) (Nuraini 2004). In the south of the area flows the Rokan River, wherein the upstream is the Luhak Agam (Agam-Pasaman) area, and downstream there is the Rokan Hulu area. This area was known as the Pannai Kingdom (11-14 CE) which was one of the subordinates of the Sriwijaya Kingdom (7-11 CE), marked by the Padang Lawas temple complex (Munoz 2006). Which in the next development is one of the territory of the Dharmasraya Kingdom (12-13 CE), Malayapura Kingdom (13-14 CE) and the Pagaruyung Kingdom (14-19 CE). In the Lubuk Layang inscription, the Malayapura Kingdom (Pre-Pagaruyung) established a subordinate kingdom in the Pasaman - Tapanuli - Rokan region led by a vice king named *Bijayendrawarman* (Kozok *et al.* 2006).

Marsden (1,811 AD), Richard Burton, and Nathaniel Ward (1,824 AD) have noted, that the Batak people in Tapanuli obeyed the Pagaruyung Kingdom as their ruler (Reid 1995; Marsden 2015). Raffles also noted that Sisingamangaraja was a Minangkabau

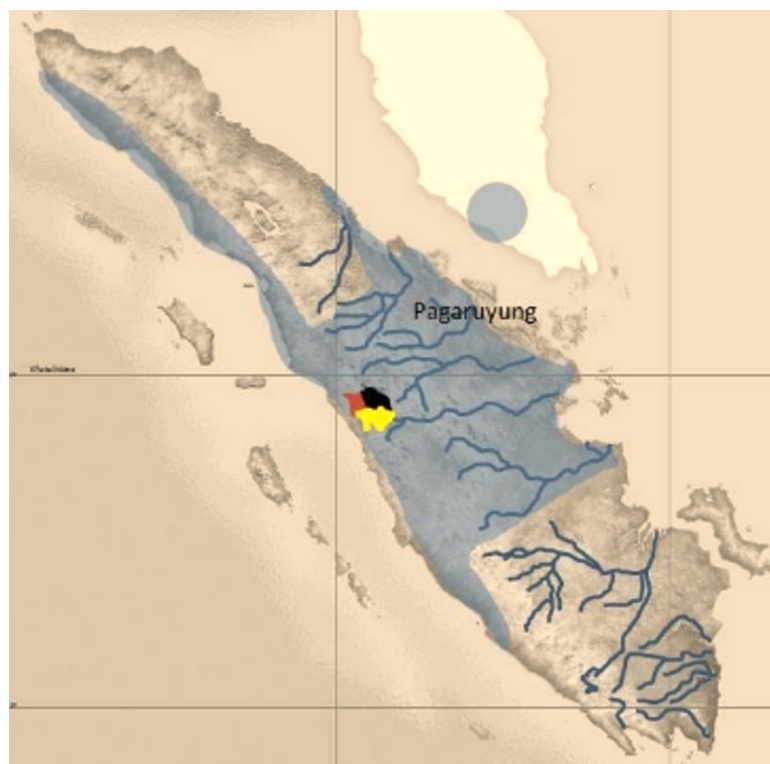
descendant of the Pagaruyung Kingdom sent as their subordinate king (Hull 1991). The Batak history book of "Tonggo-tonggo Siboru Deakparujar" states that Mandailing is the ancestor of Toba, and the Toba Kingdom was founded in the 14th century (Sangti 1977).

Rokan was ruled by a Chinese descendant under the control of the Sultanate of Malacca in 1,512 – 1,515 AD (Cortese 2018). After the Malacca Sultanate was defeated by the Portuguese, the Rokan region became part of the Pagaruyung Sultanate (Amran 1981; Navis 1984).

Linguistically, they belong to the same language family; Austronesian. The Mandailing language belongs to the sub-language of the western islands of Sumatra which is directly related to the Formosan languages in Taiwan (Tumonggor *et al.* 2013). Minangkabau and Rokan languages belong to the Malayic sub-languages directly related to Greater North Borneo's languages, where these languages developed from Formosa through the Philippines to North Borneo (Nothofer 1985; Anderbeck 2008).



**Figure 1.** Rumah Godang in Rokan Hulu (left), and Rumah Bagas Godang (right)  
(Source: Khamdevi 2017-2020)



**Figure 2.** The Map of Pagaruyung Center and its Territories (Source: Cortesão 2018; Navis 1984)

A traditional house, as an artifact, described the context of culture and the pattern of social and lifestyle in a certain period of time. All of that can be made by the community itself, appropriated, inherited by former generations, or influenced by other cultures (Khamdevi 2020a). Austronesian houses share cultural traditions through a process of cultural borrowing among and around neighboring communities that share a common linguistic origin (Fox 2006).

In Luhak Agam region, the types of Rumah Gadang are the *Rumah Surambi Papek* or *Rumah Bapaserek* style (Schefold and Nas 2008; Couto 2008). In Rokan Hulu, *Rumah Godang* tends to have similarities with *Rumah Gadang* in Luhak Agam and Luhak Tanah Datar, but the scale and proportion tend to be smaller. Mandailing traditional house, *Bagas Godang*, has two styles; *Mandailing Julu* and *Mandailing Godang* (Luthan 2015). Its facade and ornaments has similarity to the Toba's *Bolon* house and the Karo's *Siwaluh Jabu* house,

but the shape, scale and proportion tend to be as big as *Rumah Gadang*. How is the linkage of their houses characteristics? This research is expected to contribute ideas in developing historiographical narrative of the history of pre-modern architecture in Indonesia, which has not been compiled until now.

## 2. Research Method

Luhak Agam, together with Luhak Tanah Datar and Luhak Limopuluh Koto, are part of the Minangkabau region known as *Luhak Nan Tigo*, from *darek* (inland) to *rantau* (frontier), see Figure 2. This research is part of previous research series with the same method, such as the traditional houses characteristics linkage between Luhak Limopuluh Koto and Bangkinang (Khamdevi 2019b, 2020a) and between Luhak Tanah Datar, Dharmasraya, and Batang Kuantan (Khamdevi 2019a, 2020b).

This research is a qualitative research, which uses the case study method. The characteristics of traditional houses were analyzed: Spatial, Physical, Figural Configuration, and Stylistic (Habraken 1988). The space (genotype) is very consistent and has stronger linkage, the form (phenotype) is relatively consistent and has medium linkage, and the style may change and has weaker linkage (Güney 2007; Hillier 2011; Bafna 2012; Gero and Ding 2016; Khamdevi 2020b)

The term “linkage” was chosen because this term is commonly used in the fields of linguistics and genetics to describe the network of relationships of language and genealogy. Thus, architecture is a science that is closely related to language, especially visual language in the form of architectural objects.

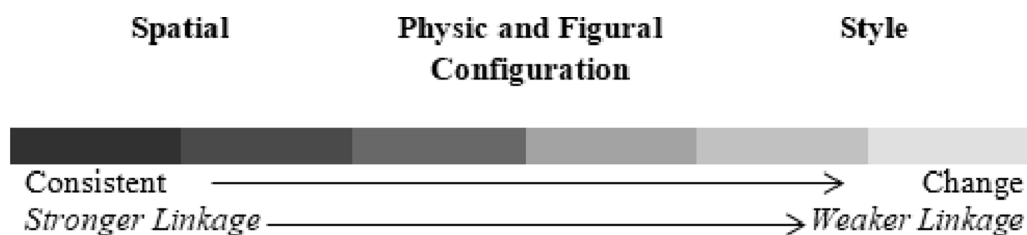
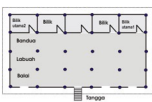




Figure 3. The Linkage Levels of Architectural Characteristics Comparison (Source: Khamdevi 2020a)

Table 2. *Rumah Gadang* Characteristics in Luhak Agam (Source: Schefold 2008; Couto 2008)

Traditional House	Characteristics			
<b>Rumah Gadang Luhak Agam</b>   	Spatial System Space Pattern Orientation Hierarchy	Space Pattern Orientation Hierarchy	<i>Balai - Labuh - Bandua - Bilik</i> River and Qibla Public - Semi Public - Semi Privat - Privat	
	Physical System & Figural Quality	Physical form Materials Space Barrier	Physical form Materials Space Barrier	<i>Lipek Pandan</i> (gable roof with high ridge), Ship ( <i>Lanchara/Lancang</i> ), or Buffalo Horn Wood, Bamboo ( <i>Sasak</i> ), and Palm Fiber Wood Wall at Sleeping Room
	Stylistic System	Roof Column Openings Stairs Ornaments	Roof Column Openings Stairs Ornaments	Gable Roof and Hipped Roof Combination Roof Slopes called <i>Gonjong</i> 1 <i>Tonggak Tuo</i> (Main Pole) Hexagonal or Octagonal Cross Section Shape Doors and Windows 7-11 Steps Fauna abstract shape & Floral



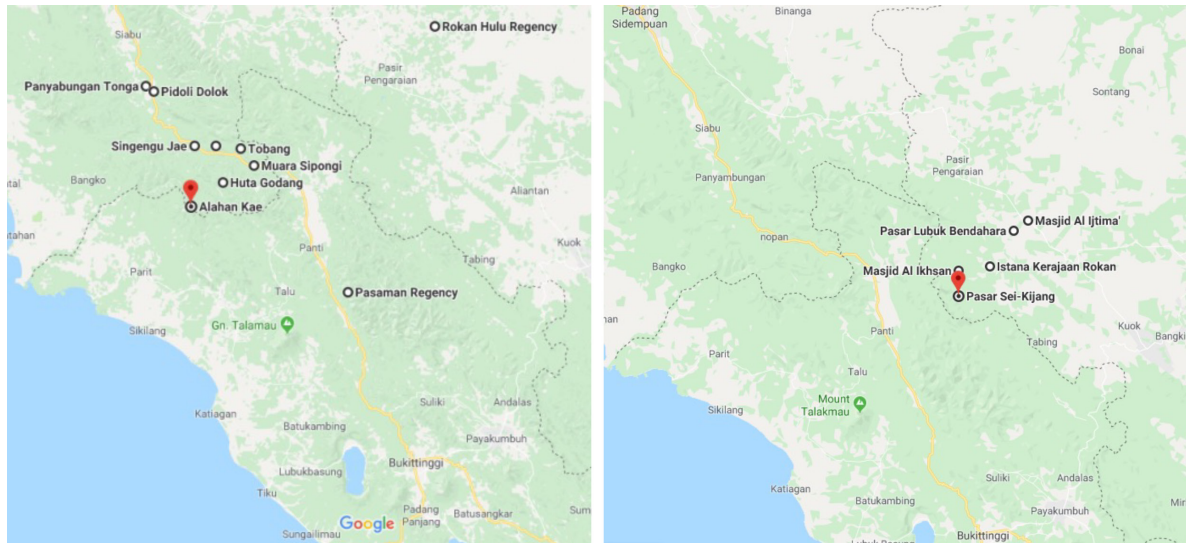


Figure 4. The Map of Research Location in South Tapanuli (left) and in Rokan Hulu (right)  
(Source: Google Maps, 2021)

The Luhak Agam house is used as the basis for comparison in analyzing the houses in South Tapanuli and Rokan Hulu, see Table 2. The research locations in South Tapanuli are as follows (see Figure 4): Mandailing Godang in Panyabungan (Pidoli Dolok and Panyabungan Tonga), and Mandailing Julu in Huta Nopan (Singengu Jae, Huta Godang, Alahan Kae, and Tamiang). The research locations in Rokan Hulu are as follows (see Figure 4): Ujung Batu, Lubuk Bendahara, Rokan IV, Cipang Kiri Hilir, and Cipang Kiri Hulu.

### 3. Research Result and Discussion

#### 3.1 Research Result

##### 3.1.1 Mandailing (South Tapanuli)

Panyabungan Tonga and Singengu Jae houses are large in scale and proportion, while those in Tamiang tend to be smaller. The house has two slopes roof, which is indistinguishable to the common roof of the Minangkabau's house, see Figure 5. There are no ornaments at the end of the roof of the house in Panyabungan Tonga. At Singengu Jae, the roof end has a *Bagonjong*-like ornament. While in Tamiang, the end of the roof has a buffalo head and horn ornament (*tanduk ni orbu*). The carvings on the buildings show

local decorations. The building is mainly oriented following the location of the river, and sometimes there is an adjustment to the direction of Qibla.

The house plan in Panyabungan Tonga, Singengu Jae, and Tamiang are transversal rectangular shape. Their space pattern and hierarchy have similarity to the common Minangkabau's house. The bedrooms at the back of the house (*biliks*) functioned as a private area, while the middle room is used for living room and meeting room (*pantar tonga*). In front of the house there is a public veranda (*parangin-anginan*), see Figure 6. The columns stood on stone pedestal and its cross section shape is octagonal. The wall material of the building is wooden board and its roof material is tin or in the past it was palm fibers. The most of the columns are arranged in odd numbers of rows to the side and to the back. The stairs has odd numbers of steps (7-9 steps).

The houses in Pidoli Dolok, Huta Godang, and Alahan Kae are large in scale and proportion. The high of the two slopes roof is even and almost similar to Minangkabau's roof (see Figure 7), but it is lower and even the ridge is almost straight. At the end of the roof there is a *tanduk ni orbu*



Figure 5. Rumah Bagas Godang in Panyabungan Tonga (left) and Singengu Jae (right) (Source: Khamdevi 2017-2020)

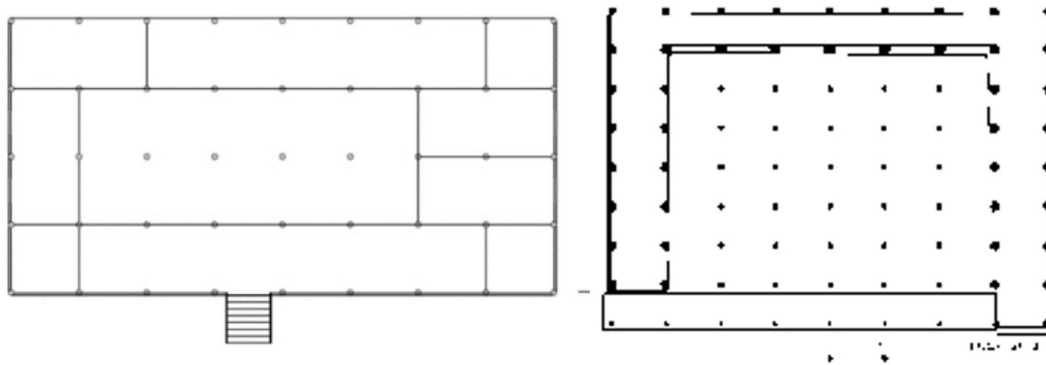


Figure 6. The Floorplan of Bagas Godang in Panyabungan Tonga (left) and Singengu Jae (right) (Source: Khamdevi 2017-2020)

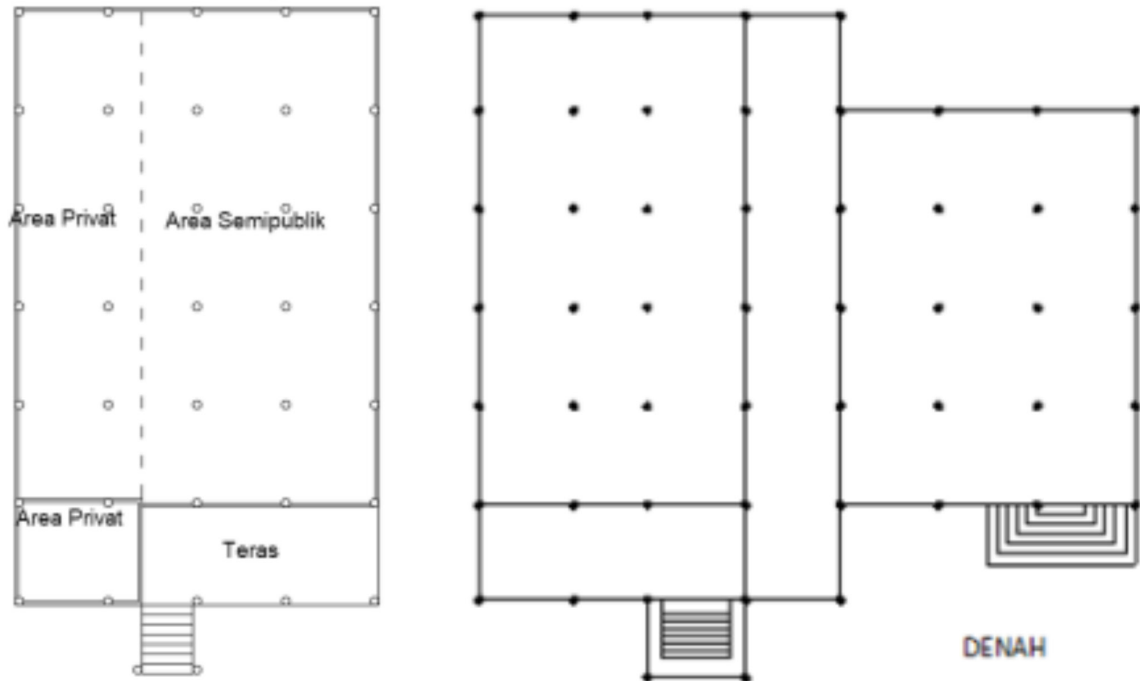


Figure 7. Rumah Bagas Godang in Pidoli Dolok (left) and Huta Godang (right) (Source: Khamdevi 2017-2020)

ornament. The carvings on the buildings also have local decorations. The main orientation also follows the location of the river and sometimes follows Qibla direction.

The plan of the house in Pidoli Dolok, Huta Godang, and Alahan Kae is longitudinal rectangular shape (see Figure 8). At glance, its plan shape is very different to *Rumah Gadang*. However, if we turn it 90 degrees clockwise, the composition of the space will look similar. The

plan is also like the plan of *Siwaluh Jabu* which is split in half. It begins with a *parangin-anginan* as a public area as a guest room. Inside the house, the *biliks* are on the left side and the *pantar tonga* is on the right side as meeting room. The columns stood on stone pedestal and its cross section shape is octagonal. The houses used wooden board walls and tin roof. The column arrangement is in odd numbers of rows to the side and to the back. The stairs also have odd numbers of steps (7-9 steps).



**Figure 8.** The Floorplan of *Rumah Bagas Godang* in Pidoli Dolok (left) and *Huta Godang* (right)  
(Source: Khamdevi 2017-2020)



**Figure 9.** The houses in Sibanggor Julu (left) and in Huta Godang (right)  
(Source: Khamdevi 2017-2020)

The houses in Sibanggor Julu are considered early houses in the Angkola-Mandailing area called *Bagas* (see Figure 9). The roof is in the form of a simple hip style, like a simplification of the houses in North Nias. Some house in Huta Godang has resemblance of Luhak Agam's *Rumah Gadang*-like house. The owner has a Minangkabau ancestor who mingled with the Mandailing tribe there.

In Tobang, the smaller *Bagas Godang* are found a lot. Some houses have transversal rectangular layout shapes and some have longitudinal rectangular layout shape (see Figure 10). In Muaro Sipongi, the houses have Luhak Agam house characteristics physically and spatially. The *Gonjong* ornaments are at the end of the roof, but local carvings are on the walls and roof of the building.





Figure 10. The houses in Tobang (left) and in Muaro Sipongi (right) (Source: Khamdevi 2017-2020)



Figure 11. The houses in in Lubuk Bendahara (left) and in Rokan IV a (right) (Source: Khamdevi 2017-2020)

### 3.1.2 Rokan Hulu

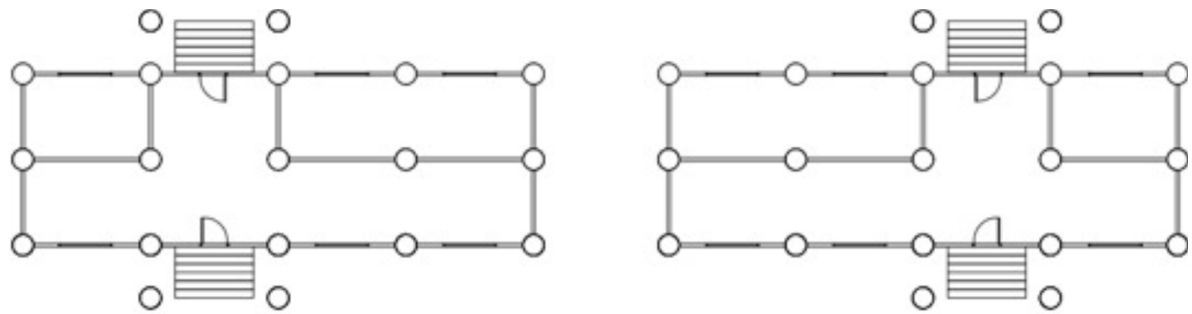
These houses in Ujung Batu, Lubuk Bendahara, Rokan IV a are stilt building with a rectangular shape that extends to the side (transverse rectangular). The shape of the gable roof is known as the *Lipek Kajang* style (boat roof) where the ridge is slightly curved (also referred to as *Kajang Padati*), but not as steeper and higher as *Rumah Gadang* (curved *Lipek Pandan*) and almost similar to *Luhak Tanah Datar* roof rather than *Luhak Agam* roof. These types of houses are similar to houses in Kampar, Kuantan, Hulu Batanghari, and West Sumatra's west coast. These houses tend to follow the Rokan River and sometimes seem to follow the Qibla direction.

Inside the house, there is a bedroom bordered by a wall made of wood boards, which

separates the sleeping room (*Bilik*) from the living room (*Tongah*). The roof material was formerly palm fiber or thatch, now it is just a zinc roof, while the wall material is wooden boards. The foundation of this house used a stone pedestal system, where the octagonal section shaped columns of the house are anchored to a pedestal stone. At the ends of the roof there are no ornaments. The stairs have an odd number of steps, about 5-7 steps.

The Rokan IV houses b and c, and Cipang Kiri Hilir have similar shapes and forms, and very similar to *Luhak Agam* house. According to several local residents, that formerly the Rokan IV Palace (Rokan IV b) had a more curved roof ridge (*Lancang* or *Lanchara* ship roof or curved *Lipek Pandan*)

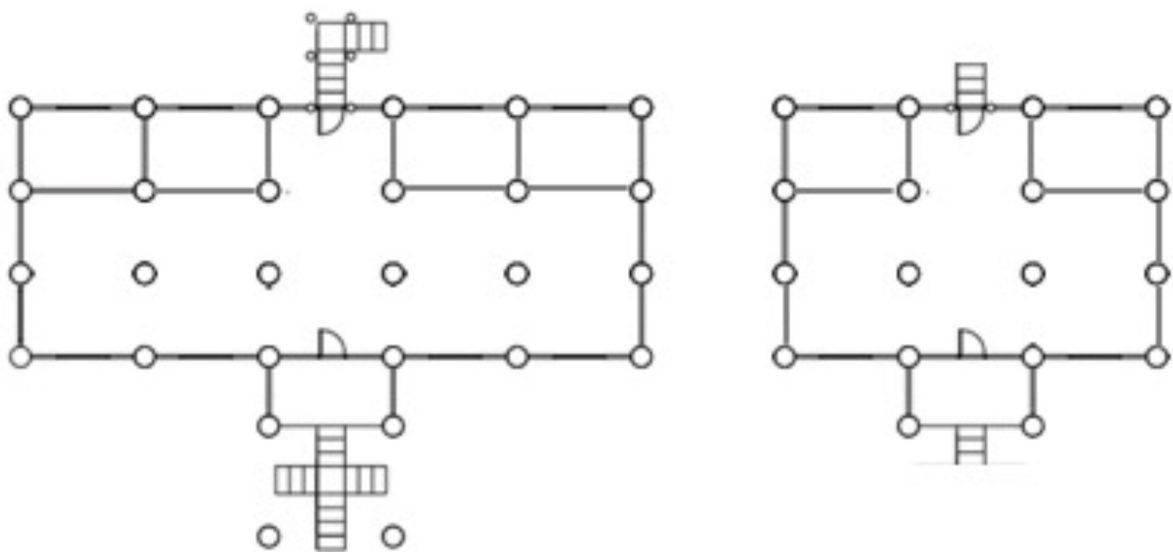




**Figure 12.** The Floorplan in in Lubuk Bendahara (left) and in Rokan IV a (right)  
(Source: Khamdevi 2017-2020)



**Figure 13.** The houses in Rokan IV b (left) and in Cipang Kiri Hilir (right)  
(Source: Khamdevi 2017-2020)



**Figure 14.** The Floorplan in Rokan IV b (left) and in Cipang Kiri Hilir (right)  
(Source: Khamdevi 2017-2020)

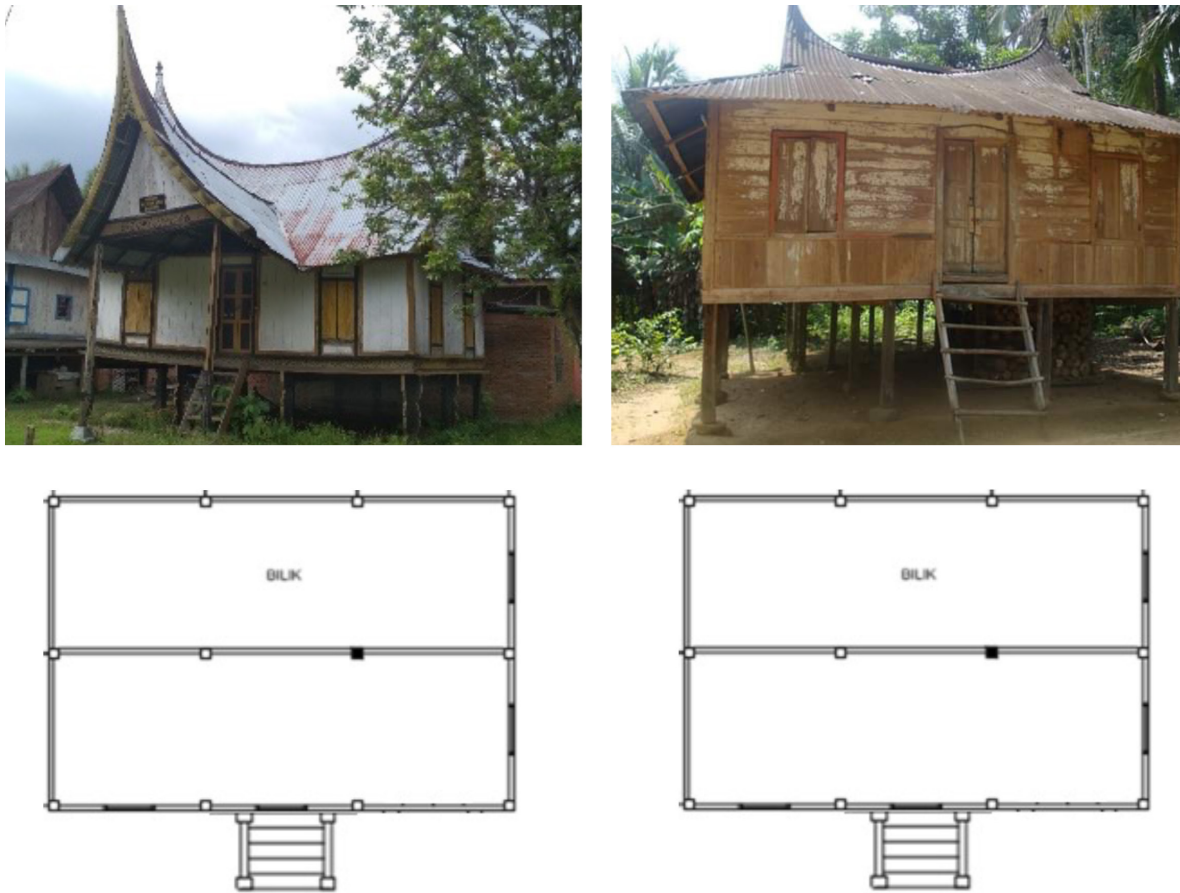


Figure 15. The House and its Floorplan in Rokan IV d (left) and in Cipang Kiri Hulu (right)  
(Source: Khamdevi 2017-2020)

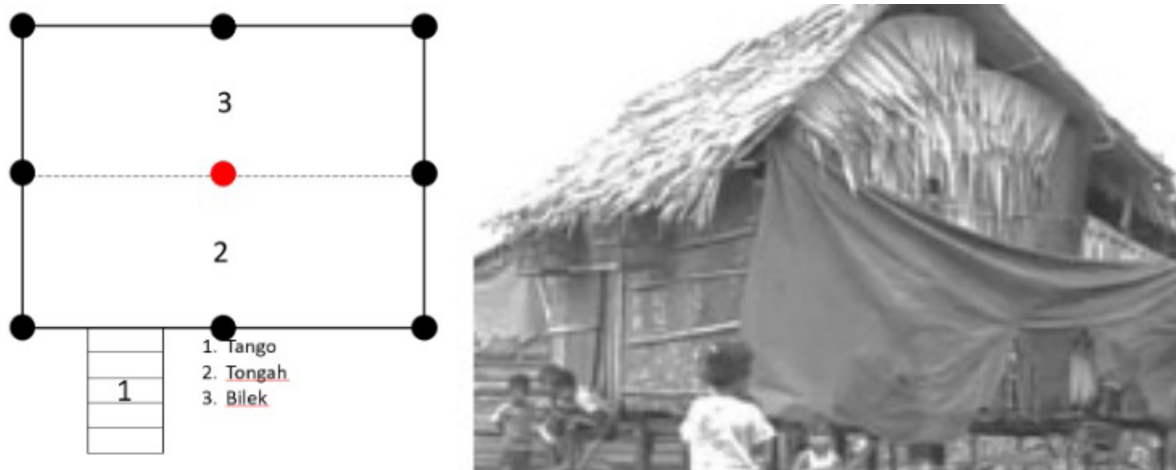


Figure 16. The Floorplan and its House of Sakai People (Source: Khamdevi 2017-2020)

and had *Gonjong* at both ends. The hip roof type is also similar to the *Bagas Godang* roof. They also mentioned that the decorations on the Palace were also new patches added by the Riau Province government.

There is a stair in front of the building with an odd number of steps, about 5 – 11 steps. Then we enter a little veranda or *Surambi*. Inside the house, there are a living room or *Tongah* and a sleeping room at the

back or *Bilik*. There is also an Anjung on the right, for customary leaders.

The Godang Rokan IV d house and the Godang Cipang Kiri Hulu house are very similar to the Minangkabau's house. The House of Godang Cipang Kiri Hulu is more similar to the *Rumah Gadang* Luhak Agam, while the House of Godang Rokan IV d is more similar to the *Rumah Gadang* Luhak Tanah Datar.

In the downstream of Rokan river, the people of Sakai (*Ughang Daghek*) lived nomadically. They were migrated from Pagaruyung (Minangkabau). Now, they are commonly found in Minas, Sobanga, Mandau, and Bonai. Their house (*'Umah* or *Ghumah*) is very rustic with simple materials (woods, bamboos, and leaves). The house only have one space which divide by a wooden board into two rooms; the living room (*Tongah*) and the sleeping room (*Bilek*) with a hearth (*Dapu' Tungku*). Presently, they will add front and back terraces (*Pelanta*) and kitchen (*Patapak*). Its layout plan shape a transversal rectangular. The roof type is commonly a curved *Lipek*

*Kajang*. The main pole is called *Tiang Tuo* or *Tiang Panunjang* (Khamdevi, 2021).

### 3.2 Discussion

#### 3.2.1 The Architectural Characteristics Linkage among Luhak Agam and Mandailing

The characteristics between them have relatively strong linkage in all spatial system, but weak in physical system – figural quality and stylistic system, especially in their physical form, column and ornaments (see Table 3). There are two types of layout shape in South Tapanuli; transversal rectangular and longitudinal rectangular. The longitudinal rectangular is likely more local, if we look at the generality of the houses in Karo and Toba. And somehow it may have a connection with Mentawai and Nias layouts. The roof style of the houses with curved ridge somehow has a strong linkage to the *Rumah Gadang*, except in the Huta Godang and Alahan Kae with a straight ridge. All the houses in South Tapanuli have octagonal section shapes.

**Table 3.** The Architectural Characteristics Linkage between Luhak Agam and Mandailing (Source: Khamdevi 2017-2020)

Architectural Characteristics		Panyabungan Tonga	Singengu Jae	Tamiang	Pidoli Dolok	Huta Godang	Alahan Kae
<b>Spatial System</b>	Space Pattern	√	√	√	√*	√*	√*
	Orientation	√	√	√	√	√	√
	Hierarchy	√	√	√	√	√	√
<b>Physical System &amp; Figural Quality</b>	Physical form	√*	√	√	X	X	X
	Materials	√	√	√	√	√	√
	Space Barrier	√	√	√	√	√	√
<b>Stylistic System</b>	Roof	√*	√	√*	√*	√**	√**
	Column	√*	√*	√*	√*	√*	√*
	Openings	√	√	√	√	√	√
	Stairs	√	√	√	√	√	√
	Ornaments	X	√*	X	X	X	X

**Table 4.** The Architectural Characteristics Linkage between Luhak Agam and Rokan Hulu  
(Source: Khamdevi 2017-2020)

Architectural Characteristics		Ujung Batu, Lubuk Bendahara, & Rokan IV a	Rokan IV b, Rokan IV c, & Cipang Kiri Hilir	Rokan IV d	Cipang Kiri Hulu
Spatial System	Space Pattern	√	√	√	√
	Orientation	√	√	√	√
	Hierarchy	√	√	√	√
Physical System & Figural Quality	Physical form	√	√	√	√
	Materials	√	√	√	√
	Space Barrier	√	√	√	√
Stylistic System	Roof	√*	√	√*	√
	Column	√	√	√	√
	Openings	√	√	√	√
	Stairs	√	√	√	√

**3.2.2 The Architectural Characteristics Linkage among Luhak Agam and Rokan Hulu**

In general, their characteristics have a stronger linkage (see Table 4). The difference only found on their roof type of choice. In Ujung Batu, Lubuk Bendahara, and Rokan IV a, they used *Lipek Kajang* roof with curved ridge (*Kajang Padati*) rather than *Lancang* roof. In Rokan IV d, the house used *Luhak Tanah Datar* roof.

**3.2.3 The Hypothesis of the “Traits and Knowledge Sharing” and the Evolution of the Houses in Luhak Agam, Rokan, and South Tapanuli**

In principle, their spatial pattern sequence maintains the same Austronesian culture: public space in the front to a private room in the back. However, the variations of the placement of the space can be different, which shows the different traits of each. Some of the houses in South Tapanuli have the same variation of space placement as the Sumatran speakers group (Western Islands of Sumatra), where the placement of the rooms on the left and right are arranged continuously to the back and divided by circulation spaces. Therefore, the shape of the plan in the Sumatran speakers area tends to extend to the back resulting longitudinal

rectangular plan. Some of the houses in South Tapanuli also have the same variation as the Malayic-speaking group. This variation has the layout of the space arranged continuously to the left side and the right side so that the shape of the floor plan tends to extend to the side resulting transversal rectangular plan. Thus, these houses show the influence of the Malayic cultural trait. Roxana Waterson in Schefold *et al.* (2003), said that Austronesian houses are identical to the forms of rectangle plans.

Basically the direction and the placement of houses and roads is relatively adjusted to follow the location of large rivers and small rivers which are the main water sources for settlements. This is very much identical to Austronesian houses, at least in Western Malayo-Polynesian-speaking areas that depend on rivers. In subsequent developments, the direction of laying the building was adjusted to the direction of the Qibla when Islam entered.

The structure of the houses in the three study areas used a joint connection system that overlapping each other with tenons and reinforced with pegs. Malayic-speaking houses have a unified structure from bottom to top. This unitary structure was also used in houses in South Tapanuli, which distinguishes it from the



structure of houses from other Western Islands of Sumatra speakers, where the lower and upper structures are separated.

The arrangement of the posts on the houses in Agam and Rokan has an odd number from front to back consistently, while from right to left the number is even dominantly. While in South Tapanuli, both from front to back and from the right and left sides, odd numbers are more dominant. For the Mandailing people odd has a magical and sacred meaning.

The houses in Agam and Rokan have one main post located inside close to the main door generally on the right, which is called *Tonggak Tuo* or *Tiang Tuo*. Meanwhile, in South Tapanuli, the first post was actually in the middle, but it was not specifically sacred and given a special name. Instead, they interpret the posts as a whole. The five post on the short side of the building represent the number of customary components, while the seven or nine posts on the long side of the building represent the number of customary officials.

The roof type of Minangkabau houses, including those in Agam, is basically classified as *Lipat Pandan* (*Lipek Pandan*) which has a high ridge. While the roof type of the houses in Rokan used the *Lipat Kajang* style (*Lipek Kajang*) which has a low ridge. These two types of roofs are the most basic in Malayic-speaking buildings, while each will have more variations. The *Lipat Pandan* roof is commonly found in the highlands (*hulu*), while the *Lipat Kajang* roof is often found in the lowlands (*hilir*) and the coast.

The *Pucuk Rebung* (bamboo shoot) ornament (Minangkabau: *Pucuak Rabuang*) is a cultural trait that is often associated with Malayic speakers, which is often found in their wall carvings and their gables. Even the shape of the *Gonjong* roof at Rumah Gadang in Minangkabau took the shape of a bamboo shoot, as in the poem "*Gonjongnya Rabuang Mambusiuk*". The presence of this ornament (*Bindu* or *Pusuk Ni Robung* or *Pusuk Robung*) on the houses in South Tapanuli in their gable (*Bindu Matoga-*

*Matogu* or *Tutup Ari*), indicates the influence of Malayic variations that entered this area. The lizard ornament, which is a common cultural trait in the speaking area of the Western Islands of Sumatra is absent from houses in South Tapanuli.

The decoration of buffalo head and horns usually adorned Austronesian houses, at least in Western Malayo-Polynesian-speaking areas. This decoration (*Tanduk Ni Orbu*) is found at the top of the ridge tip of the houses in South Tapanuli, especially the houses that have a layout plan that extends to the back (longitudinal rectangle). While the houses which have a layout plan that extends to the side (transversal rectangle) have *Gonjong* decoration or no decoration at all. Generally, *Gonjong* or *Bagonjong* decorations adorned many houses in Minangkabau, consisting of three parts; *labu*, *balimbiang*, and *antiang*, where at the top there is a crescent moon and star design (some are also without stars) which are generally symbols of Islam. At first glance, the shape of the crescent moon is shaped like a buffalo horn. Some Minangkabau coastal areas also used *Gonjong*, but some used *Selo Bayuang* or *Selembayung* decorations (a carved diagonal cross in the form of buffalo horns), and some do not wear decorations at all.

Houses with low and high curved roofs are characteristic of houses in Sumatra, especially Central Sumatra, North Sumatra, and South Sumatra. At Borobudur Temple, some reliefs has a Figure of ancient houses similar to houses in Minangkabau (Miksic 1991). We can find also this Figure in some reliefs in Prambanan Temple. Maybe the house style had become common in Java during the Syailendra Dynasty that originating from Malay (Sumatra). Maybe those houses in East Priangan (Galuh) were the remnants. Boechori (2012) said that the founder of the Mataram Kingdom in Java was a Malay from Akhandalapura (specifically from Central Sumatra), as can be proven in the Malay-language Sojomerto Inscription; his name is Dapunta Selendra. Some Figures of houses on fragments at Muaro Jambi Temple are similar to traditional houses in Central and South Sumatra (Tjoa-Bonatz *et al.* 2009).



Figure 17. The Houses in Temple Reliefs of Borobudur and Muaro Jambi (Source: Miksic 1991; Tjoa-Bonatz 2009)

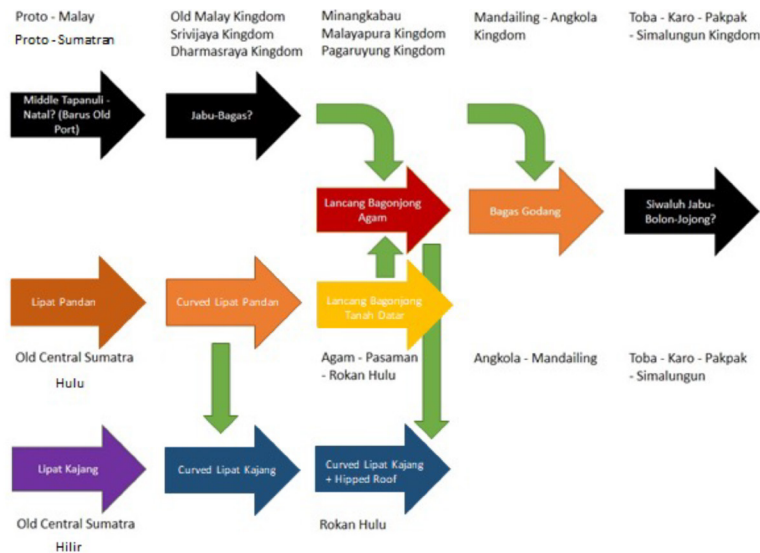


Figure 18. The Hypothesis of the "Traits and Knowledge Sharing" and the Evolution of the Houses in Luhak Agam, Rokan, and South Tapanuli

By looking at cultural, linguistic, and historical factors, the results and discussion above can produce a hypothesis regarding the evolution and "traits and knowledge sharing" of houses in this region (see Figure 18). When the *Luhak Tanah Datar* house and *Rokan Hulu* house, and early *Bagas* house resulted a new type of *Rumah Gadang* style; the *Luhak Agam* house and *Rumah Bagas Godang* in South Tapanuli.

#### 4. Conclusion

The results of this study indicate that there was a general characteristics between the *Bagas Godang* house in South Tapanuli (Mandailing), the *Rumah*

*Godang* in Rokan Hulu with the *Rumah Gadang* in Luhak Agam, which are the houses of Austronesian speakers. The meeting point of the regions showed the melting point of diverse traits or variations of austronesian culture that were mutually influenced each other. The influence from Minangkabau is very strong to the houses in South Tapanuli and Rokan. Even Rokan can still be considered the closest family of Minangkabau. This can be explained due to the expansion of the overseas territory (*rantau*) of the Pagaruyung Kingdom. The influence of South Tapanuli to Agam, Pasaman, and Rokan, is in the form of the idea of using a hipped roof, which merges into one with the use of a gable roof.

All three house variations are multi-family house types, which are some variations of Austronesian culture. Spatially, all three have the basic principles of spatial planning for Austronesian houses, both spatial patterns and spatial hierarchies. The inner room is at least divided into a front and a back room. The front room functions as a living room, while the back room functions as a bedroom. The shape of the floor plan extending backwards (longitudinal rectangular shape) is the character of the houses of the Western Islands of Sumatra speakers, which is also the characteristics of Austronesian houses in the Philippines and Sulawesi. While the characteristics of Malayic speakers houses, the floor plans tend to extend to the side (transversal rectangular shape). What differs from the three are only the additional spaces. The main orientation of the houses following the direction of the river is a strong characteristic in Sumatra, similar to what happened in Borneo. The secondary orientation towards Qibla demonstrates the influence of Islam on this region, by means of a less extreme adjustment to its primary orientation.

The shape of the hipped and gable roof is characteristic of the Western Islands of Sumatra, while the shape of the hipped roof is characteristic of Malayic speakers, which can be attributed to the roof forms of houses in Greater North Borneo, and even Borneo in general. The visual idea of a boat or ship shape is common in Sumatra, but the shape of a buffalo or its horns is very distinctive in its own right in the regions of North Sumatra and West Sumatra. In Malayic-speaking areas, especially in the Central Sumatra, the development of the shape from the *Kajang* boat to the *Lancang* ship shows the development of the local culture and maritime technology of the people. The current assumption is that this design idea was adopted from Dong Son culture. In the archaeological record, the idea of the shape of this roof design first appeared in the Dong Son culture, which until now is still debated whether they are Austroasiatic, Austronesian, or Kra-Dai. But for now all scientists can agree on is that they speak Austroasiatic and have Negrito-

like features. These roof shapes also remind us of the forms of houses found in the reliefs of the Srivijaya-Mataram temples, such as at Borobudur Temple, at Prambanan Temple and the reliefs found at Muaro Jambi Temple. These shapes of the roofs of the houses are different from the houses found in the temple reliefs of the Singasari Kingdom, and the temple relies on the Majapahit Kingdom, which tends to have a hipped roof.

The use of roofs made of palm fibers is very typical to be found in North Sumatra and West Sumatra, while roofs made of sago palm or other types of palm leaves are very typical in the eastern coast of Sumatra and South Sumatra. An odd number of steps seems to be common in Western Malayo-Polynesian-speakers areas. The choice of ornamental motifs is adjusted to the local motifs of each region, but the *Pucuk Rebung* (Bamboo Shoots) motif and buffalo head and horn decoration at the top of the ridge tip are often appears in all these regions.

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