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Relation form and function of limas house in the city of Palembang

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ABSTRACT

Palembang is the capital of South Sumatra Province which has the character as a city of water. In the Sultanate of Palembang in the 16th century, space for a settlement began to lead to land but remain on the boundary river waters. In a further development of this housing is known as home form Limas Palembang. Limas house Palembang is experiencing rapid development in the Sultanate of Palembang Darussalam based on Islam. It is affecting the decoration on the elements of the building, as seen from the interior ornaments that include Arabic script. Meru roof shape (limas) and roof ornament (simbar and tanduk kambing) with both ends pointing upwards, is like on the roofs of traditional buildings in the central states of Hinduism and Buddhism. Namely in the East Asian region that embraces the cosmological principle in the design architecture. By using the method of qualitative research, based on the literature, and survey of the building is still there. It can be concluded that the relation or link between Form and Function in limas house Palembang inseparable from an important goal in architecture, namely the balance and harmony of form.

Keywords: Form; Function; Limas House.

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1. INTRODUCTION

Palembang is the capital of South Sumatra Province, which has the character as a city of water. Palembang since the establishment located on the banks of the Musi river. Musi river is a river that is very broad and can be navigated by large ships as well as 108 small rivers abundant in the city. Palembang natural physical condition is mostly composed of swamp (approximately 52.24%) and the rest of the land [1]. The existence of the Musi river for transportation and as a source of livelihood has been felt since the kingdom of Sriwijaya, the past kingdom of Sriwijaya, Palembang sultanate period, up to the present time [2]. At first settlements on the banks of the river is the main transport route, on the surface of the water is a space reserved for immigrant settlement. Forms houses here stilts and raft houses, which follows the height of the tide. Housing conditions are thus very suitable for areas affected by tidal water [3]. In the Sultanate of Palembang space for settlements began to lead to land but remain on the boundary river waters. The settlement reserved for noblemen of the sultanate of Palembang and leaders of ethnic groups as a complete tool of governance. In a further development of this housing are known to form a limas house Palembang, while the settlement of ethnic groups in

this case the Chinese group known as the house stage ethnic Chinese in various forms of houses. Then public houses ordinary in the form of a house on platform, but the form of his house fixed influenced by local culture. In swampy areas, especially on the banks of the river, there are houses with a form of houses on stilts, in anticipation of the tidal river. These houses are connected by paths over the water on stilts also called jerambah. Settlement it develops very fast and many meet the marshy area. If not uncontrolled by good, so the settlement will grow to settlement slum. A settlement on a swamp has unique characteristics because the majority of the population in doing activities on the water. With such conditions, it will affect the behaviour of the population and adapt to the environmental conditions. The patterns of settlement development have its own characteristics, because it is a village that grows naturally without convening a significant change in the natural environment. Meanwhile, the need for space in general the same, both in the area of swamps and on land. Settlements are located in the waters forming a separate settlement pattern in accordance with the diversity of his forms. Home form is influenced by the culture of each community's inhabitants. From the diversity of the waterfront residential architecture in the city of Palembang, it turns the settlement pattern remains oriented to the river as the

main means of transportation. This is what makes it more attractive to further study is, which was about relation form and function of the limas house in Palembang.

2 RELATIONSHIP FORM AND FUNCTION HOUSE IN MUSI RIVER PALEMBANG

As with any form of traditional houses in Indonesia, Palembang Limas home form is based also by the philosophy and function. The philosophy is based on the customs and culture, which cannot be separated from its historical background. While the function is based on the requirements posed by their customs and culture [4].

3 PHILOSOPHY AND THEORY OF ARCHITECTURE AND RIVER AREA

Growth at the edge of the area waters may provide various functions and activity, as a place of centralizing population with various levels of social and cultural, government center, a center of authority, the center of defense, and the central exchange of goods and services to meet community needs and improve the economy. In addition, because of its position between land and water, then changes could be in the form of interaction from the land or from the water [5]. Along with the development of history that happens, the neighbourhood was experiencing growth as well, especially on the pattern of its settlement order. On a broader scale of these developments may also occur, where the development of a town center on the mainland is also an influence on settlement patterns on the waterfront. This is due, because the river can be regarded as an urban space that is both formal [6]. With a surface water as the floor, so river, it can be said also as open space is natural representing the inside and around it. The existence of the river itself apart as an urban space that is open space as well as water transportation and as a place of loading and unloading of goods or as the port, as well as a place or space that indirectly created for settlement. In terms of urban, river may be regarded as the edges of a city [7], but the water's edge is not only directly adjacent to the water, but also has to do with water in the history of the development of the region, or as a part of the water in the broad context [8]. Bodies mentioned here can be either the sea, rivers, lakes, water reservoirs, canals and puddles in the former mining industries. Waterfront in view of the architecture is a media room with water as the main element, which has the character of a particular area in terms of urban spatial pattern and orientation towards the water [9].

Specifically waterfront can be defined as everything that is above water, below, beside or around the water. The waterfront filled with various functions and human activities, as: recreational activities, the activities of life, as places commercial until with the place for the protected area. This includes the physical

building and the physical elements around the region with a certain order. This area is not only limited to buildings and land directly adjacent to water bodies, but in the sense waterfront also includes buildings and land that are not directly related to the water bodies. The building and land are linked visually or historically or connected as part of a large chart [10].

4 BACKGROUND HISTORY AND PHILOSOPHY OF LIMAS HOUSE IN THE RIVER MUSI OF PALEMBANG

A. THE ESTABLISHMENT OF THE PALEMBANG LIMAS HOUSE

Limas House Palembang estimated to have existed at the time of the kingdom of Sriwijaya, a great Buddhist empire in the 7th century [11]. This can be seen from the shape of the roof, the roof Meru (limas) and ornaments (simbar and tanduk kambing) that bounce upward as on the roofs of traditional buildings in the central states of Hinduism and Buddhism (Figure 1). As well as the countries in the East Asian region that adheres to the principle of a cosmological relationship between man and the universe. This relationship is applied in the architectural design of the period [12].

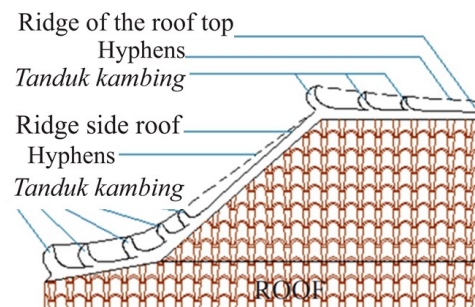


Figure 1: The position of *Tanduk kambing*

At the top of the limas roof there ornament in the form Simbar and Tanduk kambing. Simbar interpreted as a home crown decorated with jasmine flowers, which symbolize harmony and majesty of the traditional house of the pyramid. While the Tanduk kambing serves as an ornamental roof, but the amount of the Tanduk kambing has its own meaning. Some sources say that the number of Tanduk kambing indicates a social level, or degree of nobility of the pawnbroker. The walls, doors and floors are generally made of wood tembesu. Moderate to use wood frame intriguing. Every home, especially the walls and doors carved. Limas house Palembang is growing rapidly in the Palembang Darussalam sultanate, which is based on the Islamic religion. Islamic influence is very visible in ornaments and carvings. Until now carving on the roof and walls will no longer display the lotus flower or animals which signifies the confidence of Hindu and Buddhist, have been replaced by

paintings of flowers and leaves as the main symbol of the painting (Figure 2). The motive was similar to the Arabic Simbar (Platycerium Coronarium)



Figure 2: floral and leaf

B. THE PHILOSOPHY OF HOUSE LIMAS FORM IN PALEMBANG

Limas house Palembang embraces the concept of cosmological priority to balance the relationship between man and God and the natural surroundings [13]. This is reflected in the architecture and interior.

(i) Man's relationship with God is shown in the form of a rising roof (Meru) as limas and floors are terraced (kekijing), and the higher the floor, the more respectable position well (figure 3).

(ii) The balance between the human relationships with the natural surroundings (the environment) is in the form layout position of the house, which is considered the aspects of nature, and express it in the form of a symmetrical house (figure 4).

(iii) The character of an honest man is and is not arrogant, accent or style is reflected in the exterior of the house is simple without gloss paint and ornaments, but otherwise the interior is very glitzy and luxurious.



Figure 3: Floors are terraced (kekijing)

Figure 4: Symmetrical house

C. PHILOSOPHY POSITION AND LAYOUT OF THE LIMAS HOUSE PALEMBANG

In architecture, the house limas consisting of a square shape and rectangular with the turn of the east and to the west. In community philosophy Palembang called facing toward mato-arieedoop and mato-arimati. In understanding the society Palembang, mato-arieedoop means sunrise, and in philosophy interpreted as the beginning of human life. Mato-arimati means sunset significant as a sign of the end of life or death. In person, a reminder of the human life cycle from birth to death. If seen from the layout of the space, marking the direction, showing the distribution of the front and rear of the building.

The position and layout of the house limas Palembang, in the position of sunrise or sunset and facing towards the river (figure 5), or adjacent to the river (figure 6)

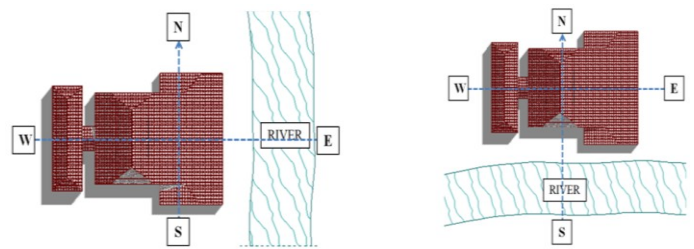


Figure 5: The river was on the east-west orientation Figure 6: The river was the north-south orientation

Before the Dutch colonial government, limas house to the projected orientation of the river. However, after colonial building roads, limas hence house facing toward the street.

D. FORM AND FUNCTION OF THE LIMAS HOUSE PALEMBANG

The mention of the house pyramid roof shape is constituted by the so-called limas. The house that stood on a wooden pole has a terraced floor called kekijing. Plan of each kekijing is a rectangle. In general, limas houses have 2 to 4 kekijing.

Based on the layout of the limas house consists of three parts, namely the front, middle, and back. The front of the house limas serves as a place to rest, this place called jogan.

In this section there is a ladder up which amounted to two pieces, beside which there is a foot wash water. A sketch of jogan there are two variations, namely rectangular floor plan and floor plan of the letter L. The front and middle of the house limas limited by wooden walls. To enter the middle part, must go through two entrances. In between these doors, there are adorned with wooden bars that have a translucent carving which also serves as ventilation. The walls using materials from wood merawan in the form of a board. Limas house Palembang erected on poles that generally the use of wood called cagak.

The form of house limas consisting of a: head, body, and leg (figure 7).



Figure 7: Head, body, and leg of limas house

Functions are as follows:

D.1. Kepala

Head that serves as a roof. The roof of this there is always a tanduk kambing, but not always there simbar. Simbar always located on the ridge of a roof on the very top. The place is right in the middle position of goat horns. Simbar with decorative

crowns symbolizes melati meaningful harmony and majesty of this custom home. Tanduk kambing that adorn the roof is also in accordance with a certain significant amount. The roof limas with the angle of inclination of 40° - 60° technically serves as ideally the tropical roof in anticipation rainfall and air humidity (figure 8).

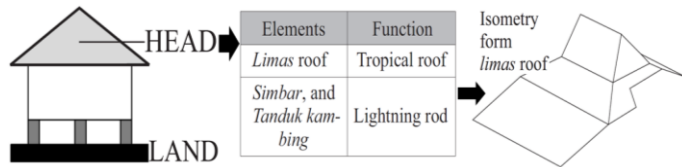


Figure 8: Parts of the head of the *limas* house

Simbar and tanduk kambing made of: mixing concrete, lime bungin, fine sand and boiling sungu (buffalo horn) coupled with iron debris (Figure 9). Therefore simbar and tanduk kambing also function as a lightning rod.

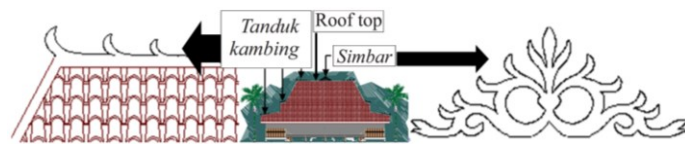


Figure 9: Details *tanduk kambing* and *simbar*

Not all house *limas* in Palembang having *simbar* (figure 10). But all the house of *limas* in Palembang having *tanduk kambing* (figure 11).



Figure 10: The house *limas* without *simbar* and had *tanduk kambing*



Figure 11: The house *limas* with *simbar* and *tanduk kambing*

D.2. Body

Body in a *limas* house was used as residence of family members (figure 12)

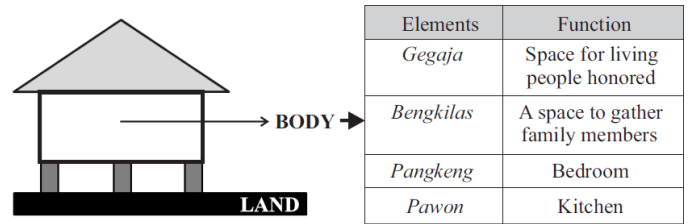


Figure 12: Parts house *limas*

D.2.1. Gegaja and Pangkeng

Highest place and honored at *limas* house Palembang has three rooms, namely:

- (i)Pangkeng Penganten, which is a walled room that is reserved for the newlyweds.
- (ii)Pangkeng Keluarga, which is a walled room reserved for heads of families with children under five.
- (iii)Amben, also called amben tetuo. Serves as the family discussion that deals with custom activities, such as determining wedding day

D.2.2. Bengkilas

Bengkilas is the room to the position of the floor lower ± .30 meters from the floor *gegaja*, serves as a family room and a living room for guests who are considered close (figure 13). There is also *bengkilas buri*. *Buri* in Palembang language means the rear.



Figure 13.Jogan

D.2.3. Pawon

This room is separate from the main house and connected by a breezeway air-canopy called *garang*. *Pawon* serves as a kitchen.

D.3. Leg

The legs are: stairs to entrance, and *cagak* as a pillar of the house. Stair entrance is placed symmetrically in a *limas* house Palembang (figure 15).



Figure 15. Stairs as entrance

CAGAK; Limas house Palembang built standing on poles (forked) of wood. The wood used is tembesu wood, and wood unglan (figure.16).

Cagak shape is round and on the bottom there is a holder called botekan that became the foundation. Botekan also of wood unglan.

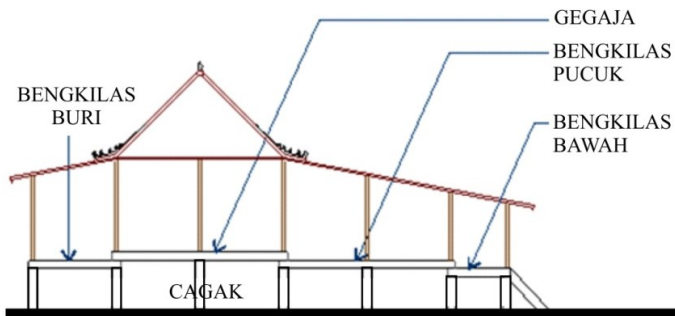


Figure 16. Section of *limas* house Palembang

Unglan reasons for choosing wood, because wood is very strong, waterproof, and cannot be eaten by termites. The reasons exalt limas house floor is as follows:

- (i) To prevent the attacks of wild animals
- (ii) To avoid from the actions of the evil aims.
- (iii) To cope with the danger of flooding.
- (iv) For health

CONCLUSIONS

The conclusions relating to form and function are as follows

- (i) Matters relating to the technical building very attentive to natural factors, such as rain, floods, lightning, etc. So the building materials was chosen to match the natural conditions. Many uses of wood materials that are widely available through the past.
- (ii) Dimensions, size, and capacity of the house, very attentive to the needs that arise from everyday activities as well as activities related to the customs. So the size of limas house Palembang is different.
- (iii) For the harmony or proportion of shape very concerned philosophy inherited form of the cosmological concept since the days of the kingdom of Sriwijaya. So that the composition of limas house Palembang remained the same until now.

From the above conclusion, it is clear that the relation or link between Form and Function in limas house Palembang inseparable from an important goal in architecture, namely balance and ensuring consistency of form.

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