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The Use of House Terrace for Domestic Activities: A Case Study of Floating House in South Borneo, Indonesia

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-----ABSTRACT-----

The house terrace is a transitional space from outside to inside, or vice versa. The front of house terrace serves to welcome guests and should provide a good view for those who see it. While the back and side terrace serves for a place to relax and gather family. The purpose of this study is to show that the terrace of the house has more functions that are useful to accommodate the domestic activities of the residents. The research uses qualitative method and direct observation on the object of study, that is activity of resident in lanting house, floating house in South Borneo. Through this research, it was found that the residents of Lanthing house used house terrace for domestic activities, especially domestic service activities such as dishwashing, clothes washing, clothes drying and bathing. Usually, space arrangement of residential, shows service activities on the back of the building and separated from the front part. But it is different on lanthing house. Domestic service activities performed on the terrace either the front, the side or the back one.

Keywords: *house terrace, domestic activity, lanthing house*

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I. INTRODUCTION

Space on the house that direct-connected with the outside is the terrace. The terrace is a transitional space from outside to inside, or vice versa. The terrace is shaded by a roof and has one or two walls as a barrier. It can be in front, beside and behind the house. Terrace in front of the house serves as a greeter area. In traditional houses used as a living room [1]. The side terrace or back one are used for a relax area, family gathering, and doing hobby activities. In this case, the function of terrace for space extension of domestic activity from the inside to outside of the house. On the terrace, residents can perform domestic activities by utilizing the view of the natural environment.

In general, domestic activities carried out in various occupations have similarities, including sleeping, eating, cooking, washing, bathing and storing [2] [3]. Lawrence [4] asserted that the need for spatial classification systems for domestic activities in residential houses refers to the opposite code of space, ie front/back, clean/dirty and privacy/public. The front links with the road as a public area is a clean zone, while the back as a service area is a dirty zone. The separation between the front and back areas has become the most common way of spatial arrangement in the houses, where the service space is located at the back, separated from the front of the house. In real-life everyday, the back area includes a kitchen, laundry room, auxiliary room and other service functions at the back of the house [5]. While the front area will relate to the public and guests so it needs a reception room and a better view than others [4].

The front of terrace is a public space located in front of the house and direct contact with outsiders. In the current residential spatial arrangement, often using the classification of opposite space as expressed by Lawrence. The front terrace is only used for guest-related activities, which are separated from other domestic activities. Space arrangements like this generally apply to occupancy on land that has sufficient land to be made terraces. But what about the order of residential space on the water? This study attempts to examine the spatial order especially for the use of terraces in the dwelling on the riverbank. The study was conducted on lanthing house, the floating house on the river. Rapoport [6] states that the activity will determine the formation of space in the dwelling. Thus, the activity of residents associated with river will determine the space formed in the dwelling.

II. THEORITICAL REVIEW

Activity is the most obvious embodiment of culture to be able to assess the use of space in occupancy [6]. Human activity reflects the desires, attitudes and knowledge of the world as a place of residence, so it tends to be different to every human being in addressing the environment. Lawrence [4] describes the influence of culture on the order of dwelling. In a different country, it will be different in its order. In Australia there is laundry room for clothes washing that are distinguished from the kitchen, while in England the activity of clothes washing is in the kitchen. Similarly in the United States, the kitchen is only used for cooking and dishwashing. In the Western there is a clear classification of its domestic spaces. There is a distinction between clean and dirty areas. The bedroom is a clean area, so it should be kept in the dirty area (kitchen), even by distinguishing the floor. The social concept of domestic space is indicated by the difference of space positions. The front area is considered a public area and should have a pleasant decorative. While the back area should be hidden or filtered from public view, such as drying clothes activities and other service activities [4] [7].

The use of space and activities will also be related to time and place [8]. In a space will form a variety of settings based on activity in accordance with the time of occurrence. And the activity goes with the place. Affirmed Wongphyat [9] that the element of time can not be separated in the use of space. "Time in space", such as the use of different space based on time, such as the living room in the middle of the day serves as a gathering place family, at night it changed the function into the bedroom. This is supported also by Septanti [10] which states that activities can be interchangeable in one space (exchange activities).

The use of domestic space is not solely determined by the physical dimensions and geometry, but also determined by the use of space as a container of activity [11]. Space can be extended according to ongoing activity, not limited by existing geometry. The space for eating and learning activities can be extended to the living room, according to the residents' occupancy. Monteiro [12] calls it "loose activities", which are flexible activities, can be done anywhere in the home and can relate to other activities. For example clothes ironing while chatting and watching TV. Lunch while listening to music and so on. But there is space that can not be extended, for example cooking activities will be in the kitchen can not be in another room, because it requires special attributes. Monteiro [12] calls it "rooted activities", that is, restricted and inflexible activities are only used for one type of activity function and depend on the specific equipment in the space.

Space usage can be done for various activities. Monteiro [12] also explained that there are various activities that can be done in one space (integrated activities). Wongphyat [9] calls it "space in space - a shared space", a space that can be used for two functions, such as a worship space located in the corner of the bedroom.

Tversky [13] explains that space is physically a place of social relations and activity. The existence of social relationships in space leads to the absence of division between different types of space, although there is a visible boundary separating between spaces [14]. Domestic space as a social space does not consider limits as the main thing in determining the division of space. The most important thing is the activity that takes place inside the space. The name label on space is not the main thing that determines the type of space, which determines is the activity that takes place in that space [11]. Activity on space is supported by fixed, semi fixed and non fixed elements to determine the type of space formed (space setting) [6] [15]. Fixed elements in the form of buildings, semi-fixed elements in the form of furniture that supports activity, and non-fixed elements in the form of activities that take place.

III. RESEARCH METHOD

This research was conducted on the settlement on the banks of the Martapura river, in the Seberang Mesjid village. In this area is founded some floating houses that called lanting house. This area is located in downtown Banjarmasin, South Borneo. The study on lanting house that inhabited by the family, to be able to see the domestic space formed by the daily activities of members of his family. In this location there are 6 lanting houses for object study.

Data obtained through direct observation of the lanting house, completed with interviews of residents. Observation is done to know the activity that takes place on the dwelling through behavioral mapping and supporting elements (semi fixed and non fixed), especially in the terrace. Interviews were conducted to find out the reasons for using the terrace for activities. The data collected is then analyzed qualitatively to obtain the used of space.

IV. RESULTS AND DISCUSSION

1. The Lanting House as Floating House

Life on the water in the form of lanting houses in Banjarmasin has existed since the early 19th century. *Lanting House* has a simple construction and local materials that exist in the form of boards and bamboo. *Lanting houses* can be moved like a ship and Tethered to the desired place [16].

Characteristics of lanting house are as follows [17] [18] [19] [20]: 1) a rectangular building with a maximum length of 8m and a maximum width of 4m, adjusting the length of the floating construction; 2) Gable roof, lightweight material with board wall arranged horizontally; 3) Floating construction in the form of bamboo collection as many as 100 stems that tied together, there are 3-4 bamboo bonds in a house that arranged parallel to the direction of the river flow; 4) On the side of the lanting there is a large wire rope with the ends attached to an ironwood pole on the ground, to hold the house so as not to be carried by the water current at high tide and low tide.

Lanting houses can be accessed from the river and from the land. Because of the rapid development of roadways in the city of Banjarmasin, the lanting house then more accessible by road. To go to the lanting house, using a wooden footbridge, the path is composed of boards with pole construction. *Lanting* house frontage from the river and the land is showed in figures 1 and 2.



Figure 1. Lanting house frontage from the river
Source: Personal documentation, 2017



Figure 2. *Lanting* house frontage from the land
Source: Personal documentation, 2016

2. The Use of Terrace House as Domestic Space

Lanting houses are oriented to the river and to the mainland. In general, lanting house has 4 main rooms, namely bedroom, multifunction room, kitchen and terrace. The position of the terrace on the house lanting has three variations, namely 1) located on four sides of the building (around the lanting house); 2) located on three sides of the building (side to the river, side to the land and beside the house); 3) located on two sides (side to the river and beside the house). Lanting houses can be accessed from the river and the mainland. Residents of lanting house consider that the side of the building facing the river is the front area. While the back area is the side of the building facing towards the mainland. Due to access from the mainland is more dominant, then the side of the building facing towards the mainland make it the front area. This can be seen from the location of the living room located on the side of the building facing towards the mainland. The position of the terrace and living room is showed in Figure 3 below.

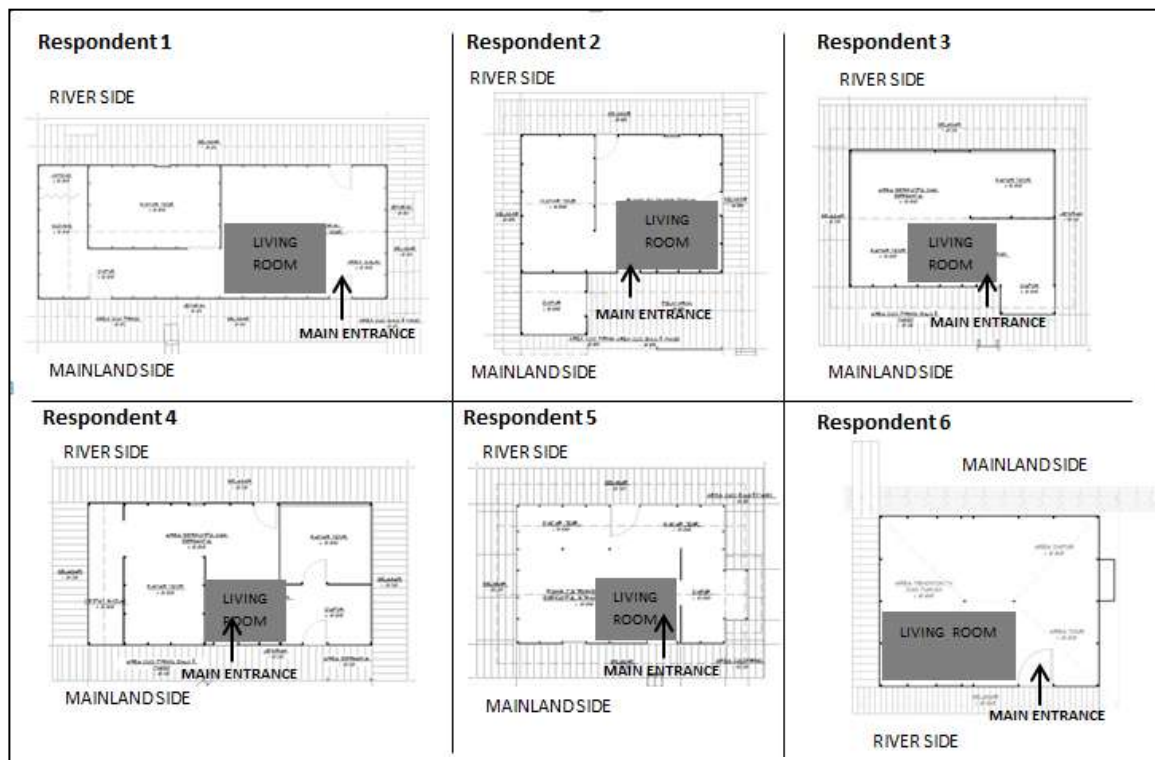


Figure 3. The Position of Terrace and Living Room
Source: Field data, 2017

Based on Figure 3 it can be seen that the main building access is dominated by the mainland side (there are 5 respondents), while the main access from the river side is only 1 respondent. This main access determines the front of the building visible to the guest (public) and determines the location of the living room. Based on this, it is determined that the front of terrace is associated with the main entrance and living room. While the other side of the terrace is the back and side one. Theory mentions that the front of terrace serves to welcome guests and is public. Not so with lanting house. The front of terrace on lanting house, not only serves as a greeter. It also works to be used for other domestic activities, such as relaxing, playing, doing hobby, and space for service activities such as dishwashing, clothes washing, clothes drying and bathing. This is shown in table 1 below.

Table 1. The Use of Terrace for domestic activities

Respondent	The use of terrace						
	relaxing	playing	doing hobby	dishwashing	clothes washing	clothes drying	bathing
1	-	V	-	V	V	V	V
2	V	V	V	V	V	V	V
3	-	-	-	V	V	V	V
4	V	V	V	V	V	V	V
5	-	-	-	V	V	-	V
6	-	V	V	V	V	V	V

Source: Field data, 2017

The most often performed on the terrace is a domestic service activities. All lanting houses use the terrace for service activities. Although the terrace is directly related to guests (public). There is no limits between main entrance and service activities. In addition, there is no space division. Everything is located in one room that is the terrace.

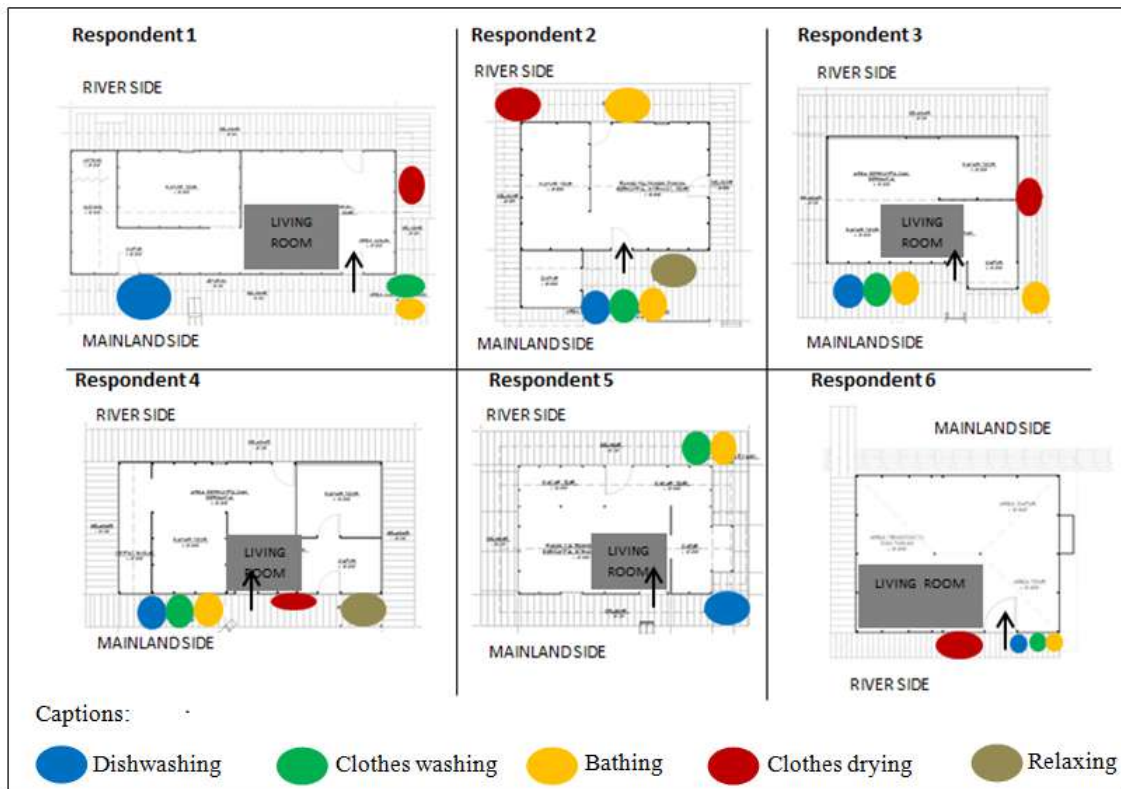


Figure 4. The Position of domestic activities on the terrace
Source: field data, 2017

Differences in the use of space can be known from the settings formed by semi-fixed and non fixed elements. Domestic activities that take place on the terrace, forming various settings according to activities and supporting elements, namely dishwashing setting, clothes washing setting, bathing settings, clothes drying setting and relaxing setting. When dishwashing and clothes washing, equipped with semi-fixed element in the form of buckets/water basins. Similarly with bathing, will be equipped with semi-fixed element in the form of scoops and soap containers. The lounge area is equipped with benches. The dishwashing activity is closed to the kitchen, while clothes washing and bathing, being free along the terrace where the inhabitants desire. The settings formed on the terrace are flexible in accordance with the activities undertaken and the existing semi-fixed elements.



Figure 5. Domestic activities on the terrace of lanting house
Source: Personal documentation, 2017

Monteiro [12] states that bathing and clothes washing includes the rooted activities, ie activities that can only be done at a certain place. Whereas in the lanting house, rooted activities can be done anywhere as long as it approaches the river, especially looking for the terrace area associated with clear water. At high tide will they use the terrace facing the mainland, and when the water recedes they use the terrace overlooking the river. The use of space on terrace can be flexible, but with certain place requirements.

Lawrence [4] states that in dwelling there is an opposite zone code, ie front/back and clean/dirty. The front area corresponds to the public as a clean area and back area as a dirty area (service). Between the front area and back one should be given a divider so that service activities that are behind is not visible in the front area. Not so with the use of space in the *lanting* house. The main access of the catwalk (land side) will be faced with a terrace that used for service area. Service areas that are considered "dirty zone" will be instantly visible to guests, no boundaries covering this area. Yatmo and Atmodiwirjo [5] found that the front area of urban residential areas could be a setting for domestic service activities. Similarly, the use of space in the *lanting* house. This is supported by the factor of proximity to the river for domestic activities.

Terrace on *lanting* house is not only used by the residents of the house, but also used by others ie neighbors, especially the terrace overlooking the river. The terrace is used by neighbors for bathing during water tide and fishing. In addition the terrace is also used by children for playing. This shows that occupancy is generally owned by individuals, but at certain times the public space on *lanting* house can also be used by others.

V. CONCLUSION

The habitation culture in the water is clearly visible on the *lanting* house. This is demonstrated by activities directly related to water. Activity is the most concrete cultural aspect. Activity can be seen in the built environment through the settings formed by fixed, semi fixed and non fixed elements that support it. On the *lanting* house, terrace is a space that is directly related to the river. Terrace not only on the front of the house, but also around the house. The use of terraces is not only a transitional space that connects the inside and outside. Terrace is also used as a space for domestic activities. Residents of *lanting* houses use the terrace as a space for domestic service activities. The use of terraces is done flexibly, depending on the tidal water of the river.

Based on this study, space codes based on labels do not determine the usefulness of the space by occupants. The most decisive thing is the easiness of ongoing domestic activities, which is supported by semi-fixed and non-fixed elements. In addition, the attachment to the river for daily needs also affects the use of terraces for domestic service activities.

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