

## The DAYAK adaptation in kampong of Kahayan riverside, Palangkaraya, Indonesia

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### ABSTRACT

This paper described the main findings on the factors of DAYAK community behavior and their adaptation to suit the riverside environment of the Kahayan river in the city of Palangkaraya, Indonesia. Kampong Pahandut that located on the edge of Kahayan river was chosen as a case study. Literature review and field study were conducted to form a baseline data on behavioral patterns. It was found that behavioral factors and their adaptation determined the old kampong to exist. Both factors have a very strong element of locality and unique that makes a difference with other places within the city of Palangkaraya.

**Key Words:** DAYAK, kampong, riverside, behavior, adaptation.

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### INTRODUCTION

Many cities in Indonesia, the beginnings of settlement were on the riverside. This initial settlement actually has been there earlier before the city was formed. Thus, the waterfront settlement became the opening of the collective settlements and eventually evolved into the city. The choice of settlement location on riverside affected by human relationship with nature as a source of life. The river serves as a source of water, food, transportation and livelihood <sup>[1,2,4,5]</sup>. Natural conditions will directly affect human behavior and forms of house that is built on the site. Form of house is influenced by the processes of human adaptation to environment which is located on the riverside. Form of house on the riverside is usually a house which is erected on poles or floating house <sup>[2,9]</sup>. The adaptation process begins when human specify location of settlements. Settlement adjustment to the environment will shape the behavior setting.

Human adaptation process also influenced by culture. Through culture, human can adapt to environment. Culture is a link between human and environment. Culture will give a distinctive feature of the settlement, which will give the difference to other places. In this case, settlement including house is a cultural product. This culture also will provide a specific character to the city which started from a kampong. Especially, kampong of ethnic DAYAK was studied in the current research with an aim to find out the determining factors for community adaptation to suit the riverside environment of the Kahayan River in the city of Palangkaraya, Indonesia.

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## MATERIALS AND METHODS

Studies on the life of the DAYAK, who lived on the riverside, were very rare. A very limited amount of literature was selected in accordance with the purpose of study, which was associated with behavior and adaptation. In addition, this study was carried out by field observations and interviews with local people. Interviewed residents were hereditary in several generations living there.

## RESULTS AND DISCUSSION

### Formation of the DAYAK settlement in riverside

Selection of residential location and form of adaptation by the DAYAK Ngaju can be learned through stories and legends. The selection of DAYAK Ngaju's residential location on the edge Kahayan river based on their needs are natural resources like water, forest, and fertile soil. It can be seen at the origin story about Kampong Pahandut that quoted from Laman <sup>[1]</sup>

The house layout is always associated with DAYAK belief which assumes that flow of river to upstream mean good and to downstream mean bad. So the direction of house always oriented toward upstream, with parallel position to the river which is source of their life <sup>[2]</sup>. The layout of house is also influenced by the activity system that formed at the location where they live. After the DAYAK specify house location then their way of life and activities will form various kinds of activity settings. House position face to river because DAYAK daily activities such as transportation, wash, bath and toilet, performed in rivers. Boat (*jukung*) as medium of transportation is located on riverside so easy to achieve. Boats used to support activities like farming, looking for forest products, hunting and fishing. System of settings which formed can be seen in the image below:

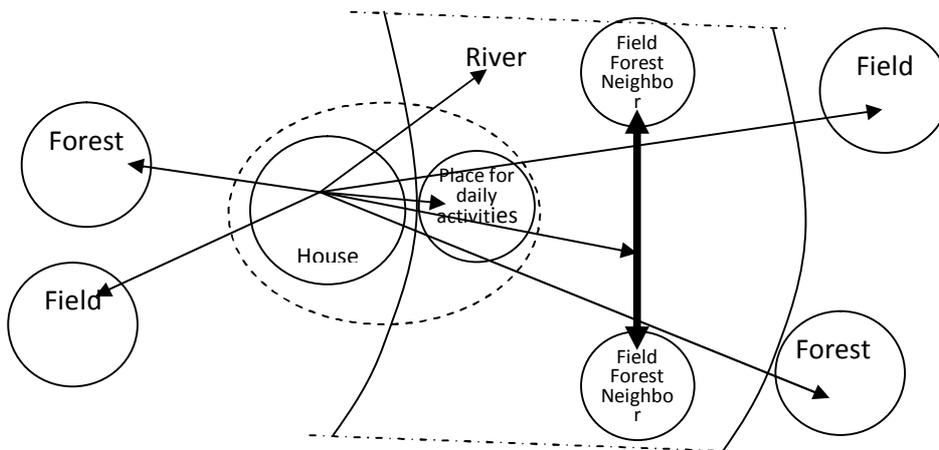


Figure 1: System of Setting in Kampong on Riverside

### Form of residential adaptation to the environment

The relationship between human and environment are inseparable, especially in the creation of place as the built environment. Holahan <sup>[3]</sup> states that relationship between human and environment are mutually adjust. With ability of cognition, human always strive to gain harmony with environment.

Settlements located in riverside and close to the forest make DAYAK to adapt on their house. Their house are usually called *huma betang* (long house, see Figure 2), *huma gantung* (high house, see Figure 3), *huma lanting* (floating house, see Figure 4).and *karak betang* (see Figure 5) and *lanting* (floating house, see Figure 6)

Dawson and Gillow state that *huma betang* allegedly not the original form of local culture but indicated an adaptation from bazaar building style in China <sup>[4]</sup>. That accord with experts assumption that the DAYAK ancestors came from Yunan (southern China). Many immigrants from China, precisely the Hok Jia from Fujian came to perform trading activities in Kalimantan <sup>[5]</sup>.

*Huma betang* for DAYAK Ngaju more than just place to stay. *Huma betang* is center of social structure from the life of DAYAK. The process of living DAYAK Ngaju originated from *huma betang*. Inside it found rules (usually unwritten) and taboo as moral guidance which encourages residents should not be doing anything that violates norms of sublime and uphold moral values and ethics <sup>[6]</sup>.

*Huma betang* also showed a picture of the DAYAK as a society that is always in groups. Togetherness is always built in small group that is family and larger group that is community. This can be seen in the expression of legend story entitled *Tambi Uwan Bawin Pampahilep* <sup>[7]</sup> that is:

*Ewen mampunduk huma betang*

means:

“They make *huma betang*”

Generally *huma betang* built in the form of a stage with a height of three to five meter from the ground. The high building to avoid from flood in the rainy season which makes the river overflowed, and wild animal attack. Pit of *huma betang* sometimes used as a place of communal activity, storage and processing of fields.

The concept of space *huma betang* compound from *ngaju* (upstream) to *ngawa* (downstream). It parallel to follow direction of river that are in the front or in the east. Linearity of spaces in *huma betang* tiered according to composition of inhabitants, from the oldest in *ngaju* (upstream) until the youngest in *ngawa* (downstream). Sequence spaces was carried out starting from *ngaju* for manufacture and distribution of materials can be more easily done. *Ngaju* is part closest to location where material placed <sup>[8]</sup>.

*Huma gantung* is another form of *huma betang*. *Huma gantung* has different forms with *huma betang* in general. The difference lays on the size, the pole of building and the space order. *Huma gantung* is usually *huma betang* specific to the kampong leaders (*demang*).



Figure 2: **Huma betang (long house)**



Figure 3: **Huma gantung (high house)**



Figure 4: **Huma lanting (floating house)**



Figure 5: **Karak betang (house for one family)**



Figure 6: **Lanting (for daily activities)**

Other forms of *huma betang* is *karak betang* (Sangalang et al, 2004; Wijanarka, 2008). *Karak betang* is a single building which is only occupied by one family. The reason for the emergence of *karak betang* because the need for more residential spaces. Other reasons allegedly because of government regulations from the Netherlands in 1904 where every one DAYAK families must live in single house <sup>[9]</sup>.

*Lanting* (see Figure 6) initially a supporter of *huma betang* part built on riverside. *Lanting* is used as a place for domestic activities such as wash, bath and toilet. Construction *lanting* is a wooden rods tied together in a row. *Lanting* existence as a place of daily activities can also be seen on the DAYAK legend story entitled *Tambak Baja 'i*, can be seen in the following terms:

*Balalu ih iye mampisisk ije biti jipen ayue akan maagah iye muhun mandui akan lanting*  
means:

“Then she wakes a servant to accompany her for bath in lanting” <sup>[7]</sup>

In further developments at the top of this *lanting* built house and called *huma lanting*. *Huma lanting* allegedly appears because it used to transfer one family to downstream to find a fertile land <sup>[2]</sup>.

In the settlement consisting of several stage houses there are courtyard that called *karatak lewu*. Its function is as a place of social interaction, children's playground, and informal meetings among neighbors. *Karatak lewu* also serves as a road linking the activities indoors and outdoors. It also became a medium toward river in their daily activities like bath, wash, toilet and take water for food and beverage needs <sup>[6]</sup>. Character *karatak lewu* is a semi-private for the community settlements.

### Contemporary adaptation

To get better understanding about adaptation and human behavior are more obvious if take urban kampong used as a case study. Urban kampong is an experience of everyday life of Indonesian people. An example is Kampong Pahandut located on edge Kahayan river. This kampong is the origin of Palangkaraya (Central Kalimantan Capital). At the beginning, this kampong is inhabited only DAYAK Ngaju and only consists of several residential. If one *huma betang* contains 5 families, then at least at that time Kampong Pahandut inhabited by 40 families <sup>[1]</sup>. Now Kampong Pahandut is dense settlements.

Development of Palangka Raya make a lot of immigrants that look for earnings at this city. Most of these immigrants settled in Kampong Pahandut. They were renting or buying a house or land from the local community. This situation makes settlement in this kampong became increasingly crowded. Settlers and crowded settlements given the change in face of this kampong. The newcomers gave a new color in this kampong which initially homogeneous becomes heterogeneous. Although many DAYAK people still live in this kampong but the local culture is no longer dominant because it began to be influenced by the culture of the settlers and the development of civilization.

The entry of immigrants in Kampong Pahandut and the influences of modernity also influence the living culture of the DAYAK Ngaju who early this beginning kampong available living at the long house (*huma betang*). Currently, for reasons of need for more residential spaces so that people Ngaju DAYAK live in single house or *karak betang*.

Although *huma betang* could no longer be found in Kampong Pahandut, but the pattern of adaptation is still running, many new house stand even though the form of a fixed single house created stage (*karak betang*), particularly those close to the riverside. This *karak betang* is oriented to the river. Figure house can be seen in Figure 7.

There are also several house which orientation does not lead to the river but the river back. This is influenced by changes in environmental conditions where there is a road for transportation. Occupancy orientation is on the road and parallel to it. *Huma lanting* still there and widely used in addition to residence as well as for economic activities.

*Karatak lewu* which originally was semi private became public, to be just a public street. This was allegedly because changing patterns of occupancy from *huma betang* into *karak betang* which lined along the kampong. Changing the function *karatak lewu* become public roads make it difficult to do communal activities. The loss of *karatak lewu* made under house if the dry conditions used for children's play activities and other communal activities. These activities are also conducted on riverside when the river receded. The condition of Kampong Pahandut when the river receded can be seen in Figure 8.



Figure 7: House in Kampong Pahandut



Figure 8: Kampong Pahandut

The patterns of adaptation to a past that is still applied not only do the DAYAKs but also newcomers to adapt in the same way. Based on the above shows that although Kampong Pahandut growing and dense, but behavior and adaptations of the past still exist are applied by people who were there. This behavior pattern that gives typical in this region.

### Evolution of settlements

At the beginning, traditional society like DAYAK Ngaju who forming settlements on the riverside and into a kampong, have a livelihood that comes from the natural surroundings. That livelihoods are hunting, fishing, livestock breeding, farm and look for forest products. For how to live, DAYAK Ngaju did an adaptation on their house. Occupancy is adjusted to the condition which is situated on riverside and close to dense forest. Their occupancy made shaped stage (*huma betang*) to avoid flooding and wild animal attacks. In the house development stage shaped with a higher pole to avoid enemy attacks. For daily activities like bathing, washing, and toilet conducted in riverside. To further facilitate these activities then they made a raft (*lanting*) that float on riverside. Lanting is needed because sometimes riverside is not a sloping land but steep. The main route of transportation is the river so the boat (*jukung*) is an important means of transportation.

In further developments, behavior and adaptation change. The changes caused by the entry of immigrants with different ethnicity, housing an increasingly crowded and more reduction in the carrying capacity of nature. The changes are also caused by the times that marked by the construction of roads to transport and the development of the kampong became part of a city.

*Huma betang* turned into a single house called *karak betang*. The house was still a stage and have the orientation to the river mainly located on the riverside. Livelihoods grow in other areas such as trade, working as employees, teachers, civil servants and others. The community is still doing activities such as farming, fishing, breeding (such as pigs and chickens) and look for forest products but not dominating. Looking for fish was replaced with activities to keep fish in cages (*karamba*). *Lanting* added the function to the maintenance of fish, where cages placed at the bottom. *Lanting* also be used to open shop, restaurant and selling fuel for motor boat (Figure 9). *Lanting* also still be used for domestic activities like bath, wash and toilet facilities (see Figure 10). Mainly carried out by residents whose houses were close to the riverside.



Figure 9: Huma lanting as a store



Figure 10: House and

In general system of setting adaptation in several DAYAK people can currently be seen in the picture below.

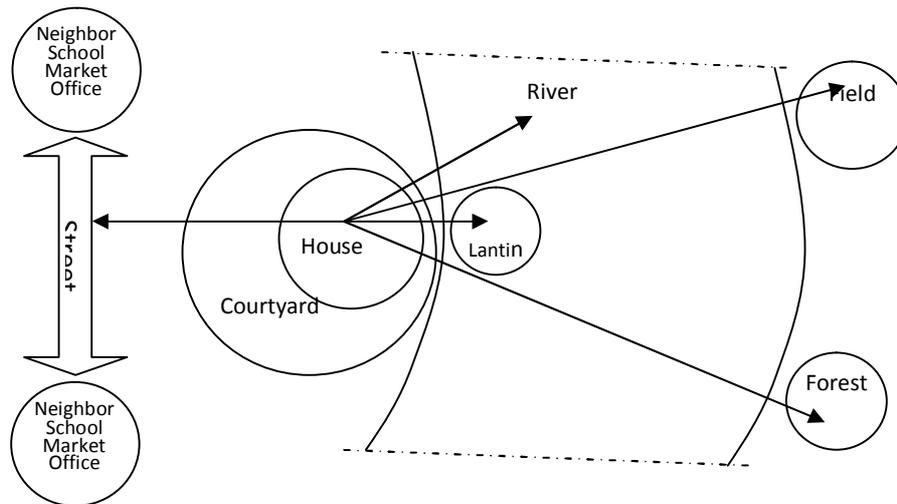


Figure 11: System of Setting in Kampong

Old kampong in the city is embodiment of an honest society ways of life which is formed from a long adaptation process. The formation of kampong cannot be separated from everyday human life. Kampong grew from experience of human life where behavior become one of the affecting even perhaps the most important. The changes are not necessarily eliminate the old culture living. There are many behavior and adaptations of the present which was adopted from the old way.

## Conclusion

Human at the time of determining the location as a place of residence will try to adapt to the environment. In this adaptation process, human behavior will be influenced by the environment. The behavior related to their livelihoods and way of living. For kampong resident who have lived for generations, environmental conditions that exist today still give pleasure to be occupied as long as they can adapt and adjust their behavior. Element density and slum impression that people see beyond the kampong is not important for discussion. The element of uniqueness behavior embodied in physical forms such as housing and settlement patterns as well as non-physical such as society lifestyle is paramount determination.

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