

**MORPHOLOGICAL CHARACTERISTIC OF PULAU BELIMBING VILLAGE IN RIAU PROVINCE, INDONESIA**

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**Abstract**

Traditional settlements in Indonesia always have local value in organizing and using space either in residential or settlement scale. They not only adapts to the environment but also cannot be separated from the local cultures. Pulau Belimbing village is the oldest village in Kampar town of Riau province which inhabited by several tribe. The space structure of the village is formed by local wisdom, abiding the order of functional space and its ownership. Each tribe will get private and public area. Nowadays, there are some damages to the village space that caused the local village characteristics disappear. The research focuses on identifying morphological identity. The paradigm of this research is naturalistic with descriptive qualitative approach. The historical technique is used as method to find the root of village charactersitic. As result the village has spatial clasification such as macro, mezzo, and micro scale. These can become tourism culture village potencial and restoration startegy.

**Key Words :** *Morphological Characteristic, Local wisdom, Space Structure Degradation of identity*

## **1. INTRODUCTION**

### **1.1 Background of Research**

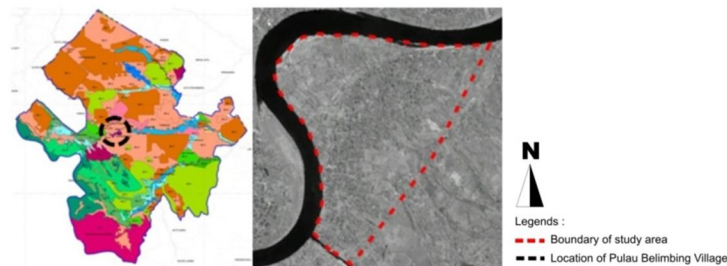
Indonesian societies have a lot of part in social culture, which is resulted from communal interaction. This is created more characteristics by their direct responses to the environment. It can be seen in some parts such as building pattern, custom and tradition, or settlement pattern as their creation. Just like human being, a city can be able to interpret as life processes. It starts from establishment process, growing and thriving process, to the end of life. A good city is a city which has memorable stage of development. This is because the processing can be known by the storyline of the establishment of the city. It can be seen into city architecture, where a distinctiveness of the city can be found. Pulau Belimbing village, as a straight forward example for this research program, is the oldest village in this area especially in Kampar River. It was inhabited by Malays clump such as Malay, Domo, Caniago, Piliang, and Pitopang.

The establishment of Pulau Belimbing village is not solely physical elements, but there are also customs and events. Moreover, spatial village layout is arranged by settlement and communal space. Rules and spatial village layout, in the past, were used by the citizens, which were becoming characteristic from Kampung Belimbing. Laying and distribution room's rules was resulted by deliberation tribal chiefs based on the needs of each tribes and village. Tribes will get private area as such tribal custom home, residential, Nongsa's Hall, business land, communal land, cemeteries, and baths. On the other hand, shared room likes Mosque, school, Islamic boarding school, multipurpose room, sport facilities were located in the central of the village, so that it was becoming the core of the village. Also, the village is quite wide enough because they have space in the outside to do their activities such as playing traditional game and drying clothes. The access in this village is more dominants on the ground rather than using boat on the river. It assumes that the village uses road hierarchy as deep as the road village because it can be accessed by foot.

Nowadays, there are more transformation such as migration, cultivated land, and mixed tribe residential, which are resulted as loosing characteristic in spatial layout to Pulau Belimbing village. Therefore, these need a straight forward effort to restore spatial characteristic to the village's original character. Two major stages are sequentially committed to find basic restoration design. Firstly, this research is trying to find the characteristic of village morphology. Secondly, is to create design for the village. As final point, this paper is focused to find the characteristic of Pulau Belimbing morphology, which is reviewing and discovering spatial layout ancient village thus describing the main characteristic of the village.

## 1.2 Location of Research

Pulau Belimbing village has  $\pm 1.6 \text{ km}^2$  area, which is located in Kuok Village, Kampar regency, Riau Province. It is one of traditional villages with  $\pm 500$  inhabitants that have Malay culture with traditional economic system based on agriculture. In addition, it is located on the edges of Kampar River, the largest river in Kampar regency. The river used by the community for a long time as source of livelihood and culture. Pulau Belimbing's climate is generally tropical climate with the highest rainfall occurs in November, which reached 925 mm. Altitude areas of the ocean surface is about 44 mdpl, whereas the area is used for residential, paddy field, pool, and land that is not cultivated.



**Figure 1** Kampung Pulau Belimbing as area of study

## 2. THEORITICAL REVIEW

### 2.1 Settlement System

In life, human always depend to their place living because human needs a room / place for the continuity their activity. More over a place could give safety, happiness, and guaranty of live. Human always consider elements and land potency before they live there. Villages are an unstructured settlement, unorganized, and informal socio-economy, no infrastructure, unplanned, with low quality of life (Sihombing, 2004). Village also is a traditional environment which has close relation to each other's and traditional culture (Herbasuki, 1984).

Settlement is a process of functioning a place that is based on human activity, and the influence of physical and non-physical setting. Furthermore, settlement arrangement influenced some elements of physical environment such as location, society group, and social culture (Rapoport, 1969). The order of room in village are a village with housing around of village's public area, a village with natural setting, and a village with traditional housing build beside of road. Mangarai traditional society has spatial concept about their settlement. Those are housing, public space, plantation, water resources (for consumption and bathing place, and so on), burial, and forest (Hambur, 2013). Hambur (2013) says

Ruteng pu'u village concept consists of three spatial classifications such as micro scale (custom home and housing), mezzo scale (Settlement), and macro scale (Village, Forest, water resources, and burial).

## **2.2 Cultural Live**

Human choose habitat and migration as reaction of environment (Rapoport, 1984). Then, it also describes that environment is specific organization in a city. Behavior in environment denotes result of interaction for each character because it is process of individual or group with all of their limits. Those Limits consist of cost, distance, time, and so on. In one side, a community can takes or chooses a place where it has high value according to environments characteristic they prefer (pull factor). While on the other side, human also leaves a place when it has negative value (push factor). Time also influences and creates relation and sense of place to their environment (Low & Altman, 1992). Attitude theory by Jorgensen (2001) says three dimension of place such as sense of place means an emotional dimension, trust about place make cognitive dimension, and their function denote a behavior symbol in place. Riverbank settlement located in the downtown and suburb areas possess similarities in creating transition space as community place to nurture the social network among people (Darjosanjoto et al, 2014).

## **2.3 Ritual on Settlements**

Each behavior reveals his status as social beings in a structural system where he is at that moment (Leach, 1997). Communities always are doing several of culture, religious, and sacred ceremony. The ceremony was listed in a routine which always maintained continuity for a long time and become rooted characteristics of a group of people and villages. Ritual is able to represent a social ritual as a form of cultural understanding and aspirations, for their ability to mask or resolve potential conflicts in their life (Norget, 2000). Ritual also relate with some factors like human, time, and location. Sense of place is something that is made in the course of time, and the result of habit or custom. Thus, it was being event repeatedly (Jhon Jackson, 1984). Rostamzadeh (2012) says sense of place is not only a physical of character, but also interaction between individual and place where it creates symbolic meaning. Therefore, the sense of place is a set of symbolic meaning of a space that varies from individual to individual and from time to time

### 3. METHODOLOGY

The base for this research is naturalistic that uses descriptive qualitative research type. It means focus on interpretation and description systematically. Facts in study area will described to reach the research aim. The key component for this research is emphasizing on natural setting, interpretation, and meaning. Focus on how respondents interpret it, and use a variety of tactics (Groat & Wang, 2002). This research uses historical method to reveal a change in village. History methods will through four stages, namely heuristic (collecting traces of the past), criticism (trace filtering in order to obtain a proven fact), interpretation, and historiography (presentation in written form). Purposive sampling is type of interview that interviewing people who know and understand about condition and tradition in Pulau Belimbing village. This research uses type of analysis called Typology-morphology analysis. This analysis technique focuses on urban fabric, growth up and change pattern. So that, it could affords to give in-depth analysis about form, spatial, physical and non-physical in study area.

### 4. RESULT AND DISCUSSION

Morphological characteristic is not only emphasis on physical aspect, but also non-physical aspect. It formed a graphic memory in a place. The physical aspect focuses on analysis about urban fabric, function of structure, object of architecture, and artifact. While the non-physical aspects focus on habits, ethnicity, and so on. Non-physical aspects will provide an understanding of the meaning of space, thus affecting the spatial pattern of the village. Pulau Belimbing village has custom rule produced through traditional meeting. The rules regulate the division of land the village in order to camouflage inter-tribal conflict. The rules influence spatial structure of village that formed space classification. Space classification found in Pulau Belimbing village such as macro, mezzo, and micro scale.

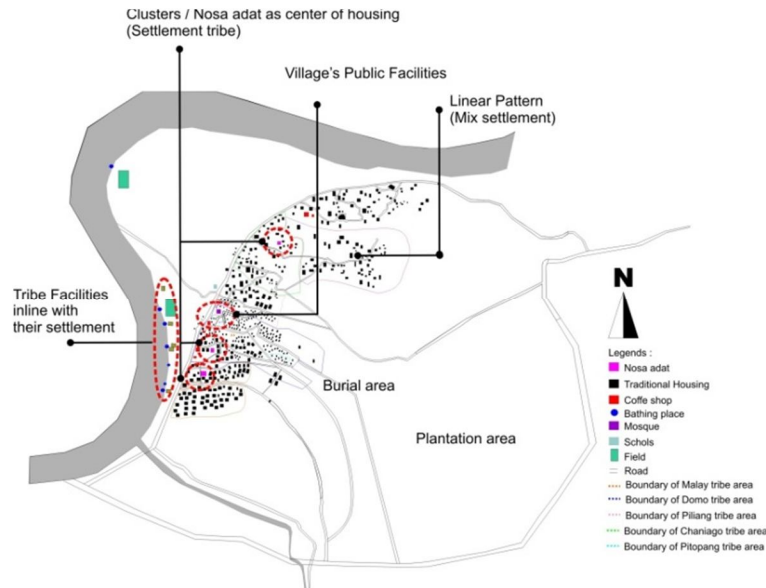


Figure 2 Spatial Character of Pulau Belimbing village

Macro scale is the village, discussed about spatial structure of village. Village structure consists of public area and settlement area. Public area was placed in the middle of village as center (nucleus). It means as center and easily reached by all of traditional houses. Public area consists of mosque, school, madrasah, and majlis taklim. In addition, bathing place and sport facilities was placed in riverside with a purpose to decreasing noise. In addition, the structure of the village formed by several settlements tribal relations, namely Malay, Domo, Chaniogo, Piliang, and Pitopang. Village has hierarchy of circulation based on land use where there is different type and user of road. Type of road consists of main road (middle village road), tribal road, and between settlement. Indigenous road will be used only for certain tribe.

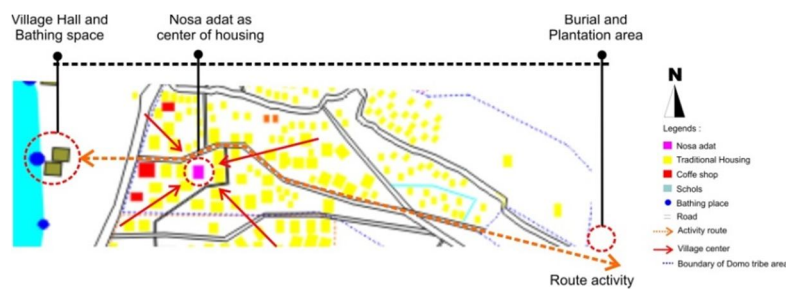


Figure 3 Spatial Structure of Tribe Settlement

Mezzo scale is special area that it's owned by each tribe. Each tribe gets area used to nosa adat, traditional house, hall, bathing place, burial, and garden area. All of them placed their place on parallel scale. The function of nosa adat is as center of settlement. Housing is placed around of nosa adat. Hall is placed in riverside in which it has function as

meeting area and break point after full day working in their tribe area. Plantation area is placed near with burial as green open space and unbuilt area. Spatial structure of village was becoming daily route that it was showing character of society Pulau Belimbing village. Their daily activity was beginning working in plantation, then back to balai for getting rest. After that they were taking a bath in bathing area, then back to their house. They were doing praying and recite Koran passages in (nosa adat) traditional house.

Micro scale of Pulau Belimbing village is housing communities. Each house has physical visual uniqueness that it in Malay housing type. Each house has uniqueness physical visual in which it is in Malay housing type. Form of roof house is curve roof or called “lontiok”. Traditional housing uses many columns and (umpak) foot foundation. Wall pattern uses triangle pattern that it meet in window jalousie. There is xelograph in border of roof that it means symbol of their tribe identity. House has typical positioning layout in which guest room located in front side, bed room in wings area, and kitchen in backside. There is storage in under roof for saving foodstuff that it’s called singok.

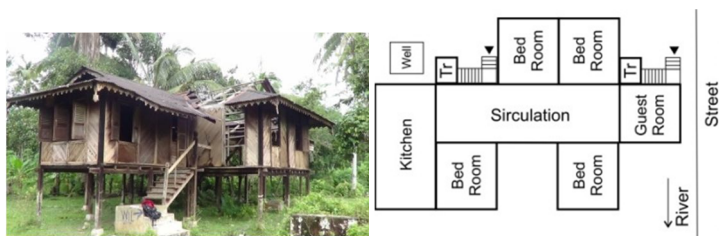


Figure 4 House of Domo Tribe (Field survey, 2016)

Characteristics of Pulau Belimbing village are also determined by the non-physical aspects of culture as a form of living. Communities have culture and ritual activities such as Baoghuong, Balimau kasai, Bakaghang, and Mamucuok. These ritual activities needs some place. Because of that, communities provide facilities having special function and sacred area such as traditional house and hall. So, both of them is most important place in village structure.



## **5. CONCLUSION**

Based on this research finding it is known that Pulau Belimbing Village has unique morphological characteristic in which different with other villages. Village Characteristic was created by tribal rule that applied in village life. Morphological characteristic were showed separation zone based on tribe rule in village. There is separation on each tribe zone that every tribe gets their own facilities. Spatial classification theory also was found in Pulau Belimbing village like macro, mezzo, and micro scale. Housing and building type have own self characteristic, so that can be an understanding medium about architecture. Besides, culture also plays a role as a characteristic in which they encountered rituals and cultural activities. From this study Pulau Belimbing have much potency as tourism cultural village. The most important things are village artifact such as custom building, traditional housing, public area, etc. Other potencies are culture and unique ritual activities.

## **6. ACKNOWLEDGEMENT**

I would like to expressing my gratitude to LPDP that has been giving funding aid for the restoration of kampung belimbing village research in thesis grants program.

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