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To cite this article: Gaisai and R Amanati 2018 *IOP Conf. Ser.: Earth Environ. Sci.* **126** 012011

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Akit's house: identification of vernacular coastal architecture in Meranti Island

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Abstract. Akit people can be found on Meranti islands near east coast Sumatra. Their houses made mainly by wood construction as stilt type house. The roof of the house was made by leaves, and bark of the tree was used on house wall. Nowadays, some changes have occurred on this vernacular house. The changes are not only as responding to the environment, environment but also are affecting by way of their life. In turn, this changing becomes an interesting phenomenon, particular comparing to the house on other islands. This research has conducted in qualitative research approach to identify how the changes of the house. Field data gathered by a range of methods such as observation, story-telling, and documentation. The data are analyzed and interpreted within an iterative process to expand understanding of the house's changing. This research offers an architectural insight into how the vernacular houses are changing.

1. Introduction

Meranti islands are part of the east coastal area on Sumatera. Meranti is consist of three large islands; Merbau, Rangsang, and Tebing Tinggi and are an abbreviation of ME (Merbau) - RAN (Rangsang) - TI (Tebing Tinggi). Apart of in Rupert island, Akit tribe is also widely spreading in Meranti island. Geographical condition of the islands with coastal areas makes the Akit's house more attractive.

Akit's house is built on piles, made of material logs walls and floor made of bark, roof made from Kepau or Sago leaves. Interior of the house can be found in three main parts; *umba* as front space, main hall and kitchen [1]. The contact between the Akit and others tribes have also accelerated the on the entrance of a changing and the Akit's construction house [2]. The change influenced by the changes the lives of the community, tradition, and expansion science and technology. As life continues, and house, as well as technologies outside the entrance to the community, have affected the Akit's

change concomitant with the changes of architecture identity. This can also define as adoption, or negotiations between something old and new. Sometimes can be observed eyes. The changing architecture has to capture transformation settlement in the Meranti's island. The changes can be a physical thing, both in terms appearance, material house, technology, and construction the house. In the transformation of a building form can be seen, but regarding non-physical such as changes of culture is an effect on the pattern the building itself. This paper is used how the changes of the Akit's vernacular architecture in the context of construction, and how the influence of technology, information, and knowledge affect to morphology forms and space of Akit's house in Meranti islands.



2. Literature Review

Akit people was one of the tribes which are found in the Riau province. They were also called the sea people as their lives are related to marine life. They are also recognized as landed-sea gypsy people who have housed on land, but are mostly still living with sea life tradition such as fisherman, and is also found as an animism people. Also, their livelihoods are using the timber of mangrove that found of the river, a strait or the sea. The timbers are used as firewood, and now this there was also a lot processed into ebony. Akit people came from Gassib-Siak Sultanate era and is found as descendants of a mixture of local and Chinese [1]. The word of Akit itself is originated from 'Rakit' which is meant a raft [3].

Vernacular architecture can be seen as a product of architectural which is based on local tradition in order to maximize the local such as material, and knowledge [4]. Study of architecture vernacular are architecture plain, with low caste, low cost, or built by using the traditional local culture and day unchanged [5]. Form and model vernacular influenced by six factors which are called by modifying factor, material factors, construction factors, technology factors, climate factors, land factors, and sociocultural factors. Architecture vernacular does not refer to another thing in culture, but it likely in to adopt regional and local culture [4]. Characteristic of architecture vernacular is the buildings that produced by the individual for his own used or localized, contractors/builders that are typically/anonymous using formulas or rules of local traditions [6].

The conclusion of some opinion above, architecture vernacular is attached to a system of live community, expression, and traditions that are forming an as a container activity, while form as scope space is a form of resolving and customs.

3. Method

This research has conducted by using the qualitative approach helps to find the nature and source of people and social problems which can focus on understanding meanings and processes through collecting a variety of empirical materials [7]. To find variety character and changing of Akit's house. Rationalistic paradigm has used in this research aimed to identifying Akit's vernacular house and investigate changes of form and space related to the cultural change of society. This research is based on the theory vernacular and theory about cultural change to identify the changes that occurred.

This research is used to identify, the Akit house that is defined as one form of adaptation, adoption, or negotiation between something old and new. It is sometimes can be observed with the plain view, architecture change recorded the identity of the transformation of the settlement pattern of Akit in Meranti. In addition, this paper is compared to Akit house in Rupert island [3].

3.1. Data Collections

Data collection was gathered using observation field, structured interview, documentation, and study documents. Observation field survey was conducted by direct observations on the ground to obtain information and primary data details about the research. The observation was mainly aimed to take a sense of existing by seeing existing of Akit's house. The story-telling method was performed to local people to make a close relationship with the people. Relationships have always been central to fieldwork everything is contingent on the quality of the relationships which the fieldwork can build up with others [8]. Documentation was used as visual frame not only on the house but also on the situation around the house.

Qualitative researched process, in general, consisting of four steps in the pre-field, work field, data analysis, and research report [9]. In the field research to the collection of primary data, this activity covering observation and field research in Meranti island; doing interview informants, chief of the tribe and local public figures. Documentation; towards an object research better the aerial view and visual images objects and aerial view object; carry out by studying record documents, or source other written obtained during the research.



3.2. Data Analysis

Grounded theory is used to classify and categorize filed data. Fieldwork study becomes the main instrument of social investigation to acquire a detailed understanding of situation [10].

4. Results and Discussions

The character of vernacular architecture can be known as Rural Settlements; Types and Processes; Built from the Ground; Resources that Grow; Coping with Climate; Living Spaces; Values, Symbols, and Meanings; Decorated Dwellings [11]. There is some characterization of architecture vernacular, form of daily familiar to a particular region of the population [5]; often made with material that available around to apply to function building; architectural vernacular assume a meaning the sake of daily life the common people, it can be said not including a building designed in professional.

The native house in Meranti islands is the stage house with wooden piles, roof made from the leaves, wall from the midrib sago, floor of wood or from midrib sago, and construction of the main wood with pegs (Figure 1). The existence of the house is assumed as the original and is difficult to prevail again. There are several houses in the village of Sesap that still have characterizes of the native tribes. The native house is consisting of living space, which serves as all space, the loose space not having the bulkhead. They limit itself in the house and is visible from grouping function, whereby on the front part for receiving guests, the middle part of the family room, and back part as the kitchen.



Figure 1. The native house of the wall midrib sago

The native house is characterizing what has said as vernacular architecture [11]. The settlement of native people in village, type, and process of building is also looked similar, that type native house of this is one type house, with the process of building with the flour fresh, a kind of ritual to construction. The manner or build technology is not orally of parents to his son. A house built as close as possible to the front, in a sense of also built with resource around it, the tribesmen dominant use midrib sago plantation resources besides is used as building materials, also as a staple food for the community.

From the roof, it evident that this house has adapted to tropical climate, the gable accommodates rainwater infall, forming a roof material is also of local material. The communal space, and attributes looked like to point out heavens in a building also that indicates that the vernacular architecture more visible complex of the tribesmen.

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Figure 2. Tribesmen settlement with the sago plantation situation around

4.1 The Akit House

Tribesmen are not called to the Akit; the native does not want to be called Akit people. Problems naming is related to change and acculturation culture. A native will be called Akit when he has acculturated, or do marriage with the other. It is mentioned that intermixture the native to the Chinese make them called the Akit. When native become Muslim they are called Malays. Acculturation culture through marriage this is distinguishes the mention of the tribes. In addition, to mentioning of the tribe, the name is also changed. Natives to be Akit, become Malay, an attribute their names are also changed. As is the case with the chief in *Tanjung* village, his native was named Lim Po Dai, when he becomes Akit, his name changed to Dam Bok Be, and when converted to Muslim the name was changed to Buchori (Figure 3a). It happens in *Sesap* village, *Batin* Sesap Mr. Amir who was originally later became Akit, but now became a Christian (Figure 3b).



(a)



(b)

Figure 3. Batin Dan Bak B as Buchori / yellow hat (a) batin Amir / green shirt (b)

Akit house is square shape by the distribution of space into three parts, *selaso*, *luang tengah*, and *luang dapu* (Figure 4b). *Luang* means airy free or extent. In contrast to the Akit house, the native house has only one living space. The Akit house is a shaped house on platform, which is initially used the ground. Now with technology and knowledge, the pillar is made by *umpak* stone and cement. The dividing of space is using a piece of wood which is called a *bendul*, naming *bendul* or *bendul* is also applied for Akit house in Rupert. *Bendul* are also used in the Talang Mamak tribe in Indragiri district of Riau province that called *bandul* or *bantalak* [12] and also in the Lum's house in the Bagka island is name as *bendul* [13].



Akit house form consists of poles and bolts as the foundation structure. The number of stairs in the house amounted to odd number of 3, 5 and 7. After a pole fitted *gelegar* that serves as a binder a mast, *rasak*, and then the floor. The walls of the native house made of midrib sago, that are arranged and tied with the rod, before fastened on the wall between with wood to outside and inside. This clamp called *jening*. Akit has used material board that is arranged with the term name *susunan sisik trengiiling* that is transverse on the building, while arrangement longitudinal on the building is called *susunan pian*.

Apart midrib sago as a wall, material wood is used in the construction, Pelawan wood, Keruing and Unai. Then the top of a wall is tied with beams called *titian tikus*. This naming is same as naming of the Lun house in Bangka [13]. Akit house saddle-shaped, material roof construction of wood and cover is made of Nibung, the palm, midrib sago. Akit people has used *depa*, *hasta*, and *jengkal* for measuring their house; Size adjust to the needs capacity and ability to build the house.

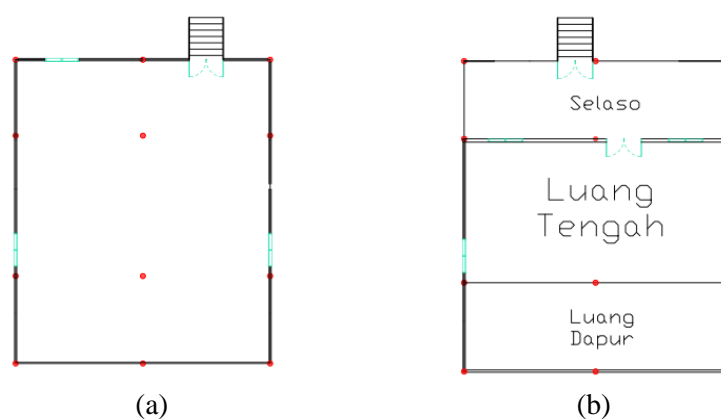


Figure 4. Native house plan (a) Akit house plan (b)

4.2 Akit Meranti house vs Akit Rupert house

Akit's house in Rupert islands (Figure 5) is built on piles. Interior of the house can be found in three main parts; umba as front space, main hall, and kitchen [3]. If we compare with Akit Meranti house form in Meranti (Figure 6), the same room division is amounted of three, but in has terms of slightly different naming. *Selaso* as *umba-umba* or front space, *luang tengah* as the living room, and *luang dapur* as kitchen.

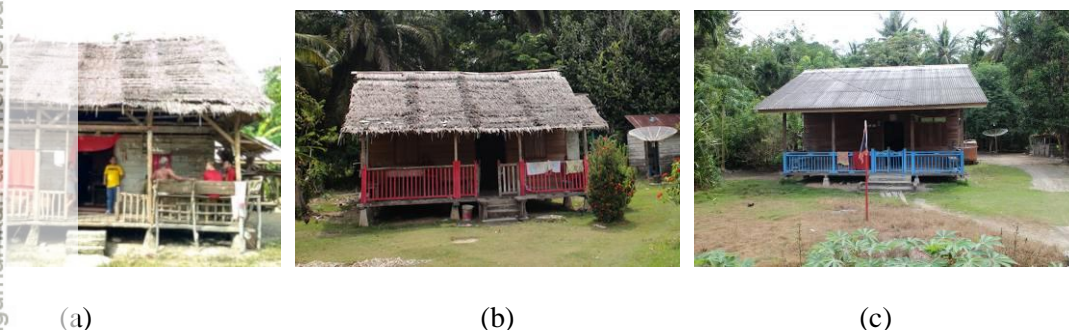


Figure 5. Rupert Akit house with leaves roof (a) wall board with leaves roof (b) wall board with zing (c)



(a)

(b)

(c)

Figure 6. Akit Meranti house with leaves roof (a) wall board with zing (b) glass windows (c)

Akit house orientation, they called *angin tua* or face is to the south. Election the north related health factors. Akit said that the sunrise should be in the side of house. And if case of natural disasters in the sense of a village found disease, Akit people must move to new village. The house is not only a place to live, but also is a place of ritual life. There are three main ritual in Akit house. First ritual is *44 hari* ritual as marriage ritual; second ritual is birth ritual they called *cuci bidan*; third ritual is *bedak limau* as the process of death.

Government service for isolated culture communities is by the presence of assistance programs of healthy house (Figure 7). In 2008 on Sesap village, government gave stage house. Stage house with wall board and zinc roof become the new house for Akit people. New technology and material are affecting to way of life and occupancy the Akit. In rupa island on 2015 procurement healthy simple house from government. From one side, it is good things for Akit community, but from another side, the design of a healthy simple house is consider inappropriate to tradition and habits of the Akit.



(a)



(b)

Figure 7. Government assistance house in Rupa island 2015 (a) in Meranti 2008 (b)

Conclusions

From the above description, there are several things that can be concluded; the changes in domestic architecture surrounding the changes in the pattern of inner space. And then, change expression by the outer space is called *Selaso* as the foyer. And the last, materials change from simple local materials become more complex.

Acknowledgments

The authors gratefully acknowledge that the present research is supported by Ministry of Research Technology, and Higher Education, Republic of Indonesia. The support is under the research grant DIPA Universitas Riau of The year 2017 Contract Number 818/UN.19.5.1.3/PP/2017.





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