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The spatial modification of *lamin* anyeq apui in sungai bawang cultural village indonesia

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Abstract. Sungai Bawang cultural village is situated in Kutai Kartanegara regency. This village, inhabited by the indigenous tribe Dayak Kenyah, has uniqueness in its tangible and intangible culture. The combination of architectural heritage and their custom on dances, carvings, and sculptures. These cultural values made this village officially launched as a Cultural village in July 2020. The *Lamin* However, after decades, the *Lamin* Anyeq Apui has been changed and modified on its spatiality. This study tried to investigate what aspects of the spatial have changed and how the modification then formed the spatial concept of recent *Lamin* Anyeq Apui. A Case study method is used in conducting this study. Data were collected from field observation in 2013 and 2023. Then, the modification of the spatiality is observed and analysed. The criteria of spatiality refer to the Spatial concept of *Lamin* Dayak Kenyah. The finding from analysis found that there was a significant modification in roof shape and the appearance of the building that became a stilt building. The main entrance also was moved in its elongated direction. There are more carvings on the wall and the roof. *Belawing* was erected in front of the *Lamin*. The Layout of the interior has little change in it. And for the exterior, a parking area has been added to *Lamin's* front yard. In conclusion, the spatial modification in *Lamin* Anyeq Apui has been changed in the improvement of what spatial aspects are needed to comply with *Lamin's* spatial concept.

Keyword: Cultural Village, *Lamin*, Space and Configuration, Spatial Element, Spatial Modification

1. Introduction

Sungai Bawang cultural village is situated in Kutai Kartanegara regency. It was a part of Tanah Datar County in Samarinda City before it was merged under the Kutai Kartanegara Regency in 1988. [1]The location of Sungai Bawang cultural village can be seen in Figure 1. This village is inhabited by the indigenous tribe Dayak Kenyah, which has uniqueness in their tangible and intangible culture. The combination of *Lamin* (long house) as an architectural heritage and their custom on dances, carvings, and sculptures. These cultural values made this village officially launched as a Cultural village in July 2020. Sungai Bawang cultural village was established as a secondary tourist attraction officially stipulated in [2] clause 18, which stated:

"In the development of the KPPK for the Muara Badak-Marang Kayu area and its surroundings as referred to in article 16 paragraph 1 letter b as follows, Sungai Bawang, Kersik cultural village, Santan Ulu waterfall, traditional fish market, five shop fisherman village, and culinary centre on Samarinda-Bontang Highway".



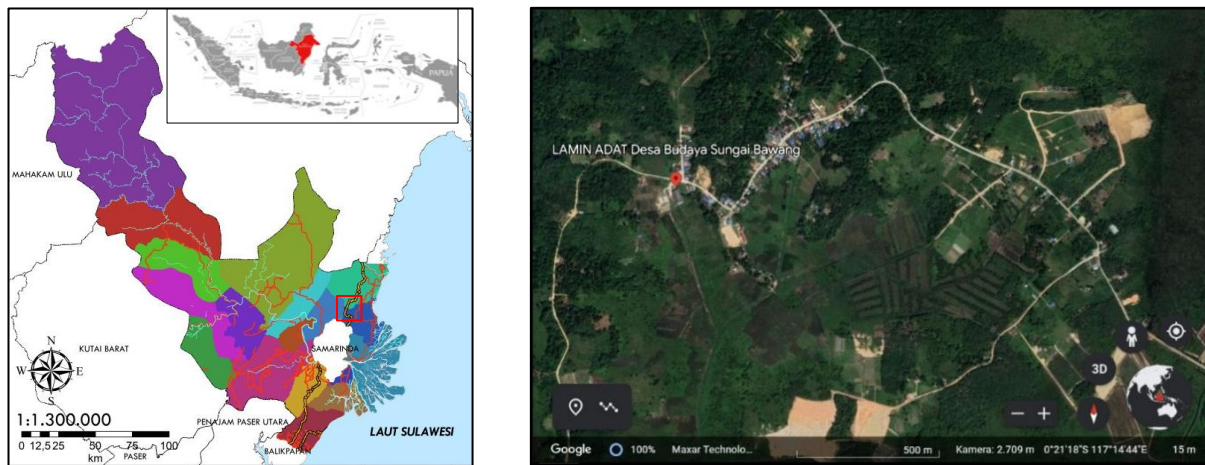


Figure 1. (a). Location of Sungai Bawang Village Kutai Kartanegara county [3] (b). Location of *Lamin Anyeq Apui* in Sungai Bawang Village [4]

There are so many different forms of housing across the globe since housing has traditionally been the representative of vernacular design and thus directly related to so many diverse cultures. And each culture has its authenticity. [5, 6] Most housing in vernacular environments and spontaneous settlement result from gradual processes of the activity system and within society among actors's way of life, values, and meanings. [6, 7] The vernacular design was believed to use unwritten precepts in many developing countries. The built environment consists of the organisation of space, time and meaning; the system of setting; cultural landscapes; and It is made up of fixed, semi-fixed and non-fixed features. [6] regarding spatial order of the normal, besides it is tied to human ergonomics, it is also related to social agreement. The house's space arrangement always had a certain autonomy. Suppose it is considered as a system so the system concept can be interpreted from the style order into technical detail such as space configuration.

The study of the interrelation among spatial, physical and stylistic tend to be independent of one another. [5] However, spatial order is necessarily thematic. It links to prior events and requires of present knowledge. Especially discussion related to vernacular houses. In the vernacular house type, the relation between space and function is more complex. [5] Familiarity with type and pattern as well as spatial system, will give a better understanding. [8]

Lamin (long house of Dayak) was built by the government of Kutai Kartanegara regency by procurement system, unlike the older *Lamin* that has been built by the Dayak community. The previous study was conducted by Widayati [9]. The Dayak people accepted and used the *Lamin* as a public space to hold communal events as they usually have in the *Lamin*. However, after a decade, the *Lamin Anyeq Apui* has been changed and modified in its spatiality. It raises some questions about the purpose of the Dayak people making those modifications in the *Lamin*. Therefore, this study aims to identify and compare what modifications have been made to the *Lamin* and what those changes mean to the spatial concept of *lamin* Dayak Kenyah.

Study the traditional house as the language of values that people share. Local culture, way of life and heritage is important. [5, 10] It is not merely accommodating function or technical aspects. The justification why some people build shape and space is not limited to climate, construction material, and kinship. Furthermore, a house resonates with the culture, social pattern, and shared preferences of the users. Interpreting a house as an interrelationship of the interdependence of three systems: spatial, physical and stylistic. [5] To some extent, the house builds in a certain concept but, in a way, allows variation within types that are the most complex of shared values in built form. Similar to spatial order that is mostly thematic. It requires background knowledge that is already known with what is now. [11] For instance, the same spatial organisation might be different in the physical boundaries.

For this study case, the *Lamin* Anyeq Apui in 2013 consists of a main building and a supporting building. The main building consists of a *usei*/main hall, sitting area, stage, storage for musical equipment, and changing room. The supporting building consists of a dining area, kitchen, and preparation area. And the toilet that separated into different buildings. *Belawing* and *Lamin's* gate had not been constructed yet. [9]

2. Materials and methods

2.1. Qualitative Method with a study case

A qualitative approach is used by researchers who construct knowledge claims based on a constructivist perspective. They try to explore individual experiences, social meanings, and historically constructed ones to develop a pattern, a concept, or a theory. These paradigms focus on an inductive process of inquiry that seeks clarification of multiple critical factors affecting the phenomenon [12]; a case study is used in this study, which is based on empirical inquiry that investigates settings and phenomena within its real-life context. This strategy explores and involves inter-relation to complex dynamics with which it intersects; it comes with a distinctive situation in which there will be many more variables of interest.[13]. The descriptive qualitative method is used to conduct this study.

2.2. Type of Data and Data Collection

This research used primary data from the fieldwork of the *Lamin* Anyeq Apui in Sungai Bawang. Visual observation was conducted at two different times. The first observation was in 2013, and the second at present is in 2023. The visual observation focuses on what aspects have experienced total change, improvement or addition and the new development in the *Lamin*.

2.3. Data Analyses

This study used abductive-rational methods, which connect the theoretical literature review and the primary data from the field observation. It primarily relies on the primary data before generating findings based on emerging information. Then, data is analysed to look at what type of changes occur in the *Lamin's* spatiality and synchronise with the Spatial concept of *Lamin* Dayak Kenyah.

3. Results and discussion

3.1. Transformation of spatial elements

The complete changes in the spatial element of the *Lamin* occur in the orientation system, space and room configuration, territory system, hierarchy system and circulation system. Meanwhile, for a system of meaning and visual character, the transformation occurs on the roof shape. The transformation in detail as follows:

3.1.1. Orientation System. The previous position of the main entrance is crosswise, with only one door. In 2023, the orientation of the *Lamin* has transformed to its lengthwise (face perpendicular to the road) with two doors as main entrances and two doors at the backside. This transformation is consistent with the orientation of the original *Lamin*, whose main entrance faced toward the river (by its lengthwise direction) as the main mode of transportation back then.

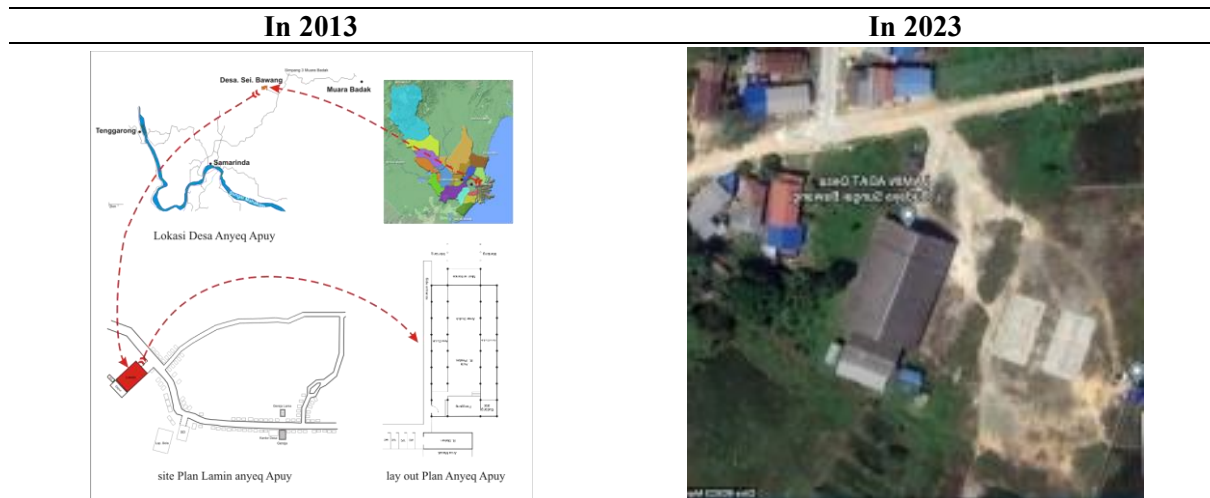
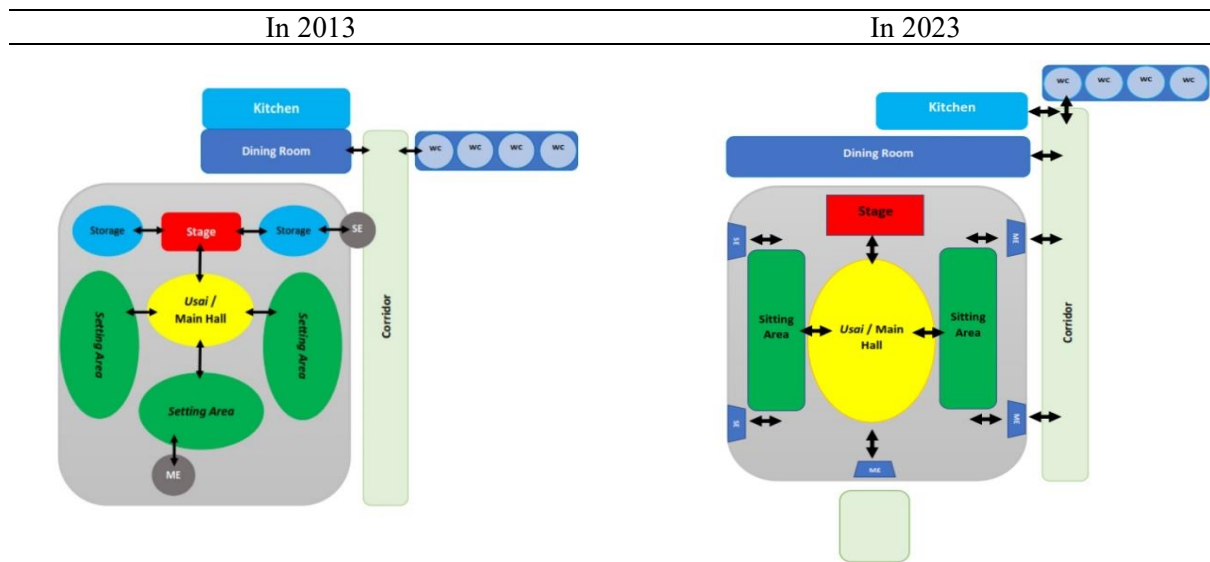


Figure 2. The Orientation system (a). In 2013 [9] (b). In 2023

3.1.2. Space System and Room Configuration. The transformation of the *lamin* orientation affects the interiority of the *Lamin's* space. The storage and changing room are omitted in the present *Lamin*. The *usei/main hall* at the centre remains the same. However, the activity in the sitting area has flexible arrangements depending on the scale of the performances. When a larger cultural festival is held, the centre of the *lamin* becomes the main hall for performance. On the other hand, for the smaller events, the performance is on the stage. The supporting building has the same function but now has a bigger dining room.



- a. The main building consists of:**
usei; a sitting area, dining area, and musical instrument storage.
- b. Supporting Buildings consist of:**
 Kitchen and Preparation Area.
 The toilet is a separate building.

- a. The main building consists of:**
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 The toilet is a separate building.

Figure 3. The space system and room configuration (a) In 2013 [9] (b).In 2023

3.1.3. Territory System. The changes are the type of the setting. The storage on the left wing has been omitted as the main entrance has changed to the lengthwise position. It has given a more spacious area to the main hall. The main hall has no fixed wall to limit specific rooms or activities. It provides flexibility in the scale of performances. The lengthwise wall now is functioned as *tape* (main wall). The existing main door is still in the previous position, but the function has changed to a side entrance.

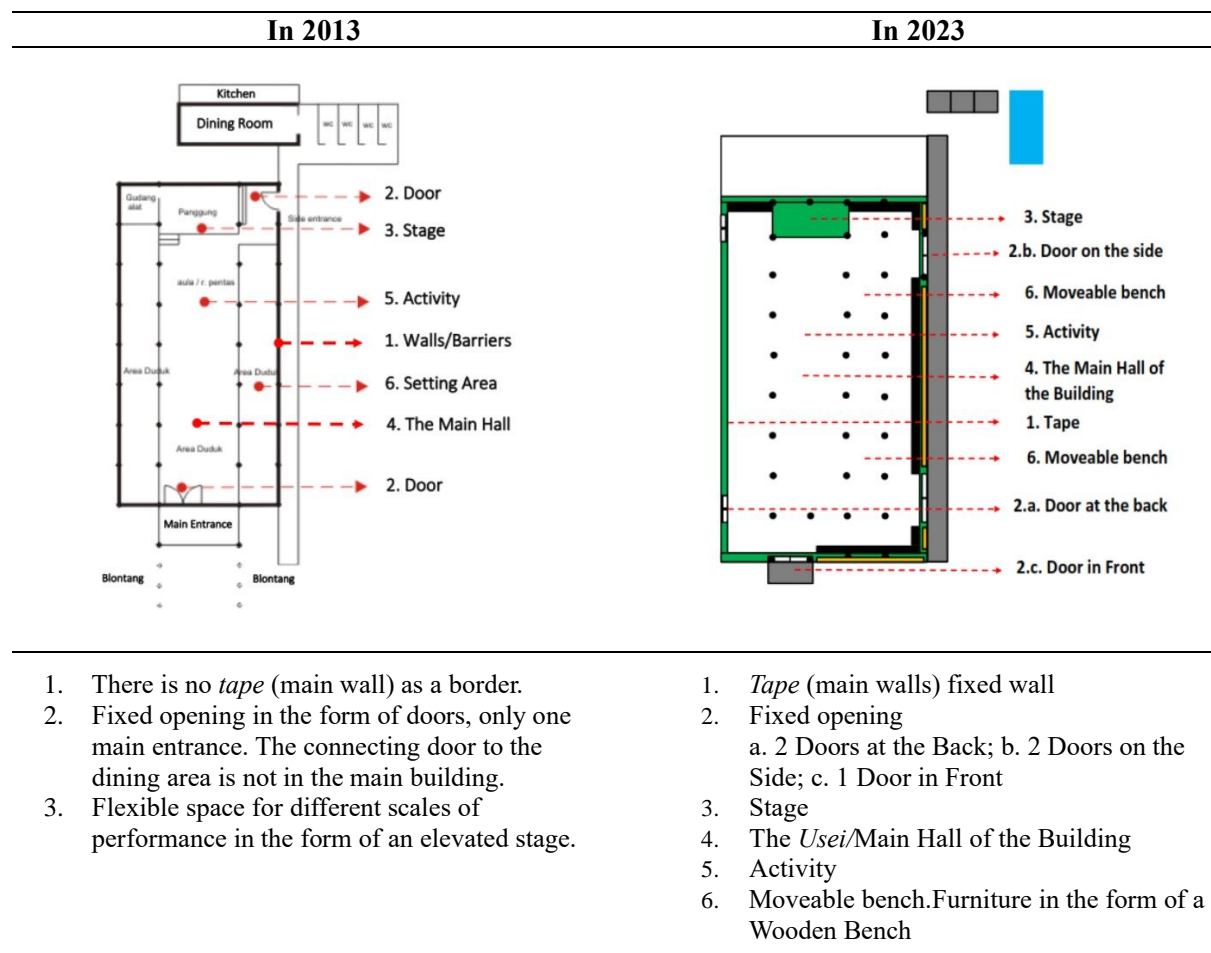


Figure 4. Territory System (a) In 2013 [9] (b). In 2023

3.1.4. Circulation System. There was no linear circulation inside *Lamin* in 2013, due to a single main entrance. As the orientation has changed, the circulation flow between the two doors and the existing door. Originally *Lamin* spatial's concept had linear circulation adjusting river as *Janan bio* (main road). Now, rivers have been replaced with a road as the transportation mode has changed on land.

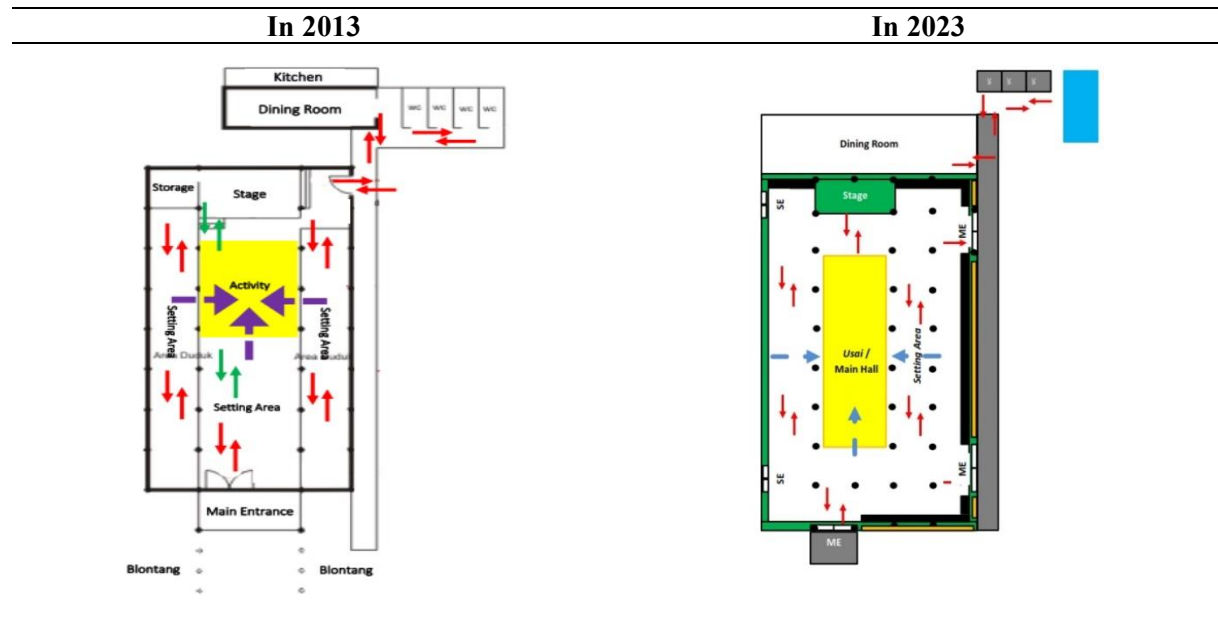


Figure 5. The circulation system (a) In 2013 [9] (b). In 2023

3.1.5. *The roof shapes.* The roof shape has changed into a gable roof. It is a significant appearance as it had Dutch with modification roof type before in 2013. And for the mass of the *Lamin's* body changed significantly to be wider, as the roof dominated its appearance. The gable roof construction provides a more spacious feeling inside the *Lamin*, specifically in the main hall. The roof shape of the *Lamin*, consisted of two gable roofs which had higher elevations to symbolise where the head of the tribe lived. The change of roof shape back to the original version of the *Lamin*.

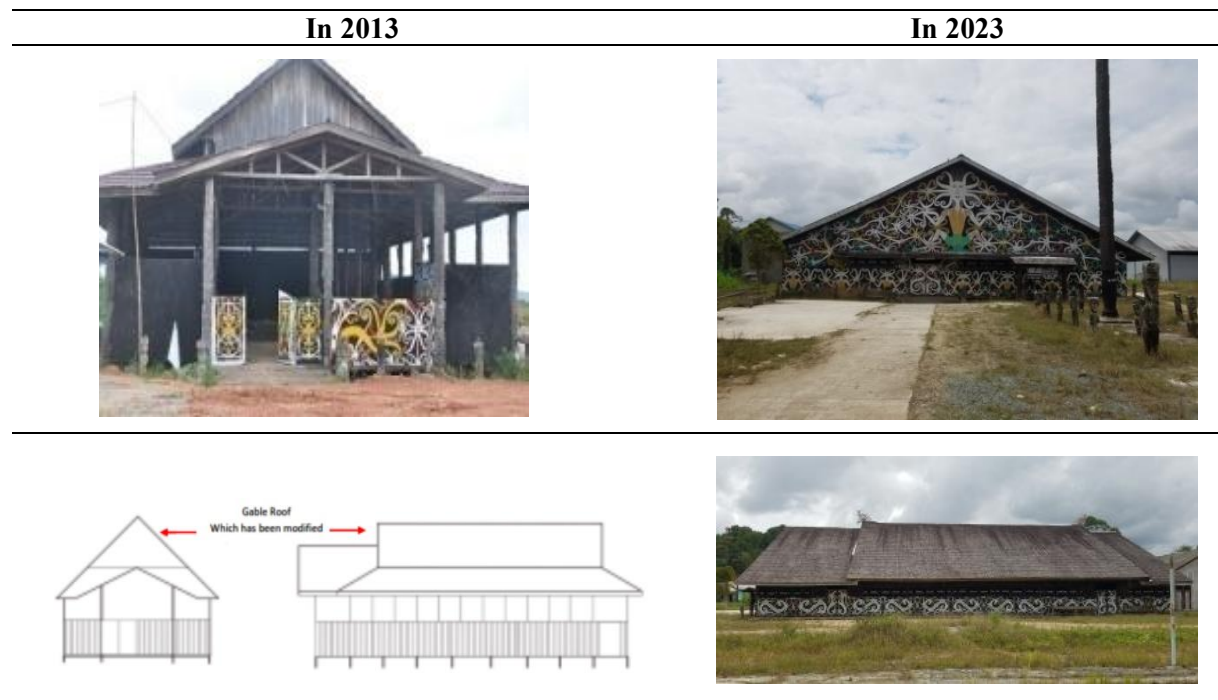


Figure 6. The roof shape (a) In 2013 [9] (b). In 2023

3.2. The improvement or the addition of the spatial elements

The *Lamin* also experienced an improvement and/or additional spatial element of the *Lamin's* interior. The improvement of *tape* (main wall carving), the additional carvings on the main column, ceiling joist and *gewel*. Not only carvings but the number of *Blontang* (figurative sculptures also increased).











Type of modification	In 2013	In 2023
a. Improvement of main wall carving.		
b. Additional Carvings on the ceiling joist, main column and the <i>gewel</i> .	 	 
c. Additional <i>Blontang</i> (Figurative sculptures)	 	 

Figure 7. The Improvement or Addition in *Lamin's* spatial elements

3.3. The new construction of the Lamin's spatial element

There are two additional constructions of the spatial element. The first is the erection of *Belawing*, a monument as *lamin* territory. The second is the construction of *lamin's* gate. This gate is a *lamin* area main entrance.



Figure 8. (a) *Belawing* in front of the *Lamin* (b). The *Lamin's* gate

4. Conclusions

There are three types of *lamin's* spatial element modifications. Firstly, the transformation or change of the spatial elements. This includes the orientation system, the space system, room configuration, the territory system, the hierarchy system, the circulation system and roof shapes and carving. The second is the improvement or the augmentation of the existing spatial element. These occur on the main wall carving and the addition of *Blontang* (figurative sculptures). The third is the construction of a new spatial element that has not existed before, e.g. the erection of *Belawing* and the construction of *Lamin's* gate.

The three modifications that occur to *Lamin Anyeq Apui* in Sungai Bawang emphasise the spatial concept of *Lamin* Dayak Kenyah. The *Lamin* built in 2013 had some elements that did not fit with the *Lamin's* spatial concept. For Dayak people, the *Lamin* is not merely a public place for gathering communal events. The physical element not only supports the building construction. Beams, column, lintel, truss, and stairs stand both technical and aesthetical aspect. The position and the formation then make space and spatial organisation that constitute their identity as a tribe. As Habraken emphasises, people need to live within their heritage [10]

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