**Tirta Dharma Weaving House, is representation from Huma Betang in West Kalimantan, Indonesia. as an architectural respond the present challenges**

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**Abstract**

Traditional architecture is basically grown up from community’s needs where the architecture that comes from a condition and challenge background on an environmental and social surrounding need to be studied more because it has a lay out of space which is not change from generation to generation.

Furthermore at this time many changes, especially changes in lifestyle due to the advancement of knowledge and technology, will affect the development or changes in the function of spaces because of the increasingly complex needs. Traditional architecture can almost be said can no longer respond to the challenges of the situation, due primarily to the functions that do not evolve from time to time. There is an interesting phenomenon lately in Indonesia, where the architects try to answer the challenges as mentioned above. One of the architects realized the importance of preservation in traditional architecture is Yori Antar.

*Tirta Dharma* Weaving House in Sintang, West Kalimantan, Indonesia is an architectural respond that lifts local identity of the Dayak Iban Long House or so-called *Huma Bentang* by Yori Antar. In this Weaving House, the functions are different from those at *Dayak Iban* Long House. Long House serves as a residence while the Weaving House are supporting *Dayak Iban*’s weaving preservation activities : both as a gallery and place to learn and produce weaving. Although it has a different function, the Long House’s principles are still maintained. The background of local culture and traditions still reflected in the Weaving House.
At the end, this paper will reveal how the transformation are designed by Yori Antar in completing this Weaving House project: starting from Long House as a residential into a weaving house, and how both transformations in culture and in local wisdom and identity meet the present challenges and perform as a contemporary architecture without changing the essence, that also called contemporary vernacular architecture.

Therefore, the discussion wholly will be about a study done by Yori Antar, where the original idea to update ‘the old’ will be an answer to the challenges of the needs as mentioned above

**Keywords:** Dayak Iban, Long House, traditional, contemporary, Weaving House

**Introduction**

Located in Sintang a small village in the inland of Kalimantan, approximately 8-10 hours drive from Pontianak, West Kalimantan, the project is an expression of concern from a Dutch missionary, Father Jacques Maessen, the name of the missionary, has now been living in the remote village of Sintang in West Kalimantan for almost 50 years [1].

![Figure 1: Map of Sintang village in West Kalimantan](image)

Living and breathing in the unique culture and tradition of the Dayak tribe, the Dutch priest has long been concerned about the tendency of more and more young people of the tribe to appreciate a more modern way of life. As modernity rolls in, the people of Sintang have begun to leave behind their tradition, especially the weaving culture, which is a shame considering the high artistic values of Sintang’s weave textiles. Father Maessen underlying determination to establish a weaving house training for young Dayak tribe [2].

Then the idea is delivered to the architect who has the same vision with the Father Maessen to preserve the archipelago (Nusantara) architecture is Yori Antar. The architect and the father backed by Yayasan Tirta Utomo, trying to revive the local tradition of weaving by providing a training ground for Sintang’s young generation. A training center was then prepared in a small village in the suburbs of Sintang, bordering a conserved forest, the name is Tirta Dharma Weaving House [3].

The fundamental concept of designing that building base on closed, familiar and friendly to the locals, and thus began the study of traditional houses Dayak Iban tribe namely Huma Betang both in
terms of philosophy, spatial and material. So Yori Antar has done to transformation that Huma Betang into Tirta Dharma Weaving House in discourse of contemporary vernacular architecture.

**Huma Betang, Dayak Iban Tribe House.**

*Huma Betang, Huma* means a House and *Betang* means Long, so *Huma Betang* is Long House, there are many term of *Huma Betang*. It can be called *Rumah Banjar* or *Rumah Panjang* or *Rumah lamin*. Referred to as the length of the house because this house has a length of up to 150 meters more in some houses, it depends on the size of the group or family who live there, and the width by 30 meters. Longhouse was built based on the needs of so-called as well as growth house.

In addition to its elongated shape, *Huma Betang* is also built on stilts which can be quite high, reaching to around 3 to 5 meters in height—the great height of the stilts referring to the mightiness of the spears commonly used by the local tribe. The top of the Long House is usually used for the living quarter of several families while the lower level functions as a communal room where everyone gathers [4].

![Figure 2: Stilts house in Huma Betang](image1)

There are two reasons why it was made as high as that, because: 1. to avoid flooding during the rainy season that threatened areas upriver in Kalimantan (Borneo) (Sintang situated near the Kapuas river, the longest river in Indonesia), 2. When the summer, basement floor is used for the weaving of cloth and webbing the rattan commonly which used to perform religious ceremonies and for daily needs [5].

![Figure 3: Webbing the rattan in Huma Betang](image2)

In terms of the location where the building will be erected, Dayak tribe emphasizes religious considerations. The house should be facing the direction; location of the house, always emphasizing the religious aspect has actually been including aspects of health, nature and others. For example, to