

# Built Environment Mamasa Traditional Architecture

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#### **ABSTRACT**

This study aims to find out what is included in the built environment of Mamasa Traditional architecture. This type of research is qualitative research. The research site in Mamasa Regency includes traditional villages around the city of Mamasa, and several traditional villages that are still intact in several sub-districts that still maintain their traditional villages. The research variable is the built environment—data collection techniques, namely primary data through field observations and secondary data through literature review. The data analysis technique is a qualitative descriptive analysis technique, with the following steps: 1) Data collection, 2) Data presentation/display, 3) Data reduction, and 4) Draw Conclusion. The results showed that the built environment of Mamasa's traditional architecture is: 1) alang (rice barn), 2) Raruk (landscape), 3) Uma and Bela' (rice fields and fields), 4) Liang (traditional graves).

Keywords: Built Environment, Mamasa Traditional Architecture

## 1. INTRODUCTION

Not many researchers have researched Mamasa's traditional architecture, especially those from the built environment point of view, so far none. The few researchers, researchers from abroad, are more focused on looking at it from an anthropological point of view and a sociological point of view, while researchers from within the country see more from an architectural point of view because generally, they research for the sake of completing their studies.

Some of these researchers tried to see Mamasa's traditional architecture from their point of view and scientific background, such as Lullulangi et al. [1] Saying, Mamasa's traditional architecture is an architectural masterpiece built by the ancestors of the Mamasa people in the past, and some are still intact and can be seen and used today. To create such a charming and high-value architectural masterpiece, it is not as easy to build majestic high-rise buildings as in modern times, but the Mamasa ancestors built with great difficulty and struggle, much less because everything was done manually by human resources, coupled with stringent rules. In the form of rituals, the customary rules must be made as custom demands for the salvation of the human inhabitants. So customary rules are so characteristic that the work is called traditional architecture. In other words, to create traditional architectural works must be the complete rite as a requirement must be met. Wasilah et al. [2] looked at the architectural form and said that the geometric shape of the Mamasa Traditional House describes the beauty of the archipelago's wooden architecture and has been proven to last a long time even though the local elements are considered old and unattractive. Asfarilla et al. [3] looked at the shape of the floor plan. They said that several Nusantara architectures that represented boats into the building were the Minangkabau Traditional House of West Sumatra, the Tongkonan Toraja Traditional House, the Mamasa Traditional House, the South Nias Traditional House, the Sao Keda Traditional House of the Ende Lio Tribe, Sumba Traditional House, Toba Batak Traditional House. Then, Buijs [4] looks at it from an anthropological point of view and explains that all parts of the house are related to gods. This concerns the provisions of the direction when building a house, namely the front-facing north. The direction is directly related to the gods. Kirana et al. [5] said the traditional house of the Mamasa tribe is the Banua traditional house. When discussing the comparison between Banua and Tongkonan, these two buildings both have a study of the philosophical meaning contained in the architecture and interior. As time goes by, Banua is now increasingly rare to find due to the rapid development of the times, so that residents have now turned to modern houses as their daily residences, this is due to the complexity of making Banua and the increasingly expensive raw materials.

The above researchers generally look at Mamasa's traditional architecture from an architectural and cultural or anthropological point of view. The only researcher who looks at traditional Mamasa architecture



comprehensively is Ansaar. [6] who said that as with other areas, especially in West Sulawesi, the Mamasa area, which is known as the domain of the Mamasa Toraja ethnic group or often called West Toraja, also has various types of traditional buildings, such as residential houses, houses custom/house where deliberation, the house where to store rice (barn), and a house where to store corpses. These types of traditional buildings, according to field observations, generally still survive without changing shape and typology so that the characteristics of traditional architecture are still visible. Ansaar explained that in addition to the traditional house as a residence, other buildings support and complement the activities of the Mamasa people, namely the rice barn (alang) and the house where the corpse is stored (Liang).

Talking about traditional Mamasa architecture, it is different from traditional architecture in general in Indonesia, since a traditional house cannot stand alone to accommodate or as a forum for community activities, both in the past as a place for traditional community activities, but until now there are still many people who even though they understand modern civilization, they still maintain the habits of their ancestors to continue their daily activities in their traditional homes, especially those who still maintain their traditional houses to this day. In addition to the houses as described by Ansaar above, there are also Alang or rice granaries, Liang, or traditional graves, but there is also Raruk or landscape as a protective plant for the village, and Uma and Bela' or rice fields and fields as a source of life for the community. All of this is a built environment that cannot be separated from traditional houses for community activities in general.

Ahira [7] divides the environment into two parts: (1) the natural environment or the environment that already exists in nature without human intervention or modification, for example, tropical forests, seas, lakes, and others. It is a very dynamic system which is a unitary space with all objects, forces, conditions, living things, and other abiotic components without human intervention. (2) the built environment, namely the living environment formed, modified, managed, and determined by human conditions to meet their life needs. Pangarso, [8] said, the built-environment is a term for the condition of an area or area where there is already a group of people living by building a residence in the form of a building/building and its complementary infrastructure, even if it is simple. Based on some of the opinions above, it can be concluded that the built environment is formed because of the human need and ability to change the landscape to make it more effective and efficient in meeting the needs of their lives.

## 2. METHOD

This study aims to find out what is included in the built environment of Mamasa Traditional architecture. This type of research is qualitative research. The research site in Mamasa Regency includes traditional villages around the city of Mamasa, and several traditional villages that are still intact in several subdistricts that still maintain their traditional villages. The research variable is the built environment. Data collection techniques, namely primary data through field observations and secondary data through literature review. The data analysis technique is a qualitative descriptive analysis technique, with the following steps: 1) Data collection, 2) Data presentation/display, 3) Data reduction, and 4) Draw Conclusion.

## 3. RESULT AND DISCUSSION

## 3.1. Result

Talking about the built environment of Mamasa traditional architecture, it cannot be separated from the natural environment or the artificial environment around the traditional village and other things related to the sources of life for the people who support Mamasa traditional culture and its surroundings. Based on the results of interviews and observations around the traditional Mamasa village, the built environment related to Mamasa traditional architecture can be grouped as follows:

### 3.1.1. Alang

Alang is a rice barn whose architectural model resembles a traditional Mamasa house, although smaller proportions. The poles are made of palm trees (Banga) made slippery to not allow mice to climb up the rice barn. In the Mamasa community, this type of alang varies, starting from the small one with only four poles, then the second type with six poles, then the more significant type with eight poles, and the most extensive type with 12 poles. Likewise, the colors and ornaments of this barn, the simplest are only natural colors (the usual wood color), then there are black ones (alang bolong), some are even carved (alang sura'). Depending on the level of nobility and wealth of the owner. Likewise, some do not wear ornaments, but some are equipped with badong, a horse's head symbol (Daradarang), or a buffalo head symbol that symbolizes the owner's social status.





**Figure 1.** Alang Sura '(carved barn) with several pillars (Banga) 8 pieces stood in front of Banua Layuk Rantebuda Mamasa District.

No less important part of this barn is the floor under the barn called Salialang. This floor is an open space with an essential role in certain events, such as a death ceremony (Rambu Soloq) or a thanksgiving event (Rambu Tukaq), where distinguished guests usually occupy the event. Furthermore, in normal circumstances, this place is a place to sit in the afternoon drinking coffee, or if new guests are arriving, before going up to the house, they usually sit first while waiting for the host to invite them to go up to the house—one example of reeds, as in Figure 1.

#### 3.1.2. Raruk

Raruk is a plant planted around villages or housing estates that serves as a landscape to protect the village, especially from solid winds, considering that generally, Mamasa traditional villages are built on ridges of hills. In addition, it also functions as an ecological air filter as a characteristic of the traditional Mamasa village, which is environmentally friendly and blends with nature. The types of plants used as Raruk (protectors) are bamboo plants, especially bamboo betung, which in addition to functioning as a protector, in certain events such as rambu tukaq or rambu soloq, this bamboo plant is beneficial for making barung or temporary houses, as a temporary place to carry out ceremonies. In addition, this event usually requires much firewood, so ancient bamboo is sometimes used as firewood to support the implementation of the ceremony.

In addition to bamboo plants, sometimes it is also interspersed with wood plants, especially *uru* wood (a local class I wood species) which is widely used as a structural material for Mamasa traditional houses which serves as a structural material reserve if any part of the traditional house construction is damaged and needs to

be replaced immediately. Sometimes it is also combined with fruit plants, such as langsat, durian, jackfruit, and others.



**Figure 2.** *Raruk* surrounding the traditional village of Ballapeu' Source: Arianus [9].

#### 3.1.3. Uma and Bela'

*Uma* and *Bela'* are rice fields and fields that are the source of life for the people in Mamasa, especially the traditional communities in the past. The model of rice fields in flat areas is the same as rice fields in general in other areas, but what is interesting is that the rice fields are made in the form of terraces around the mountain, as in Figure 3.



**Figure 3.** Uma or rice fields in the Tabang area as one of the built environments

Bela' or gardens in this area are generally planted with production crops such as coffee, fruits, and seasonal or horticultural crops in various types of vegetables.

## 3.1.4. Liang

Liang or grave is a built environment for traditional Mamasa architecture that cannot be separated from traditional Mamasa architecture in general. Although the traditional Mamasa grave architecture can be an architectural study, overall, it is still included in the built environment of Mamasa traditional architecture.

The traditional Mamasa grave architecture has evolved, giving birth to various types of Mamasa traditional grave architecture, as written by Lullulangi [10], that the typology of traditional grave architecture



in Mamasa emerged from the traditional belief in Aluk Mappurondo. However, on this occasion, the researcher will only give some examples of typologies of traditional grave architecture because the content of this research, grave architecture, is only part of the traditional Mamasa architecture-built environment in general. As for several types of traditional Mamasa grave architecture, based on observations are: Bangka-Bangka grave type, Tedong-tedong grave type, Batutu grave type, the last traditional grave type, is an artificial cave on rocks and is a public cemetery. Usually, one village has a large grave in the form of an artificial cave, and anyone who dies in that village can be put in the lokko'. In the modern era, especially after the influence of Christianity and Islam, today's grave models, many do not follow the traditional pattern but are buried directly in the ground like the usual burial method. Show one of the traditional grave models in Mamasa can be seen in Figure 4.



**Figure 4.** The *Tedong-tedong* grave is seen from the front of the feet, and the head and horn ornaments are visible like a standing buffalo. Source: Lullulangi [10]

#### 3.2. Discussion

The results showed that in general, the built environment which is closely related to the traditional Mamasa architecture, is the alang architecture which is a pair of traditional houses, which are usually erected across from the traditional houses, or with the situru' pattern, i.e., the rice barn or alang is erected in the same direction. With traditional houses either on the right side or on the left side, it depends on the location or site of the building. The following building environment that is no less important is Raruk, the landscape of the traditional Mamasa village. This raruk functions as a plant barrier to protect the village from solid winds, considering that the traditional Mamasa village is generally located at an altitude on a ridge that is vulnerable to strong winds. This raruk is usually dominated by bamboo plants but is sometimes combined with other plants, such as uru wood, as a backup material for traditional house structures, barns, or other fruit plants. Then the third built environment is a cemetery which, in popular terms in the community, is usually called Tondoktamerambu (smoke-free village). The types of traditional graves vary as described by Lullulangi et al. [10] that particular, the ancient graveyards and various types of graves were examined as follows: 1) *Bangka-Bangka*, 2) *Tedong-tedong*, 3) *Ropi*, 4) *Batutu*, and 5) *Lokko'*. So, traditional graves are added with new types of graves such as graves in general, due to the influence of Christianity and Islam, namely bodies are buried directly in the ground. Furthermore, the last built environment is Uma and Bela 'which is the source of people's lives, mainly traditional communities.

## 4. CONCLUSION

Based on the results and discussion above, it can be concluded that the built environment of traditional Mamasa architecture was formed because of the needs and abilities of the Mamasa people in the past to change the landscape to make it more effective and efficient in meeting their life needs, which consists of 1) Alang or rice barns, 2) Raruk or landscape, 3) Uma and bela' or rice fields and fields as a source of life, and 4) Liang or graves as a place to bury their departed ancestors.

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# REFERENCES

- [1] M. Lullulangi, O. Sampebua, and R. T. Indrus, "Culture and traditional architecture of Mamasa in west Sulawesi, Indonesia," *Opcion*, vol. 34, no. 15, pp. 493–512, 2018.
- [2] P. J. D. R. M. Wasilah, "Jejak Konstruksi Perahu Pada Arsitektur Mamasa," 2013.
- [3] V. Asfarilla and Y. P. Prihatmaji, "Representasi Perahu pada Arsitektur Nusantara," in *Talenta Conference Series: Energy and Engineering (EE)*, 2019, vol. 2, no. 1.
- [4] C. W. Buijs, Personal religion and magic in Mamasa, West Sulawesi: The search for powers of blessing from the other world of the gods. Brill, 2016.
- [5] M. T. K. Anindita and L. Tulistyantoro, "Studi



- Makna Kosmologi Pada Hunian Tradisional Mamasa 'Banua,'" *Intra*, vol. 7, no. 2, pp. 181–188, 2019.
- [6] Ansaar, "Arsitektur Tradisional Daerah Mamasa," Jakarta: Kementerian Kebudayaan dan Pariwisata Dirjen Nilai Budaya Seni dan Film, Direktorat Tradisi, 2011.
- [7] A. Ahira, "Pembagian Lingkungan Hidup berdasarkan Sifatnya," 2011. www.anneahira.com/lingkungan.htm.
- [8] F. Pangarso, Budiwdodo, "Desain Lingkungan-binaan ('built-environment') di Indonesia dalam menghadapi fenomena perkembangan teknologi di awal abad XXI," Bandung: Universitas Katolik Parahyangan, 2017.
- [9] A. Mandadung, *Mamasa (West Toraja)*. Ujung Pandang, 1994.
- [10] M. Lullulangi, A. Tawani, and R. Rahmansah, "Architectural Typology of Mamasa Traditional Graves, West Sulawesi, Indonesia," *Civ. Eng. Archit.*, vol. 8, no. 5, pp. 832–837, 2020.