



Cosmology of the Sasak House (*Bale Tani*) Limbungan Hamlet, East Lombok Regency, West Nusa Tenggara

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ABSTRACT: This study is very focused in order to help in terms of preservation of the Sasak tribe on the island of Lombok in the face of modernization and encourage an increase in various appreciations of traditional architecture in Indonesia, especially (*Bale Tani*) in the Sasak tribe. Limbungan Hamlet itself is located in East Lombok Regency which has a very efficient and balanced (symmetric) residential design. where the problems studied include architectural physical aspects (layout, spatial planning, construction and structure) with lifestyle, mindset and customs that describe the cosmology of the Sasak Tribe, Dusun Limbungan, Suela District, East Lombok Regency. This study uses a descriptive - qualitative approach to see the relationship between the layout and space of the *bale tani*, with the concept and philosophy of the spiritual values of the Sasak Tribe. The existence of a literature study is used in order to be able to study the views of the Sasak tribe towards space on a macrocosmic scale and the existence of physical architecture. There were discussions carried out and conclusions were drawn that the cosmology of the Sasak people is reflected in the belief in Mount Rinjani and the sun as a form of respect for the ancestors and still believes in the existence of spirits that reside in the environment around the settlements of the Sasak tribe (*bale tani*) in Limbungan Hamlet.

Key Word: Sasak Tribe, *Bale Tani*, Cosmology

I. INTRODUCTION

Indonesia is known as an archipelago and has a variety of traditional architectural settlements consisting of various types of tribes that have a unique culture that has been realized in the form of physical artifacts, art and architecture are very distinctive. Traditional architecture is the result of settlements so that each region in Indonesia (*Nusantara*) which has various variations made as a form of reaction and various types of nature, the purpose of the existence of materials, climate and plants (Dawson & Gillow, 1994). According to (Rapoport 1969) traditional architecture has the most attributes adjusted to the impact of a belief and value framework in the rules of the spatial system, which is explained by the presence of a very sacred and sacred space and profane space. There are residences and settlements that are a result of a beautiful and phenomenal culture (Rapoport 1969). As shown by Rapoport must be believed that the physical arrangement and organizational structure of the building are also closely tied to social cultural values that can run with the local area and can be realized in the norms of tradition. In his view, with the natural environment. Socio-cultural life that can be used as the dominant element and can determine the shape and appearance in architecture.

The development of civilization until now makes Indonesia cause a change in the way of living that can lead to many modern buildings. With this change, it is said to be positively related to the improvement of human quality of life, but it needs to be realized or not, humans forget the essential, from a different view so that it can be seen as a process called deoriginalization to the elimination of traditional buildings contained in

ancestral values. Sasak traditional architecture is designated as a cultural heritage village, which according to (Soeroto, 2003 : 48) traditional village as a cultural heritage where the extinction of a living monument of the rest of the old culture can be avoided. The Sasak House in Limbungan Hamlet is the same house because it has a hereditary tradition that is a rich cultural heritage with historical values which has heritage, philosophy, art and culture of the local community. The problem studied in Sasak houses is the relationship between the physical aspects of architecture (*spatial, layout, structure and construction*) with the lifestyle, Customs, and mindset of the community. The purpose of this discussion is to help the preservation of Sasak culture in the face of modernization. In addition, it can also produce and can encourage increased public appreciation of Indonesian architecture, especially traditional Sasak architecture.

II. METHODS

This study uses a descriptive-qualitative approach in which this descriptive approach discusses and describes the meaning of traditional bale tani house layout in Sasak Tribal culture found in Dusun Limbungan. While the research methods used in this study are data collection and research to answer research questions using qualitative methods, this method is applied by observing and recording some information about cosmological, tradition, philosophy, and culture related to the meaning of Bale Tani traditional ruah space in sasak culture, and is done by being able to analyze and interpret into writing.

2.1. Population And Sample

This study was in the traditional Sasak settlement area of Limbungan Hamlet which focused on Bale Tani building as the main object of study. This study focused on the relationship between the layout and space of bale tani traditional buildings based on cosmological aspects in the Sasak culture in Limbungan Hamlet.

2.2.1 Data Type

a. PhysicalData

Physical Data is taken and will be made the basis in the depiction of the spatial plan. The physical Data required are :

1. The size, structure, and model of traditional Sasak bale tani building
2. Space conditions in traditional buildings
3. Material used

b. Data Subject

The subject data taken will be used as a guide in the results of the analysis of traditional Sasak houses which are continued as discussion data on the objects that have been selected. Data subjects required are :

1. Philosophy, culture, customs and traditions in traditional Sasak settlements, especially in Dusun Limbungan
2. Principles of space and cosmological principles in Sasak culture

2.2.2 Data Collection Techniques

Conduct a survey to the location in order to obtain various information and data in the preparation of arguments that are used as data descriptions of various problems that will be raised, by the existence of it will be done in the process of searching for information by way of observation to the field. In practice, researchers observed in a systematic way about bale tani traditional house, all done by recording the data that will be collected with aids such as cameras that can produce photos and videos whose results are then supported by the results of observations and important notes obtained in the field. The study of literature is also related to The Theory of the Sasak cultural fiber house that can support the writing process in the form of scientific work.

III. LITERATURE REVIEW

• Traditional Architecture

Amos Rapoport (1960) said that traditional architecture is an architectural formation that is passed down from

generation to generation in the future. Can also learn the traditional building which means it can also learn the traditions of the community more than just a few traditions build physically. There are traditional communities that are bound by their customs and culture that can be a concession in living together.

Rahmatia in (2002) traditional house can be interpreted as a traditional house, a behavior and behavior of the local community in the activity of building a house, hereditary or its own characteristics are maintained since the first, traditional houses are generally characteristic of using natural materials in the area.

According to (Bruce Allshop 1997) traditional architecture (traditional architecture) is an architecture that is obtained in the same way and given from generation to generation without change is often called regional architecture.

And according to (Said 2004) wrote that a traditional house is a building with a structure, shape, way of making and and decoration that has its own characteristics, and is inherited from generation to generation and can be used to carry out life activities by the surrounding population and others.

- **Cosmology**

Cosmology comes from the Greek, the cosmos can be called the arrangement or good order. The enemy is the one who is in chaos. Cosmology can be said to be looking for structures and laws that are common and most profound in fully earthly reality.

Amos Rapoport has argued that architecture can be viewed as a manifestation of various cultural aspects, social aspects, ritual techniques and is able to express beliefs or cosmological rules and is able to communicate various information containing various value systems (Rapoport,1969).

Cosmology is the study of a large-scale structure and history of the universe. In particular, it deals with the origin and evolution of cosmological subjects studied in astronomy, religion and philosophy.

Cosmology is not an astronomy that divides the entire universe into galaxies, planets, stars, and examines them in order to get a comprehensive picture of the universe. Cosmology examines time and space, investigates the origins of all natural matter, studies important cosmic events, including the origin of life and the possible development of intelligence.

- **Sasak tribe on Lombok Island**

The Sasak tribe is a native tribe of Lombok island and was formerly known as Sasak Boda which was a belief before knowing islam and most of its traditional settlements lived in inland areas. The Life of the Sasak people has a strong connection with nature the natural setting consisting of mountains, hills, fields and rivers is a natural form of the macrocosm. Until now, the sasak people still maintain their cultural beauty even though they tend to be open to tourists who still visit their traditional settlements. Since the past, the Sasak ethnic who know the container that became the parent in the life of their social life that regulates the life of the community, and the place they are looking for a reference that sets some sanctions for violations in the social order of the community.

- **Sasak Customs and Culture**

The belief system along with the religion (religion) adopted still entrusts traditional beliefs that are animism. Sasak people still believe in the existence of evil spirits around settlements or sacred places such as mountains and forests and rivers. And the Sasak people really believe in the supernatural power of Mount Rinjani which is where Dewi Anjani lives who is respected by the Sasak Indigenous People. In the placement of a traditional house or the structure of the construction of a traditional Sasak house, parents must be located higher than their children.

IV. RESULTS AND DISCUSSION

Traditional Sasak settlements have bale tani and panteq buildings that have always existed from the past until now. Both buildings have different shapes, functions, sizes and shapes. The two buildings are Bale Tani and Panteq (Lumbung Padi). In addition, cemeteries can mean important in Sasak tribal society. Ancestral graves are also arranged by Custom, which is on the slopes of Mount Rinjani. The cemetery is considered a sacred place that must be respected, with rituals at certain times.

A. Layout Unit

Sasak settlements have patterns, along with cosmic and symmetrical locations and orientations. In Limbungan Hamlet itself there is a Bale Tani traditional building as a place of residence for the Sasak Indigenous people which in the traditional settlement of the shipyard does not allow the construction of new traditional houses or renovations because it will eliminate the existing philosophical values. The location of the settlement is relatively isolated, but there is a view from the hill towards the sea because the location of the settlement is in a very high hilly area where traditional Sasak houses have spatial and architectural values different from ordinary residential houses in general because the location of traditional buildings is always in a high area and has customary rules that apply identical to community behavior and the influence of the environment. The traditional house of the shipyard located in Desa Perigi, which still maintains its authenticity for generations, along with the development of the times in the traditional village of the shipyard has experienced expansion into the hamlet of West Shipyard and East Shipyard, while the center remains in the West Shipyard. The building models in the shipyard have the same shape and their individual components and characteristics. When there is a Sasak tribal community wants to change the shape of the traditional house, especially on the location of the door and roof, the community must get out of the members of the Traditional Village Community of the shipyard. The people of Limbungan Hamlet all work as farmers and have their own fields. In Limbungan Hamlet there are traditional rituals and religious culture. This event is routine but the space used is not used only for ritual, so it can be seen that the structure also looks temporal. Based on considerations of location is often chosen as a place of settlement that is a hill or can be called on the slopes of Mount Rinjani which is still surrounded by forest and close to the springs.

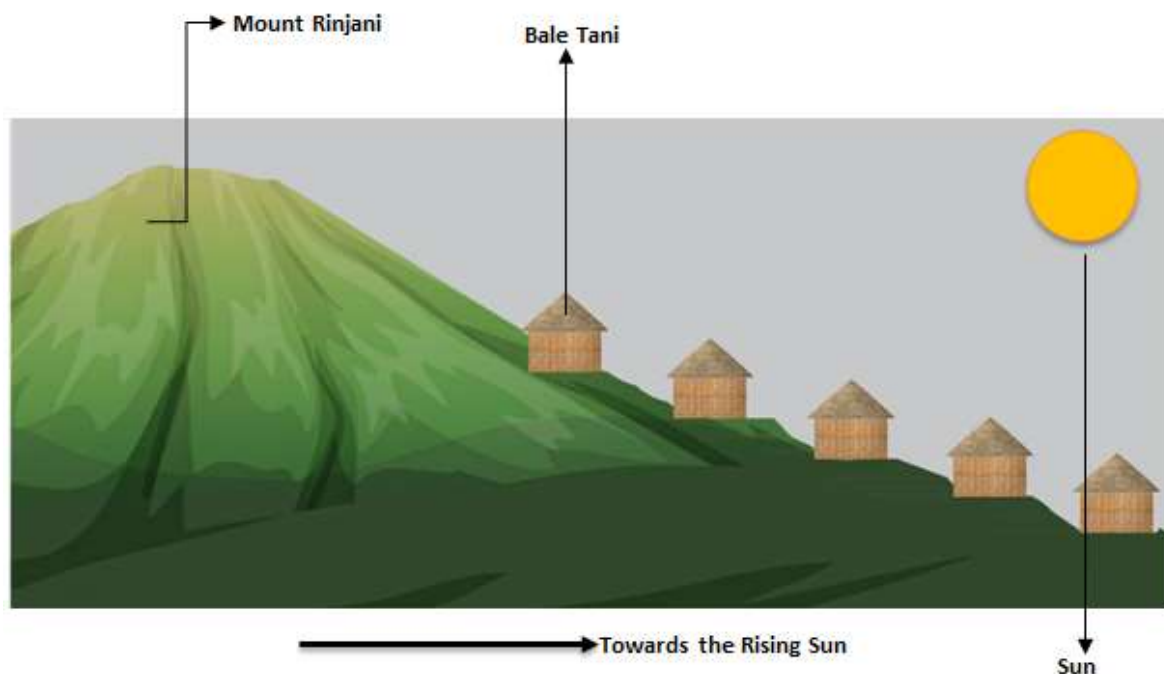


Figure 1: Bale Tani's Position On Nature

Source: Sketch, Author 2022

Traditional Sasak houses are permanent and have structures made from natural materials. The orientation of the traditional building facing east (*facing the sun*) which is believed to be the giver of life and keep away from disaster or catastrophe (*Bala'*). The direction of the Rising Sun in the cosmology of the Sasak tribe according to ancestors can refuse reinforcements and can bring good fortune for the Sasak people who are in the hamlet of Limbungan. there was a thought that the Sasak tribal community at that time was still limited to fields, forests and mountains. All the necessities of life are very dependent on nature so that it can be said that the Sasak people are very spoiled with nature.

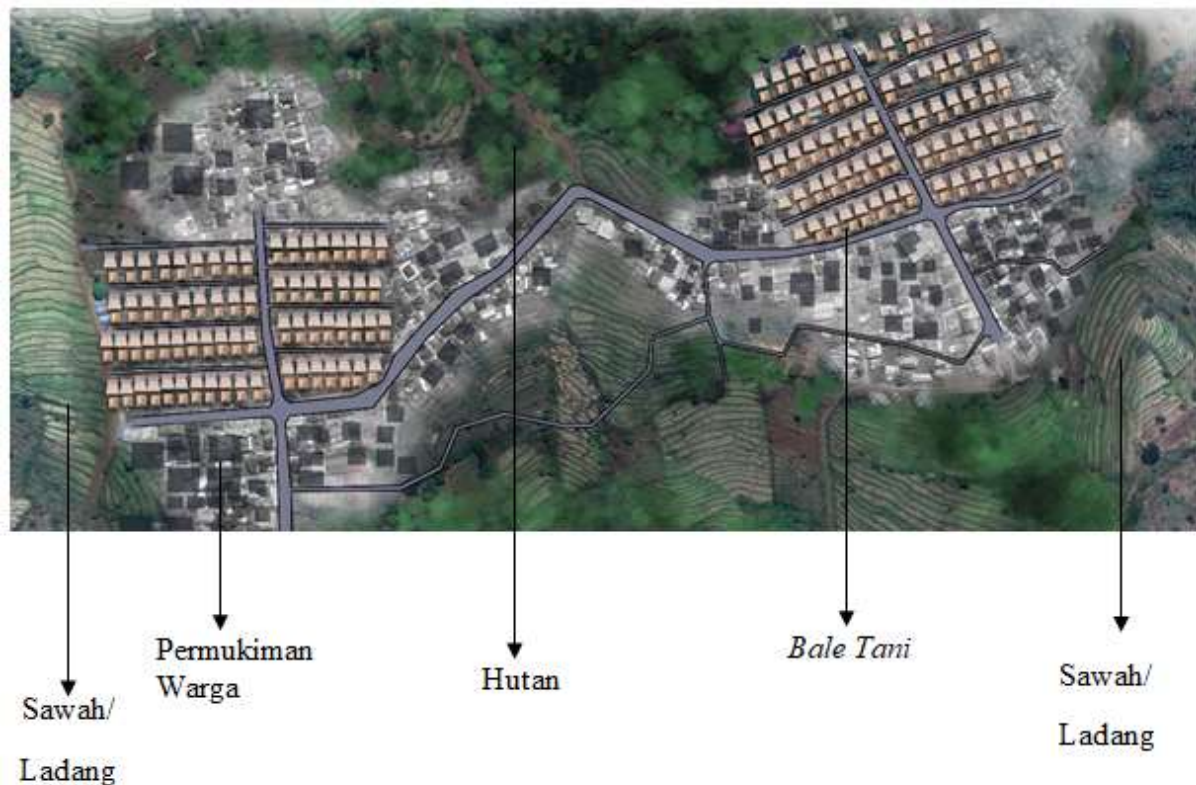


Figure 2: Sasak Settlement (Bale Tani)

Source: Sketch, Author 2022

Building in addition to bale tani located in the Sasak Tribal Settlement of Dusun Limbungan is a small panteq building that serves as a place to store rice (Lumbung Padi) and a place to receive guests who come to visit with the size of panteq 1.77 – 3 meters from the roof model to the ground. The location of panteq and bale tani is not far, the building is facing each other between bale tani and panteq facing south and North. In panteq itself there is a place to store the harvest which is then sold and for consumption by the Sasak people who are in the settlement.

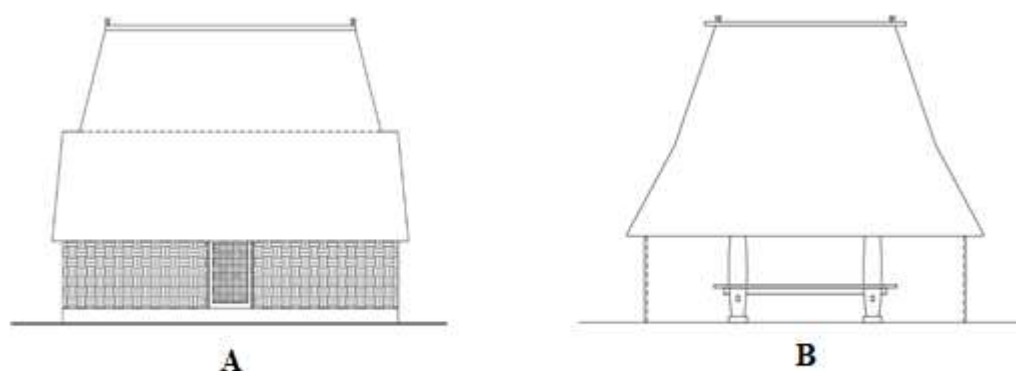


Figure 3: (A) Bale Tani; (B) Panteq

Source: Sketch, Author 2022

Based on the layout and process of building a settlement, if the traditional Sasak settlement is very trusting and viewed as the main usnur elements, namely bale tani and followed by panteq buildings as the second element. Traditional Sasak houses are always neatly lined up to form several groups, following the contours of the land in the traditional settlement of Dusun Limbungan. The physical form of nature in the form

of forests, hills and mountains that form settlements represented by the arrangement or contour land as a barrier between bale tani's House and panteq.

B. Shape and Construction

Bale tani traditional house is a resting place building used by Sasak people. Bale tani traditional house has a size of 5.10 x 6.00 meters and the height of the building from the ground to the roof reaches 4.5 meters.



Figure 4: Bale Tani Today

Source: Sketch, Author 2022

Almost all life activities of the Sasak people are carried out in the front yard of the house and pannteq, both limited activities, namely internal family activities and general activities that can involve many people. Bale tani consists of two spaces, namely sesangkok room and Inan bale room (bale dalem) as picture no., namely sesangkok kiri, sesangkok kanan, and Inan bale consisting of pawon and bedroom. Each space has its own function for activities or support the life of the community. (Table 1).

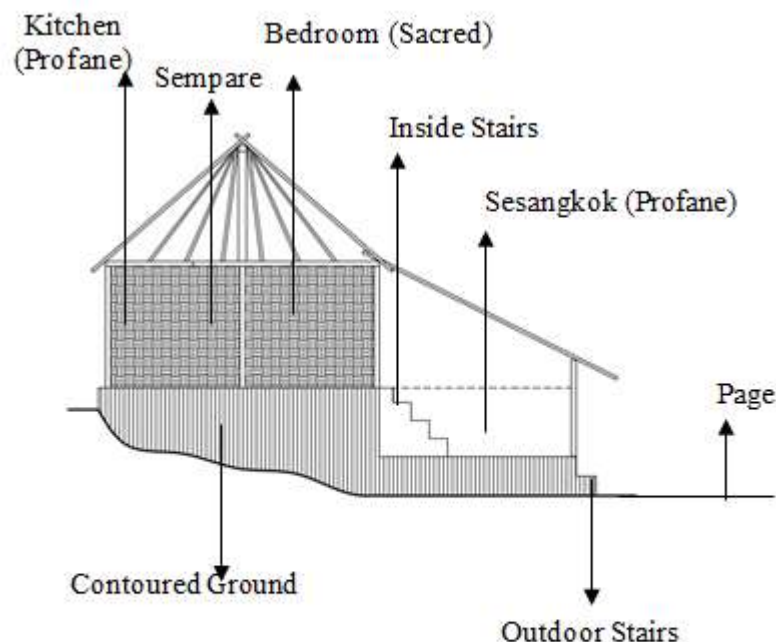


Figure 5: Looks Pieces Bale Tani

Source: Sketch, Author 2022

Tabel 1. Ruang di Bale Tani dan Fungsinya

<i>Ruang</i>	<i>Fungsi</i>
<i>Page</i>	Page that serves as a place to perform religious events and perform the customs that apply in the hamlet of Limbungan
<i>Outdoor Stairs</i>	Outer staircase used as a link between the yard to sesangkok
<i>Sesangkok</i> (Profane)	Sesangkok is a public space used as a place to rest, visit, family gathering place in the hamlet of Limbungan
<i>Inside Stairs</i>	Inner ladder used as a link between sesangkok to Inan bale (<i>bale dalam</i>)
<i>Bedroom</i> (Sacred)	The bedroom (sacred) or commonly called a private room that is used by the daughter's bed, inaq (mother), and a place that is sacred where men should not sleep in it.
<i>Kitchen</i> (Profane)	A semi-public kitchen used for cooking
<i>Sempare</i>	Sempare is under the roof which is made to store items such as kitchen utensils and so forth.

Bale tani is a combination of various residential units so that it becomes one compact building mass. In accordance with the customs of the Sasak tribe, every family that bar (from marriage or who moved from another place) should not build a house again, and for the newly married are welcome to join or if it is not enough in traditional settlements proceed to the manufacture of new homes outside the traditional settlements. The spaces in bale tani have a relationship that illustrates how the social life of a strong and close-knit community between sesangkok and Inan bale. Pages that are generally found in Bale tani dwellings are functioned for joint activities from traditional, religious, gathering, deliberation and so on.

Bale tani traditional building Model with a height of 4.50 meters using building materials from nature. The materials used are such as wood, bamboo, straw ties from bamboo, and the floor is still using cow dung. Especially for floors that use cow dung, they do and interfere in every major activity such as commemorating religious days or every Friday.



Figure 6: Bale Tani Sasak Structure Isometry

Source: Sketch, Author 2022

As a whole, the construction of the Sasak traditional house shape is a transformation or can be analogized from the human body frame (Head, Body and feet). In the belief of the Sasak people, Mount Rinjani is known for its sacred level. The world of the macrocosm and the microcosm of the ancestral story where the layout of the division is arranged in one arrangement, by placing the world of life in the middle flanked by the lower world and the upper world. In order for the lower world and the upper world to provide protection to the Middle world, and as for humans who live in traditional settlements (bale tani), they must obey the rules and the order in the world of the macrocosm.

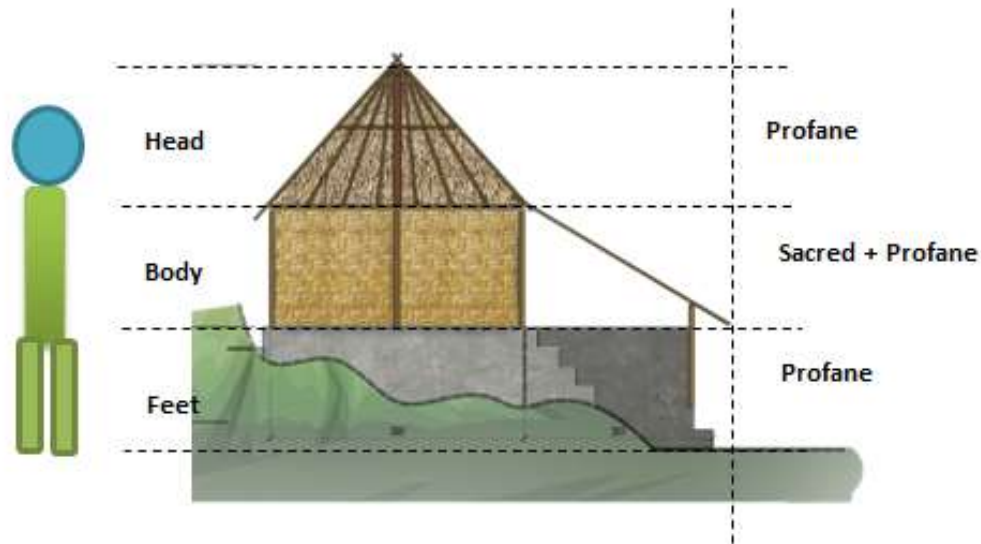


Figure 7: Sasak Tribe Analogy

Source: Sketch, Author 2022

The Shape of the structure has a good response to nature although at the time of its manufacture is still limited to knowledge and deepening of the construction technology is very simple. Aspects of lighting and ventilation are good and have been thought of by ancestors. However, there are no windows in the hamlet of Limbungan, for the entry of wind and lighting through walls made of bamboo that has been woven. Bamboo that has been woven has holes for wind and light to enter. The placement of the door in the middle between the walls, as well as the door in the middle to enter the inan bale (*bale dalem*). There is an arrangement of floor material that is used is cow dung, a closed terrace shape and given a partition to go to Inan bale. But Everything is inseparable from the cosmology of the Sasak people in viewing the dwelling as part of the nature and Supernatural of Mount Rinjani. Respect for the high ruler and manifested from the orientation of traditional Sasak buildings towards the direction of the Rising Sun and Mount Rinjani where all the space facing the movement of the sun facing east. There is a division of zones in Dusun Limbungan, namely the outer zone (first zone) sesangkok, and the inner zone (second zone) bale dalam, where the first zone serves as a place to receive guests, the men's bed and the second zone there is a sleeping room, the pawon where the bedroom functions is the women's bed, where the body rests before burial, where there is a cosmological value that is not allowed for men to sleep in the bedroom, while the pawon serves as a place to cook. Floor Level of sesangkok and Inan bale there is a difference in the floor where, Inan bale is higher than sesangkok. The first zone in the traditional Sasak building zoning division is the public zone while the second zone in particular is private and semi-private.

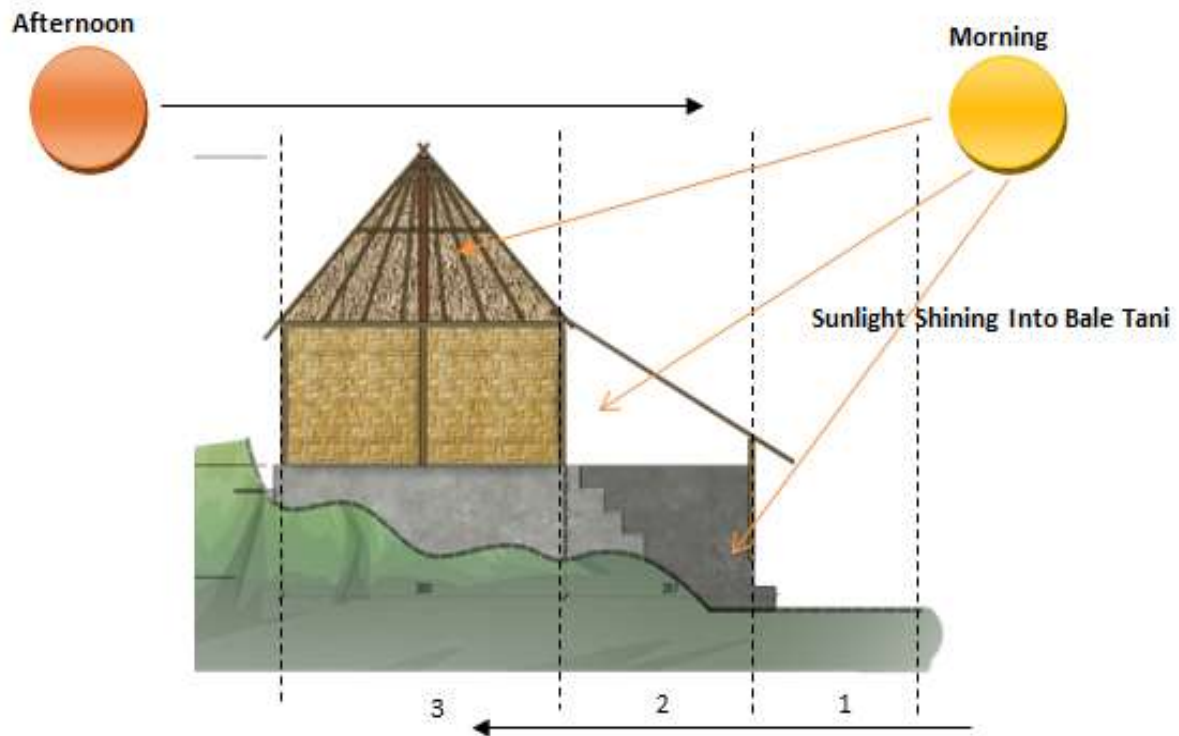


Figure 8: There Is an Arrangement Of Bale Tani

Source: Sktech, Author 2022

C. Floor Plan

The bedroom inside (Inan bale) as a bed that is private and sacred when viewed cosmologically and viewed from the overall plan of this traditional bale tani House facing east in order to reject bala' and can be seen from the horizontal which is divided into two pieces, namely the front (sesangkok) and the back or middle (inan bale). Inan bale can be interpreted as a space that the back or middle is considered sacred + profane related to (divine relationship). With this, it can be strengthened by the function of inan bale, which has a bedroom (sacred) where the body rests before being buried and men should not sleep, as well as a place to give birth and funsgi pawon (profane) where cooking for the Sasak tribe community. Part sesangkok can be said as a form between man and Man (Human) which is considered to function as a living room that serves as a place to receive visits and families who visit. There are vertical and horizontal models of traditional Sasak houses in the hamlet of Limbungan.

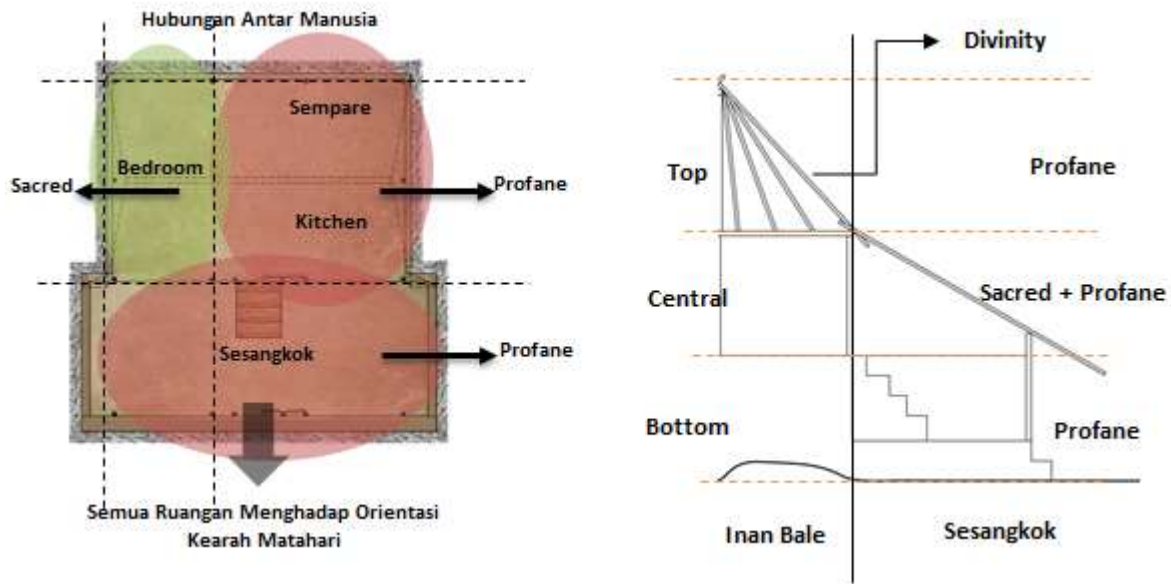


Figure 9: Denah Bale Tani

Sumber: Penulis, 2022

V. CONCLUSION

The universe and its contents are a form of order that can be made easy to understand and to be a couple between humans since birth. There are regularities that have been read for a long time by people in the past and can be a reference in interacting with nature. Sasak people in Dusun Limbungan who have existed in the past have a meaning where life must be integrated with nature and can be realized through customs and culture that are applied in Sasak settlements in Dusun Limbungan. man and the earth can be seen as a form of a unified whole as well as interrelated together and interconnected very closely. There is a public view of nature in ancient times (past) is still very limited, they think there are only forests, fields, mountains, and hills that have spirits and guardians and can know the high ruler.

The direction of the sun according to the Sasak people from ancestral times always believe in trust and to respect the Almighty and can refuse reinforcements and disasters that will come to the hamlet of Limbungan and can bring good fortune when obeying existing rules, especially traditional settlements. The formation of the settlement as a whole as well as The Shape of the indigenous territory that settled in the West Shipyard and East Shipyard.

Determination of the location of the construction of bale tani based on a sensitivity of the Sasak people who read nature and see the surrounding natural conditions and can avoid threats that may occur. The closeness between nature can cause traditional buildings that can be analogous to humans, and there is the meaning of sacred spaces such as bedrooms (Inan bale) that are forbidden to enter and can form the upper, middle and lower realms. There is also the view of the Sasak people who always pay attention to the nature of the macrocosm in outline as seen from the shape and area of traditional Sasak settlements which are always directed to the East and in a high place which is due to prevent reinforcements and protect themselves from war.

VI. BIBLIOGRAPHY

- [1] Abdul Aziz, Said. (2004). *Toraja Simbolisme Unsur Visual Rumah Tradisional*, Penerbit: Ombak, Jogjakarta
- [2] Allsop, Bruce (1977). *A Modern Theory of Architecture*. Rotledge & Kagan Paul, University Press.
- [3] Anindita.Maria.T.K, Tulistyantoto.L. (2019). Studi Makna Kosmologi Pada Hunian Tradisional Mamasa "Banua". Jurnal INTRA, Vol. 7 No. 2. 2019.

- [4] Deni Maulana. (2020). *Kajian Rumah Betang (Ompuk Domuk) Dayak Dosan Kabupaten Sanggau, Kalimantan Barat*. Jurnal Arsitektur Pendapa. Vol 3. No. 1. 2020.
- [5] Komalasari.F.D, Umar.H.H, Suryani.I, Juliana, Nursaptini, Tahir. (2020). *Nilai Kearifan Lokal Dalam Rumah Adat Limbungan Suku Sasak*.
- [6] Nugrahani.F. (2014). *Metode Penelitian Kualitatif dalam Penelitian Pendidikan Bahasa*. Surakarta: Cakra Books.
- [7] Prayoga.E.G, Anisa, (2019). *Pendekatan Arsitektur Tradisional Pada Bangunan Pendidikan Berkonsep Modern "Karol Wojtyla" Universitas Katolik Atma Jaya*. Jurnal Arsitektur PURWARUPA. Volume 3, No 3 Juli 2019.
- [8] Rapoport, Amos. 1969. *House Form and Culture*. PRENTICE-HALL, INC., Englewood Cliffs, New York.
- [9] Rohmi Wir'aeni (2017). *Nilai Edukatif Pada Arsitektur Rumah Adat Bale Sasak Di Dusun Limbungan Lombok Timur Nusa Tenggara Barat*. SKRIPSI, Program Studi Pendidikan Seni Rupa, Universitas Negeri Yogyakarta. 2017.
- [10] Sabrina, Antariksa, Prayitno, (2010). *Pelestarian Pola Permukiman Tradisional Suku Sasak Dusun Limbungan Kabupaten Lombok Timur*. Jurnal Tata Kota dan Daerah, Jurusan Perencanaan Wilayah dan Kota Fakultas Teknik Universitas Brawijaya, Vol. 2, No. 1 2010.
- [11] Wirata, Sueca, 2014. *Konsep Arsitektur Rumah Adat Suku Sasak di Dusun Segenter, Kecamatan Bayan, Lombok Utara – NTB*. RUANG Jurnal Lingkungan Binaan. Vol. 1, No. 1, April 2014.