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Effect Local Direction on Balinese Traditional Settlement Layout, Case Study:
Pengotan Traditional Village In Bali, Indonesia**

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Thanks you very much for revision my article. This is revised result on Figure 1, Figure 2 and Figure 4.

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Effect Local Direction on Balinese Traditional Settlement Layout, Case Study: Pengotan Traditional Village In Bali, Indonesia

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Abstract The pattern of Pengotan Village is extended from the *kaja* to the *kelod* which consists of three zones, namely the *Utama* (zone of sacred) as the space intended for shrines (temple), *Madya* as the space for residential housing units, and the *Nista* zone (zone of profane) intended for the graveyard (*setra*). This pattern is repeated in clusters of residential housing units. This study aims to spatial study of *luan* and *teben* orientations in Indigenous Village Pengotan through an approach: (1) history of the Traditional Village Pengotan, (2) conception of the mountain as a sacred direction, (3) conception *luan* and *teben* on settlements in the mountainous area, (4) general concepts of sacred and profane space and (5) conception of signifier and signified spaces in architecture. The method used is naturalistic interpretive in studying space in a conceptual (intangible) and concrete (tangible) context through empirical studies on sensual (observation), native's viewpoint, logic viewpoint (researcher's viewpoint) and transcendental aspects. The results of this study are (1) spatial patterns based on *luan* and *teben* conception; (2) the signifier and signified system in space of *luan* and *teben* orientation and (3) the relationship between Mount Batur and Mount Abang as *luan* (sacred) orientation in the Pengotan Village.

Keywords *luan* and *teben* orientation; Tuluk Biyu Temple; Mount Abang; signifier and signified system; spatial patterns

1. Introduction

The *luan* concept in the spatial of sacred and profane orientation is called *kaja* (north) and *kangin* (east). *Kaja* is identified with the direction of the mountain and *kangin* is the direction of the rising sun. In the Hindu-Balinese orientation, the mountain is a symbol of the dwelling of God's and deceased ancestors [1]. To honor the ancestors and the gods who are believed to be able to provide safety and well-being, the orientation of the layout of highland

settlements is oriented towards the mountain (*kaja* / high place). The profane concept describes the opposite of *kaja* and *kangin* is the direction of *kelod* which is identified with a low place or land and *kauh* direction in the form of the sun sinking. The concept of *luan* and *teben* in residential spatial planning in Bali is generally in mountainous settlements called Bali Aga settlements. Bali Aga is a term used to refer to ancient Balinese settlements with the afterward settlements, Bali Aga is in a mountainous or highland area [2].

The concept of *luan* and *teben* correlates with the concepts of sacred and profane, the orientation of *luan* is characterized by zoning the sacred and profane symbolized by zoning the *teben* area. Sacred space is generally used as worship spaces in connecting the spiritual nature of humans with God through ritual symbols. Profane space correlates with zones for physical activity or does not have a connection with God [2]. The layout of Pengotan Village has a linear pattern which is divided into three zones, namely the *Utama* (Sacred Place / Desa Temple, Puseh Temple, Bale Agung, and Prajapati Temple), the *Madya* zone (residential area), and the *Nista*/low zone (*Setra* / cemetery). The zoning is based on the orientation of *luan* and *teben*, which is also the direction of sacred orientation (Tuluk Biyu Temple / *kaja*) and *teben* as the direction of profane orientation (low place / *kelod*). Desa Temple, Puseh Temple, Bale Agung Temple, and Pajapati Temple are symbols of worship of God or the symbol of the mountain as a place of residence for the gods. In this context, Tuluk Biyu Temple as the spirit of Pengotan Village residents in a high area. The *luan* zone has a sacred meaning, so there are local rules for entering the temple area. The concept of a high land such as a mountain is a symbol of where the sky meets (*purusa* / male aspect) and earth (*predana* / female aspect). The meeting of heaven and earth creates a balance in the form the universe prosperity [2].

The concept orientation of *luan* is also often illustrated in the "home garden" unit. The residential units of the Pengotan villagers line up in a linear pattern with the village main road as the axis of the linear spatial structure. One cluster of

residential units consists of several family leaders who related to each other (family). One family unit consists of three zones, namely *tegak sanggah* (holy place), *tegak umah* (*meten*/below building and *bale* building), and *tegak teba* (empty land and *lebuh*). The *utama* (sacred) orientation of the yard of one family unit is towards *luan* (*kaja* / Tuluk Biyu Temple) and the *nista* orientation (profane) is towards *teben* (house yard). The *luan* orientation marking system in the home garden unit is sacred and worship orientation towards *kaja* (Tuluk Biyu Temple). Another marker is the occupant's sleeping position orientation with his head towards the *kaja* (Tuluk Biyu Temple). The *teben* orientation as the opposite direction in the form of *teba* and *lebuh*. *Lebuh* is the lowest direction in the concept of *luan* and *teben*. This direction is used as a ritual activity for the cosmic realm in the form of *bhuta* (the physical element of the universe). In addition to this, space is used as a ritual for the cosmic realm is *natah*. *Natah* is the orientation of building masses (*meten* buildings and *bale* buildings) and is used for religious ritual activities and social activities. As a ritual space for the cosmic realm, *natah* has a meaning as a space of balance between the *sekala* (concrete) and the *niskala* (abstract). *Sekala* in the context of *luan* orientation and *teben* is (earth / *predana*) as a physical and *niskala* is the soul as the *luan* orientation (sky / *purusa*) [3].

The concept of *luan* in the spatial layout of Pengotan Village housing is not only towards *kaja* but also the *kangin*. The direction of *kangin* is marked by the orientation position of *pelinggih* (worship element) for the ancestors of the Pengotan Village inhabitants which is on the slopes of Mount Abang (*kangin*). Before immigrating to another place, residents of Pengotan Village settled on the slopes of Mount Abang. Therefore, in the form of respect for the origin of the place of birth, it is manifested in the form of a cult that faces *Kangin* (*luan*). The same direction also occurs in the position of the head of the corpse towards *kangin* (Mount Abang) as a form of a life cycle that is returning to the origin of the place of birth. This concept is following the statement that the sun rises oriented towards the east (*kangin*) so that it has a high value or sacred and is used as a *parhayangan* area (family sanctuary) [4].

The purpose of this study is a study of *luan* and *teben* orientation spatial planning through a study of behavior systems and zoning systems, a system of signifier and signified of elements in the direction of *luan* and *teben*, and a study of the history of the origin of the inhabitants of Pengotan Village. The study uses qualitative interpretive naturalistic methods through analysis of sensual (natural observation), emic (native's viewpoint), ethical, logical, and transcendental aspects. The results of this study are: (1) spatial patterns based on *luan* and *teben* conception; (2) a signifier and signified system in the direction of *luan* and *teben* and (3) the relationship between the Tuluk Biyu Temple and Gunung Abang as a *luan* (sacred) orientation in the Pengotan Traditional Village.

2. Materials and Methods

This research is located in the Pengotan Traditional Village as one of the mountain villages in the Bangli area. The uniqueness of the village is to have a core zone (traditional housing) and periphery zone (garden house), as well as a linear village pattern with the concept of orientation that is still ancient namely *luan* and *teben*. The method used in reviewing the concept of *luan* and *teben* orientation is interpretive naturalistic. In interpreting the orientation concept of *luan* and *teben* in Pengotan Village, researchers used a method of data analysis with sensual empirical (natural observation), empirical logic, empirical emic (native's viewpoint), empirical ethics, and transcendental [5]. The focus of the study is on behavioral systems and space zoning and marking systems, direction signifier spaces at the position of *luan*, and *teben*. The research instrument used was a variable researcher in the form of signifier and signified of *luan* and *teben*, while the independent variables were the values and behavior of the community in using space, the history of Pengotan Village formation, and the relationship between Pengotan Village residents and their natural environment. In producing transcendental findings in natural settings, the method of data collection is focused on unstructured interviews with traditional village leaders and local communities by not intervening in the information obtained. An empirical sensual study through observation of empirical data using photo and sketch media in the form of a research logbook. The information obtained was analyzed through a dialogue approach to findings with the concepts of highland area architectural designation aimed at explaining the findings and conducting an induction or synthesis process to produce transcendental.

3. Research Result

3.1. Description of Traditional Pengotan

Pengotan Village is one of the old villages in Bali which is characterized by the craftsmanship order (saints occupy governance) called *peduluan*. Unlike the village government system, consists of the village head, secretary, treasurer, and staff assistants. Pengotan village is a new village formation in ancient times, which originated from Karangasem Regency, on the Abang Mountain and Tuluk Biyu Temple. Therefore, *kawitan* (the place of origin/ancestor) of the Pengotan Indigenous Village community originated from a village on the slopes of Mount Abang, precisely located in the east (*kangin*) from the position of the Village of Indigenous Pengotan now. The history of the Pengotan starts from the *gegebug* expedition (control of the territory) of Panji Sakti King in Singaraja. Information that spread was that King Panji Sakti will pass the slopes of Mount Abang. Village Elders held deliberations on this matter and it was decided to move to

the south to find a safe place from the attack of King Panji Sakti. Finally in the southern part of the Bangli region and was well received by the ruling king of Bangli because the community had well-honed artistic creativity while living in the forest on the slopes of Mount Abang. The community's first work in Bangli was Dalem Purwa Temple as the forerunner of the ancestors of Pengotan Village. The next development is Desa Temple, Puseh Temple, and Dalem Temple as manifestations of the *Tri Murti* concept. Then there was social friction between immigrant villages and local villages. Bangli authorities liked immigrants because of their creativity, so immigrant communities were saved by moving them to a safe place (now called Pengotan Village). The movement of the community brings their inscriptions and culture in adaptation to the surrounding environment. When determining the starting point of Pengotan Village which was originally a wilderness, *lateng* plants were found (the Latin term called *Dendrocide macrolides*) which had been eaten by tree caterpillars (called *subatah*) and dirt from eating plants such as oot (bran) then the area this is called Pengotan.

Pengotan Village has a macro zoning system which is divided into two: main village (*adat*) and periphery village (secular). Its culture and customs still maintain this village to date. The main village has a linear pattern with clusters that have a linear configuration and are inhabited by elders of each family who have been ritually purified. People who work as farmers prefer to live in a "garden house" and will return to the main house if there are traditional ceremonies. The people who live on agricultural land are divided into 8 (eight) *banjar* (the smallest unit of the traditional village) around the core village namely Banjar Tiyang Desa, Banjar Delod Desa, Banjar Dajan Desa, Banjar Yoh, Banjar Besenga, Banjar Penyebeh, Banjar Padpadan, and Banjar Sunting. (see Figure 1).

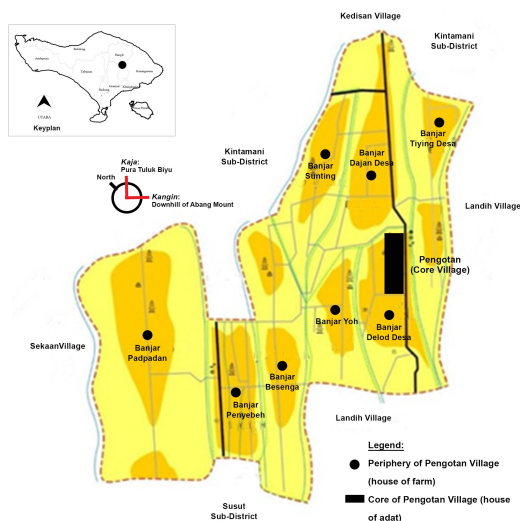


Figure 1. Core village (*adat*) and periphery village (secular) of Pengotan Village

3.2. Luan and Teben Orientation System at the Village Unit

The spatial pattern of Pengotan Village is divided into three, namely *Utama* (sacred zone), *Madya* (housing / secular zone), and *Nista* (cemetery / profane zone). Determination of the main orientation direction is determined based on direction (the place of residence of the gods/ancestors) and direction of *teben* (low place direction/opposition from *luan* direction). The orientation of the village in Pengotan is identified as the direction of *kaja* (the direction of Tulus Biyu Temple) as a sacred direction. The concept of *luan* and *teben* in the linear pattern in Pengotan Village is seen in the configuration of building masses that function as religious rituals, housing functions, and agricultural functions and public spaces. The signified system and directions from the *luan* and *teben* orientation in Pengotan Village are explained as follows:

- The layout of the *luan* is marked by the configuration of cluster buildings of the holy places, namely Bale Agung Temple, Puseh Temple, Desa Temple, and Prajapati Temple. (see Figure 2). The temples are a symbol of God's worship in a higher order of functions except for Prajapati. Unlike other villages in Bali, the position of the Prajapati Temple which is a symbol of death which is generally placed in the cemetery zone (*setra*) in *teben* village, in the Pengotan Village the holy place is in the *luan* zone. The Prajapati Temple in Pengotan Village is located in the other villages precisely in the village of Desa Temple and Puseh Temple. This means that (1) Pengotan Village is an ancient village that immigrated to the Bangli area which did not recognize the concept of burning dead bodies and ceremonies in raising the status of the deceased to a higher place. People who have died without carrying out the process of the death ceremony are still seen as deceased ancestors and are at the upper level, and (2) the layout of Pengotan Village shows that the position of the Prajapati Temple is in the middle of the cemetery zone even though it is not in one zone. The masses of buildings in the *luan* zone have an orientation towards *Kaja* where the gods and ancestors have died. The orientation of the *Kaja* is the Tulus Biyu Temple which is in the east of Mount Batur. The concept of *luan* is related to the concept of ancestors-related [6]. The ancestors are the gods who have given welfare to the community in the form of the existence of forests and the supply of water resources used by the people of Pengotan Village. Other zones are intended for worship facilities (temples) which in the layout of Pengotan Village have sacred values compared to other zones. The sacred space in Pengotan Village following Eliade's statement states that the sacred space also called "temple" is a space to get a chaotic orientation of profane world homogeneity, find the world and feel the true nature [7].
- The *teben* spatial is an opposition from the *luan* space. In the village Pengotan signifier of the *teben* space is a

space intended for *pitra yadnya* ceremonies (ceremonies intended for deceased humans) and *bhuta yadnya* (ceremonies intended for the cosmic realm). The people of Pengotan Village who have died will be buried and burned in *Setra* (cemetery) which is in the direction of *teben* (*kauh*) in the pattern of Pengotan Village, precisely the lower end (*kauh* / south) of the main village. (see Figure 2). Pengotan village has a burial site (*setra*) which is divided into four parts, namely (1) *kaja* zone intended for burial for deceased saints, (2) *kangin* zone for the burial of female bodies, (3) *kelod* zone for the burial of male bodies and (4) zones for the burial of the bodies of children. In the zoning arrangement for the burial of a corpse, the concept of *luan* is considered as a burial for a saint. The saints in Pengotan Village are elders who have been ordained in religious customs and are considered to have a higher position than the community at large. In the ceremony at Bale Agung Temple, there is a building in the form of an elongated shape called Bale Agung. The building is intended for saints in Pengotan Village. The end zone of the main village is precisely in the other part of the blind zone, there is a road cross formed by the vertical (main) and horizontal axis. At the point of the room is a place for performing *bhuta yadnya* ceremonies at the expense of (slaughtering) a cow. This *pitra yadnya* ceremony aims at rituals that are intended for *bhuta kala* (cosmic realm) in creating a natural balance. Anythings of ritual activities carried out by Hindus in Bali to glorify and maintain cosmic balance are based on the emergence of human consciousness centered on nature (cosmos) [8]. This zone is also intended for *nebusin* ritual activities or ritual ceremonies to take back the surviving human spirits who were held by local people in the trust of the *bhuta*. (see Figure 2). So it can be concluded that the *teben* space is a space for profane activities such as the burial of bodies, rituals related to the cosmic realm.

- c. The *Madya* space (center) in the Pengotan Village is marked by a zone of the home garden units of the locals. The residential yard units are lined up and have a linear pattern with the village's main road as its central axis. Each yard unit is connected to the village main road by road to each yard unit. The orientation of these yard units towards *luan* (Tuluk Biyu Temple) is marked by a holy place (objection) for each family and the orientation of the *teben* in the form of an entrance to the yard unit. This means that the concept of *luan* and *teben* in village units has the same pattern in residential units. The activities carried out in this zone tend to be related to human and social. As a place to live and establish the social life of local people and ritual activities related to humans (*manusa yadnya*). (see Figure 2). Looking at the relationship between the concept of *luan* and *teben* in the settlement unit of Pengotan Village, that *luan* is identified with something sacred (soul) and *teben* is profane (body).

The residents of Pengotan Village guard the two poles

through ritual activities and attitudes towards space in various daily activities. The belief of the Hindu-Balinese community states that the harmonization of the two spaces affects the continuity of the lives of the people who occupy residential space/middle space / *Madya* space (*pawongan*). The statement of two opposing poles that complement each other, namely in Kusdiwanggo's research on *Sakuren*, complementary relations are not mutually dominating or controlling, or in other terms, there is no dialectic and tension, there is a harmony [9].

In the context of *luan* and *teben* dichotomy, both poles or orientations must be maintained in creating a point of balance, namely the space between or transitions of the opposite poles. Then the term triadic is known in spatial planning in Bali, they are *utama* (*luan*), *madya* (middle) and *nista* (*teben*). The middle space (*madya*) is a balance point between the *utama* space and the *nista* space called *natah*. According to Wijaya, the yard's core space is used as a ritual space to create a balance between the *Sakala* space and *Niskala* called *Natah* [3]. *Natah* or midpoint is a space in Pengotan Village in the form of *pempatan agung* or space in the village center. *Pempatan Agung* is used as a space to hold the *Pecaruan Agung* ritual ceremony which aims to balance the macrocosm and the microcosm. The *madya* space is a balance between the *luan* and *teben* pole.

The orientation systems of *luan* and *teben* are also illustrated in the concept of houses in Pengotan Village, namely "traditional houses" and "garden houses". Pengotan Village which is divided into 8 (eight) traditional *banjar* (the smallest unit of the village) is a zone intended for secular activities, namely farming or gardening activities. The livelihood of the residents of Pengotan Village is largely to cultivate agricultural land, so they must establish lodgings that develop into "garden houses". Whereas in traditional houses is a space for religious ritual and traditional ritual activities. Daily activities take place in the "garden house" while those who manage traditional houses are elders who have been traditionally appointed to live in traditional houses. In conjunction with the *luan* and *teben* orientation system, the traditional house is a traditionally arranged space and is intended for sacred and ritual activities while the "garden house" is used for activities that are secular (livelihood space). Therefore, the concept of local wisdom regarding original spatial planning in Pengotan Village has been maintained through *luan* (conceptual/sacred) conception as space and orientation that needs to be preserved as the core of the space or area of Pengotan Village.



Figure 2. Luan, Madya, Teben Zones of Pengotan Village

3.3. Luan and Teben Orientation System in the House Yard Units

The layout of the home garden unit is a configuration of cluster housing yards that are lined up in a linear pattern and bound by a central axis called *Rurung Desa* (the village's main road). One home garden unit consists of 8 to 10 family heads who have blood relations. Home units in the yard unit that have blood relations can be seen from the marker in the form of a sacred place (*sanggah*) which protects several housing units and has one entrance to the *sanggah* area and the yard of the house. One unit of the home garden is divided into three zones, they are *tegak sanggah* zone (sanctuary zone), *tegak umah* zone (home zone) and *tegak teba* zone (space zone). The outermost part of the *tegak teba* is *lebu* or *rurung*. *Tegak sanggah* is *luan* of the house yard, *tegak umah* as the middle zone (middle) and *tegak teba* and *lebu* as the *teben* zone of the home garden unit. According to Wijaya stated that the transformation of space starts from *luan* (*sanggah*) then the home garden unit, and if there is an increase in building mass, the zone used is the red zone. The addition is like a bathroom. Thus, the movement of the zone starts from *luan* then moves downstream (*teban*) [10].

The addition of a new family head affects the addition of a housing unit which is to stay away from the axis of the village's main road to the limit determined by the village. The addition of houses does not affect the addition of *sanggah* (holy place) if the new family head has a family relationship with the family who has settled in that place.

The main road as the main axis of the village has the meaning as the initial space that connects between the *luan* and *teben* spaces. In the house yard unit, some axes bind two building masses, namely *meten* buildings and *bale* buildings. The middle space or *natah* is an outer space that is used as a ritual space for the cosmic nature (*bhuta*), the space for bathing the body before being sent to the cemetery (*setra*), and the social space of the community (gathering), when there is a traditional event in the house. *Natah* is a space and the intermediate space is a symbol of balance between *luan* and *teben*. The balance concept is the meeting of the two elements giving birth to the motion of life, purifying the universe from negative elements that threaten the life and life of mankind in the universe (balance) [11].

As a space for balance, *natah* in Pengotan Village functions as a space for performing the *pecaruan* ceremony (cosmic natural ritual), bathing the corpse which means freeing and cleansing worldly elements that are still attached to the body of the deceased person which is done at a neutral point (empty / *natah*) and social space (community gathering place). The *luan* and *teben* orientation system in the house yard unit are shown in Figure 3.

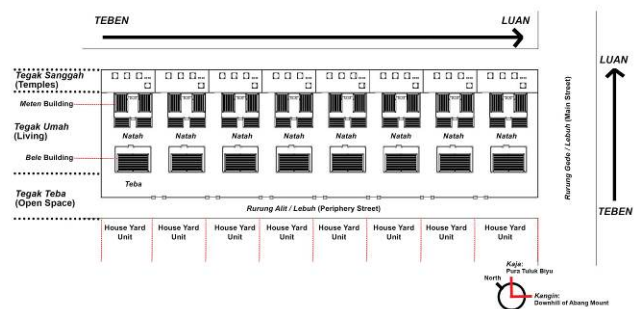


Figure 3. Luan and Teben Orientation System in the House Yard Units

3.4. Luan and Teben Orientation System in Sanggah, Meten Building, and Bale Building

The pattern of garden unit management in one family consists of three zones, namely *tegak sanggah* (*luan*), *tegak umah* (*madya*) and *tegak teba* (*teben*). *Tegak sanggah* consists of worship buildings (*pelinggih*) which have an orientation towards *kaja* and *kangin*. The direction of *kaja* as a qibla in the worship of gods which is located in Tuluk Biyu Temple and the direction of *kangin* as a qibla towards Mount Abang as the origin (*kawitan*) of the Pengotan Village residents. In this context, worship of the deity in Tuluk Biyu Temple has provided welfare to the residents of Pengotan Village through a system of irrigation and rain for agriculture, and worship of ancestors (*kawitan*) who once lived on the slopes of Mount Abang. (see Figure 4).

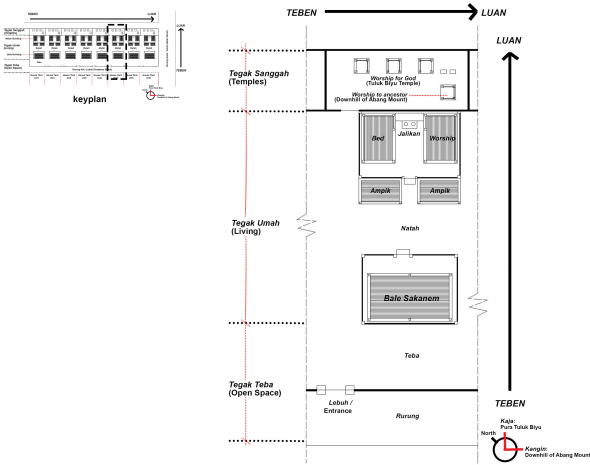


Figure 4. Luan and Teben Orientation System in Sanggah, Meten Building and Bale Building

Tegak umah consists of *meten* buildings, *bale* buildings and spaces between *natah* (empty spaces). The orientation of the *meten* building towards *kaja* (*luan*) has two spaces, namely the inner room and the terrace (*ampik*). The space in the *meten* building is divided into three zones, namely *dipan* (*bale*) as a bed, *dipan* (*bale*) as a ritual place and the middle zone between the two *bale* which consists of a cooking stove (*penyalikan*) and a furniture cabinet. The orientation of the three spaces towards *kaja* (*luan*), the sleeping position of the occupants of the house with heads towards *luan* (*kaja*), orientation of worship rituals and offerings are oriented towards *kaja* (*luan*) and the mouth position of the cooking stove (*penyalikan*) facing the *kelod* which means the position of the person cook oriented towards the *kaja* (*luan*). This means that the interior layout orientation of the *meten* building is oriented towards *luan* (*kaja*) which is the direction of the place where Bhatara Shiva Giri Natha (God) lives which can provide welfare in the form of protection and fertility in the area of Pengotan Village. *Ampik* space is the front porch of the *meten* building which functions as a social space for family members. (see Figure 5).

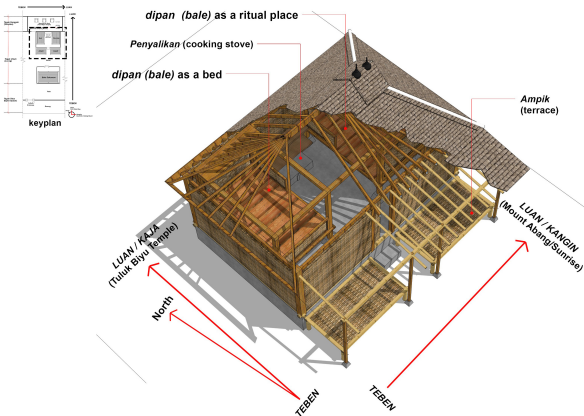


Figure 5. Luan and Teben Orientation of Meten Building

Bale building is in the opposite direction of the *meten* building which forms a diametric pattern. This *bale* building is often referred to as *Bale Adat*. The orientation of this *bale* is towards *teben* (*kelod*) with the position of the entrance on the *kaja* side. This *Bale* has 6 (six) poles, the orientation of the length of the *bale* in this building towards *kangin* and *kauh*. *Bale* buildings are used for religious ritual activities, namely wedding ceremonies and death ceremonies. The orientation of the person carrying out the wedding ceremony in the direction of *kangin* (the direction of Mount Abang), as well as the position of the head of the deceased person who was buried while in the room facing *kangin*. Unlike the *meten* building, the interior layout is oriented towards the dwelling places of the gods, in the traditional *bale* oriented towards *kangin*, which the origin of Pengotan Village inhabitants on the slopes of Mount Abang. The concept of *kaja* and *kangin* has the same meaning, namely *luan*, but what distinguishes them is worship, one to god and the other to *kawitan* from the inhabitants of Pengotan Village. (see Figure 6).

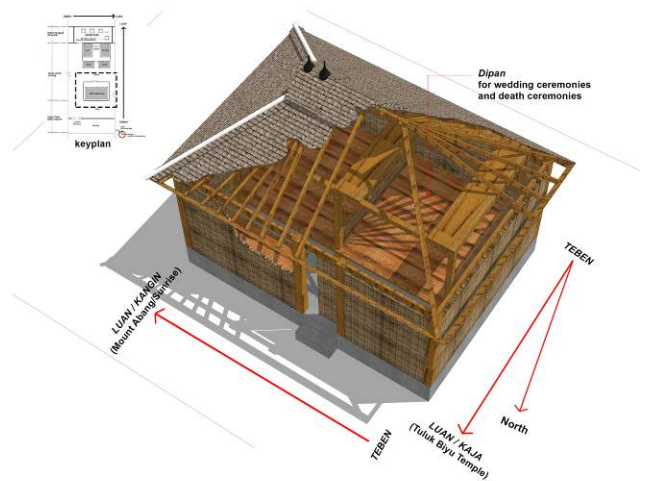


Figure 6. Luan and Teben Orientation of Bale Building

The space between the *meten* building and the *bale* building in the residential unit layout in Pengotan Village is called *natah*. In the context of *luan* and *teben*, *natah* has two orientations namely vertical and horizontal. Vertical orientation is *luan* as upward direction (*purusa* / male element) and *teben* (*pertiwi* / ground that is stepped on). The meeting between the *Purusa* and *Perdana* creates a cosmic balance that is carried out through the *pecaruan* ceremony in the room. *Natah* is also a space for liberation, namely as a space for rituals of *pemelukatan* (eliminating negative elements in the human body through rituals) and cleaning up dirty (negative) elements on the physical body. So it can be said that, *teben* as a liberation room and balance point. The orientation of the bodies bathed in the *Natah* space is in the direction of *Kangin* as an orientation symbol to the population of the Pengotan Village, where deceased humans return to their origin. (see Figure 7).

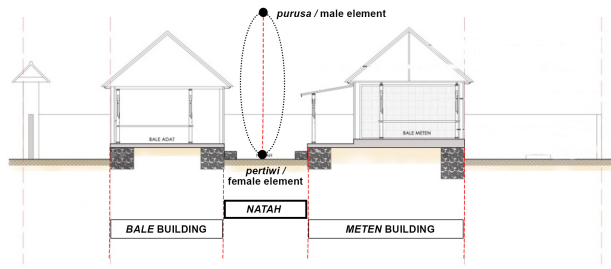


Figure 7. *Natah* : Space between *Meten* and *Bale* Building

4. Conclusions

The orientation of *luan* and *teben* in the settlements of Pengotan Village is the direction of *kaja* and *kangin*. *Kaja* as the axis that connects humans with their creators (God), which is marked by the Tuluk Biyu Temple as the *luan* orientation. *Kangin* is an orientation direction that connects humans to their ancestors or the origin of the inhabitants of Pengotan Village, namely on the slopes of Mount Abang. *Kangin* orientation also leads to the beginning of life which is marked by the direction of the rising of the sun. *Teben* is an opposite orientation from *luan* which is in the direction of *kelod* and *kauh*. The concept of *luan* and *teben* orientation dichotomy forms a sacred and profane zoning system, in which the *luan* zone means sacred which is characterized by a mock layout or holy place, spiritual behavior, and rituals intended for God (soul). Whereas *teben* means profane which is marked by the burial chamber (*setra*) and spaces for cosmic (*bhuta*) natural rituals. The dualistic relationship between *luan* and *teben* forms a conception of balance through triadic relations with the formation of transitional space as the two-pole center called *natah* (axis of the village's main road, village intersection). This implies that the concept of *luan* and *teben* is not dualism but as a dichotomy that has an order as space that has the same role with different functions to create a balance of the cosmos.

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Effect Local Direction on Balinese Traditional Settlement Layout, Case Study: Pengotan Traditional Village in Bali, Indonesia

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Abstract The pattern of Pengotan Village is extended from the *kaja* (sacred) to the *kelod* (profane), which consists of three zones, namely the *Utama* (zone of sacred) as the space intended for shrines (temple), *Madya* (transition/between space) as the space for residential housing units, and the *Nista* zone (zone of profane) intended for the graveyard (*setra*). This pattern is repeated in clusters of residential housing units. This study aims to spatial analysis of *luan* (sacred) and *teben* (profane) orientations in Indigenous Village Pengotan through an approach: (1) history of the Traditional Village Pengotan, (2) conception of the mountain as a sacred direction, (3) conception *luan* (holy) and *teben* (profane) on settlements in the mountainous area, (4) general concepts of religious and secular space and (5) conception of signifier and signified spaces in architecture. The method used is naturalistic interpretive in studying the area in a conceptual (intangible) and concrete (tangible) context through empirical studies on sensual (observation), native's viewpoint, logic viewpoint (researcher's perspective), and intangible aspects. The results of this study are (1) spatial patterns based on *luan* (sacred) and *teben* (profane) conception; (2) the signifier and signified system in the space of on *luan* (holy) and *teben* (profane) orientation and (3) the relationship between Mount Batur and Mount Abang as *luan* (sacred) orientation in the Pengotan Village.

Keywords *luan* (sacred) and *teben* (profane) orientation; Tuluk Biyu Temple; Mount Abang; signifier and signified system; spatial patterns

1. Introduction

The *luan* (sacred) concept in the spatial of sacred and profane orientation is called *Kaja* (north) and *Kangin* (east). *Kaja* is identified with the mountain's direction, and *Kangin* is the direction of the rising sun. In the Hindu-Balinese orientation, the hill is a symbol of the dwelling of God's and deceased ancestors [1] [2] [3] [4]. To honor the ancestors and the gods who are believed to provide safety and well-being, the layout of highland settlements is oriented towards the mountain (*Kaja* / high place). The profane concept describes the opposite of *Kaja* (the direction of a hill of sacred value), and *Kangin* (sunrise direction of holy value) is the direction of *Kelod* (movement of the sea of offensive matter), which is identified with a commonplace or land and *Kauh* (direction of the sunset of profane value) direction in the form of the sun sinking. The concept of *luan* (sacred) and *teben* (profane) in Bali's residential spatial planning is generally in mountainous settlements called Bali Aga settlements. Bali Aga is a term used to refer to ancient Balinese settlements with the afterward settlements; Bali Aga is in a mountainous or highland area [5] [6][7] [8].

The concept of *luan* (sacred) and *teben* (profane) correlates with religious and secular; the orientation of *luan* is characterized by zoning the holy and unholy symbolized by zoning the *teben* area. Sacred space is generally used as worship spaces in connecting humans' spiritual nature with God through ritual symbols. Profane space correlates with zones for physical activity or does not connect with God [5] [9] [10] [11]. The layout of Pengotan Village has a linear pattern which is divided into three zones, namely the *Utama* (Sacred Place / Desa Temple, Puseh Temple, Bale Agung, and Prajapati Temple), the *Madya* zone (residential area), and the *Nista*/low zone (*Setra* / cemetery). The zoning is based on the orientation of *luan* (sacred) and *teben* (profane), which is also the direction of religious orientation (Tuluk Biyu

Temple / *Kaja*) and *teben* as the direction of profane orientation (low place / *kelod*). Desa Temple, Puseh Temple, Bale Agung Temple, and Pajapati Temple are symbols of worship of God or the mountain's character as a residence place for the gods. In this context, Tuluk Biyu Temple is the spirit of Pengotan Village residents in a high area. The *luan* zone has a sacred meaning, so there are local rules for entering the temple area. The concept of a high land such as a mountain is a symbol of where the sky meets (*purusa* / male aspect) and earth (*predana* / female part). The meeting of heaven and earth creates a balance in the universe's prosperity [5] [12].

The concept orientation of *luan* (sacred) is also often illustrated in the "home garden" unit. The residential units of the Pengotan villagers line up in a linear pattern, with the village main road as the axis of the linear spatial structure. One cluster of residential units consists of several family leaders related to each other (family). One family unit consists of three zones, namely *tegak sanggah* (holy place), *tegak umah* (*meten*/below building and *bale* building), and *tegak teba* (empty land or multifunctional area). The *utama* (sacred) orientation of the yard of one family unit is towards *luan* (*kaja* / Tuluk Biyu Temple), and the *nista* orientation (profane) is towards *teben* (house yard). The *home garden unit's luan orientation marking system* is sacred and worship orientation towards *kaja* (Tuluk Biyu Temple). Another marker is the occupant's sleeping position orientation with his head towards the *kaja* (Tuluk Biyu Temple). The *teben* (sacred) orientation is the opposite direction in the form of *teba* (profane) and *lebuh* (profane). *Lebuh* (profane) is the lowest direction in the concept of *luan* (sacred) and *teben* (profane). This direction is used as a ritual activity for the cosmic realm in *bhuta* (the universe's physical element). In addition to this, space is used as a ritual for the cosmic realm is *natah* (plaza). *Natah* (plaza) is the orientation of building masses (*meten* buildings / main building and *bale* buildings periphery) and is used for religious ritual activities and social activities. As a ritual space for the cosmic realm, *natah* (plaza) has a meaning as a space of balance between the *sekala* (concrete) and the *Niskala* (abstract). *Sekala* (concrete) in the context of *luan* (sacred) orientation and *teben* (profane) is (earth / *predana* / female symbol) as a physical and *Niskala* (abstract) is the soul as the *luan* (sacred) orientation (sky / *purusa* / male symbol) [13] [14].

The concept of *luan* (sacred) in the spatial layout of Pengotan Village housing is not only towards *Kaja* (Tuluk Biyu Temple) but also the *Kangin* (Mount Abang). The direction of *Kangin* (Mount Abang) is marked by the orientation position of *pelelinggih* (worship element) for the ancestors of the Pengotan Village inhabitants, which is on the slopes of Mount Abang (*Kangin*). Before immigrating to another place, residents of Pengotan Village settled on the slopes of Mount Abang. Therefore, in the form of respect for the origin of the area of birth, it is manifested in the form of a cult that faces *Kangin* (*luan*). The same direction also occurs in the head of the corpse towards *Kangin* (Mount Abang) as a form of a life cycle returning to the origin of the place of birth. This concept is following the statement that the sun rises oriented towards the east (*Kangin*) so that it has a high value or sacred and is used as a *parhayangan* area (family sanctuary) [15] [16].

The purpose of this study is a study of *luan* (sacred) and *teben* (profane) orientation spatial planning through an analysis of behavior systems and zoning systems, a network of signifier and signified of elements in the direction of *luan* (sacred) and *teben* (profane), and a study of the history of the origin of the inhabitants of Pengotan Village. The course uses qualitative interpretive naturalistic methods by analyzing sensual (natural observation), emic (native's viewpoint), ethical, logical, and intangible aspects. The results of this study are: (1) spatial patterns based on *luan* (sacred) and *teben* (profane) conception; (2) a signifier and signified system in the direction of *luan* (religious) and *teben* (earthly) and (3) the relationship between the Tuluk Biyu Temple and Gunung Abang as a *luan* (sacred) orientation in the Pengotan Traditional Village.

2. Materials and Methods

This research is located in the Pengotan Traditional Village as one of the mountain villages in the Bangli area. The uniqueness of the village is to have a core zone (traditional housing) and periphery zone (garden house), as well as a linear village pattern with the concept of orientation that is still ancient, namely *luan* (sacred) and *teben* (profane). The method used in reviewing the concept of *luan* (holy) and *teben* (profane) orientation is interpretive naturalistic. In interpreting the orientation concept of *luan* (sacred) and *teben* (profane) in Pengotan Village, researchers used a method of data analysis with sensual empirical (natural observation), practical logic, empirical emic (native's viewpoint), empirical ethics, and transcendental [17]. The study focuses on behavioral systems and space zoning and marking schemes, direction signifier spaces at the *luan* position (sacred), and *teben* (profane). The research instrument used was a variable researcher in the form of a signifier. It signified *luan* (religious) and *teben* (secular).

In contrast, the independent variables were the community's values and behavior in using space, the history of Pengotan Village formation, and the relationship between Pengotan Village residents and their natural environment. In producing transcendental findings in natural settings, data collection is focused on unstructured interviews with traditional village leaders and local communities by not intervening in the information obtained—a sensual empirical study through observation of empirical data using photo and sketch media in a research logbook. The information

obtained was analyzed through a dialogue approach to findings with highland area architectural designation concepts to explain the results and conduct an induction or synthesis process to produce transcendental.

3. Research Result

3.1. Description of Traditional Pengotan

Pengotan Village is one of Bali's old villages characterized by the craftsmanship order (saints occupy governance) called *peduluan*. Unlike the village government system, it consists of the village head, secretary, treasurer, and staff assistants. Pengotan village is a new village formation in ancient times, originated from Karangasem Regency, on the Abang Mountain and Tuluk Biyu Temple. Therefore, *kawitan* (the place of origin/ancestor) of the Pengotan Indigenous Village community originated from a village on the slopes of Mount Abang, precisely located in the east (*Kangin*) the Village of Indigenous Pengotan now. The history of the Pengotan starts from the *Gegebug* Expedition (control of the territory) of Panji Sakti King in Singaraja. Information that spread was that King Panji Sakti would pass the slopes of Mount Abang. Village Elders held deliberations on this matter, and it was decided to move to the south to find a safe place from the attack of King Panji Sakti. Finally, in the southern part of the Bangli region, and was well received by the ruling king of Bangli because the community had well-honed artistic creativity while living in the forest on the slopes of Mount Abang. The community's first work in Bangli was Dalem Purwa Temple as the forerunner of the ancestors of Pengotan Village. The next development is Desa Temple, Puseh Temple, and Dalem Temple as manifestations of the *Tri Murti* concept (the concept of Hinduism's three main deities). Then there was social friction between immigrant villages and local villages. Bangli authorities liked immigrants because of their creativity, so immigrant communities were saved by moving them to a safe place (now called Pengotan Village). The movement of the city brings its inscriptions and culture in adaptation to the surrounding environment. When determining the starting point of Pengotan Village, which was initially a wilderness, *lateng* plants were found (the Latin term called *Dendrocnide macrolides*) which had been eaten by tree caterpillars (called *subatah*) and dirt from eating plants such as oot (bran) then the area this is called Pengotan.

Pengotan Village has a macro zoning system divided into two: main village (*adat*) and periphery village (secular). Its culture and customs still maintain this village to date. The main village has a linear pattern with clusters with a linear configuration and is inhabited by elders of each family who have been ritually purified. People who work as farmers prefer to live in a "garden house" and return to the main house if there are traditional ceremonies. The people who live on agricultural land are divided into 8 (eight) *banjar* (the smallest unit of the ancestral village) around the core village, namely Banjar Tiyang Desa, Banjar Delod Desa, Banjar Dajan Desa, Banjar Yoh, Banjar Besenga, Banjar Penyebeh, Banjar Padpadan, and Banjar Sunting. (see Figure 1).

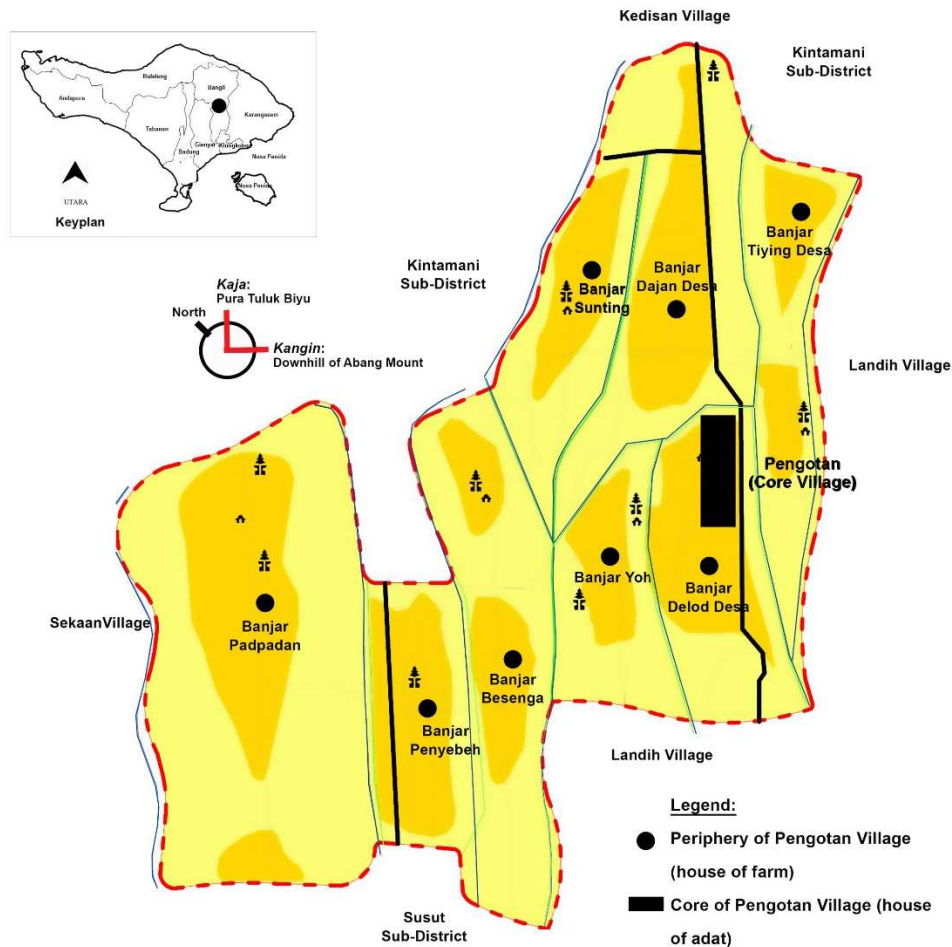


Figure 1. Core village (*adat*) and periphery village (secular) of Pengotan Village

3.2. *Luan* (Sacred) and *Teben* (Profane) Orientation System at the Village Unit

The spatial pattern of Pengotan Village is divided into three, namely *Utama* (sacred zone), *Madya* (housing / secular area), and *Nista* (cemetery/offensive zone). Determination of the main orientation direction is determined based on principle (the residence of the gods/ancestors) and the direction of *teben* (low place direction/opposition from *luan* direction). The village's orientation in Pengotan is identified as the direction of *kaja* (the order of Tuluk Biyu Temple) as a sacred direction. The concept of *luan* (holy) and *teben* (profane) in the linear pattern in Pengotan Village is seen in the configuration of building masses that function as religious rituals, housing functions, and agricultural functions, and public spaces. The signified system and directions from the *luan* (sacred) and *teben* (profane) orientation in Pengotan Village are explained as follows:

- a. The *luan* (heavenly) is marked by the configuration of the holy places' cluster buildings, namely Bale Agung Temple, Puseh Temple, Desa Temple, and Prajapati Temple. (see Figure 2). The temples are a symbol of God's worship in a higher order of functions except for Prajapati. Unlike other villages in Bali, the position of the Prajapati Temple is a symbol of death, which is generally placed in the cemetery zone (*setra*) in *teben* (profane) village, in the Pengotan Village, the holy place is in the *luan* (sacred) zone. The Parajapati Temple in Pengotan Village is located in the other villages, precisely in the village of Desa Temple and Puseh Temple. This means that (1) Pengotan Village is an ancient village that immigrated to the Bangli area which did not recognize the concept of burning dead bodies and ceremonies in raising the deceased's status to a higher place. People who have died without carrying out the process of the death ceremony are still seen as dead ancestors and are at the upper level, and (2) the layout of Pengotan Village shows that the position of the Prajapati Temple is in the middle of the cemetery zone even though it is not in one area. The masses of buildings in the *luan* zone have an orientation towards *Kaja* (main direction) where the gods and ancestors have died. The *Kaja* exposure is the Tuluk Biyu Temple, which is in the east of Mount Batur. The concept of *luan* (sacred) is related to the idea of ancestors-related [18]. The ancestors are the gods who have given

welfare to the community in the form of the existence of forests and the supply of water resources used by Pengotan Village people. Other zones are intended for worship facilities (temples), which have sacred values in the layout of Pengotan Village compared to different zones. Following Eliade's statement, the holy space in Pengotan Village states that the sacred space, also called "temple" is a space to get a chaotic orientation of profane world homogeneity, find the world and feel the real nature [19] [20].

- b. The *teben* (profane) spatial is an opposition from the *luan* (sacred) space. In the village Pengotan, the signifier of the *teben* (secular) area is a space intended for *pitra yadnya* ceremonies (ceremonies intended for deceased humans) and *bhuta yadnya* (rituals designed for the cosmic realm). The people of Pengotan Village who have died will be buried and burned in *Setra* (cemetery), which is in the direction of *teben* (offensive zone) in the pattern of Pengotan Village, precisely the lower end (*kauh* / profane) of the main village. (see Figure 2). Pengotan village has a burial site (*setra*) which is divided into four parts, namely (1) *kaja* (main direction / Tuluk Biyu Temple) zone intended for burial for deceased saints, (2) *kangin* (Abang Mount) zone for the funeral of female bodies, (3) *kelod* (*kangin* opposition) zone for the burial of male bodies and (4) zones for the tomb of the bodies of children. In the zoning arrangement for a corpse funeral, the *luan* concept is considered a funeral for a saint. The saints in Pengotan Village are elders who have been ordained in religious customs and are deemed to have a higher position than the community. In the ceremony at Bale Agung Temple, there is a building in the form of an elongated shape called Bale Agung. The building is intended for saints in Pengotan Village. The main village's end zone is precisely in the other part of the blind area; there is a road cross formed by the vertical (primary) and horizontal axis. At the point of the room is a place for performing *bhuta yadnya* (ceremonies intended for the cosmic realm) ceremonies at the expense of (slaughtering) a cow. This *pitra yadnya* ceremony aims at rituals intended for *Bhuta Kala* (cosmic realm) to create a natural balance. Anythings of ritual activities carried out by Hindus in Bali to glorify and maintain cosmic balance are based on the emergence of human consciousness centered on nature (cosmos) [21] [22] [16]. This zone is also intended for *nebusin* ritual activities or ritual ceremonies to take back the surviving human spirits held by local people in the trust of the *bhuta* (spirits). (see Figure 2). So it can be concluded that the *teben* (profane) space is a space for secular activities such as the burial of bodies, rituals related to the cosmic realm.
- c. The *madya* space (middle) in the Pengotan Village is marked by a zone of the locals' home garden units. The residential yard units are lined up and have a linear pattern, with the village's main road as its central axis. Each yard unit is connected to the village main road by road to each yard unit. The orientation of these yard units towards *luan* (Tuluk Biyu Temple) is marked by a holy place (objection) for each family and the direction of the *teben* (profane) in the form of an entrance to the yard unit. That means that the concept of *luan* (sacred) and *teben* (profane) in village units has the same residential units pattern. The activities carried out in this zone tend to be related to humans and society. As a place to live and establish local people's social life and ritual activities related to humans (*manusa yadnya*). (see Figure 2). Looking at the relationship between the concept of *luan* (sacred) and *teben* (profane) in the settlement unit of Pengotan Village, that *luan* (religious) is identified with something sacred (soul) and *teben* is profane (body).

Pengotan Village residents guard the two poles through ritual activities and attitudes towards space in various daily activities. The Hindu-Balinese community believes that harmonizing the two areas affects the continuity of the lives of the people who occupy residential space/middle space / *madya* space (*pawongan*/ zones for residential homes). The statement of two opposing poles that complement each other, namely in Kusdiwanggo's research on *Sakuren*, complementary relations are not mutually dominating or controlling. In other terms, there is no dialectic and tension; there is harmony [23] [24].

In the context of *luan* (sacred) and *teben* (profane) dichotomy, both poles or orientations must be maintained in creating a point of balance, namely the space between or transitions of the opposite poles. Then the term triadic is known in spatial planning in Bali; they are *utama* (*luan* / sacred), *madya* (middle), and *nista* (*teben* / profane). The middle space (*madya*) is a balance point between the *utama* (sacred) space and the *nista* (profane) space called *natah* (plaza/space). The yard's core space is used as a ritual space to balance the *Sakala* space and *Niskala* called *Natah* [13] [25] [26] [27]. *Natah* or midpoint is a space in Pengotan Village in *pempatan agung* or area in the village center. *Pempatan Agung* is used as a space to hold the *Pecaruan Agung* (ceremony for spirit) ritual ceremony to balance the macrocosm and the microcosm. The *madya* space is a balance between the *luan* (sacred) and *teben* (profane) pole.

The orientation systems of *luan* (sacred) and *teben* (profane) are also illustrated in the concept of houses in Pengotan Village, namely "traditional houses" and "garden houses." Pengotan Village, divided into 8 (eight) traditional *banjar* (the smallest unit of the village) is a zone intended for secular activities, namely farming or gardening activities. The livelihood of the residents of Pengotan Village is mainly to cultivate agricultural land, so they must establish lodgings that develop into "garden houses." Whereas in traditional houses is a space for religious ritual and regular ritual activities. Daily activities take place in the "garden house" while those who manage traditional houses are elders who have been traditionally appointed to live in conventional homes. In conjunction with the *luan* (sacred) and *teben* (profane)

orientation system, the traditional house is a usually arranged space and is intended for religious and ritual activities. In contrast, the "garden house" is used for secular activities (livelihood space). Therefore, the concept of local wisdom regarding initial spatial planning in Pengotan Village has been maintained through *luan* (conceptual/sacred) conception as space and orientation that needs to be preserved as the core of the room or area Pengotan Village.



Figure 2. Luan, Madya, Teben Zones of Pengotan Village

3.3. Luan (Sacred) and Teben (Profane) Orientation System in the House Yard Units

The home garden unit's layout is a configuration of cluster housing yards lined up in a linear pattern and bound by a central axis called *Rurung Desa* (the village's main road). One home garden unit consists of 8 to 10 family heads who have blood relations. Home units in the yard unit with blood relations can be seen from the marker in the form of a sacred place (*sanggah* / temple to ancestors), which protects several housing units and has one entrance to the *sanggah* area and the yard of the house. One branch of the home garden is divided into three zones; they are *tegak sanggah* zone (sanctuary zone), *tegak umah* zone (home zone), and *tegak teba* zone (flexible space / low-value space). The outermost part of the *tegak teba* (flexible space / low-value space) is *lebu* (the outer part of the house) or *rurung* (road). *Tegak sanggah* (sanctuary zone) is *luan* (sacred) of the house yard, *tegak umah* (home zone) as the middle zone (middle) and *tegak teba* (flexible space / low-value space) and *lebu* (the outermost part of the house) as the *teben* (profane) zone of the home garden unit. According to Wijaya stated that the transformation of space starts from *luan* (*sanggah*) then the home garden unit, and if there is an increase in building mass, the zone used is the red zone. The addition is like a bathroom. Thus, the movement of the site starts from *luan* (sacred) then moves downstream (*teban*) [28].

The addition of a new family head affects a housing unit's expansion to stay away from the axis of the village's main road to the limit determined by the village. The addition of houses does not affect the proliferation of *sanggah* (holy place) if the new family head has a family relationship with the family who has settled in that place. As the village's central axis, the main road has the initial space connects the *luan* and *teben* areas. Some axes bind two building masses in the house yard unit, namely *meten* buildings (main building) and *bale* buildings (building for traditional activities). The middle space or *natah* (plaza) is an outer space that is used as a ritual space for the cosmic nature (*bhuta*), the space

for bathing the body before being sent to the cemetery (*setra*), and the social space of the community (gathering), when there is a formal event in the house. *Natah* is a space, and the intermediate area is a symbol of balance between *luan* (sacred) and *teben* (profane). The balance concept meets the two elements giving birth to the motion of life, purifying the universe from harmful components that threaten humanity's energy and experience in the universe (balance) [29] [30].

As a space for balance, *natah* (plaza) in Pengotan Village functions as a space for performing the *pecaruan* ceremony (cosmic natural ritual), bathing the corpse, which means freeing and cleansing worldly elements that are still attached to the body of the deceased person which is done at a neutral point (empty / *natah*) and social space (community gathering place). The *luan* (sacred) and *teben* (profane) orientation system in the house yard unit is shown in Figure 3.

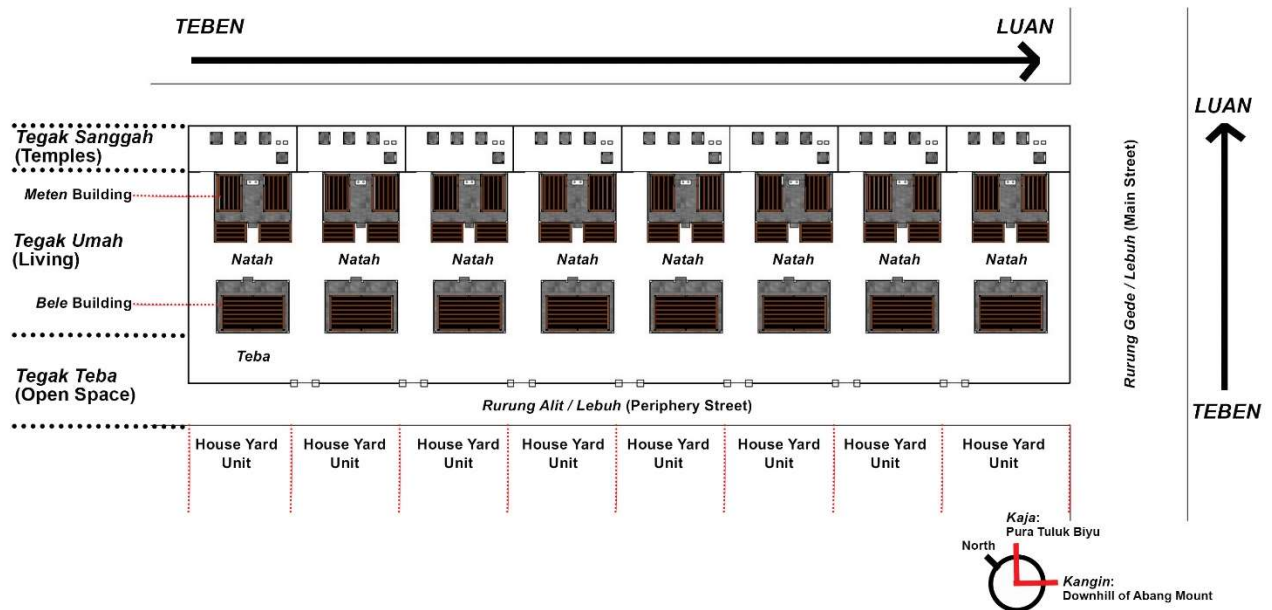


Figure 3. Luan and Teben Orientation System in the House Yard Units

3.4. Luan (Sacred) and Teben (Profane) Orientation System in Sanggah (Temple to Ancestors), Meten Building (Main Building), and Bale Building (Building for Tradition Activities)

The pattern of garden unit management in one family consists of three zones, namely *tegak sanggah* (*luan*/sanctuary zone), *tegak umah* (*madya* / home zone), and *tegak tebe* (*teben* / flexible space / low-value space). *Tegak sanggah* (sanctuary zone) consists of worship buildings (*pelelingih*), which have an orientation towards *kaja* (sacred) and *kangin* (profane). The *Kaja* (primary path) direction as a qibla in the worship of gods is located in Tuluk Biyu Temple. The rule of *kangin* as a qibla towards Mount Abang as the origin (*kawitan*) of the Pengotan Village residents. In this context, worship of the deity in Tuluk Biyu Temple has provided welfare to Pengotan Village residents through a system of irrigation and rain for agriculture and worship of ancestors (*kawitan*) who once lived on the slopes of Mount Abang. (see Figure 4).

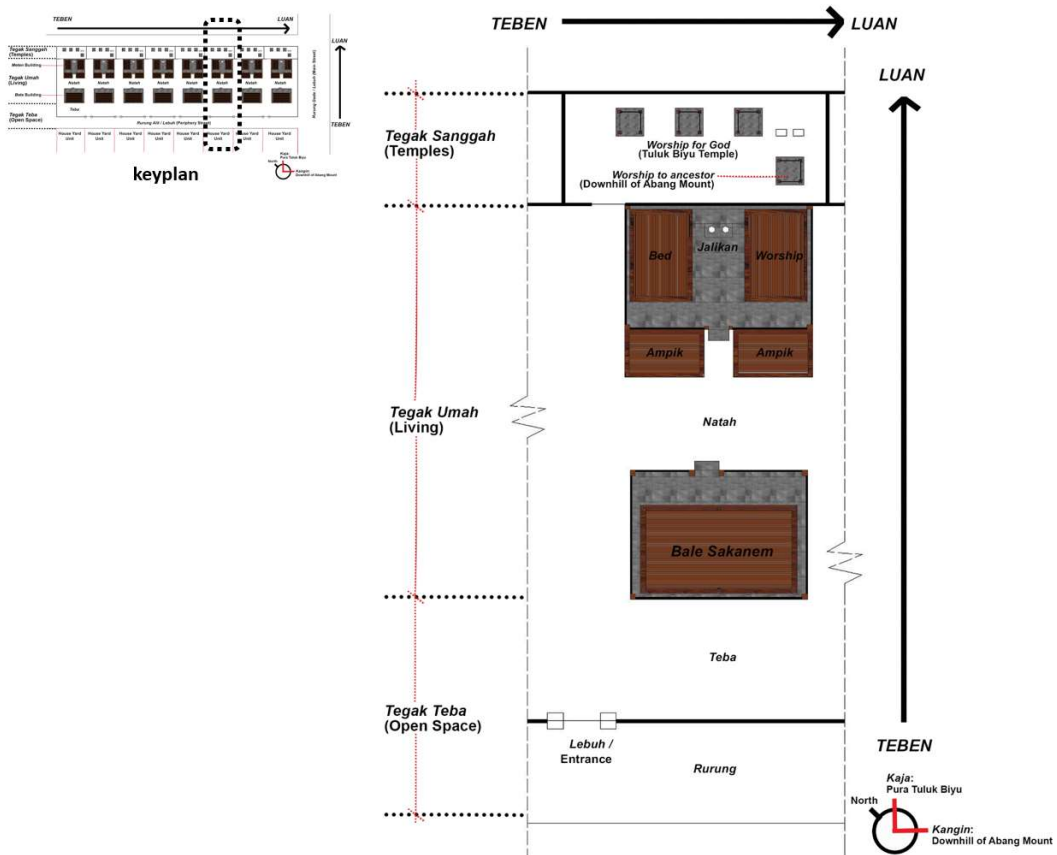


Figure 4. Luan and Teben Orientation System in Sanggah, Meten Building, and Bale Building

Tegak umah (home zone) consists of *meten* buildings (main building), *bale* buildings (building for traditional activities), and spaces between *natah* (empty spaces). The orientation of the *meten* building (main building) towards *Kaja* (*luan* / sacred/main direction) has two areas, namely the inner room and the terrace (*ampik*). The space in the *meten* building (main building) is divided into three zones, namely *dipan* (*bale/bed*) as a bed, *dipan* (*bale/bed*) as a ritual place, and the middle zone between the two *Bale* (foundation), which consists of a cooking stove (*penyalikan*) and a furniture cabinet. The orientation of the three spaces towards *Kaja* (*luan* / sacred), the sleeping position of the occupants of the house with heads towards *luan* (*Kaja* / religious), the orientation of worship rituals and offerings are oriented towards *Kaja* (*luan* / sacred), and the mouth position of the cooking stove (*penyalikan*) facing the *kelod* (profane) which means the part of the person cook oriented towards the *Kaja* (*luan* / sacred). The means that the interior layout orientation of the *meten* building (main building) is oriented towards *luan* (*kaja* / sacred), which is the direction of the place where Bhatara Shiva Giri Natha (God) lives, which can provide welfare in the form of protection and fertility in the area of Pengotan Village. *Ampik* (terrace) space is the front porch of the *meten* building (main building), which functions as a social space for family members. (see Figure 5).

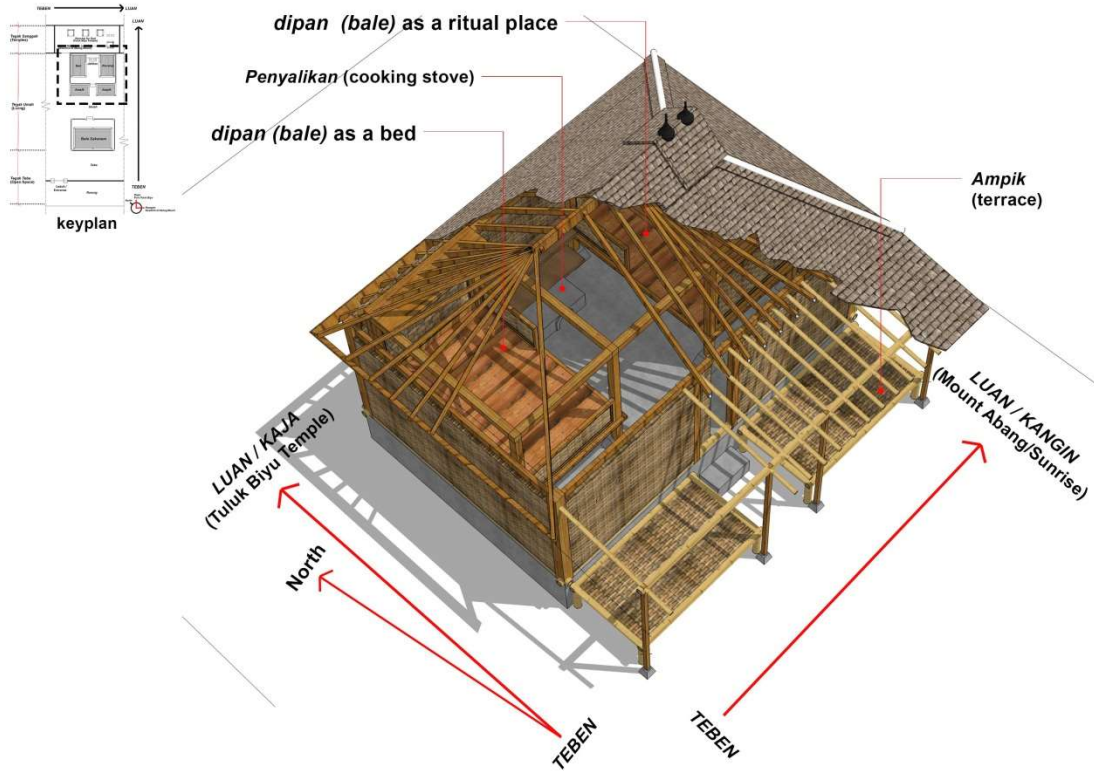


Figure 5. Luan and Teben Orientation of Meten Building

Bale building (building for traditional activities) is in the opposite direction of the *meten* building (main building), forming a diametric pattern. This *bale* building (building for regular activities) is often referred to as *Bale Adat*. This *Bale*'s orientation is towards *teben* (*kelod* / profane) with the *Kaja* side entrance. This *Bale* has 6 (six) poles, the direction of the length of the *Bale* in this building towards *Kangin* (sacred / Mount Abang) and *kauh* (profane). *Bale* buildings (buildings for traditional activities) are used for religious ritual activities, namely wedding ceremonies and death ceremonies. The orientation of the person carrying out the wedding ceremony in the direction of *kangin* (the direction of Mount Abang) and the head of the deceased person buried while in the room facing *kangin* (Mount Abang). Unlike the *meten* building (main building), the interior layout is oriented towards the gods' dwelling places. The traditional *Bale* was introduced towards *kangin* (Mount Abang), which the origin of Pengotan Village inhabitants on the slopes of Mount Abang. The concept of *kaja* (Tuluk Biyu Temple) and *kangin* (Mount Abang) has the same meaning, namely *luan* (sacred), but what distinguishes them is worship, one to God and the other to *kawitan* (the place of origin/ancestor) from the inhabitants of Pengotan Village. (see Figure 6).

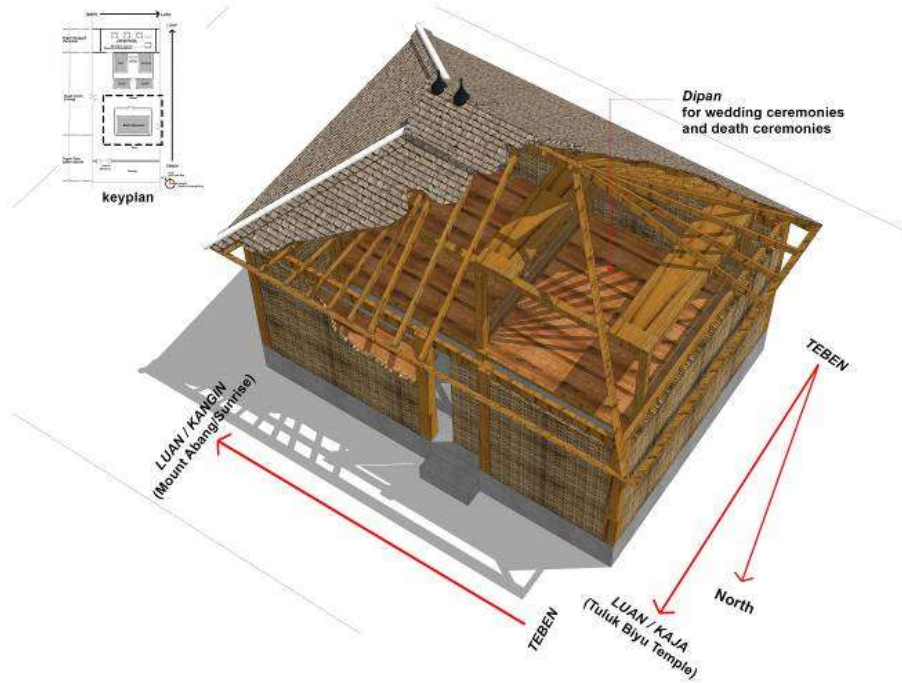


Figure 6. Luan and Teben Orientation of Bale Building

The space between the *meten* building (main building) and the *bale* building (building for traditional activities) in the residential unit layout in Pengotan Village is called *natah* (plaza/middle space). In the context of *luan* (sacred) and *teben* (profane), *natah* (plaza/middle space) has two orientations, namely vertical and horizontal. Vertical orientation is *luan* (holy) as upward direction (*purusa* / male element) and *teben* (*pertiwi* / ground that is stepped on). The meeting between the *Purusa* (male aspect) and *Perdana* (female part) creates a cosmic balance that is carried out through the *pecaruan* (ceremony for spirits) tradition in the room. *Natah* (plaza/middle space) is also a space for liberation, namely as a space for rituals of *pemelukatan* (eliminating harmful elements in the human body through ways) and cleaning up dirty (dangerous) aspects of the physical body. So it can be said that *natah* (middle space) is a liberation room and balance point. The orientation of the bodies bathed in the *natah* space (middle space) is in the direction of *kangin* (Mount Abang) as an orientation symbol to the Pengotan Village population, where deceased humans return to their origin. (see Figure 7).

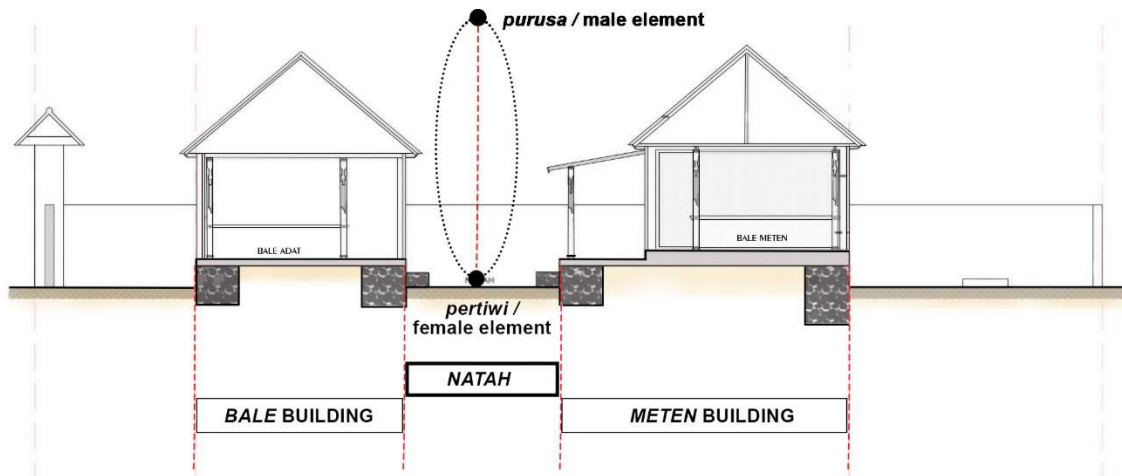


Figure 7. Natah : Space between Meten and Bale Building

3.5. The Influence of *Luan* (Sacred) and *Teben* (Profane) Orientation on Social and Spiritual Spatial System

The spatial hierarchy of traditional houses is divided into three levels, *tegak sanggah* (sanctuary zone), *tegak umah* (home zone), and *tegak teba* (flexible space / low-value space). *Tegak sanggah* (sanctuary zone) consists of elements of space and the form of worship to God; *tegak umah* (home zone) consists of *meten* buildings (main building), *bale* buildings (building for traditional activities) and plazas (*natah*), and the orientation space of both times of the building. *Tegak teba* (flexible space / low-value space) in the form of space is usually used as a space for planting and *lebuh* (road). The hierarchy of the area is influenced by the conception of *luan* (sacred) and *teben* (profane) that is, the direction of *luan* (sacred) intended for the function of ritual activities or religious activities (*tegak sanggah*) and the rule of *teben* (profane) intended for secular parts of circulation places in and out of the yard of the house (*tegak teba*). Towards *luan* (sacred) activities are more religious and towards *teben* activities are profane. The spatial system of rituals occurs in the direction of *luan* (holy), the *tegak sanggah* (sanctuary zone) of the denial marked by worship activities and routines to Ancestors and God. The sacred elements of worship are *pelinggih-pelinggih* (adoration building) arranged in a row in the direction of *luan* (sacred / *kaja* and *kangin*). According to Eliade, these sacred elements as the hierophany of holy space and its position are towards religious orientation [31] [20]. The entrance to this zone is in the place or direction of *teben* (opposition towards *luan*), meaning that *luan* (sacred) direction is the direction intended for ritual activities marked by the position of placement *pelinggih* (building worship) in the order of *luan* while the entrance as non-ritual access is in the *teben* zone.

Social activities of the community in Pengotan Village in the form of wedding activities and death activities involving Pengotan Village people as a form of mutual assistance in completing these activities. Usually, the action occurs in *natah* (plaza) and the *teba* (back room of the house). *Natah* (middle space) as a community gathering room in carrying out social activities (secular) [13] [25]. People invited to be in or housed in plazas or *natah* (middle space) in wedding or death activities, *lebuh* (the outermost part of the house) used to prepare ritual facilities whose activities are social or help each other. Profane and secular social activities occur in the upright and *tegak teba* (flexible space / low-value space) with the direction of position in *teben* (sinful). The description above can be explained in figure 8:

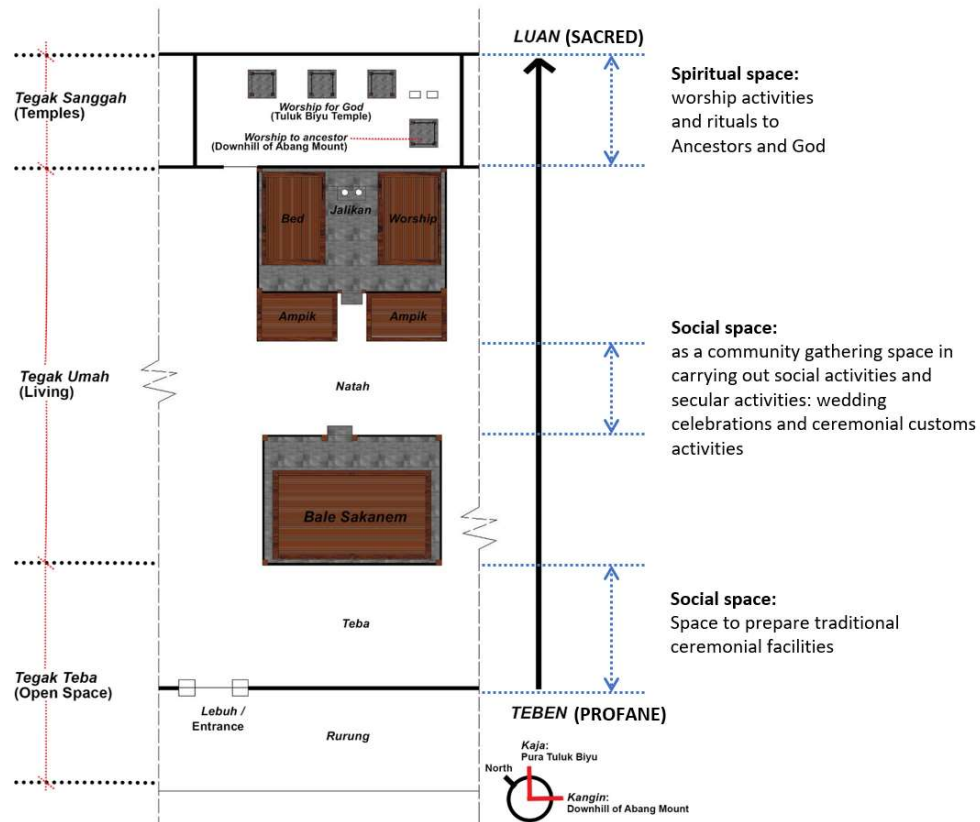


Figure 8. Spiritual and Social Spaces in House Unit

4. Conclusions

The orientation of *luan* (sacred) and *teben* (profane) in the settlements of Pengotan Village is the direction of *Kaja* (Tuluk Biyu Temple) and *Kangin* (Mount Abang). *Kaja* (Tuluk Biyu Temple) is the axis that connects humans with their creators (God), which is marked by the Tuluk Biyu Temple as the *luan* (sacred) orientation. *Kangin* (Mount Abang) is an orientation direction that connects humans to their ancestors or Pengotan Village inhabitants' origin, namely on the slopes of Mount Abang. *Kangin* (Mount Abang) orientation also leads to the beginning of life marked by the direction of the sun's rising. *Teben* (profane) is an opposite orientation from *luan* (sacred), which is in the order of *kelod* (secular) and *kauh* (material). The concept of *luan* (holy) and *teben* (profane) affects the layout of macro, mezzo, and micro settlements of Pengotan Village. The spatial system of space influenced by the concept of *luan* (sacred) and *teben* (profane) affects settlements' spatial layout and involves social activities and rituals. The method of social activities occupies the direction of *teben* (profane and secular), namely *natah* (middle space) and *teba* (multi-function room), while the system of ritual activities is towards *luan* (sacred) in the zone of *tegak sanggah* (holy place). This means that the influence of *luan* (religious) and *teben* (profane) conception orientation is local wisdom that regulates spatial architecture and social activities and rituals in harmony with the direction of view of Pengotan Village people. The concept of this direction is different from the idea of the cosmological order in Bali. In traditional Balinese architectural cosmology, *luan* (sacred) direction is oriented towards the location of Mount Agung (the highest mountain in Bali). At the foot of Mount Agung, there is the largest temple adored by Hindus in Bali. When dialogue with the concept of *luan* (sacred) and *teben* (profane) in Pengotan Village, has a difference in orientation direction with the idea of the cosmological order that applies in general in Bali. *Luluhur* / ancestors (concept becomes the primary reference in positioning *luan* / sacred) movement in the spatial layout of Pengotan Village. The philosophy that can be produced in this research is the primary orientation in Pengotan village people's life system, referring to the ancestors as the origin and end of the life of the people of Pengotan Village.

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Effect Local Direction on Balinese Traditional Settlement Layout, Case Study: Pengotan Traditional Village in Bali, Indonesia

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Abstract The pattern of Pengotan Village is extended from the *kaja* (sacred) to the *kelod* (profane), which consists of three zones, namely the *Utama* (zone of sacred) as the space intended for shrines (temple), *Madya* (transition/between space) as the space for residential housing units, and the *Nista* zone (zone of profane) intended for the graveyard (*setra*). This pattern is repeated in clusters of residential housing units. This study aims to spatial analysis of *luan* (sacred) and *teben* (profane) orientations in Indigenous Village Pengotan through an approach: (1) history of the Traditional Village Pengotan, (2) conception of the mountain as a sacred direction, (3) conception *luan* (holy) and *teben* (profane) on settlements in the mountainous area, (4) general concepts of religious and secular space and (5) conception of signifier and signified spaces in architecture. The method used is naturalistic interpretive in studying the area in a conceptual (intangible) and concrete (tangible) context through empirical studies on sensual (observation), native's viewpoint, logic viewpoint (researcher's perspective), and intangible aspects. The results of this study are (1) spatial patterns based on *luan* (sacred) and *teben* (profane) conception; (2) the signifier and signified system in the space of on *luan* (holy) and *teben* (profane) orientation and (3) the relationship between Mount Batur and Mount Abang as *luan* (sacred) orientation in the Pengotan Village.

Keywords *luan* (sacred) and *teben* (profane) Orientation, Tuluk Biyu Temple, Mount Abang, Signifier

and Signified System, Spatial Patterns

1. Introduction

The *luan* (sacred) concept in the spatial of sacred and profane orientation is called *Kaja* (north) and *Kangin* (east). *Kaja* is identified with the mountain's direction, and *Kangin* is the direction of the rising sun. In the Hindu-Balinese orientation, the hill is a symbol of the dwelling of God's and deceased ancestors [1] [2] [3] [4]. To honor the ancestors and the gods who are believed to provide safety and well-being, the layout of highland settlements is oriented towards the mountain (*Kaja* / high place). The profane concept describes the opposite of *Kaja* (the direction of a hill of sacred value), and *Kangin* (sunrise direction of holy value) is the direction of *Kelod* (movement of the sea of offensive matter), which is identified with a commonplace or land and *Kauh* (direction of the sunset of profane value) direction in the form of the sun sinking. The concept of *luan* (sacred) and *teben* (profane) in Bali's residential spatial planning is generally in mountainous settlements called Bali Aga settlements. Bali Aga is a term used to refer to ancient Balinese settlements with the afterward settlements; Bali Aga is in a mountainous or highland area [5] [6][7] [8].

The concept of *luan* (sacred) and *teben* (profane)

correlates with religious and secular; the orientation of *luan* is characterized by zoning the holy and unholy symbolized by zoning the *teben* area. Sacred space is generally used as worship spaces in connecting humans' spiritual nature with God through ritual symbols. Profane space correlates with zones for physical activity or does not connect with God [5] [9] [10] [11]. The layout of Pengotan Village has a linear pattern which is divided into three zones, namely the *Utama* (Sacred Place / Desa Temple, Puseh Temple, Bale Agung, and Prajapati Temple), the *Madya* zone (residential area), and the *Nista*/low zone (*Setra* / cemetery). The zoning is based on the orientation of *luan* (sacred) and *teben* (profane), which is also the direction of religious orientation (Tuluk Biyu Temple / *Kaja*) and *teben* as the direction of profane orientation (low place / *kelod*). Desa Temple, Puseh Temple, Bale Agung Temple, and Pajapati Temple are symbols of worship of God or the mountain's character as a residence place for the gods. In this context, Tuluk Biyu Temple is the spirit of Pengotan Village residents in a high area. The *luan* zone has a sacred meaning, so there are local rules for entering the temple area. The concept of a high land such as a mountain is a symbol of where the sky meets (*purusa* / male aspect) and earth (*predana* / female part). The meeting of heaven and earth creates a balance in the universe's prosperity [5] [12].

The concept orientation of *luan* (sacred) is also often illustrated in the "home garden" unit. The residential units of the Pengotan villagers line up in a linear pattern, with the village main road as the axis of the linear spatial structure. One cluster of residential units consists of several family leaders related to each other (family). One family unit consists of three zones, namely *tegak sanggah* (holy place), *tegak umah* (*meten*/below building and *bale* building), and *tegak teba* (empty land or multifunctional area). The *utama* (sacred) orientation of the yard of one family unit is towards *luan* (*kaja* / Tuluk Biyu Temple), and the *nista* orientation (profane) is towards *teben* (house yard). The *home garden unit's luan orientation marking system* is sacred and worship orientation towards *kaja* (Tuluk Biyu Temple). Another marker is the occupant's sleeping position orientation with his head towards the *kaja* (Tuluk Biyu Temple). The *teben* (sacred) orientation is the opposite direction in the form of *teba* (profane) and *lebuh* (profane). *Lebuh* (profane) is the lowest direction in the concept of *luan* (sacred) and *teben* (profane). This direction is used as a ritual activity for the cosmic realm in *bhuta* (the universe's physical element). In addition to this, space is used as a ritual for the cosmic realm is *natah* (plaza). *Natah* (plaza) is the orientation of building masses (*meten* buildings / main building and *bale* buildings periphery) and is used for religious ritual activities and social activities. As a ritual space for the cosmic realm, *natah* (plaza) has a meaning as a space of balance between the *sekala* (tangible) and the *Niskala* (intangible). *Sekala* (tangible) in the context of *luan* (sacred) orientation and

teben (profane) is (earth / *predana* / female symbol) as a physical and *Niskala* (intangible) is the soul as the *luan* (sacred) orientation (sky / *purusa* / male symbol) [13] [14].

The concept of *luan* (sacred) in the spatial layout of Pengotan Village housing is not only towards *Kaja* (Tuluk Biyu Temple) but also the *Kangin* (Mount Abang). The direction of *Kangin* (Mount Abang) is marked by the orientation position of *pelinggih* (worship element) for the ancestors of the Pengotan Village inhabitants, which is on the slopes of Mount Abang (*Kangin*). Before immigrating to another place, residents of Pengotan Village settled on the slopes of Mount Abang. Therefore, in the form of respect for the origin of the area of birth, it is manifested in the form of a cult that faces *Kangin* (*luan*). The same direction also occurs in the head of the corpse towards *Kangin* (Mount Abang) as a form of a life cycle returning to the origin of the place of birth. This concept is following the statement that the sun rises oriented towards the east (*Kangin*) so that it has a high value or sacred and is used as a *parhayangan* area (family sanctuary) [15] [16].

The purpose of this study is a study of *luan* (sacred) and *teben* (profane) orientation spatial planning through an analysis of behavior systems and zoning systems, a network of signifier and signified of elements in the direction of *luan* (sacred) and *teben* (profane), and a study of the history of the origin of the inhabitants of Pengotan Village. The course uses qualitative interpretive naturalistic methods by analyzing sensual (natural observation), emic (native's viewpoint), ethical, logical, and intangible aspects. The results of this study are: (1) spatial patterns based on *luan* (sacred) and *teben* (profane) conception; (2) a signifier and signified system in the direction of *luan* (religious) and *teben* (earthly) and (3) the relationship between the Tuluk Biyu Temple and Gunung Abang as a *luan* (sacred) orientation in the Pengotan Traditional Village.

2. Materials and Methods

This research is located in the Pengotan Traditional Village as one of the mountain villages in the Bangli area. The uniqueness of the village is to have a core zone (traditional housing) and periphery zone (garden house), as well as a linear village pattern with the concept of orientation that is still ancient, namely *luan* (sacred) and *teben* (profane). The method used in reviewing the concept of *luan* (holy) and *teben* (profane) orientation is interpretive naturalistic. In interpreting the orientation concept of *luan* (sacred) and *teben* (profane) in Pengotan Village, researchers used a method of data analysis with sensual empirical (natural observation), practical logic, empirical emic (native's viewpoint), empirical ethics, and transcendental [17]. The study focuses on behavioral

systems and space zoning and marking schemes, direction signifier spaces at the luan position (sacred), and *teben* (profane). The research instrument used was a variable researcher in the form of a signifier. It signified *luan* (religious) and *teben* (secular).

In contrast, the independent variables were the community's values and behavior in using space, the history of Pengotan Village formation, and the relationship between Pengotan Village residents and their natural environment. In producing transcendental findings in natural settings, data collection is focused on unstructured interviews with traditional village leaders and local communities by not intervening in the information obtained—a sensual empirical study through observation of empirical data using photo and sketch media in a research logbook. The information obtained was analyzed through a dialogue approach to findings with highland area architectural designation concepts to explain the results and conduct an induction or synthesis process to produce transcendental.

3. Research Result

3.1. Description of Traditional Pengotan

Pengotan Village is one of Bali's old villages characterized by the craftsmanship order (saints occupy governance) called *peduluan*. Unlike the village government system, it consists of the village head, secretary, treasurer, and staff assistants. Pengotan village is a new village formation in ancient times, originated from Karangasem Regency, on the Abang Mountain and Tuluk Biyu Temple. Therefore, *kawitan* (the place of origin/ancestor) of the Pengotan Indigenous Village community originated from a village on the slopes of Mount Abang, precisely located in the east (*Kangin*) the Village of Indigenous Pengotan now. The history of the Pengotan starts from the *Gegebug* Expedition (control of the territory) of Panji Sakti King in Singaraja. Information

that spread was that King Panji Sakti would pass the slopes of Mount Abang. Village Elders held deliberations on this matter, and it was decided to move to the south to find a safe place from the attack of King Panji Sakti. Finally, in the southern part of the Bangli region, and was well received by the ruling king of Bangli because the community had well-honed artistic creativity while living in the forest on the slopes of Mount Abang. The community's first work in Bangli was Dalem Purwa Temple as the forerunner of the ancestors of Pengotan Village. The next development is Desa Temple, Puseh Temple, and Dalem Temple as manifestations of the *Tri Murti* concept (the concept of Hinduism's three main deities). Then there was social friction between immigrant villages and local villages. Bangli authorities liked immigrants because of their creativity, so immigrant communities were saved by moving them to a safe place (now called Pengotan Village). The movement of the city brings its inscriptions and culture in adaptation to the surrounding environment. When determining the starting point of Pengotan Village, which was initially a wilderness, *lateng* plants were found (the Latin term called *Dendrocnide macrolides*) which had been eaten by tree caterpillars (called *subatah*) and dirt from eating plants such as oot (bran) then the area this is called Pengotan.

Pengotan Village has a macro zoning system divided into two: main village (*adat*) and periphery village (secular). Its culture and customs still maintain this village to date. The main village has a linear pattern with clusters with a linear configuration and is inhabited by elders of each family who have been ritually purified. People who work as farmers prefer to live in a "garden house" and return to the main house if there are traditional ceremonies. The people who live on agricultural land are divided into 8 (eight) *banjar* (the smallest unit of the ancestral village) around the core village, namely Banjar Tiyang Desa, Banjar Delod Desa, Banjar Dajan Desa, Banjar Yoh, Banjar Besenga, Banjar Penyebbeh, Banjar Padpadan, and Banjar Sunting. (see Figure 1).

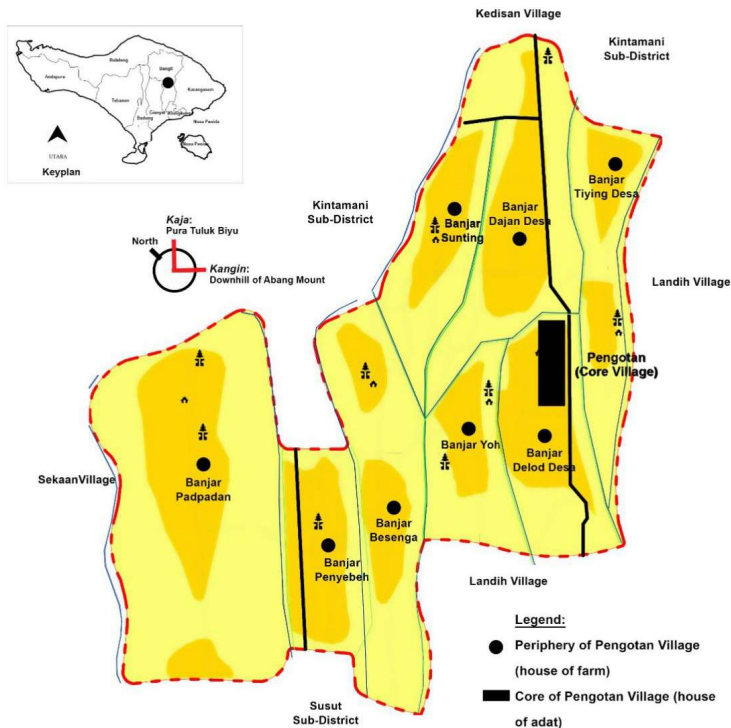


Figure 1. Core village (*adat*) and periphery village (secular) of Pengotan Village

3.2. Luan (Sacred) and Teben (Profane) Orientation System at the Village Unit

The spatial pattern of Pengotan Village is divided into three, namely *Utama* (sacred zone), *Madya* (housing / secular area), and *Nista* (cemetery/offensive zone). Determination of the main orientation direction is determined based on principle (the residence of the gods/ancestors) and the direction of *teben* (low place direction/opposition from *luan* direction). The village's orientation in Pengotan is identified as the direction of *kaja* (the order of Tuluk Biyu Temple) as a sacred direction. The concept of *luan* (holy) and *teben* (profane) in the linear pattern in Pengotan Village is seen in the configuration of building masses that function as religious rituals, housing functions, and agricultural functions, and public spaces. The signified system and directions from the *luan* (sacred) and *teben* (profane) orientation in Pengotan Village are explained as follows:

The *luan* (heavenly) is marked by the configuration of the holy places' cluster buildings, namely Bale Agung Temple, Puseh Temple, Desa Temple, and Prajapati Temple. (see Figure 2). The temples are a symbol of God's worship in a higher order of functions except for

Prajapati. Unlike other villages in Bali, the position of the Prajapati Temple is a symbol of death, which is generally placed in the cemetery zone (*setra*) in *teben* (profane) village, in the Pengotan Village, the holy place is in the *luan* (sacred) zone. The Prajapati Temple in Pengotan Village is located in the other villages, precisely in the village of Desa Temple and Puseh Temple. This means that (1) Pengotan Village is an ancient village that immigrated to the Bangli area which did not recognize the concept of burning dead bodies and ceremonies in raising the deceased's status to a higher place. People who have died without carrying out the process of the death ceremony are still seen as dead ancestors and are at the upper level, and (2) the layout of Pengotan Village shows that the position of the Prajapati Temple is in the middle of the cemetery zone even though it is not in one area. The masses of buildings in the *luan* zone have an orientation towards *Kaja* (main direction) where the gods and ancestors have died. The *Kaja* exposure is the Tuluk Biyu Temple, which is in the east of Mount Batur. The concept of *luan* (sacred) is related to the idea of ancestors-related [18]. The ancestors are the gods who have given welfare to the community in the form of the existence of forests

and the supply of water resources used by Pengotan Village people. Other zones are intended for worship facilities (temples), which have sacred values in the layout of Pengotan Village compared to different zones. Following Eliade's statement, the holy space in Pengotan Village states that the sacred space, also called "temple" is a space to get a chaotic orientation of profane world homogeneity, find the world and feel the real nature [19] [20].

The *teben* (profane) spatial is an opposition from the *luan* (sacred) space. In the village Pengotan, the signifier of the *teben* (secular) area is a space intended for *pitra yadnya* ceremonies (ceremonies intended for deceased humans) and *bhuta yadnya* (rituals designed for the cosmic realm). The people of Pengotan Village who have died will be buried and burned in *Setra* (cemetery), which is in the direction of *teben* (offensive zone) in the pattern of Pengotan Village, precisely the lower end (*kauh* / profane) of the main village. (see Figure 2). Pengotan village has a burial site (*setra*) which is divided into four parts, namely (1) *kaja* (main direction / Tuluk Biyu Temple) zone intended for burial for deceased saints, (2) *kangin* (Abang Mount) zone for the funeral of female bodies, (3) *kelod* (*kangin* opposition) zone for the burial of male bodies and (4) zones for the tomb of the bodies of children. In the zoning arrangement for a corpse funeral, the *luan* concept is considered a funeral for a saint. The saints in Pengotan Village are elders who have been ordained in religious customs and are deemed to have a higher position than the community. In the ceremony at Bale Agung Temple, there is a building in the form of an elongated shape called Bale Agung. The building is intended for saints in Pengotan Village. The main village's end zone is precisely in the other part of the blind area; there is a road cross formed by the vertical (primary) and horizontal axis. At the point of the room is a place for performing *bhuta yadnya* (ceremonies intended for the cosmic realm) ceremonies at the expense of (slaughtering) a cow. This *pitra yadnya* ceremony aims at rituals intended for *Bhuta Kala* (cosmic realm) to create a natural balance. Anythings of ritual activities carried out by Hindus in Bali to glorify and maintain cosmic balance are based on the emergence of human consciousness centered on nature (cosmos) [21] [22] [16]. This zone is also intended for *nebusin* ritual activities or ritual ceremonies to take back the surviving human spirits held by local people in the trust of the *bhuta* (spirits). (see Figure 2). So it can be concluded that the *teben* (profane) space is a space for secular activities such as the burial of bodies, rituals related to the cosmic realm.

The *madya* space (middle) in the Pengotan Village is marked by a zone of the locals' home garden units. The residential yard units are lined up and have a linear pattern, with the village's main road as its central axis. Each yard unit is connected to the village main road by road to each yard unit. The orientation of these yard units towards *luan*

(Tuluk Biyu Temple) is marked by a holy place (objection) for each family and the direction of the *teben* (profane) in the form of an entrance to the yard unit. That means that the concept of *luan* (sacred) and *teben* (profane) in village units has the same residential units pattern. The activities carried out in this zone tend to be related to humans and society. As a place to live and establish local people's social life and ritual activities related to humans (*manusa yadnya*). (see Figure 2). Looking at the relationship between the concept of *luan* (sacred) and *teben* (profane) in the settlement unit of Pengotan Village, that *luan* (religious) is identified with something sacred (soul) and *teben* is profane (body).

Pengotan Village residents guard the two poles through ritual activities and attitudes towards space in various daily activities. The Hindu-Balinese community believes that harmonizing the two areas affects the continuity of the lives of the people who occupy residential space/middle space / *madya* space (*pawongan*/ zones for residential homes). The statement of two opposing poles that complement each other, namely in Kusdiwanggo's research on *Sakuren*, complementary relations are not mutually dominating or controlling. In other terms, there is no dialectic and tension; there is harmony [23] [24].

In the context of *luan* (sacred) and *teben* (profane) dichotomy, both poles or orientations must be maintained in creating a point of balance, namely the space between or transitions of the opposite poles. Then the term triadic is known in spatial planning in Bali; they are *utama* (*luan* / sacred), *madya* (middle), and *nista* (*teben* / profane). The middle space (*madya*) is a balance point between the *utama* (sacred) space and the *nista* (profane) space called *natah* (plaza/space). The yard's core space is used as a ritual space to balance the *Sakala* space and *Niskala* called *Natah* [13] [25] [26] [27]. *Natah* or midpoint is a space in Pengotan Village in *pempatan agung* or area in the village center. *Pempatan Agung* is used as a space to hold the *Pecaruan Agung* (ceremony for spirit) ritual ceremony to balance the macrocosm and the microcosm. The *madya* space is a balance between the *luan* (sacred) and *teben* (profane) pole.

The orientation systems of *luan* (sacred) and *teben* (profane) are also illustrated in the concept of houses in Pengotan Village, namely "traditional houses" and "garden houses." Pengotan Village, divided into 8 (eight) traditional *banjar* (the smallest unit of the village) is a zone intended for secular activities, namely farming or gardening activities. The livelihood of the residents of Pengotan Village is mainly to cultivate agricultural land, so they must establish lodgings that develop into "garden houses." Whereas in traditional houses is a space for religious ritual and regular ritual activities. Daily activities take place in the "garden house" while those who manage traditional houses are elders who have been traditionally appointed to live in conventional homes. In conjunction with the *luan* (sacred) and *teben* (profane) orientation

system, the traditional house is a usually arranged space and is intended for religious and ritual activities. In contrast, the "garden house" is used for secular activities (livelihood space). Therefore, the concept of local wisdom regarding initial spatial planning in Pengotan Village has

been maintained through *luan* (conceptual/sacred) conception as space and orientation that needs to be preserved as the core of the room or area Pengotan Village.



Figure 2. *Luan, Madya, Teben* Zones of Pengotan Village

3.3. Luan (Sacred) and Teben (Profane) Orientation System in the House Yard Units

The home garden unit's layout is a configuration of cluster housing yards lined up in a linear pattern and bound by a central axis called *Rurung Desa* (the village's main road). One home garden unit consists of 8 to 10 family heads who have blood relations. Home units in the yard unit with blood relations can be seen from the marker in the form of a sacred place (*sanggah* / temple to ancestors), which protects several housing units and has one entrance to the *sanggah* area and the yard of the house. One branch of the home garden is divided into three zones; they are *tegak sanggah* zone (sanctuary zone), *tegak umah* zone (home zone), and *tegak teba* zone (flexible space / low-value space). The outermost part of the *tegak teba* (flexible space / low-value space) is *lebuh* (the outer part of the house) or *rurung* (road). *Tegak sanggah* (sanctuary zone) is *luan* (sacred) of the house yard, *tegak umah* (home zone) as the middle zone (middle) and *tegak teba* (flexible space / low-value space) and *lebuh* (the outermost part of the house) as the *teben* (profane) zone of the home garden unit. According to Wijaya stated that the transformation of space starts from *luan* (*sanggah*) then the home garden unit, and if there is an increase in building mass, the zone used is the red zone. The addition is like a bathroom. Thus, the movement of the site starts from *luan* (sacred) then moves downstream (*teban*) [28].

The addition of a new family head affects a housing

unit's expansion to stay away from the axis of the village's main road to the limit determined by the village. The addition of houses does not affect the proliferation of *sanggah* (holy place) if the new family head has a family relationship with the family who has settled in that place. As the village's central axis, the main road has the initial space connects the *luan* and *teben* areas. Some axes bind two building masses in the house yard unit, namely *meten* buildings (main building) and *bale* buildings (building for traditional activities). The middle space or *natah* (plaza) is an outer space that is used as a ritual space for the cosmic nature (*bhuta*), the space for bathing the body before being sent to the cemetery (*setra*), and the social space of the community (gathering), when there is a formal event in the house. *Natah* is a space, and the intermediate area is a symbol of balance between *luan* (sacred) and *teben* (profane). The balance concept meets the two elements giving birth to the motion of life, purifying the universe from harmful components that threaten humanity's energy and experience in the universe (balance) [29] [30].

As a space for balance, *natah* (plaza) in Pengotan Village functions as a space for performing the *pecaruan* ceremony (cosmic natural ritual), bathing the corpse, which means freeing and cleansing worldly elements that are still attached to the body of the deceased person which is done at a neutral point (empty / *natah*) and social space (community gathering place). The *luan* (sacred) and *teben* (profane) orientation system in the house yard unit is shown in Figure 3.

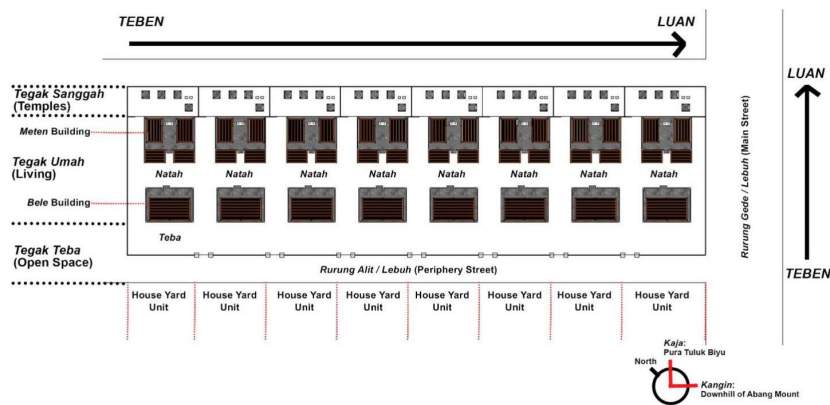


Figure 3. Luan and Teben Orientation System in the House Yard Units

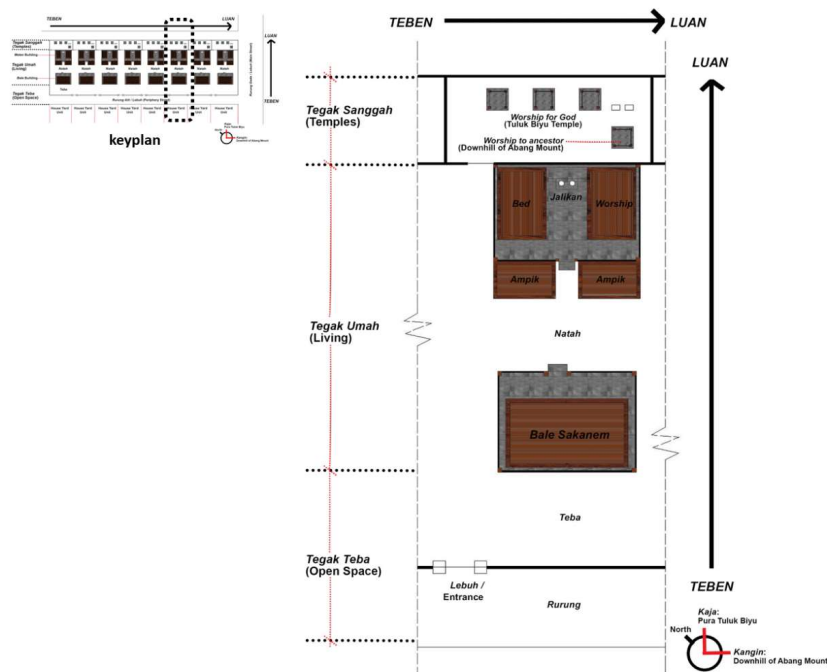


Figure 4. Luan and Teben Orientation System in Sanggah, Meten Building, and Bale Building

3.4. Luan (Sacred) and Teben (Profane) Orientation System in Sanggah (Temple to Ancestors), Meten Building (Main Building), and Bale Building (Building for Tradition Activities)

The pattern of garden unit management in one family consists of three zones, namely *tegak sanggah* (luan/sanctuary zone), *tegak umah* (*madya* / home zone), and *tegak teba* (*teben* / flexible space / low-value space). *Tegak sanggah* (sanctuary zone) consists of worship buildings (*pelinggih*), which have an orientation towards *kaja* (sacred) and *kangin* (profane). The *Kaja* (primary path) direction as a qibla in the worship of gods is located in Tuluk Biyu Temple. The rule of *kangin* as a qibla towards Mount Abang as the origin (*kawitan*) of the Pengotan Village residents. In this context, worship of the deity in Tuluk Biyu Temple has provided welfare to Pengotan Village residents through a system of irrigation and rain for agriculture and worship of ancestors (*kawitan*) who once lived on the slopes of Mount Abang. (see Figure 4).

Tegak umah (home zone) consists of *meten* buildings (main building), *bale* buildings (building for traditional activities), and spaces between *natah* (empty spaces). The

orientation of the *meten* building (main building) towards *Kaja* (luan / sacred/main direction) has two areas, namely the inner room and the terrace (*ampik*). The space in the *meten* building (main building) is divided into three zones, namely *dipan* (*bale/bed*) as a bed, *dipan* (*bale/bed*) as a ritual place, and the middle zone between the two *Bale* (foundation), which consists of a cooking stove (*penyalikan*) and a furniture cabinet. The orientation of the three spaces towards *Kaja* (luan / sacred), the sleeping position of the occupants of the house with heads towards *luan* (*Kaja* / religious), the orientation of worship rituals and offerings are oriented towards *Kaja* (luan / sacred), and the mouth position of the cooking stove (*penyalikan*) facing the *kelod* (profane) which means the part of the person cook oriented towards the *Kaja* (luan / sacred). This means that the interior layout orientation of the *meten* building (main building) is oriented towards *luan* (*kaja* / sacred), which is the direction of the place where Bhatara Shiva Giri Natha (God) lives, which can provide welfare in the form of protection and fertility in the area of Pengotan Village. *Ampik* (terrace) space is the front porch of the *meten* building (main building), which functions as a social space for family members. (see Figure 5).

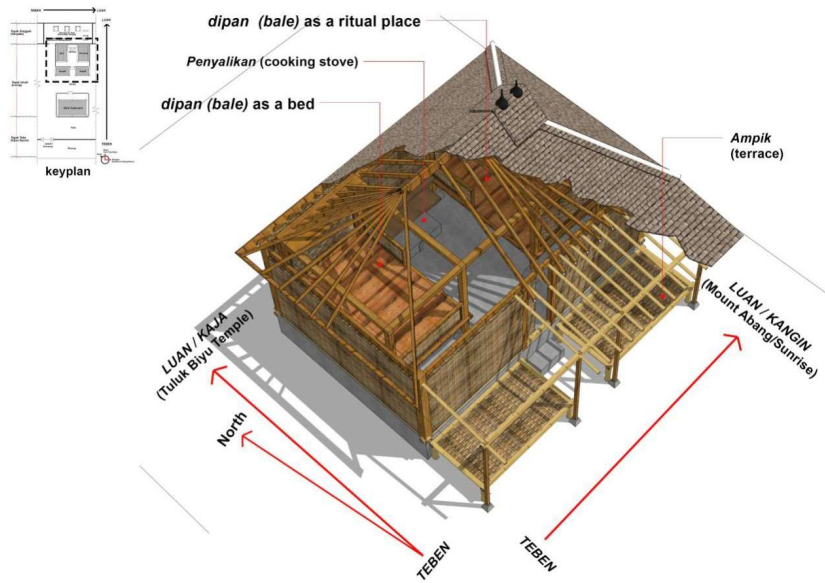


Figure 5. Luan and Teben Orientation of Meten Building

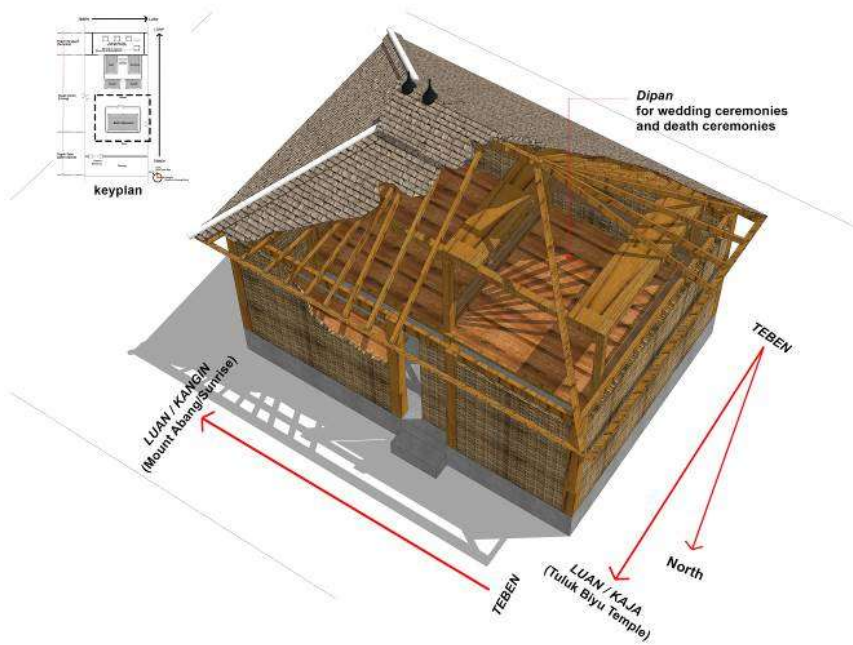


Figure 6. Luan and Teben Orientation of Bale Building

Bale building (building for traditional activities) is in the opposite direction of the *meten* building (main building), forming a diametric pattern. This *bale* building (building for regular activities) is often referred to as *Bale Adat*. This *Bale*'s orientation is towards *teben* (*kelod* / profane) with the *Kaja* side entrance. This *Bale* has 6 (six) poles, the direction of the length of the *Bale* in this building towards *Kangin* (sacred / Mount Abang) and *kauh* (profane). *Bale* buildings (buildings for traditional activities) are used for religious ritual activities, namely wedding ceremonies and death ceremonies. The orientation of the person carrying out the wedding ceremony in the direction of *kangin* (the direction of Mount Abang) and the head of the deceased person buried while in the room facing *kangin* (Mount Abang). Unlike the *meten* building (main building), the interior layout is oriented towards the gods' dwelling places. The traditional *Bale* was introduced on the slopes of Mount Abang towards *Kangin* (Mount Abang), which was the origin of the inhabitants of Pengotan Village. The concept of *kaja* (Tuluk Biyu Temple) and *kangin* (Mount Abang) has the same meaning, namely *luan* (sacred), but what distinguishes them is worship, one to God and the other to *kawitan* (the place of origin/ancestor) from the inhabitants

of Pengotan Village. (see Figure 6).

The space between the *meten* building (main building) and the *bale* building (building for traditional activities) in the residential unit layout in Pengotan Village is called *natah* (plaza/middle space). In the context of *luan* (sacred) and *teben* (profane), *natah* (plaza/middle space) has two orientations, namely vertical and horizontal. Vertical orientation is *luan* (holy) as upward direction (*purusa* / male element) and *teben* (*pertiwi* / ground that is stepped on). The meeting between the *Purusa* (male aspect) and *Perdana* (female part) creates a cosmic balance that is carried out through the *pecaruan* (ceremony for spirits) tradition in the room. *Natah* (plaza/middle space) is also a space for liberation, namely as a space for rituals of *pemelukatan* (eliminating harmful elements in the human body through ways) and cleaning up dirty (dangerous) aspects of the physical body. So it can be said that *natah* (middle space) is a liberation room and balance point. The orientation of the bodies bathed in the *natah* space (middle space) is in the direction of *kangin* (Mount Abang) as an orientation symbol to the Pengotan Village population, where deceased humans return to their origin. (see Figure 7).

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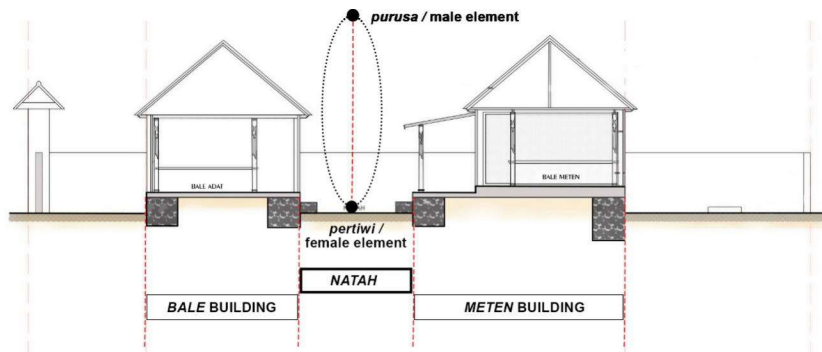


Figure 7. *Natah* : Space between *Meten* and *Bale* Building

3.5. The Influence of *Luan* (Sacred) and *Teben* (Profane) Orientation on Social and Spiritual Spatial System

The spatial hierarchy of traditional houses is divided into three levels, *tegak sanggah* (sanctuary zone), *tegak umah* (home zone), and *tegak teba* (flexible space / low-value space). *Tegak sanggah* (sanctuary zone) consists of elements of space and the form of worship to God; *tegak umah* (home zone) consists of *meten* buildings (main building), *bale* buildings (building for traditional activities) and plazas (*natah*), and the orientation space of both times of the building. *Tegak teba* (flexible space / low-value space) in the form of space is usually used as a space for planting and *lebuh* (road). The hierarchy of the area is influenced by the conception of *luan* (sacred) and *teben* (profane) that is, the direction of *luan* (sacred) intended for the function of ritual activities or religious activities (*tegak sanggah*) and the rule of *teben* (profane) intended for secular parts of circulation places in and out of the yard of the house (*tegak teba*). Towards *luan* (sacred) activities are more religious and towards *teben* activities are profane. The spatial system of rituals occurs in the direction of *luan* (holy), the *tegak sanggah* (sanctuary zone) of the denial marked by worship activities and routines to Ancestors and God. The sacred elements of worship are *pelinggih-pelinggih* (adoration

building) arranged in a row in the direction of *luan* (sacred / *kaja* and *kangin*). According to Eliade, these sacred elements as the hierophany of holy space and its position are towards religious orientation [31] [20]. The entrance to this zone is in the place or direction of *teben* (opposition towards *luan*), meaning that *luan* (sacred) direction is the direction intended for ritual activities marked by the position of placement *pelinggih* (building worship) in the order of *luan* while the entrance as non-ritual access is in the *teben* zone.

Social activities of the community in Pengotan Village in the form of wedding activities and death activities involving Pengotan Village people as a form of mutual assistance in completing these activities. Usually, the action occurs in *natah* (plaza) and the *teba* (back room of the house). *Natah* (middle space) as a community gathering room in carrying out social activities (secular) [13] [25]. People invited to be in or housed in plazas or *natah* (middle space) in wedding or death activities, *lebuh* (the outermost part of the house) used to prepare ritual facilities whose activities are social or help each other. Profane and secular social activities occur in the upright and *tegak teba* (flexible space / low-value space) with the direction of position in *teben* (sinful). The description above can be explained in figure 8:

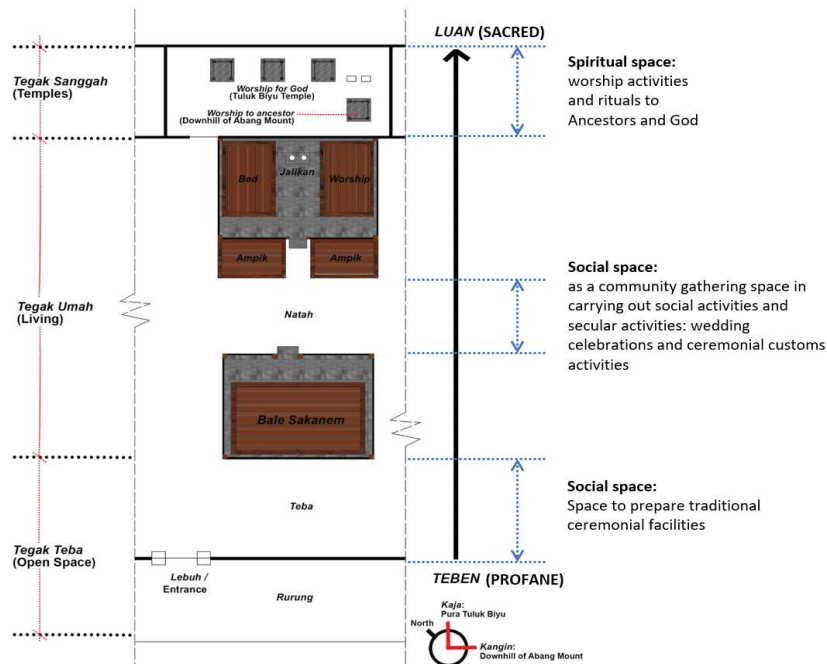


Figure 8. Spiritual and Social Spaces in House Unit

4. Conclusions

The orientation of *luan* (sacred) and *teben* (profane) in the settlements of Pengotan Village is the direction of *Kaja* (Tuluk Biyu Temple) and *Kangin* (Mount Abang). *Kaja* (Tuluk Biyu Temple) is the axis that connects humans with their creators (God), which is marked by the Tuluk Biyu Temple as the *luan* (sacred) orientation. *Kangin* (Mount Abang) is an orientation direction that connects humans to their ancestors or Pengotan Village inhabitants' origin, namely on the slopes of Mount Abang. *Kangin* (Mount Abang) orientation also leads to the beginning of life marked by the direction of the sun's rising. *Teben* (profane) is an opposite orientation from *luan* (sacred), which is in the order of *kelod* (secular) and *kauh* (material). The concept of *luan* (holy) and *teben* (profane) affects the layout of macro, mezzo, and micro settlements of Pengotan Village. The spatial system of space influenced by the concept of *luan* (sacred) and *teben* (profane) affects settlements' spatial layout and involves social activities and rituals. The method of social activities occupies the direction of *teben* (profane and secular), namely *natah* (middle space) and *teba* (multi-function room), while the system of ritual activities is towards *luan* (sacred) in the zone of *tegak sanggah* (holy place). The means that the influence of *luan* (religious) and *teben* (profane) conception orientation is local wisdom that regulates spatial architecture and social activities and rituals in harmony with the direction of view of Pengotan Village people. The concept of this direction is different from the idea of the cosmological order in Bali. In traditional Balinese architectural cosmology, *luan* (sacred) direction is oriented towards the location of Mount Agung (the highest mountain in Bali). At the foot of Mount Agung, there is the largest temple adored by Hindus in Bali. When dialogue with the concept of *luan* (sacred) and *teben* (profane) in Pengotan Village, has a difference in orientation direction with the idea of the cosmological order that applies in general in Bali. *Luluhur* / ancestors (concept becomes the primary reference in positioning *luan* / sacred) movement in the spatial layout of Pengotan Village. The philosophy that can be produced in this research is the primary orientation in Pengotan village people's life system, referring to the ancestors as the origin and end of the life of the people of Pengotan Village.

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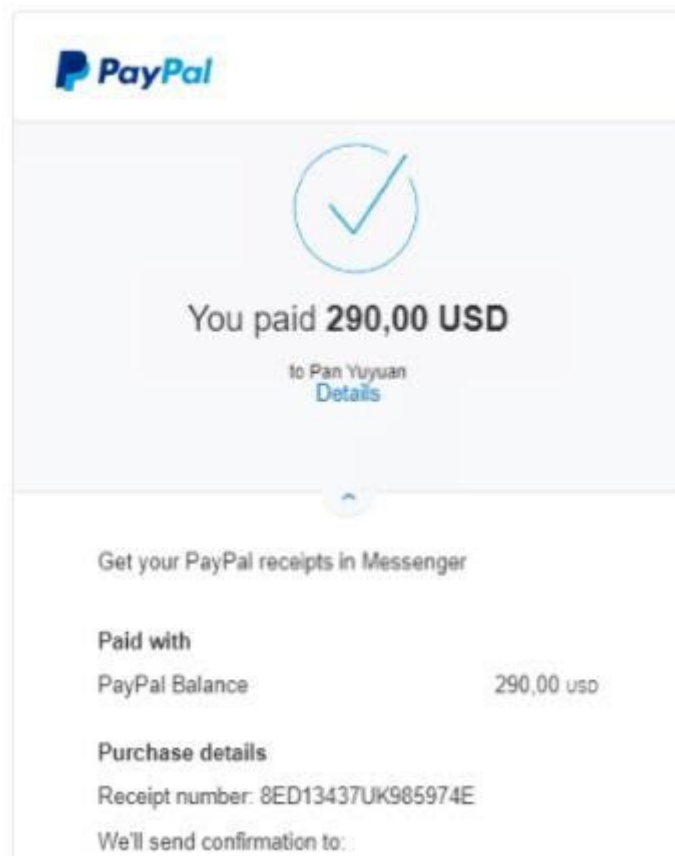


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