Nurjani, Ni Putu Suda, Paturusi, Syamsul Alam, Dwijendra, Ngakan Ketut Acwin, and Putra, I Dewa Gede Agung Diasana. (2019), Morphology of Backpacker Dormitory Inside Traditional Balinese House, Canggu Village, Bali, Indonesia. In: Journal of Social and Political Sciences, Vol.2, No.3, 489-496.

ISSN 2615-3718

DOI: 10.31014/aior.1991.02.03.89

The online version of this article can be found at: https://www.asianinstituteofresearch.org/
Morphology of Backpacker Dormitory Inside Traditional Balinese House, Canggu Village, Bali, Indonesia

Ni Putu Suda Nurjani1, Syamsul Alam Patursi2, Ngakan Ketut Acwin Dwijendra3, I Dewa Gede Agung Diasana Putra4

1 Student of Doctoral Program Engineering Science Udayana University, Lecture of Engineering Department Mahendradatta University. Email: suda.nurjani@gmail.com
2 Lecture of Doctoral Program Engineering Science Udayana University. Email: syamsul@unud.ac.id
3 Lecture of Doctoral Program Engineering Science Udayana University. Email: acwin@unud.ac.id
4 Lecture of Doctoral Program Engineering Science Udayana University. Email: diasanaputra@unud.ac.id

Correspondence: Ni Putu Suda Nurjani. Student of Doctoral Program Engineering Science Udayana University, Bali, 80234, Indonesia. Hp: +62 85935384909, E-mail: suda.nurjani@gmail.com

Abstract
Traditional Balinese houses have identical values and rituals that are very strong. Bali has a height limit for vertical development. All of building unit height is prohibited more than 15 m. This regulation is the main obstacle to vertical development building in Bali. The increasing visit of backpacker without accompanied expansion of land, encourages people to look for several alternatives in developing accommodation owned. The existence of dormitory is considered to best represent the needs of backpacker travelers who have a low budget. However, the sleeping position of the Balinese who requires head placement in the east or north. Will be very difficult when having to put more than two beds in a room. This research includes explorative qualitative research, where the data collection technique uses a combination of several methods including observation of dormitory in Canggu. Depth interviews with tourist accommodation owners and tourists who occupy also very important to know the change of space. The existing physical dormitory settings are compared with tourist perceptions, so can describe findings of this study with sketch. The chosen design pattern is returned to the accommodation owner to see the value of the space that must be maintained. The results of this study indicate that "Monkey House" is a term used to refer to the form of dormitory. Placement of the bed with a head position must be directed to Luan (east or north orientation). The construction of dormitory in bale dangin (bale adat) is strictly prohibited regarding the ritual function which is accommodated by bale dangin.

Keywords: Morphology, Dorm, Balinese Architecture, Tourism Area

Background

The implementation of Tri Hita Karana in traditional Balinese house has been widely discussed in the research of architectural experts. Sulistyawati (1996: 5) describes that traditional Balinese houses are composed of various philosophies such as babies in the womb (manik ring cucupu), Catur Purusa Artha, Tat Twam Asi, Desa-Kala-Patra, Dewata Nawa Sanga, and Rwa Bhineda. But in its implementation it is always based on
ceremonies, wewaran (lucky days), and pengurip. Gomudha (1999: 89-127) identifies the value of traditional Balinese architecture based on the concept of spatial space and buildings. The concept of spatial planning and urban design in traditional Balinese house is Tri Loka, Nawa Sanga, Swastika Sana, Tri Angga, and center orientation building at Natah. Dwijendra (2008) also make identification about basic principles of traditional Balinese house. That is following the concept of Bhuana Agung and Bhuana Alit. All three experts have same concept when analyse Balinese traditional architecture. However, in its implementation it is very dependent on the Desa-Kala-Patra (the area where the building was established). Between one region and another area in Bali will have a physically different building shape, but have similarities orientation which considers the mountain is symbolized of sacred area and sea direction for the profane area. When the current Balinese house is faced with a new tourism function, many type of buildings come up. Many people use empty land inside the house to build new accommodation, or the another one only use a part of empty rooms inside the building for rent. Provisions on the legality of housing space utilization for tourist accommodation built in Badung Regency have been regulated in the Badung Regent Regulation Number 6 of 2016 Concerning Standardization of Business Tourism Lodges. In this article it is very explicitly stated. Such as in article 1 paragraph 5 that "tourist cottage business is an effort to provide accommodation in the form of residential buildings inhabited by the owner and partially used for rent by providing an opportunity for tourists to interact in their owners' daily lives". Article 3 paragraph 1 also states that "tourist huts are individual businesses". In this regulation it is very clear that the construction of tourist accommodation in traditional Balinese homes is an attempt to introduce Balinese culture to local tourists and foreign tourists who stay overnight. Buildings that are born due to interactions between tourists and residents is a manifestation of acculturation of space as a form of self-adjustment between different cultures.

Damayanti (2014) revealed that, architectural buildings would not exist without life in them. Morphology is part of human culture in creating space. Building architecture is not only discus about space and form, but also a language that reflects the meaning behind the form, and the purpose building of the structure itself. In simple terms, morphology is the study of logical physical forms. Similar with her statement, Damayanti also mentioned, that the morphological aspect is the identification of environmental characters that are realized through the form of buildings where the figural quality can be read through patterns, hierarchies, and relationships between spaces. Each part of an architectural building has a symbolic function other than physical function. The parts in the building of traditional architecture have a very deep meaning for the local community. That is related to the living conditions that have been inherited from generation to generation. As happened in traditional Balinese homes. Balinese homes not only functioned as settlements, but also functioned as the venue for the yadnya ceremony. So, there are many spaces in traditional Balinese homes that have ritual values that cannot be eliminated physically. The sleeping position of the Balinese who requires a head position in the east or north, will be very difficult when having to put more than two beds in a room. The essence of this value must be considered carefully.

Tourism is present as a new magnet in the development of traditional Balinese house layout in Canggu Village. The change in the characteristics of tourists who come, namely from conventional tourists to backpacker tourists. Demands a low-rise but comfortable stay. Completeness of facilities is no longer the main choice of tourists. A bedroom with a cupboard and a table has been considered sufficient to represent the comfort of tourist facilities right now. The main component that determines the choice of tourist accommodation is the presence of wifi access that has good connections. Dormitory is one of the most efficient solutions to accommodate backpacker's needs. In addition to the cheap price, dormitory accommodation can also accommodate more than four people in one room. However, the Balinese culture forbids vertical construction beyond the height of 15 m, so that the existing dormitory in Bali is very different from other dormitory in the world. This study reviews the differences in dormitory in Bali with other dormitory in the world. Customary considerations and space values is a basic consideration in the construction of dormitory in the homes of Balinese people.
Research Question

From the research background, it can be raised the problem of morphology hostel dorm in Canggu tourism area.
1. What is different between Balinese dormitory and dormitory around the world?
2. Which one area inside the house can be commercial zone for dormitory?

Research Objectives

Balinese traditional house is very difficult to develop. Limiting vertical buildings makes the Balinese people prefer spatial development horizontally. However, the increase in population and also increase of tourists who come, encourages people to make modifications to the site owned. This study discusses about the forms of backpacker dormitory inside traditional house in Canggu tourism area. Identification of dormitory buildings is very important to do. Considering the orientation of sleeping to the east or north is something important. That is mandatory for the people in Bali. The Balinese people strongly prohibit the position of sleeping towards the west or south. When the dormitory enters as a request from tourists, the sleeping space of the Balinese people is required to be able to accommodate more than two beds in a room. This is what is still a debate for owners of tourist accommodation in Bali today. This research provides a basic understanding for policy makers, the public and accommodation owners about how to regulate the composition of buildings within the site, as well as structuring furniture in rooms.

Description of Research Location

This research took place in Canggu Village, North Kuta District, Badung Regency, Bali Province, Indonesia. Administratively, Canggu Village has an area of 523 ha. The physical boundary of Canggu region is, to the north is Dalung Village. The other side on the south is Indonesian Ocean. East boundary is Tibubeneng Village. And the last it west is Pererenan Village. As shown in figure 1 below.

Outcome Targets and Research Benefits

The focus of this research is building accommodation that specifically made for backpacker tourists in Canggu tourism area. The urgency of this research can be seen from various perspectives. In terms of local
communities, the results of this study can be used as an alternative design to develop dormitory accommodation within their sites. For business actors, this study can be used as a benchmark to determine the efficiency and effectiveness of space use so that the accommodation owned is able to provide higher economic value. Whereas for the government this research is very important to be carried out considering that there are no official rules governing the construction of dormitory in Bali. The results of this study can be used as the basis for the preparation of regional spatial regulations, especially in dormitory accommodation built in residential homes.

RESEARCH METHODS

This research includes explorative qualitative research. Data collection technique uses a combination of several methods including observation of the entire dormitory in Canggu. Depth interviews with tourist accommodation owners and tourists who occupy inside the dormitory. The existing physical dormitory settings are compared with tourist perceptions. Analysis about interior and furniture placement inside bedroom. Comparison between various parts dormitory in the world with Balinese dormitory. The results of this comparison then gave rise to distinctive physical values that only existed in Bali. In the end, all of result analysis are made in the form of images and narratives sentence that describe about backpacker accommodation morphology in Canggu tourism area. The chosen design pattern is returned to the accommodation owner to see the value of the space that must be maintained.

RESULT AND DISCUSSION

Results

The development of Balinese traditional house in the Canggu tourism area can be seen from two systems. First is seen from the geometric rules that are associated with cosmology and religion. The second is seen based on rules relating to community social relations. Today’s development, religious and social rules are shifted by technological and economic factors so that the concept of form follow function (form adjusts function) emerges. This concept has the disadvantage of not having a human nature so that in its implementation a new concept appears which is called form follow culture. Physically, the development of the area with spatial patterns is organized and lives side by side with local communities. Development of infrastructure can utilize existing structures. The developed area must be arranged with basic structured (having an activity zone with a complete system between occupant zones and tourist zones). Having a building orientation that is clearly in accordance with the Hulu Teben concept. Integrated relationships (compact and efficient functional and spatial relations). Clear area between developing new functions for tourists and functions that accommodate the activities of residents must be considered. The results of the observation inside tourist accommodation in Canggu clearly reflect the form follow culture. As shown in figure 2 below:

![Placement of building units inside traditional Balinese housing that are used for tourism](source: Author)
Discussion

Characteristics of Dormitory in the World

In various parts of the world, the term dormitory is usually used to refer to housing designated for students. Zulkarnaen dkk (2018) describe that Student dormitory is an environment as a residence in the form of buildings with rooms that can be occupied by several residents in each room for a longer period by students who are taking a study or activity activities. Activity inside the dorm is sleep (shelter), study (education) and gather. While the forms of dormitory commercialized for tourists are known as hostels. The basic standard of a building called dormitory is that the number of beds in a room must exceed two beds. Use of public facilities together, such as sharing bathroom and kitchen. There are no private facilities in the room. The physical form of the building is made more than three floors vertically as shown in figure 3 below:

![Dormitory in Zübeyde Hanım Sorority located in “Meric St, Nr: 9, Bestepe/Ankara, Turkey Source: Yildrim dkk (2009)](image)

Spatial Issue of Dormitory Building in Canggu

Canggu community have very strong tradition and customs. Similar with the arrangement of space, customs and traditions also apply to the regulation of building composition. Although faced with the demand for tourist accommodation, the spatial construction in Canggu still follows the traditional spatial concept of Balinese architecture. The results of interviews with dormitory owners found some common values and basic concepts of building dormitory in the Canggu community residence, as shown in the following table:

| Position of Dormitory Building inside the house | Facilities owned in the room | The shape of the building looks | Interior shape |
|-----------------------------------------------|-----------------------------|--------------------------------|----------------|
| Bale daje                                     | Single bed                  | Must follow the concept of tri angga | The position of the head of the bed is placed in luan (east or north) |
| Bale delod                                    | Table                       | Using Balinese ornaments        | The position of the head of the bed should not be directly opposite the door |
| Behind bale adat                              | wifi                        | Shape of roof is limelight or saddle | The bed is on the edge close to the wall so that the middle room in the room is obtained as a place of interaction between tourists. |
| Teba (Empty backyard)                         | Sharing bathroom and kitchen | The height of the building should not exceed 15 m where the level of 0.00 is calculated from the ground level | There is a table at the bottom of which contains a shelf for a place of clothing |

Source: Author

Table 1. Characteristic Features of Dormitory Building Inside Canggu Traditional House
Morphology of Balinese Dormitory in Canggu Tourism Area

Mentayani et al. (2007) suggested that the morphology of architecture not only found a classification of the shape and structure of an object, but rather toward an understanding of the evolution and transformation of a building. In similar case, Mentayani et al. also provide an understanding that morphological concepts are fundamental studies in seeing and sorting the components of a building and classifying them into certain types. Morphology is also the study of evolution of types and models, showing transformation and metamorphosis of a form due to various indicators of change. In general, classification of dormitory in Canggu Village is reviewed from two sides. First from the placement of buildings in the site (exterior) and in terms of placement of furniture in the room. From the exterior dormitory in Canggu Village can be classified into two types, the first dormitory that is built in one natah (courtyard) with residents, the two dormitory that are built in one plot with residents but are given a guardrail to maintain the privacy of the residents as shown at figure 4 following:

| Dormitory that Built In One place with occupant (in same natah/courtyard) | Dormitory that built in one site with occupant but have clear boundary for divide privacy tourist and occupants |
|---|---|
| ![Image](image1.png) | ![Image](image2.png) |

**Figure 4.** Classified dormitory form exterior building

*Source: Author*

Gergely et al (2017) revealed that interior dormitory can be arranged in two ways. Bed position can put near the wall (picture a) or can put in the middle room (picture b).

![Image](image3.png) ![Image](image4.png) ![Image](image5.png)

**Figure 5.** Alternative Interior Dormitory Hostel in Budapest, Hungaria

*Source: Gergely et all (2017)*

According gergely et al research, Canggu also have special interior design for backpacker dormitory. Backpacker dormitory in Canggu consists of 4 until 6 bed in one room with center orientation is cuan (nort or east) area. The bed is placed near the wall with the aim of having a central space as a place of interaction between tourists, as shown in the following picture:
Traditional Balinese house have a strong traditional concept, but that does not mean traditional Balinese house cannot develop. The tourism function is permitted to be built inside a traditional Balinese house with a note that the cultural values inside, should not be removed. Buildings that are allowed to be rented are Bale Daje and Bale Delod or the addition of rooms behind the Bale Dangin. The construction of dormitory inside Bale Dangin (bale adat) is strictly prohibited regarding the ritual function of Bale Dangin. Bale dangin is the most important building for Balinese people, especially in Canggu, because inside this building ceremony from people was born until Balinese people dead was held. In general, the classification of Balinese dormitory in Canggu Village can be seen from two sides. First side is the placement of buildings in one site (exterior building unit), and in terms of placement of furniture inside the bedroom. From the exterior side, dormitory in Canggu Village can be classified into two types. First dormitory type that is built in one Natah (courtyard) with Balinese occupant. Second dormitory type that are built in one plot with Balinese house but are given a specific boundary wall to maintain the privacy of the Balinese occupants. Backpacker dormitory in Canggu consists of 4 until 6 bed in one room. Center orientation is Luan (north or east orientation) area. The bed is placed near the wall with the aim of having a central space as a place of interaction between one tourists to another.

ACKNOWLEDGMENTS

Acknowledgments to those who have supported the writing of this paper are all my supervisor at Udayana University and the Engineering Faculty of Udayana University, also Mahendradatta University for the support of research grants and Village Head and all the owners of the dorm in Canggu Village.

References

Anom, I. A. S., Saptono Nugroho, I Gusti Agung Oka Mahagangga. (2017). Turismemorfosis: Tahapan Selama Seratus Tahun Perkembangan dan Prediksi Pariwisata Bali. In S. A. P. I Nyoman Dharma Putra (Ed.), Metamorfosis Pariwisata, Tantangan Membangun Pariwisata Berkelanjutan di Bali. Denpasar: Pustaka Larasan.

Ayu Siwalatri, J. P., Purwanita Setijanti. (2015). Spatial concepts of Bali indigenous architecture. Paper presented at the International Conference Green Architecture for Sustainable Living and Environment (GASLE).

Carmen D. Steggell, S. K. B., Lori A. Davidson, Pat R. Vega, Eric D. Hutton, Amelia R. Rodecap. (2003). Exploring Theories of Human Behavior in Housing Research. Housing Theory and Society. doi:10.1080/08882746.2003.11430480

Clinton Aigbavboa, W. T. (2018). Residential Satisfaction and Housing Policy Evolution. Coulombel, N. (2010). Residential choice and household behavior : State of the Art. Paper presented at the Sustainicity.

Diasana Putra I Dewa Gede Agung, M. L., Robert J. Fuller. (2017). A Methodology To Evaluate The Transformation Of Traditional Balinese Houses As A Consequence Of Tourism. International Journal Of Architectural Research, 11(1), 83-100.

Dwijendra, N. K. A. (2003). Perumahan dan Permukiman Tradisional Bali. Permukiman "Natah", 01(01), 8-24.
Kiliçaslan, H. (2013). Design of Living Spaces in Dormitories. Procedia - Social and Behavioral Sciences. doi:10.1016/j.sbspro.2013.08.699

Elya Santa Bukit, H. H., Arif Sarwo Wibowo. (2012). Aplikasi Metode N.J. Habraken pada Studi Transformasi Perumukian Tradisional Lingkungan Binaan Indonesia, 01(01), 51-62.

Hory Gergely, Z. M., Peter Mullner, Melinda Benko. (2017). Exploration Of Spatial Design Issues at Backpacker Hostels In Budapest's Historic Center: Informality, Density, Adaptability. Frontiers of Architectural Research, 6, 157-168.

Ira Mentayani, N. A. (2007). Tipologi dan Morfologi Arsitektur Suku Banjar di Kal-Sel. INFO – TEKNIK, 8(2).

Kemal Yildirim, O. U. (2010). The Effects of Space Quality of Dormitory Rooms on Functional and Perceptual Performance of Users: Zübeyde Hanım Sorority. Gazi University Journal of Science, 23(4), 519-530. Retrieved from www.gujs.org

Linda Groat, D. W. (2013). Architectural Research Methods. United State of America: John Wiley & Sons, Inc.

Menuh, N. N. (2015). Karakteristik Wisatawan Backpacker Mancanegara Dan Dampaknya Terhadap Perkembangan Pariwisata Di Kuta, Bali. (Master), Udayana, Denpasar.

Murphy, L. (2001). Exploring Social Interactions of Backpackers. Annals of Tourism Research, 28(1), 50-67. doi:https://doi.org/10.1016/S0160-7383(00)00003-7

Parwata, I. W. (2011). Rumah Tinggal Tradisional Bali dari Aspek Budaya dan Antropometri. Mudra, 26(1), 95-106.

Pearce, P. L. (1990). The Backpacker Phenomenon: Preliminary Answers to Basic Questions: Department of Tourism, James Cook University of North Queensland.

Pratama Zulkarnaen, N. E., Ima Defiana. (2018). Responsive Student Dormitory Design with Hybrid Ventilation Strategy in Education Region of Malang City. International Journal of Engineering Research & Technology (IJERT), 7(1), 169-174. Retrieved from http://www.ijert.org

Rusydi, M. (2008). Perilaku Penghuni Rumah Dome Di Prambanan Sleman Adaptasi Dan Adjustment Di Seting Baru. Lintas Ruang, 2(3), 99-108.

Sri Efrinita Irwan, T. M. (2019). A graph theory approach to the dormitory room placement problem. Journal of Science and Applicative Technology, 111-118. doi:https://doi.org/10.35472/281472.

Sulistyawati, A. (2018). Teo-Kosmologi Arsitektur Bali & Transformasinya (I. K. Donder Ed.). Surabaya: Paramita