

Transformation of Traditional Housing in Traditional Village of Gunung Sari, Jatiluwih, Tabanan Regency

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Abstract Traditional houses in Gunung Sari Pakraman Village, Jatiluwih Village, Tabanan, have a specific spatial configuration of traditional houses that becomes the local identity of the area. However, with the development of tourism in this village, traditional houses are not only a source of pride, but they also serve as an object of commodification. This is an interesting phenomenon in which on the one hand the people try to keep the identity of the traditional houses to attract tourists, while on the other hand they transform their houses into tourist accommodation facilities. Therefore, the aims of this study are to investigate the paradoxical phenomenon of the house transformation in this village; to find out what actually the design of the traditional vernacular house is; to explore the actual role and meaning of the transformed houses that can still be preserved; to find out the extent of the impact of the transformation and the factors causing such transformation; to explore the new roles and values that constitute the new configuration and discuss the impact of the new values on the meaning and values of the original configuration. Furthermore, this research will explore the differing aims that are to preserve the traditional house characteristics and to meet the tourism demands. Field observations were conducted at some houses selected by the stratified random sampling technique and interviews were carried out to explore the impact of the transformation of physical configuration on the values and meanings of traditional houses. With the identification of the characteristics of this transformation, it is expected that this study can be a reference on house transformation and provide a decent perspective for the community, government and tourism players on the transformation of traditional houses in Gunung Sari Pakraman Village, Jatiluwih Village, Tabanan.

Keywords: houses, traditional, local identity, transformation, tourism.

I. INTRODUCTION

A. Research Background

The traditional settlement of Gunung Sari Pakraman village, which is part of Jatiluwih Village, Tabanan Regency, has a specific spatial configuration of traditional houses which becomes the local identity of the area. However, with the tourism development in this village, the traditional settlement not only becomes a source of pride, but it also serves as an object of commodification. Increased tourist visits encourage construction of various tourist facilities, which leads to changes in the spatial configuration of Jatiluwih traditional village. This is an interesting phenomenon in which on the one hand the people are proud of their traditional houses and try to maintain their traditional houses and area to attract tourists, but on the other hand they transform their houses into tourism facilities. The focus of this phenomenon is that house transformation poses a major challenge in the era of tourism

economy in maintaining the original spatial configuration of traditional houses as an expression of cultural identity.

The settlement pattern of Jatiluwih Village is closely related to its cultural philosophies, which are Balinese cultural philosophies namely *Rwa Bhineda*, *Tri Hita Karana*, *Tri Mandala* as well as *Wana Asri* concepts, manifested in the spatial concept of the cultural preservation area of Jatiluwih Village. However, tradition is not static as it undergoes a process of gradual changes [1], [2], [3], [4]. A tradition does not always simply repeat the previous tradition, but it is a process of adopting new elements in a selective manner. A new tradition will undergo the process of filtering, adjustments and modifications that are tailored to the existing needs [5], [6], [7], [8], [9], [10], and [11]. People's interaction with foreign cultures affects the process of receiving a new tradition in the society [2]. The focus of this discussion is to discuss the dynamic cultural transformation in anticipation of the impact of tourism. Transformation that occurs is a challenge and a pressure for

the effort to maintain the traditional configuration as an identity. As researchers in the field of architecture, social, culture and tourism structures, the research team is able to describe the existing problems and identify as well as assess the phenomenon of the traditional house transformation as an effort to maintain the local identity and to meet the tourism challenge.

B. Research Problems

From the above background, the problems formulated in this research on the transformation of traditional houses in Gunung Sari Village, Jatiluwih, Tabanan Regency are as follows:

1. How is the development of village layout, including the morphology and the buildings layout in Gunungsari Pakraman Village, Jatiluwih?
2. What is the impact of changes in configuration on the values and meaning of the original house configuration and what are the factors causing those changes?

C. Research Objectives

The changes are challenges for the society and government to maintain the natural conditions, culture and tradition of the society, which are resources for tourism development. On the other hand, the society and culture change along with people's interaction with foreign cultures and the desire to accommodate the needs of the visiting tourists. Therefore, the aims of this study are:

1. To investigate the paradoxical phenomenon of the house transformation in Gunung Sari Pakraman Village, Jatiluwih Village and to explore the differing aims between conserving traditional house characteristics and meeting the tourism demands.
2. This study is dedicated to providing guidance on how to transform houses to meet the tourism needs while at the same time conserving the traditional housing area.

II. RESEARCH METHODS

This is an explorative-descriptive research which explores and explains or describes a phenomenon non-experimentally, and consists of the following stages:

A. Data Collection

1. Research Design
 - Selecting and formulating research problems
 - Determining the variables and data sources: settlement pattern and house design and house morphology (shrines, pavilions, *natah* (central courtyard))
 - Conducting a library research on the designs and types of traditional houses in Bali and that develop in Jatiluwih Village.
2. Collecting Research Data
 - Determining and developing research instruments

- Selecting research objects with the following criteria: traditional houses that have not undergone changes in spatial configuration and traditional houses that have undergone changes in spatial configuration
- Collecting data on houses that meet the above criteria using a tiered information system of informants who have previously been interviewed, until some objects that meet the above criteria are obtained.
- Collecting data by interviewing homeowners and related institutions associated with the temple's status and its year of construction and any restoration that has been conducted.
- Measuring the traditional houses using theodolites or measuring tapes equipped with a check list
- Data Tabulation

B. Research Analysis and Results

1. Data processing: conducting data editing, data encoding and data presentation
2. Data analysis: doing tabulation of each variable's data which have been taken from each object, outlining the morphological types of the existing traditional houses, the spatial changes, as well as the impact of the transformation to changes in the value and meaning.
3. Research conclusions and suggestions: formulating conclusions and suggestions.

C. Targeted Outcomes and Research Significance

The emphasis of this research is the transformation of the morphological types of traditional houses made by the homeowners in connection with demography changes, lifestyle changes and tourism development. The transformation of the morphological types of houses is a process of change (as a distinguishing element), as well as the existence (as a fixed element) present in the house, in accordance with the applicable architectural rules. The targeted outcomes of the research on the house transformation in Gunung Sari Pakraman Village, Jatiluwih Village, Tabanan Regency are:

1. The original morphological types of the houses.
2. The changes in homeowners' characteristics in connection with the transformation of morphological types.

Furthermore, this research is expected to provide significant benefits and contributions for both the government and society, such as:

1. to be able to provide a useful contribution to society and any party implementing the tourism development policy that is one of the priority programs of the national development;
2. to be able to provide a contribution in the form of theory on the transformation of traditional houses in Gunung Sari Pakraman Village, Jatiluwih Village, Tabanan;
3. to be able to provide a basic foundation to determine the direction of the conservation program development

of the traditional houses in the world cultural heritage site of Jatiluwih Village in particular, and in Bali and Indonesia in general.

D. Literature Review

Tradition was defined in the 1950s and 1960s as a static element, with little innovation based on the customs of the elite in a society. However, at the time being, tradition is not always a static phenomenon but a gradual transformation process [1]. The idea of a tradition is very accommodating and it can transform in a process of intergenerational transmission. This transmission process derives from human ideas as a response to old tradition with little or no change [12].

There are several things that may cause transformation as stated by Soekanto (1984:10), namely:

1. Technology, as all aspects of life involves technology.
2. Lifestyle and demography, with the influence of time and the changes in the classifications of occupation, age, and the role of status.
3. Politics as it is closely related to the policies issued by the authorities.
4. Economics, which is seen from the conditions and developments in the community business.

Using the above theory of transmission of tradition, transformation is defined as the creation of houses including the architectural designs and traditions therein, explored to understand the ways people construct their houses and the house compounds as a physical form of culture in response to the new conditions and to show their identity.

III. RESULT AND DISCUSSION

A. The Morphological Type of Balinese Traditional Vernacular Houses

Basically, the designs of *pekarangan* (Balinese house compounds) applied in Balinese society is based on the concept of *sanga mandala* (the spatial concept that divide an area into nine parts according to eight directions and the central). In Jatiluwih Village, the concept of *sanga mandala* does not really serve as a guideline for *pekarangan* designs. The *pekarangan* design in this village is based on the concept *tri hita karana* (the concept of harmony and balance of three elements, the *parahyangan*, *pawongan* and *palemahan*). Through the application of the *tri hita karana* concept, the *pekarangan* formed extends perpendicular to the main road. According to the division of space based on the *tri hita karana* concept, the *parahyangan* area is closer to the mountain and the road as it is valued higher than *pawongan* and *palemahan* that are placed farther away from both the mountain and the road.

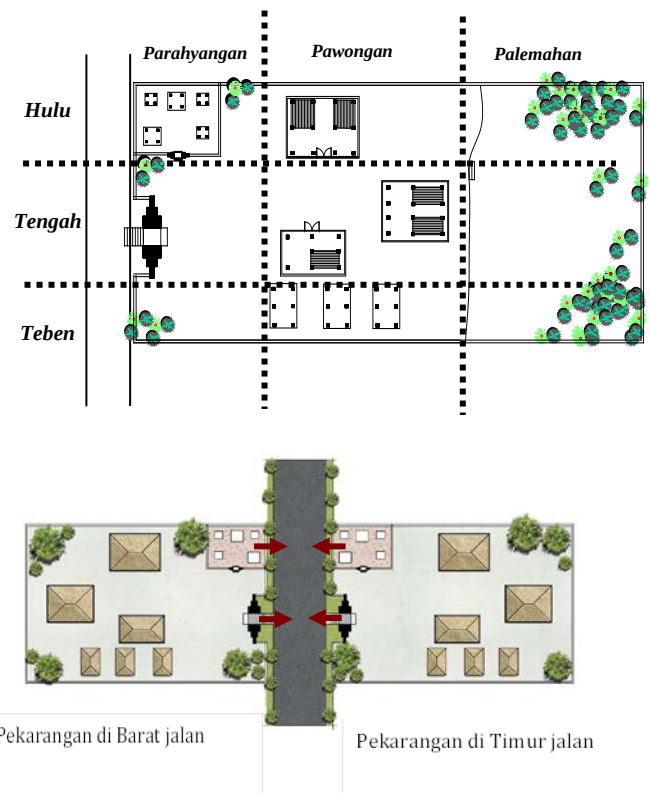


Fig. 1. The orientation of *pekarangan* to the road in Gunung Sari Pakraman Village, Jatiluwih

The unique characteristics of the *pekarangan* design in Jatiluwih Village as shown in Figure 1 are:

1. *Sanggah/merajan* (family shrines) in the *pekarangan* (house compounds) in Jatiluwih Village is located in the zone closest to the mountain and always oriented to the road.
2. In one *karang* (house compound), there are some related families. In the original *pekarangan* design, the type of house owned is the same. In one house compound, there are some buildings, i.e. *meten* (sleeping pavilion), *paon* (kitchen) and *lumbung* (a rice barn) as well as a communal *bale* (jointly-owned pavilion). *Meten* (sleeping pavilion) is a place to rest/sleep, *paon* (kitchen) is a place to cook, and *lumbung* (rice barn) is a place to store agricultural products.
3. The buildings in one *pekarangan* (house compound) are placed in a line, which extends perpendicular to the main road.
4. The hierarchy of the three kinds of buildings that have different functions consecutively from the highest function is *meten*, *paon*, and rice barn. Among the three, *meten* (sleeping pavilion) is located in the area closest to the mountain lined up lengthwise behind the *sanggah* (family shrines), while the other two (the *paon* and the rice barn) are in *kelod* (the south).
5. There is a *bale gede/bale saka roras* (twelve-post pavilion) which is jointly owned by the people in one *pekarangan*. This pavilion usually serves as a place for the communal activities of the people living in the compound, such as religious ceremonies. However, in a

lengthy house compound with many families, there can be more than one *bale gede*.

The design of Balinese traditional house compounds in Jatiluwih Village is different from the common Balinese traditional house design in Bali, as the *pekarangan* design in this village employs a combination between the *hulu-teben* (upward-downward) concept and the *tri hita karana* concept oriented to the road and the mountain. Based on the location against the road, the *pekarangan* design can be divided into two categories, namely: (1) the *pekaragan* design for houses located on the west side of the road and (2) the *pekaragan* design for houses located on the east side of the road. At houses located on the west side of the road, the family shrines are placed in the *teben* (downward or seaward) zone because the orientation is the main road of the village.

B. House Compound Transformation

The transformation of traditional houses in Jatiluwih Village is identified by comparing the research objects with traditional houses that still maintain their original layout and design. The houses were categorized to show the degree of change of the houses that undergo transformation. Table 1 below shows the comparison among the categories of houses in Jatiluwih Village and their level of transformation:

1. Category A: houses which undergo a slight transformation. This category can be seen from the absence of change in the materials used and the house shape, as well as functions, and the absence of new space in one compound.
2. Category B: houses which undergo some transformations. This category can be seen from the existence of change in the material used and the house shape, while the space function remains the same, and there is no new space in one compound.
3. Category C: houses which undergo many transformations. This includes transformations in terms of the materials used and the house shape. Some houses may undergo a transformation of space function and some may not, and there is a new space in one compound.
4. Category D: houses which undergo a huge transformation. This includes transformations in terms of the material used, the house shape, functions; and there is a new space with a new function.

TABLE 1
CATEGORIES OF HOUSE COMPOUND TRANSFORMATION
HIGHER LEVEL OF TRANSFORMATION

Item	Category A	Category B	Category C	Category D
Material	remain the same	Different	Different	Different
Shape	remain the same	Different	Different	Different

Function	remain the same	remain the same	Different/same	Different & New
Layout	remain the same	remain the same	Different	Different & New

Source : Manik (2007)

Based on the above categorization of the house transformation, the house transformation can also be categorized into 4 types, namely:

1. Category A – having very few changes

Houses in the category A undergo a transformation the least. Many even do not undergo any transformation (Figure 2).

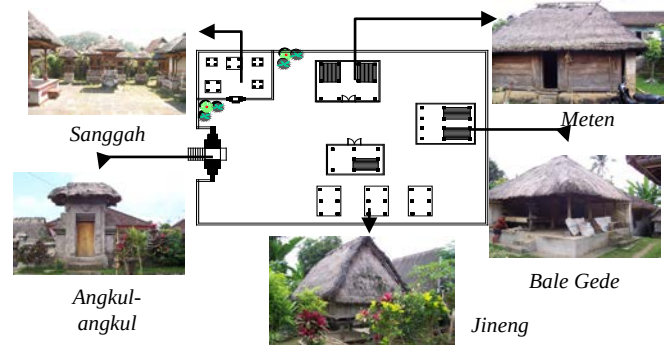


Fig. 2. Design and Shape of the Traditional Vernacular House

2. Category B – having several changes

Houses in the Category B undergo a transformation in the materials used and the house shape, while the functions and layout tend to remain the same as that of the original Balinese traditional house compound (Figure 3). The changes mainly occur in the materials used for floors, walls and roofs. The materials used are more practical, cost-effective, time-saving and energy-efficient. Changes are also marked with the addition of new building(-s) that occupy a vacant space within the house compound; however, it does not change the patterns of the mass and the shape of *natah* (central courtyard) which is traditionally very useful for conducting religious ceremonies.

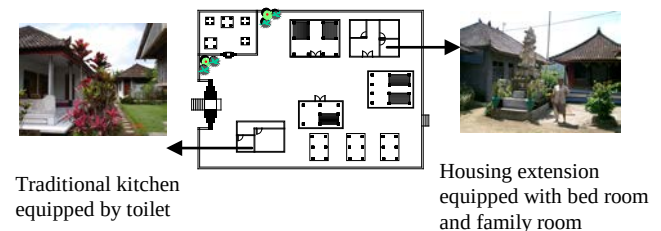


Fig. 3. Design and Shape of Category B Modified House

3. Category C – having Many Changes

Visually perceptible transformation in the category C houses is in the materials used, building shapes, space functions and layout designs. On average, category C

houses have additional or new building (-s) or changes in the shape of the new building by adding new functions to the building. The new buildings with the shape influenced by the shapes of modern buildings are usually called office pavilions

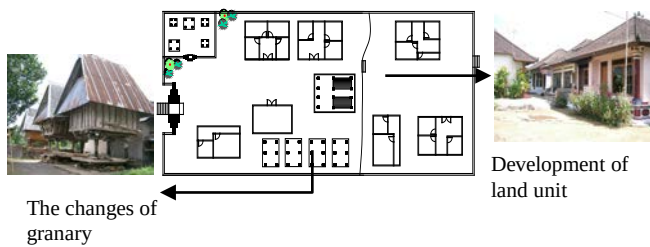


Fig. 4. Category C House Site Plan

4. Category D – with Huge Changes

Transformation in the Category C includes the development of the house archetype, shape and the materials used. However, the element that remains unchanged in the compound of Category D are the *bale gede* (big pavilion) since its function is very complex. It serves as a place to receive guests, and a venue for ceremonies such as *manusa yadnya* and *pitra yadnya* especially for death-related ceremonies. *Bale gede* has a significant role as a place for conducting those ceremonies.

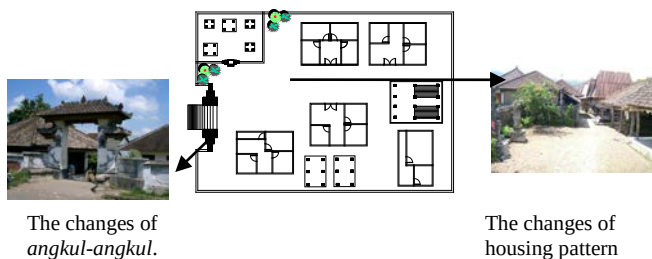


Fig. 5. Site Plan for Modified Houses in the Category C

C. Factors Causing the Houses Transformation

The construction of infrastructure to better the flow of transportation for the marketing of farm and plantation produce to be distributed outside the village results in the need for adequate means of transportation. The ownership of vehicles will certainly require a space, i.e. a garage, either temporary or permanent. In addition to that, the tourism activities in the surrounding area leads to the construction of tourism supporting facilities such as stalls and stores which then leads to the transformation of traditional houses. The development of activities requires the transformation of functions. An enclosed (indoor) space was traditionally used only as a sleeping pavilion, but now it is also used as a dining room or family room. Joint activities were initially done in the house terrace and courtyard but now they are done indoor. It shows that the occupants increasingly need a private space as a place to express themselves. The construction of a working pavilion is one

of the examples. A working pavilion that has a family room and an additional bedroom shows that there has been a function transformation in the house compound. Reasons for the addition of this space are closely associated with the increasingly complex types of activities in line with the current development. Transformation of activity patterns refers to the lifestyle of the occupants that is getting more complex.

Some changes in the transformation and the causes can be described as follows:

1. Changes in Materials used – due to some factors such as technology, economy, lifestyle/social-cultural factors. Along with the development or the era, building technologies are getting more sophisticated which lead to mass construction. The use of traditional materials (wood, reed and compacted clay) starts to be reduced, and even they are no longer used.
2. Changes in Shapes – due to some factors such as technology, economy, lifestyle/social-cultural factors. The shape of the houses is more influenced by the transformation of building materials, such as: changes in the slope of the roof due to the use of clay pantiles and zinc. The use of carved rocks as a material allows the making of typical *geganyaran* carvings (carving style from Gianyar Regency), while the use of ceramics tiles gives the floor bright colors.
3. Changes in Functions and Layout – due to some factors such as demography, economy, lifestyle/social-cultural factors. An enclosed space that was traditionally functioned only as a sleeping chamber is now also used as a dining room or family room. Joint activities that were initially done in the house terrace or courtyard are now done in an enclosed space (indoor).

IV. CONCLUSION

A. Conclusions

Based on the results and discussion above, the conclusions are as follows:

1. There have been house transformations in Gunung Sari Pakraman Village, Jatiluwih ranging from a slight transformation (Category A) to the huge one (Category D), from changes in the material used (Category B) to changes in the layout design (category D).
2. The causes of transformation are the advancement of technology, changes in demography, lifestyle, as well as social, cultural and economic development.

B. Suggestions

Some suggestions can be formulated as follows:

1. There is a need to conduct preservation activities to maintain the existing potential and support the development in accordance with the potential of the area. The appropriate forms of preservation activities in Jatiluwih Village are conservation, preservation and revitalization. Conservation is applied to the visual aspects in a form of elements such as Batukaru

protected forest, rice fields and rice terrace. Preservation is applied to temples, the village design, *bale banjar* (*banjar* hall), *bale desa* (village hall), and to functional aspects such as land use and circulation, visual aspects such as buildings layout and compound design.

2. There is a need to manage the area and houses so that the transformation that happens does not change the meaning and values contained in the layout of the area. The model design and prototype needs to be formulated to be used as a guideline/reference/model for occupants in transforming their house in Gunung Sari Pekraman Village, Jatiluwih Village, Tabanan.

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REFERENCES

- [1] Eisenstadt, SN. 1973. Post-traditional Societies and the Continuity and Reconstruction of Tradition. *Daedalus*. Vol. 102, No. 1, Post-Traditional Societies (Winter, 1973), pp. 1-27, the MIT Press on behalf of American Academy of Arts & Sciences.
- [2] Gusfield, JR. 1967. Tradition and Modernity: Misplaced Polarities in the Study of Social Change, *American Journal of Sociology*, Vol. 72, No. 4, pp. 351-362.
- [3] William, R. 1983. *Culture and society: 1780–1950*. New York: Columbia University Press.
- [4] Clifford, J. 1994. *The predicament of culture: twentieth-century ethnography, literature, and art*, Harvard University Press, Cambridge.
- [5] Geriya, IW. 2007. Konsep dan Strategi Revitalisasi Kearifan Lokal Dalam Penatan Lingkungan Hidup Daerah Bali, in AAGR Dalem, IW Wardi, IW Suarna & IWS Adnyana (eds), *Kearifan Lokal Dalam Pengelolaan Lingkungan Hidup*, Penerbit Universitas Udayana, Denpasar, pp. 52-60.
- [6] Mantra, IB. 1993. *Bali Masalah Sosial Budaya dan Modernisasi*. Denpasar: Upada Sastra.
- [7] Nordholt, HS. 1986. *Bali: Colonial Conceptions and Political Change 1700-1940 from Shifting Hierarchies to 'Fixed' Order*, Rotterdam: Erasmus.
- [8] Vickers, A. 1989. *Bali: A Paradise Created*. Ringwood Victoria: Penguin Books Australia Ltd.
- [9] Agung, IAAG. 1991. *Bali in the 19th Century*. Jakarta: Yayasan Obor Indonesia.
- [10] Dharmayuda, IMS. 1995. *Kebudayaan Bali: Pra Hindu, Masa Hindu dan Pasca Hindu*. Denpasar: CV Kayumas Agung.
- [11] Picard, M. 1996. *Bali: Cultural Tourism and Touristic Culture*. Singapore: Archipelago Press.
- [12] Shils, E. 1971. Tradition, Comparative Studies in Society and History, Vol. 13, No. 2, *Special Issue on Tradition and Modernity*, pp. 122-159. 1981. Tradition. London: Faber and Faber Limited.