



Research Article

TRANSFORMATION OF BALE DAJA ARCHITECTURE IN HOUSING OF SADING VILLAGE, BADUNG, BALI, INDONESIA

Ni Made Emmi Nutrisia Dewi¹, Ngakan Ketut Acwin Dwijendra^{2*} and Putu Rumawan Salain³

¹Department of Interior Design, Sekolah Tinggi Desain Bali, Bali, Indonesia

^{2,3}Department of Architecture, University of Udayana, Bali, Indonesia

ARTICLE INFO

Article History:

Received 8th March, 2018

Received in revised form 24th

April, 2018 Accepted 16th May, 2018

Published online 28th June, 2018

Key words:

Transformation, architecture, housing, form, meaning

ABSTRACT

Bale daja is one of the buildings contained in the housing in Sading Village which currently still maintained its existence. However, as time goes by with increasing family members and space needs, the *bale daja* is transformed. This is an interesting phenomenon because on the one hand the community still maintains its architecture and its function as a supporter of religious ceremonies, but on the other hand the community performs a good transformation of the space function in accordance with the needs of the current space and architectural design according to technological developments. The purpose of this study is to analyze the phenomenon of *bale daja* transformation in Sading Village in the form of *bale daja* architecture transformation, the cause of transformation and the *meaning* that is in the transformation. Therefore, this study will analyze the existence of *bale daja* architecture which is still used as a supporting building of religious ceremonies and demands of space and technology needs today. The data were obtained through field observation of selected houses and interviews to obtain in-depth data on the physical form of transformation and the values and meanings contained in the *bale daja*. Through the results of this study is expected to be used as a guide for Sading Village in doing *bale daja* transformation to fit the concept of traditional Balinese architecture but still able.

Copyright©2018 Ni Made Emmi Nutrisia Dewi et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Bale daja is one of the traditional buildings located in a yard of a house in the village of Sading. This building is usually used as a place to rest or sleep and supporting buildings of religious ceremonies in accordance with the concept of traditional Balinese architecture in general. But along with the development of time, space and technological needs, *bale daja* architecture has undergone a transformation both in terms of form, function and material. This is due to the increase in the number of family members, causing an increase in space requirements which ultimately lead to changes in the *bale* architecture. The phenomenon is very interesting because when people still need *bale daja* as a supporting building *ceremony* activities with all the designs that follow the concept of Balinese traditional architecture, but on the other side of the community do the transformation due to the influence of space requirements and current technological developments.

The former, architecture of *bale daja* in the residence of Sading Village generally has a rectangular shape with the number of eight poles (*saka*). Besides its function as a place to sleep, deliberation and ceremonial place.

In the case of the use of building materials such as the roof of thatch, the wall of the mold, the floor tile, bamboo columns, and others as well as decorations of ornaments or carvings look simple and interior decorations are only found in some homes such as statues, etc. But at this time the architecture of *bale daja* experiencing the transformation of the terms of form, the number of *saka* (pole), building function, materials/ornaments/decorative and interior decoration. In terms of form that has a variety of shapes such as rectangle, square, L shape and there are also irregular shapes. While in terms of functionality has increased as a residential building, as well as in terms of materials, ornaments and decoration following the latest technological developments.

By looking at the phenomenon of transformation and issues of problems that occur in the architecture of *bale daja* in Sading Village and the process of changing the values of tradition and values that are still maintained that serves to preserve the architecture of *bale daja*, it is necessary to examine how the transformation architecture of *bale daja* in residence in Sading Village, Badung, Bali. From the phenomenon above seen the occurrence of *bale daja* transformation this shows that the challenge of indigenous people of Sading Village today is in maintaining *bale daja* architectural design to fit the concept of traditional Balinese architecture but still meet the needs of its users.

*Corresponding author: Ngakan Ketut Acwin Dwijendra
Department of Architecture, University of Udayana, Bali, Indonesia

Research on the transformation of *bale daja* architecture in the residence of Sading Village, Badung, Bali is very important because the architecture is a product of physical form so it needs to be expressed the meanings contained in its physical form. In addition, through this research can provide a solution to the phenomenon of this *bale daja* transformation as an attempt to maintain the local identity, especially the identity of this traditional village of Sading and meet the needs of space and technology today.

LITERATURE REVIEW

Transformation is the change of object from original to a new form that still adopts some of its original form or does not show similarity with its original form (Josef Prijotomo, 1992). In the transformation process changes in the form of objects in the form of functions or forms such as addition, subtraction, division, displacement, coating, deconstruction and so on (Broadbent, 1973 in Amanati 2008). The change of form in the transformation is due to the merging and cultural dialogue as well as the development and shifting of values which then form a new culture (Krier, 2001). In terms of spatial order, transformation occurs is influenced by the increasingly complex needs of the space by its use, causing the addition or subtraction of space (Stephany, 2009). There are several factors that cause the transformation of technology, lifestyle, demography, politics and economy (Soekanto, 1984: 10).

RESEARCH METHODS

This research was designed using qualitative naturalistic approach and cultural study perspective. This method is used in accordance with the needs of research data in the form of data related to the architecture of the *bale daja* residence in Sading Village whose data collection and observation process is done in accordance with the natural conditions of the place that became the object of research studies so as to produce data in the form of ideas, perceptions, the beliefs and descriptions of those objects and then presented in the form of descriptions. This study also uses the perspective of cultural studies so as to find the meanings contained in the transformation of *bale daja* architecture in the residence of Sading Village, Badung, Bali and can reveal or dismantle all matters related to *bale daja* architecture such as values, beliefs, routines of life, all forms of behavioral habits of society and so on by observing the physical form of architecture.

Types of data used in this study are qualitative data obtained through field observation, interviews on informants, personal documents, and presented in the form of description of the condition of the case studied such as identity of informants, activities, functions of each space on the *bale daja* and so on. In this research using inductive data analysis system. The results of the findings in the field are logical to find the concept of findings and then given explanations and meaning that can be made a conclusion. The object of research is *bale daja* which is one of the traditional building in the residence of Sading Village, Badung regency, Bali.

RESULTS AND DISCUSSION

In this section explains the discussion about the transformation of *bale daja* architecture in the dwelling house of Sading Village, Badung, Bali. The three main sections discussed in this research are the transformation of the form, the causal factor of transformation and the meaning of transformation of

bale daja architecture in the dwelling house of Sading Village, Badung, Bali.

Transformation of Bale daja Architecture Form at Houses in Sading Village, Badung, Bali

This section discusses all the transformation of the shape and physical form of *bale daja* architecture in the dwelling house of Sading Village, Badung, Bali which consists of several parts, namely the transformation of the building form and the number of *saka*/pole, space and building function, materials, decorative and ornaments and interior decorations.

Building Form and Number of Saka/Pillar

At first the form of *bale daja* building in the residence of Sading Village, Badung, Bali has a rectangular shape with the number of *saka*/pole 8 or commonly called *bale bandung*.



Figure 1 Example of the *Bale daja* Existing Plan and Front View

Along with the development of the era then the *bale* has undergone a transformation in the form and number of pole. The transformation of the *bale daja* can be the addition of building area both horizontally and vertically (second floor). So the number of pole/*saka* also increase (as example Figure 2 below).



Figure 2 Example of the *Bale daja* Plan and Front View which is expanding the building

Bale daja also undergoes a transformation that does not resemble the original form of the building, more resembles the form of residential buildings in general that is L and the number of irregular *saka* (Figure 3).



Figure 3 Example of *Baledaja* Front View which is L-shaped and the number of *saka* is irregular

Space and Building Functions

In terms of space function as well as the overall building also undergoes a transformation so as to contribute to the change in the shape of the building. The transformation of the function of the space in the form of the addition of space that was formerly

only intended as a sleeping room or storage of ceremonial means, currently functioned as well as living room, family room, bathroom and others (can be seen on the building plan on Figure 2 and Figure 3).

Materials

In the use of materials also undergone a transformation of the former roof of the weeds/tile, wall soil mold/*paras*, floor tile/ceramic, bamboo/wooden columns, and others.



Figure 4 The use of existing materials

Currently the use of building materials more varied in accordance with technological developments. As an example of wall materials using ceramic or natural stone with a variety of colors such as yellow, white, black and so on. And finishing of *saka/pole* is made of ceramic coated concrete (Figure 5 left) and wood coated tinsel (Figure 6).



Figure 5 Bale daja with the use of more varied materials

Variety of Decorative /Ornaments and Interior Decorations

Ornaments/carvings are still simple and interior decoration is only found in some homes such as statues, pendants and so on. But at this time there is a variety of decorations in the form of very detailed carvings (Figure 6) and some are not using carvings/plain (Figure 5).



Figure 6 Examples of decorative/ornament use with more complicated/detailed engraving

Factors Causing Transformation of Bale Daja Architecture at Houses in Sading Village, Badung, Bali

The transformation of *bale daja* architecture in the residence of Sading Village, Badung, Bali is caused by several factors, namely:

Economic Factors

As the times progressed, the economy of Sading Village community increased. It is very influential in the form of *bale daja* architecture, so in general people who have a high economic level then it can maintain the architectural form of *bale sakutus* (*saka 8*) without the addition of space or other space (Figure 4). As well as details ornaments/decorations in more detail. But if the low economic level of society transforms the form with the addition of building area and function so that the building form does not resemble *bale daja* in general (Figure 3).

Factors of Social Life and Culture

This socio-cultural factor is related to the function of the *bale daja* in terms of accommodating all the activities of the people of Sading Village who still maintain the tradition that is generally done is implementing *sangkep* or meeting on the courtyard of the *bale daja* and save the ceremony. Therefore, although there are some *bale daja* who changed the form of residential buildings, but still retain the terrace page for the purposes of religious ceremonies (example Figure 3).

Factor of ideology, trust and education of society

The ideological, trust and educational factors have close relationship that is generally people who have a high education then has an ideology that leads to modern and low level of belief on things are traditional. However, with the community of Sading Village, although the community is dominantly in high education, the community still has an ideology and belief that social activities and religious ceremonies conducted in *bale daja* must be maintained, so that the existence of *bale daja* is maintained even though some have transformation.

Technological Development Factor

Transformation is also influenced by the development of technology both in terms of design floor plans, decorative forms and types of materials. So indirectly the development of technology greatly affects the occurrence of transformation on the *bale daja*.

Family Membership Added Factors and Land Limitations

Over time the family members also participate in the increase so that indirectly require the addition of space. However, the problem is that the land available in some houses in Sading Village is limited. Therefore, the *bale* has undergone a transformation, either in the form of horizontal spacing of the surrounding land or towards the vertical if the surrounding land is no longer present (Figure 2).

The Meaning of Bale Daja Architecture Transformation in Residential Home in Indigenous Village Sading, Badung, Bali

Meaning is the embodiment of a value that contains a particular meaning and purpose contained in a work of art. So in the form and physical form of *bale daja* architecture in DesaAdatSading which undergoes such transformation contains various meanings such as:

Religious Meaning

In the application of traditional Balinese architecture concept to *bale daja* in Sading Village there are some religious values. The form of religious values such as: there is a belief in the position of *bale daja* in Sading Village is located in the north

(*kaja*) which is a sacred direction, so that all activities performed in *bale daja* is still sacred.

Social Meaning

Social meaning that appears on *bale daja* in Sading Village that contains social value in it. *Bale daja* that uses the concept of traditional Balinese architecture is not only functioned as a meeting place (*sangkep*) or also can be used as a place to make *banten* (worship means) who invite *kramabanjar* or close relatives.

Aesthetic Meaning

The aesthetic meaning embodied in the transformation of *bale daja* architecture in the residential house of Sading Village, Badung, Bali is seen in the physical shape of the building more detailed carving, using the latest materials, and made using sophisticated technology. That looks even though the community still maintains the use of traditional Balinese architectural concepts but modified in accordance with current conditions more sophisticated and display a more attractive form of aesthetics.

Meaning of Preservation

In this case the definition of conservation is an effort in order to maintain the existence of cultural products and values contained therein through the efforts of protection, development and utilization. So here the meaning of preservation in the transformation of *bale daja* architecture in the residence of Sading Village, Badung, Bali is the effort of citizens in maintaining the traditional Balinese architecture on *Bale daja* and the values contained therein. The conservation effort is like protecting by preventing from extinction, developing it in accordance with the development of time (eg updating its architecture according to the latest technological developments).

Imagery Meaning

Imagery in architecture is an assessment or perception / impression and meaning captured by people to a physical form of an architectural masterpiece. Then the meaning of imagery that is found in traditional Balinese architecture on *bale daja* in residence in Sading Village, Badung, Bali is that some *bale daja* vying to show the interesting traditional Balinese architecture and using advanced technology. This is because that through the shape of the architecture seen the success of the owners. In this case *bale daja* which has a traditional Balinese architecture that is interesting and in accordance with the times is generally judged by the general public that the *bale daja* owner has a good economy, high education, success and follow the current development.

CONCLUSION

The conclusion of this research is that the form of *bale* architecture transformation at residence in Sading Village, Badung, Bali consists of 4 parts, namely building form and number of *saka*, function of space and building, material. And decoration and interior decoration. There are various factors that led to the transformation of *bale* architecture in residential villages in Sading, Badung, Bali, namely economic factors, social and cultural factors, beliefs and ideological factors, public trust and education, technological developments, family members increase and land limitations. The transformation of *bale* architecture in the residence of Sading Village, Badung,

Bali has caused various meanings such as religious meaning, social meaning, aesthetic meaning, meaning of preservation and meaning of images.

Acknowledgment

Thanks to the parties who have assisted the process of completion of this research. We would like to express our gratitude to all the villagers of Sading, and all those who can

References

- Amanati, R. (2008). Transformation of Meanings in Visual Display of Theme Park Architecture. *Journal of Science and Technology* 7 (2), September 2008: 45-53.
- Astra Wesnawa, I Gede. (2010). Implementation of Tri Hita Karana Concept in Rural Settlement Environment (Case of Badung Regency of Bali Province). *Journal of Sustainable Lands*, Vol. 10 No. August 2, 2010: 295-301.
- Bakhtiar, et al. (2014). Type of Theory on Archipelago Architecture by Josef Prijotomo. *Journal of NALARs*, ISSN 1858 1137, Vol. 11 No. August 2, 2014: 32-47.
- Broadbent, Geoffry. (1973). *Design in Architecture*. London: John Wiley and Sons.
- Budihardjo, Rachmat. 2013. Bali Architecture Concept Application on Castle Building. *Journal of Media Matrasain*, Vol. 12 No. January 1, 2013: 17-42.
- Budiharjo, E. (1986). *Architecture conservation in Bali*. Yogyakarta: Gajah Mada University Press.
- Covarrubias, M. (1974). *Island of Bali*. Kuala Lumpur: Oxford University Press.
- Derek & Japha, V (1991) 'Identity through detail: an architecture and cultural aspiration in Montagu, South Africa, 1850-1915', TDSR, vol. II, pp. 17-33.
- Dwijendra, NKA (2003). Bali Traditional Housing and Settlements. *Journal of Settlement Natah*, Vol. 1 No. February 1, 2003: 8 - 24.
- Dwijendra, NKA (2008) *Arsitektur Rumah Tradisional Bali, Berdasarkan Asta Kosal Kosali*, Denpasar: Udayana University Press.
- Dwijendra, NKA (2009) *Arsitektur Kebudayaan Bali Kuno*, Denpasar: Udayana University Press.
- Gelebet, I Nyoman. et al. 1986. *Traditional Balinese Architecture*. Denpasar: Ministry of Education and Culture Project Inventory and Documentation of Regional Culture.
- Geriya, IW. (2007) 'The concept and strategy of revitalizing local wisdom in the environment of Bali', in AAGR Dalem, IW Wardi, IW Suarna & IWS Adnyana (eds), *Local wisdom in environmental management*, Udayana University Publishers, Denpasar, pp. 52-60.
- Kagami, H (1988) *Balinese traditional architecture in process*, Inuyama: the Little World Museum of Man.
- Krier, R. (2001). *Architectural Composition*. Translation Edition. Jakarta: Erlang Indonesia.
- Kusbiantoro, Krismanto, et al. (2011). 'The Role of Natah as a Balinese Spatial Order of Occupation, Case Study: Batuan Village Gianyar, Bali'. Research Report. Bandung: Maranatha Christian University.
- Ngakan Made Anom Wiryasa & Ngakan Ketut Acwin Dwijendra (2017). Institutional Structure Models in Implementation of Spatial Planning. *Journal of Sustainable Development; Vol. 10, No. 4; 2017 ISSN*

- 1913-9063 E-ISSN 1913-9071. Published by Canadian Center of Science and Education.
- Nordholt, HS (1986) Bali: colonial conceptions and political change 1700-1940 from shifting hierarchies to 'fixed' order, Rotterdam: Erasmus.
- Pakilaran A.U. (2006). "Transformation of Shape and Spatial in Store House in Chinatown Area of Makassar (1970-2005)". Thesis. Bandung: ITB.
- Patton, Michael Quinn. (1980). *Qualitative Evaluation Method*. Sage Publications
- Picard, M (1996) Bali: cultural tourism and touristic culture. Singapore: Archipelago Press.
- Picard, M. (1996). Bali: cultural tourism and touristic culture. Singapore: Archipelago Press.
- Poerwadarminta, WJS (1989) *Kamus Besar Bahasa Indonesia*. Jakarta: Balai Pustaka.
- Prijotomo, Josef. (1992). Ideas and Forms of Javanese Architecture. Yogyakarta: GadjahMada University Press.
- Proshansky, HM *et al.* (1983) 'Place identity: physical world socialization of the self', *Journal of Environmental Psychology*, vol. 3, pp. 57-83.
- Putra, IDGADP. (2015) 'The impact of tourism on the transformation of the tradisional Balinese house, unpublished PHD thesis, Melbourne: Deakin University Australia.
- Shils, E (1971) 'Tradition', *Comparative Studies in Society and History*, vol. 13, no. 2, Special Issue on Tradition and Modernity, pp. 122-159.
- Son, IDGADP. (2015) 'The impact of tourism on the transformation of the traditional Balinese house, unpublished PHD thesis, Melbourne: Deakin University Australia.
- Stephany, Shandra. (2009). 'Transformation of the Order of Space and Shape on Tongkonan Interior in Tana Toraja South Sulawesi', *Interior Dimension*, Vol. 7, No. 1. thing: 28-39.
- Suambara. I Wayan, *et al.* (2014). Regional Development Work Plan (RPKD) Badung District Year 2015. Badung: BappedaLitbangBadung reGENCY.
- Sueca, N.P. (2007). "Continuity and Physical Changes of Traditional House Architecture in Desa Kesat Kesiman Denpasar Bali". Research Report. Denpasar: Udayana University.
- Sueca, N.P. *et al.* (1999). "Transformation of Traditional Public Space on Growth Center, Environmental Case Study Along Jalan Supratman Denpasar". Research Report. Denpasar: Udayana University.
- Swellengrebel, JL (1984) Introduction, in JL Swellengrebel (ed), *Bali: studies in life, thought, and ritual*, Foris Publication Holland, Netherlands, pp. 1-76.
- Wikstrom, T (1995) 'The home and housing modernization', in DN Benjamin, *The home: words, interpretations, meaning and environment*. Avebury: Aldershot.
- Wood RE (1993) 'Tourism, culture and the sociology of development', in K Hitchcock & Parnwell (eds), *Tourism in South-East Asia*, Routledge, London, pp. 48-70.

How to cite this article:

Ni Made Emmi Nutrisia Dewi *et al* (2018) 'Transformation of Bale Daja Architecture in Housing of Sading Village, Badung, Bali, Indonesia', *International Journal of Current Advanced Research*, 07(6), pp. 13221-13225.
DOI: <http://dx.doi.org/10.24327/ijcar.2018.13225.2347>
