Typology of Balinese Traditional Ornaments in Resort Hotel Buildings in Sawangan, Kuta Selatan, Bali

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Abstract—Referring to the Bali Provincial Regulation Number 5 of 2005 which states that building facades must pay attention to aesthetic principles and characteristics of traditional Balinese architecture. This study aims to analyze the implementation and typology of traditional Balinese ornaments on the building of a resort hotel in Sawangan, Kuta Selatan. The use of ornaments at resorts building in Sawangan is inspired and takes forms from traditional Balinese ornaments. Therefore, it is necessary to study the characteristics of building ornaments through a typological approach and the results are useful in implementing regulations and preserving Balinese cultural values in essential forms, especially in resort hotel architectural design. The method used in this study is a qualitative rationalistic approach to the concept and form of ornaments associated with traditional Balinese ornaments. The results of this study indicate a typology based on the concept of ornament forms and elements that are related or take ideas from traditional Balinese ornaments.

Keywords: typology; ornament; resort; hotel; Sawangan.

I. Introduction

Ornamental design or commonly called ornament is etymologically derived from Greek language, namely from the word ornere which means decoration work, and ornamentum means the resulting work, namely decoration [1]. Decoration also means a decorative element that functions to decorate an object, in order to add aesthetic value and grandeur [2]. Ornaments and decorative have a symbol or symbolic and at the same time the formation of identity [3]. The decoration in buildings is one of the building’s character formers and is one way to find out the style or style used in the building. Decoration is something that is designed to add to the beauty of an object. Based on the lexical meaning, decoration can be defined as: a) decoration; b) something designed to add to the beauty of an object normally without practical use; c) actions, qualities and so on which aim to add to the beauty [4].

Ornaments are one of the characteristics of Balinese traditional architecture. The presence of modern architectural styles in Bali has had an effect on the reduced implementation of traditional Balinese ornaments in buildings. In order to maintain the value of traditional Balinese architecture, especially ornamentation, the Provincial Government of Bali made the Bali Provincial Regulation Number 5 of 2005 which states that the exterior appearance of a building must pay attention to the aesthetic principles of the form, architectural characteristics, and the environment around it and to consider the principles of preservation. Requirements for the buildings exterior must apply traditional Balinese architectural concept and /or pay attention to the form and characteristics of Balinese traditional architecture.
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Sawangan area is one of the areas in Benoa Village, Kuta Selatan which has a rapid development of tourist accommodation. This study uses 3 resort hotel that is located in Sawangan. This study uses a qualitative rationalistic method through the conceptual approach and types of traditional Balinese ornaments, the concept of unity, accents and forms in architecture. The formulation of traditional Balinese ornament concepts and architectural concepts becomes the basis for analyzing the ornament variants on the facades of resort buildings in Sawangan. There are 3 types of Balinese traditional ornaments based on their shape, namely: keketusan, pepatran and kekarangan. Architectural concepts related to unity, accent and the form of a complete ornament and complementary elements.

The purpose of this research is to identify the variants and concepts of the ornamental forms used on the facades of the resort hotel buildings in Sawangan. This is related to the implementation of the Bali Provincial Regulation Number 5 of 2005, especially the ornaments used on building facades. The final results of this study also aim to maintain the values of traditional Balinese architectural concepts in tourist accommodation buildings, especially resort hotels as tourist attractions and introduce traditional Balinese architecture.

**Balinese Traditional Ornaments**

In Balinese Traditional Ornaments, there are two main forms that are used as a decorative design concept, namely the form of flora and fauna. The form of the ornament is divided into 3 types, including:

(a) **keketusan** which takes the most important part of a plant which is patterned repeatedly by processing to enhance its projection, for example: mas-masan, genggong, bias membah and others;

(b) **pepatran** displays in the form of beautiful ornament compositions in a form also called patra whose basic idea is taken from the floral form, for example: patra punggel, china, olanda, banci and others;

(c) **kekarangan** is a form of decoration with an arrangement that tries to approach the existing flora and fauna with an emphasis on beauty in certain parts, for example: karang gajah, guak, bentulu, daun dan angsa [5].

The ornaments position on the building's facade is closely related to the *Tri Angga* concept because each ornament has a different meaning. *Tri Angga* is an expression of values that divides physical life into three hierarchical parts. *Tri Angga* conception is a concept that regulates the composition of the elements of human life in their natural / physical environment.

The division of the ornaments position on the building facades, among others, is as follows:

a. **Head of the building**: ornament on the roof, namely in the form of a pepatran, which is in the form of celedu and murda.

b. **Body of the building**: the ornaments used are in the form of keketusan, pepatran and kekarangan at several corners of the building such as karang guak, karang boma, karang tapel and so on. In addition, there is a pepalih, which is an arrangement patterns on a brick wall.

c. **Foot of the building**: using a keketusan and kekarangan ornament such as karang asti. At the feet, there are bebaturan, which is the floor of the building, different levels or stairs as a passage up and down the floor to the yard.

The position of the ornament has a certain meaning, such as the karang asti in the form of an elephant located at the foot of the building because the elephant is considered as a support for the building. On the other hand, the karang guak is a bird because it is considered lighter and can fly so that it is located in the upper corner of the building [6].
Typology concept

In terms of solving problems, this study uses several architectural theories such as typology and typomorphology theories. Typology is the study of types. Types are groups of objects that have the same characteristics of formal structures. Typology is the study of grouping objects as models, through similarity in shape and structure, namely the study of types with categorization and classification activities to produce types. The diversity and uniformity of these categories and types can be seen at the same time [7]. According to Johnson [8], typology is a study of types. Type comes from the word typos (Greek) which means impression, image, or figure of an object. In general, types are often used to describe the overall shape, structure, or character of a particular form or object. The grouping of architectural objects can be done in three stages, namely determining the basic form, basic properties and studying the development of basic forms into new forms [9]. In addition to typology as a method, it is also a conception of grouping architectural objects in finding similarities in basic properties [10].

The Concept of Form in Architecture

The concept of identifying an architectural object can be done by recognizing the characteristics of the object in question, so that the characteristics of an object will be easily recognized in relation to finding the typology of an architectural object [11]. Added that the expression of an architectural object can be divided into 3 aspects such as:

- physical system, namely the plan form, spatial organization, space orientation and hierarchy;
- physical system, namely the use of materials from the architectural object; and
- display system, namely the appearance and elements of the architectural object [12].

II. Method

The location of this research is located in the Sawangan area, which is included in the Peminge Traditional Village, Benoa Village, South Kuta District. This study focuses on a resort hotel building located in the Sawangan area and uses Balinese traditional concept ornaments in its building design. There are 3 research objects that will be examined, among others: (1) St. Regis Bali Resort; (2) Hilton Bali Resort; (3) The Ritz Carlton Bali.

The research method used in examining the typology of ornamentation in resort hotel buildings is a qualitative rationalistic which can be divided into two stages, namely the data collection method and the data analysis method. The data collection method is done by:

(a) direct observation to the field to observe ornamental objects in the resort hotel building in Sawangan;
(b) literature review relevant to this research topic, namely the form of Balinese traditional ornamentation, the concept of typology in architecture and the concept of unity, accent and form in architecture;
(c) interviews with competent figures with the object being studied in obtaining information directly and conceptually. The data analysis was carried out using a qualitative descriptive method as well as examining the forms of ornamentation in the resort hotel buildings and their relation to traditional Balinese ornaments.

III. Results and Discussion

St. Regis Bali Resort

The building design of the St. Regis Bali Resort uses an architectural concept that takes some ideas from traditional Balinese architecture. The overall resort design is inspired by the Balinese "Nyegara Gunung" concept which depicts a sacred journey from the mountain to the sea. The term "Nyegara" means sea and "Gunung" means mountain which can also be interpreted as the holiest temple in Bali, located on the highest land in Bali, Pura Besakih. The forms of ornaments used are also inspired by traditional Balinese ornaments.

The restaurant wall uses a flower-shaped ornament whose idea is taken from the keketusan mas-masan, but has transformed from its shape, size and pattern. The shape taken is in the form of flower petals which consists of four parts and does not have a core. The patterns are made apart from each other. The material used uses sandstone which is painted brown in accordance with the design of the hotel building.

The top of the roof using a murda whose shape is inspired by the shape of pepatran which is transformed into a flower bud shape so that it is used as an ornament on the roof of the building.

The function of this murda ornament is not only aesthetically pleasing but has a function as a lightning rod that is placed on the top of the roof. The material used in this murda ornament uses clay to strengthen the traditional impression.
At the entrance to the villa building, there are ornaments in the form of *patra punggel* carved on the top of the door. This ornament is commonly used at the entrance (*angkul-angkul*) of traditional Balinese buildings. Ornamental material uses wooden material to give a natural and traditional feel to the entrance to the building.

![Murdha ornaments on top of St.Regis Bali Resort roof](image1)

![Pepatran ornaments on entrance door and outdoor sculpture St. Regis Bali Resort](image2)

In addition, in the garden area, there are sculptures whose shapes take the idea of *karang daun* combined with several elements from *patra punggel* and *patra sari*. The material used in the sculpture is natural stone which is large in size so that it gives a monumental impression and functions as a landmark to indicate a certain location in the hotel area.

**Hilton Bali Resort**

The Hilton Bali Resort building was originally Grand Nikko Bali hotel which the building concept inspired from traditional Balinese buildings. The Hilton Bali Resort building uses the *Tri Angga* concept in its building design so that it has a clear division between the head, body and foot of the building. The head part is in the form of a roof in the form of a pyramid shape, the body of the building is in the form of a room and its supports, and the legs are in the form of a ladder and also a building border.

The hotel building has lots of stairs and also an elevator because the location of this hotel is on the edge of a cliff so that there is a high level difference between the buildings, this happens because the building maximizes the view towards the beach so that it is designed to get the best view and position.

The use of *kekarangan* ornaments is very common in the hotel buildings, from the bottom to the roof of the building. *Kekarangan* ornament is transformed into a simpler form without leaving the basic concept. For example, *karang guak* in the shape of a bird which still has a shape like a bird's head and *karang asti* ornament that resembles an elephant's head. Apart from the shape, the position of the ornament still refers to the original concept. *Karang guak* is located at the top of the building while the *karang asti* is located at the foot of the building.

![Kekarangan ornaments on Hilton Bali Resorts building](image3)

![Pepatran ornaments on The Ritz-Carlton Nusa Dua building](image4)

In one part of the building, there is an ornament of snail-shaped snails combined with other ornamental elements. In addition, on the roof of the building there is a *patra punggel* which is modified to *ikuh celedu*, besides that there is also a *murdha* on the top of the roof.

![Keketusan and Pepatran ornaments on Hilton Bali Resorts building](image5)

The architectural design of The Ritz-Carlton Nusa Dua applies the local symbolism of "Kalpataru", as the main concept of the whole building. This "Kalpataru" has a philosophy as the source of life, which represents strength, wisdom and beauty. The interior and exterior design of the hotel uses "wicker" decorations which aim to create architectural and environmental works of rural Bali.

The ornaments in this resort building use the concept of traditional Balinese ornaments, but the forms used are transformed into a simpler form without traditional Balinese carvings. At the corner of the roof there are no ornaments such as *ikuh celedu*. Whereas in the listplank, the roof is seen using plain wood without any ornaments.

![Pepatran ornaments on The Ritz-Carlton Nusa dua building](image6)

In several other parts of the building there are several ornaments that take the form of *keketusan kuta mesir* ornament that has been modified on the walls of the building. The pattern used is to adjust to the extent and shape of the wall that extends upwards. The material uses a white jogja face to match the hotel building design. There is a modified
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patra samblung ornament and used as a wall decoration. The shape of the ornament and the pattern has undergone a transformation with a simpler leaf shape. The material used also uses a uniform white jogja face with other ornamental colors.

Tidak terdapat adanya kekarangan pada desain bangunan karena konsepnya yang lebih modern sehingga pada sudut-sudut bangunan tidak terdapat ornamen kekarangan. Hanya ada bentuk bebataran pada kaki bangunan tanpa adanya ornamen sama sekali.

IV. Conclusion

Ornamental analysis is divided based on the type of ornament used and the placement on the building facade. The types of peculiar ornaments found on the hotel facade include: keketusan mas-masan, bias membah, genggong, banci and kuta mesir. The implementation of the harshness on the hotel facade undergoes a transformation into a simpler and more modern form, it can be seen from the form that the burst is not as complicated and complete as the original concept. In addition, there is a combination of keketusan genggong and patra banci that produces ornaments with new and beautiful shapes. The ignition position is implemented on the part of the building body which is used as a wall and window ornament.

In the type of pepatran ornament used are patra punggel, patra banci and patra olanda. The type of pepatran that is widely used is the patra punggel which is modified to produce a shape like murda and ikuh celedu. The position of the pepatran is implemented on the head and body of the building which is used as an ornament on the roof and walls of the building. Murda and ikuh celedu are used on the head of the building as an ornament on the tops and corners of the roof of the building. However, not all roofs of buildings use pepatran ornaments, only about 50-75% of entire roof. In addition, there is a patra banci to fill the empty space in the middle of the hotel building wall.

The types of kekarangan ornament used on building facades such as karang gajah, karang guak, karang bentulu, karang daun and karang angsa. There is 1 resort building, namely the Hilton Bali Resort which uses 3 types of kekarangan ornaments, such as karang gajah, karang guak, karang bentulu are implemented in about 75% of the hotel building facades. The use of kekarangan ornaments is influenced by the traditional Balinese architectural style used at the Hilton Bali Resort. Although there is a transformation of the form of kekarangan which is simpler than the original ornamental concept.

There is a karang guak in the corners of the upper body of the building and in the middle it uses karang bentulu, while at the foot of the building there is an karang gajah ornament. It can be concluded that the implementation of the ornament on the hotel facade has maintained the basic concept of Balinese traditional ornaments by undergoing a transformation into a simpler and more modern form.

The shape of the ornament adapts to the hotel architectural style which combines traditional Balinese architecture with modern architecture. The use of ornaments on the head of the building uses a modification of the pepatran in the form of murda and ikuh celedu, the body and legs of the building use the pepatran and kekarangan as ornament for walls, windows and the base of the building.

The materials used include jogja sandstone, silakarang paras stone, palimanan stone, clay, concrete and wood. There are 2 research objects that use 5 different types of materials in ornaments, namely St. Regis Bali and Hilton Bali Resort. Palimanan stone, clay and jogja face have a smooth texture with natural color hues, while silakarang face has a coarser texture with a natural gray color. The use of concrete and wood materials has a texture that tends to be smooth with finishing natural color. The use of materials in the ornament conforms to the hotel's architectural style, which is a blend of modern and traditional architecture. Materials that are widely used in ornaments are clay and silakarang paras stone, because they are considered to represent traditional Balinese architectural styles. The ornamental materials used have shapes and colors that match the architectural style of the hotel.

<table>
<thead>
<tr>
<th>Hotel</th>
<th>Keketusan</th>
<th>Pepatran</th>
<th>Kekarangan</th>
</tr>
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<tbody>
<tr>
<td>Ritz Carlton Bali</td>
<td>Jogja Stone</td>
<td>Silakarang stone, Wood.</td>
<td>Jogja stone</td>
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</tbody>
</table>
Based on observations and information from the informants, it is concluded that there are 3 ornamental functions on the resort hotel facade, including:

The function of decoration, which is an ornament that only has a function to beautify or enhance the aesthetic value of the building facade. Ornaments are not related to building structures or building utility systems.

Constructive technical function, ornament not only serves to beautify the facade, ornament also functions in the building construction system. The construction functions include, among others, roof ridges, lightning rods and water showers.

The function of symbols / markers, namely the ornament serves to provide information or a pointer to find out the functions and activities in the building. This is to make it easier for hotel visitors to distinguish buildings from one another.

In implementing ornaments in hotel buildings, there are several considerations. Based on an interview with Wayan Wirantaja, Head of Engineering Staff at St. Regis Hotel, there are several considerations that determine the decision to design a hotel facade whether or not to use the concept of traditional Balinese ornaments. The factors that influence the implementation of the ornament include the following:

The expensive ornamental construction costs will affect the construction costs when compared to buildings that do not use traditional Balinese ornaments.

Building construction time if using traditional ornaments will take longer than buildings that do not use ornaments.

Maintenance of a building that has a lot of ornaments will cost money, time and effort. The hotel must carry out regular maintenance on the building facades such as cleaning and repairing damaged ornaments.

It is hoped that knowing these determinants can be reconsidered in the future so that the implementation of Balinese traditional architecture can run even better. It is better if it is separated from these considerations, trying to keep the hotel design using the Balinese traditional architecture concept, although not as a whole so that Bali didn't lose its identity and culture.

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References