Interpretation of Hierarchical Layouts and Shape of Ornaments in Balinese Architecture

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Abstract. The existence of ornaments and decorations in the form of architecture, especially Balinese architecture is one of the architectural elements that distinguishes one architecture from another. The purpose of this research is to reveal the meaning of Balinese architectural ornaments and decorations made of stone related to the placement and shape of the ornaments and decorations. In this study, the meanings to be studied are representational meanings and responsive meanings. In this initial study, the exploration of ornaments and decorations on Balinese architecture will be carried out in the perspective of meaning with the context of the placement and form of ornaments and decorations on Balinese architecture made of stone. The study method used in this research is basically a qualitative method using normative criticism technique. Broadly speaking, this research concludes that representationally related to the hierarchical placement of ornaments and decorations implies the strength of natural characteristics and natural obedience, while those related to ornaments and decorations contain the meaning of pleasure and beauty. Responsively related to the hierarchy of ornaments and decorations contains the meaning of balance, while related to the form of ornaments and decorations contains the meaning of appreciation for all elements of nature.

Keywords: Interpretation, Hierarchy Layout, Shape, Meaning, Ornament Dan Decoration

1 Introduction

In the architectural process there are three main activities, one of which is the 'making' activity, namely the activity of realizing architectural ideas into three-dimensional building forms, (Winand Klassen, 1990: 14). This activity is an effort to unite and arrange architectural elements in certain ways into a physical form of the building. A building comes with all the thoughts, tastes, agreements, norms, selection, modification, imitation/mimesis, creativity, beliefs and beliefs that exist within the presenter, Josef Prijotomo (1988). The 'making' activity as the beginning of the process of realizing architectural formations is closely related to the arrangement and preparation of materials, the use of construction systems and the methods of completion or completion of the formations themselves.

What is described is entirely related to the term 'techne' proposed by Aristotle in Lorens Bagus (2000), namely the ability to make something with the right understanding of the principals involved. Porphyrios (1991) and Frampton (1995), mention that the term 'techne' is the origin of the term 'tectonics', namely knowledge related to carpentry or 'carpentry'. In

Indonesia, 'tectonics' is translated into tectonic, which is the art of working on and finalizing parts of the architectural look. The attention that is usually paid to tectonic matters is construction, especially the completion of a construction, Josef Prijotomo (1988). The result of processed construction into a form of higher architectural quality is what is meant by ornaments and decorations.

In Bali, the architectural forms that are presented are full of ornaments and decorations, with various distinctive features and patterns and with various touches that add to the variety of these ornaments and decorations, which are one of the distinguishing elements from other architecture in this archipelago. These ornaments and decorations are an integral part of Balinese architecture in its presence as a bodily formation. As an integral part of this ornament and decoration, it has a very important role in presenting the physical formations of an architecture, Josef Prijotomo (1988).

Other aspects that we can observe from these ornaments and decorations in connection with so many forms, patterns and meanings that appear are; aspects of embodiment, aspects of manufacturing procedures, aspects of form, aspects of materials, and aspects of layout. So basically, ornaments and decorations besides functioning as a symbolic expression and beauty, also function as the completion of the construction system.

The existence of ornaments and decorations in the form of architecture, especially Balinese architecture is one of the architectural elements that distinguishes one architecture from another. Exploration of the presence and presence of ornaments and decorations in Balinese architecture can be done in various points of view (perspective) and field of cultivation (context). In this initial study, the exploration of ornaments and decorations in Balinese architecture will be carried out in the perspective of meaning (meaning) with the context of the layout and form of ornaments and decorations in Balinese architecture made of stone.

The purpose of this research is to reveal the meaning of Balinese architectural ornaments and decorations made of stone related to the placement and form of these ornaments and decorations. According to Hersberger (in Broadbent, et al., 1980:22) basically meaning is divided into 2 (two), namely: representational meaning and responsive meaning. Representational meaning or objective meaning is meaning that arises from outside and is related to objects, events, and so on. While the meaning of responsive or subjective meaning is all related to internal factors and is only owned by the observer and captured by his own feelings.

Based on this reference, the meaning of Balinese architectural ornaments and decorations made of stone in the context of their placement and form will be carried out on the representational and responsive meanings contained in the ornaments and decorations.

Research on ornaments and decorations in Balinese architecture, which is carried out in the perspective of meaning with the context of placement and form, is expected to answer and explain the following problems:

- a. What is the hierarchy of the placement of ornaments and decorations and their forms in Balinese architecture made of stone?
- b. What meanings do ornaments and decorations contain in Balinese architecture, both meaning based on their placement and form?
- c. Therefore, the exploration of meaning will begin with identifying the location and form of ornaments and decorations in Balinese architecture.

2 Research Methods

The study method in this study is adapted to the mindset used by the reviewer in solving problems that arise. In the assessment mindset, it is clear that the activities carried out are depicting, interpreting and evaluating activities. So that all activities that will be carried out in this study are included in the cultivation of a critique. The understanding of criticism in the study, based on the notion of criticism according to Wayne Attoe (1978), in his book entitled "Architecture and Critical Imagination", states that there are three types of criticism, namely; normative criticism, interpretive criticism and descriptive criticism, which consists of ten fundamental methods.

In this study, the normative criticism method will be used. Normative criticism is a criticism that is based on norms. Norms in architecture can be in the form of doctrines (statements, opinions, standards), systems, types and sizes. This criticism requires rational considerations in working on architectural issues, so that it can be called objective with clear logical steps and can be accounted for in the pattern of reasoning. In other words, this criticism can be called 'reason' criticism or mind's view. Therefore, normative criticism is most suitable for dealing with issues that are theoretical in nature (or more deeply at the philosophical level).

3 Results and Discussion

Josef Prijotomo (1997), states that architectural ornaments as a collection of various types, patterns, colors of decorative elements can be broadly grouped into two, namely ornaments and decorations and decorations. Ornaments and decorations are decorations that are an integral part of construction, in other words that these ornaments and decorations arise as a result of the completion of construction called tectonics. The presence of ornaments and decorations in architectural formations is the result of construction activities, namely the preparation of materials with a certain appearance, technique and manufacturing method, with the aim of giving a certain impression or expressiveness to the building.

Meanwhile, decoration is decoration that is attached to architectural components, but is not an integral part of the construction and is merely installed as an aesthetic/decorative element. In other words, decoration is an element of decoration that is present in architectural formations by being affixed or affixed to certain parts of the building, as an element to decorate the building.

Decorative forms in Balinese architecture are translations of objects that exist in nature, such as plants, animals, humans and some are based on religious values and beliefs which are abstracted into a harmonious embodiment of beauty. The forms of decoration, color schemes, how to make and placement contain certain meanings and purposes. According to Gelebet, (1985: 331), what is considered in the presentation (processing and placement) of decoration in a building is aesthetics, ethics and logic.

The decorations in the oldest Balinese architecture before external influences were in the form of lines and geometric decorations, in the form of circles or curved and straight lines that were repeated rhythmically, Oka (1985:263). And then (after external influences) is a reflection of objects that exist in nature, namely in the form of plants (flora), animals (fauna) and humans (which are usually displayed in the form of thoughts about religion, customs and beliefs). For more details, the typology of ornaments and decorations and decorations in Balinese architecture can be seen in the following table.

Table 1. Ornamental Variety Typology (Ornaments and decorations and Decorations) in Architecture Bali

Architecture Bali				
No.	Jenis	Tipologi	Tipologi Bentuk	
110.	Ragam Hias	Ragam Hias	Tipologi Dentuk	
1.	Ragam Hias Flora	A.Keketusan B.Kekarangan 1) Karang Batu 2) Karang Bun 3) Simbar 4) Bentala 5) Menur 6) Dore C.Pepatraan 1) Patra Wangga 2) Patra Bun- bunan 4) Patra Pipid 5) Patra Punggel 6) Patra Samblung 7) Patra Pae 8) Patra Ganggong 9) Patra batun Timun 10) Patra Sulur 11) Patra Bun dengan	a. Ukiran b. Tatahan c. Pepulasan d. Pepalihan e. Lelengisan	
2.	Ragam Hias Fauna	Motif A.Kekarangan 1) Karang Asti 2) Karang Tapel 3) Karang bentulu 4) Karang Manuk/Goak 5) Karang Sae 6) Karang Boma 7) Ikuh Teledu B.Patung 1) Patung Garuda 2) Patung Singa 3) Patung Lembu 4) Patung Naga 5) Patung Kura- Kura 6) Patung Kera 7) Patung Souvenir 8) Patung Binatang C.Patra Dasar / relief	a. Ukiran b. Tatahan c. Pepulasan d. Lelengisan	
3.	Unsur-Unsur Alam	A. Air B. Api-apian C. Awan D. Gegunungan	a. Ukiran b. Tatahan c. Pepulasan d. Lelengisan	

		E. Bebatuan	
		F. Kekayonan	
		G. Geginan/Profesi	
		A. Patung	
		B. Pratima	a. Ukiran
4.	Agama &	C. Rerajahan	b. Tatahan
4.	Kepercayaan	D. Patung Pada	c. Pepulasan
		Bagian Bangunan	d. Akit-akitan
		E. Relief Religi	
		 A. Kekupakan 	
		B. Kencut	a. Ukiran
		C. Jaro	b. Tatahan
5.	Ragam Hias	D. Tapuk Manggis	c. Kekupakan
5.	Lainnya	E. Patra	d. Lelengisan
		F. Lelengisan	e. Akit-akitan
		G. Pepalihan	c. Akit-akitali
		H. Reruitan/Sebitan	

Sumber: Survey, 2021

The main function of decoration in Balinese architecture is as an ornamental and decorative element that adds to the aesthetic value of the building. The function of decoration as an element of architectural aesthetics can be shown through the form, color, texture, material, material, arrangement and elements of art that are integrated harmoniously. Decorative variety in the form of ornaments and decorations in Balinese architecture, is mostly found on the outside (exterior) of the building.

This is due to the fact that more human activities are carried out outside the room, therefore the outside of the building is decorated. Besides functioning as an aesthetic element, this decoration also has a symbolic function, especially implemented in sacred buildings and temporary buildings for religious ceremonies.

Here are some visualizations of ornaments and decorations in Balinese architecture made of stone.



Fig 1. Keketusan (Sulur dan Mas-masan) Sumber: Gelebet, 1986

Ornaments in the form of a curvaceous shape taken from the characteristics of vines, flowers and seeds, are used in the transition from the legs to the body of the building and from the body to the head of the building. And also used as a frame on the areas of the building. The ornament of steadfastness has a meaning that binds positive traits, namely the fulfillment of the need for clothing, food and shelter and the achievement of living in harmony and peace in this world and in the hereafter.



Fig.2. Pepatraan (Patra Sari) Sumber: Gelebet, 1986

Ornaments in the form of representations of basic ideas are taken from the characteristics of flora, starting from twigs, leaves, pistils and flowers which are stylized and displayed in their entirety. This type of decoration is in the form of compositions of decorative beauty in patterns which are also called patra. Each patra has a strong identity, so it is easy to know but can vary in its application. Used to fill relatively wide fields in buildings. The meaning of pepatraan is to provide protection to human life from fear, heat and thirst, so as to provide comfort for humans who live in the building environment decorated with pepatraan.

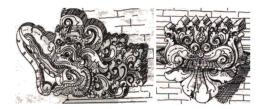


Fig3. Kekarangan (Karang Asti) and Kekarangan (Karang Simbar) (Gelebet, 1986)

Ornaments in the form of coral generally take the form of fauna (see figure 3) above which takes the form of an elephant, known as coral asti or coral elephant and flora (see picture 4) above which takes the form of a plant, known as coral simbar. Coral has an expressionist style, which leaves the actual form so that the fauna is presented in an abstract way. Karangan displays a form of decoration with an essay that tries to approach the existing flora forms by emphasizing parts of beauty. Like the type of keketusan or pepatran, the type of coral is very much found in traditional Balinese decorations.



Fig 4. Togog (Patung Dwarapala) and Pelinggih Padmasana

One of the decorations in the form of decoration is a statue (togog). Like picture 4 above, it is a dwarapala statue which is usually placed in front (right and left) of the entrance to a holy place (temple). Especially for ornaments in the form of corals by taking the basic idea of fauna, the layout is adjusted to the characteristics of the referred fauna (see Figure 6). The characteristics that become the basis or consideration in its placement include body size and shape, habitat and living habits, and life characteristics. The image of the padmasana pelinggih above shows the order of the placement of the ornaments starting from the bottom in the form of Bedawang Nala (a turtle wrapped by two dragons), coral asti / elephant, coral, tapel coral, goak / manuk coral, and bentulu coral.

The basic idea of ornamental forms in Balinese architecture comes from the forms of flora and fauna that are stylized in such a way, indicating that nature and all its contents in Balinese architecture have an important position and must get attention and become a source of knowledge and consideration in the embodiment of architecture. The use of the basic idea of the form of flora and fauna can be interpreted representationally as an attempt to represent nature as a source of pleasure and beauty. Responsively the use of flora and fauna as the basic form of ornament in Balinese architecture can be interpreted as a form of human appreciation for all elements of nature that have provided and fulfilled all the needs of human life.

In terms of the placement of ornaments based on the distinctive characteristics of the flora and fauna used, representationally it can be interpreted as a representation of the strength of natural characteristics and natural obedience, which is owned by each of the flora and fauna used. By placing ornaments in accordance with the natural characteristics and living nature of the flora and fauna used, it is hoped that they can express the strength and nature of nature in the form of architecture that is formed. The placement of ornaments, which takes into account both their physical characteristics and their nature, can responsively be interpreted as a human effort to achieve balance, both with God, nature and all of its contents and also between humans.

4 Conclusion

Representationally related to the hierarchical layout of ornaments and decorations implies the strength of natural characteristics and natural obedience, while those related to ornaments and decorations contain the meaning of pleasure and beauty. Responsively related to the hierarchy of ornaments and decorations contains the meaning of balance, while related to the form of ornaments and decorations implies respect for all elements of nature.

References

- Achmad Djunaedi, 1989, Pengantar Metodologi Penelitian Arsitektur, Universitas Gajah Mada, Yogyakarta.
- [2] Demetry Porphyrios, 1991, Classical Architecture; The Living Tradition, McGraw-Hill, Inc, London.
- [3] Eko A. Prawoto, 1999, Tektonik Arsitektur Y.B. Mangunwijaya, Cemeti Art House, Yogyakarta.
- [4] Gelebet, I Nyoman, 1986, Arsitektur Tradisional Bali, Departemen Pendidikan dan Kebudayaan Propinsi Bali, Denpasar.
- [5] Josef Prijotomo, 1988, Pasang Surut Arsitektur di Indonesia, CV. Ardjun, Surabaya.
- [6] -----, 2004, Arsitektur Indonesia Menuju Keniscayaan, PT. Wastu Lanas Grafika, Surabaya
- [7] ------, 2006, (Re)Konstruksi Arsitektur Jawa: Griya Jawa dalam Tradisi Tanpatulisan, PT.
 Wastu Lanas Grafika, Surabaya

- [8] -----, 2018, Prijotomo Membenahi Arsitektur Nusantara, PT. Wastu Lanas Grafika, Surabaya
- [9] Pangarso, Budiwidodo, FX., dkk., 2014, Teknik Pendekatan Desain: Bentuk Estetik Arsitektural, Kanisius Yogyakarta
- [10] Prawoto, E., A., 2000, Membaca Batu dan Kayu: Apresiasi pada Kualitas Tektonika Arsitektur, Procedding of The Third International Symposium of Islamic Expression In Indonesian Architecture, h. 51 – 58
- [11] Heinz Frick, 1997, Pola Struktural dan Teknik Bangunan di Indonesia, Kanisius, Yogyakarta.
- [12]
- [13] -----, 1989, Traditional Rural Architecture and Building Methods in the Hill of Central-East Nepal, Dome Verlag, Liechtenstein.
- [14] -----, 1998, Sistem Bentuk Struktur Bangunan, Kanisius, Yogyakarta.
- [15] -----, 1999, Ilmu Bahan Bangunan, Kanisius, Yogyakarta.
- [16] Kenneth Frampton, 1995, Studies in Tectonic Culture, The MIT Press, London.
- [17] Lucien Febre, 19..., Architecture and Techne, http://architronic.saed.kent.edu/v7n1/v7n104a.html.
- [18] Made Wijaya, 2002, Architecture of Bali: A Source Book of Traditional and Modern Form. Bali, Wijaya Word
- [19] Norman Crowe, 1995, Nature the Idea of a Man-Made World, The MIT Press, London.
- [20] Nuri Arthana, 2002, Kajian Tektonika Terhadap Ornamen dan dekorasi Pada Arsitektur Bali, Thesis Program Pascasarjana Institut Teknologi Sepuluh Nopember, Surabaya
- [21] Pius A. Partanto, 1994, Kamus Ilmiah Populer, Arkola, Surabaya.
- [22] Ranjit Kumar, 1993, Writing a Reasearch Proposal, Curtin University of technology, Australia.
- [23] Winnand Klassen, 1990, Architecture and Philosophy, University of SanCarlos Cebu City, Philippines.
- [24] Wayne Attoe, 1978, Architecture and Critical Imagination, John Wiley & Sons, New York.