Evolution of Hindu–Buddhist Architectural Ornaments Into Javanese Traditional Architecture: Case Study of Sewu Temple

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Abstract: Sewu Temple is the second largest Buddhist temple after Borobudur Temple, located in Klaten Regency, Central Java. As an architectural masterpiece built in the 8th century and older than Borobudur and Prambanan Temples, Sewu Temple has an important role in the development of archipelago’s architecture. The background of the temple building can be known through the ornaments that decorate parts of the temple. Ornaments contain certain meanings with Hindu-Buddhist principles, not only as visual ornament elements, so the role of ornaments is important. Ornaments are an artistic component that is added to decoration in crafts, including architecture. Ornamenation cannot be separated from the socio-cultural background of the community and the area of origin of the ornament, because ornamentation is a means of communication to reduce culture from the previous generation to the next generation. Therefore, it is necessary to further study the evolution or development of the forms and meanings of architectural ornaments in the archipelago with a time series of architectural developments in the Hindu-Buddhist era and traditional architecture, especially Java, following the location of the temple. The purpose of this study is to examine the evolution of forms, patterns, and meanings of Hindu-Buddhist architectural ornaments found in Sewu Temple in their development towards traditional Javanese architecture. This research uses descriptive qualitative method. This research found that there is a relationship between Javanese architectural ornaments and architectural ornaments found in Sewu Temple in terms of motifs, placement patterns and the meaning of ornaments.

Keywords: ornaments, traditional, Javanese architecture, Sewu Temple

Introduction

Ornaments are components of art that are added as decoration to crafts, including architecture (Gustami, 2008). Ornaments not only as decoration but also illustrate the socio-cultural background of the people from which the ornament came (Sunaryo, 2009). Ornaments appear as a result of human existence and its relationship with the environment which aims to add qualitative features to objects together with the quantitative states in the process of individual efforts to think, design, create, and communicate, people find ornaments in every field of design, from small objects to urban planning (Sağlam, 2014).

In line with these opinions, ornaments become a means of communication to bring down a culture from the previous generation to the next generation (Oliver, 1997). Communication is a process of transferring an idea from the source to the recipient with the intention of changing the behavior of the recipient (Rogers, 1986). In this case, the source is an ornamental maker on the temple as an ancestor, and the recipient is the next generation. Looking at the importance of the role of ornaments in architectural works that have functions and objectives as a means of communication to reduce culture from generation to generation, architectural ornaments become an interesting topic for further research to find out the evolution motives and their meaning from time to time.

One of the archipelago cultures is Javanese culture. Javanese civilization is an advanced civilization, this is evidenced by the existence of large kingdoms in the land of Java and its
inheritance that can be seen today. One product of its culture is Javanese architecture which is divided into the Classical Javanese Era or the Hindu-Buddhist Era and then develops into the Javanese Traditional Era. Traditional Javanese architectural works still use ornaments as ornaments on the building. These ornaments come from previous cultures, namely the Hindu-Buddhist Era. The architectural heritage of the Hindu-Buddhist Era is the temple (Soekmono, 1974).

The role of ornament is important in its presence in the temple building, because through ornaments we can find out functions, history, community rituals, orientation, position, hierarchy, and private aspects - the public at the temple (Halim, 2017). Sewu Temple is the largest Buddhist temple after Borobudur Temple and is older than the Borobudur Temple and Prambanan Temple. Through Sewu Temple we can see the variety of ornaments that developed during the Hindu-Buddha period, especially in Java.

Therefore, further study is needed regarding the development of the shape and meaning of architectural ornaments found in Sewu Temple and Javanese architecture to determine the evolution of the forms and meanings of architectural ornaments in the Hindu-Buddhist era with the Traditional Javanese era. Analysis of the study of ornaments in Sewu Temple in Central Java was carried out by mapping the ornaments found in Sewu Temple and then conducting a literature review of the ornaments found on Javanese Traditional architecture, both Central Java and DIY. Comparative studies were conducted to see the comparison of ornaments found in Sewu Temple and Javanese architecture by looking at the variety of ornamental motifs, ornamental placement, and the meaning of ornaments.

![Figure 1. Location map of the Candi Sewu in Klaten, Central Java, Indonesia](image)

**Method**

The type of research used is a qualitative research approach, which is a method that involves an interpretive and naturalistic approach to the subject of research by learning things in natural settings, trying to understand or interpret a phenomenon (Groat & Wang, 2013). The research strategy chosen is phenomenology, namely researchers identify experiences about a phenomenon. The procedure of this study requires the researcher to examine the subject by directly and relatively long involvement in the object of his research to develop meaning patterns and relations (Moustakas, 1994).

Phenomenology explains the phenomenon and its meaning for individuals by conducting interviews with a number of individuals. This finding was then related to the philosophical
principles of phenomenology. This study ends with the essence of meaning (Taylor, Bogdan, & DeVault, 2015).

The pre-field stage consists of literature studies related to research topics, namely literature related to temple ornaments and Javanese architectural ornaments. Literature studies are conducted so that researchers have background research so that they are better prepared when entering the next stage. Some points from the literature study that will become the foundation in this research such as:

**Study of Javanese Temple in Central Java**

The Classical Era is also called the Hindu-Buddhist Era because it is based on evidence in the form of inscriptions that the development of Hindu-Buddhist culture in Java lasted around the 8-15th century which was also a period of development of cultural milestones, namely royal systems, scripts, religious architecture, arts, etc. (Munandar, 2012). The Classical Javanese Era left "traces" which until now are still standing firmly and we can enjoy as evidence of historical heritage from the past, one of which is the temple. The temple is a place of worship and funeral of the kings, and/or building forms that originate from the Hindu-Buddhist kingdom (Soekmono, 1974).

The temple building in Java has two styles, namely the Central Javanese Temple and East Javanese Temple (Soekmono, 1974). The Temple in Central Java has several general features, including the shape of a curvy building, its roofs and steps, the door and niches decorated with Kala-Makara, the dimensions of relief are high with naturalist themes, the temple is in the middle of the page, human and animal figures are directed to the observer (enface), the theme of the story in the relief is generally wiracarita (epos). In Kala's head, in addition to pairing with makara (a mythical animal combined between elephants and fish), generally Kala in Central Javanese temples is depicted without a lower jaw (often without a pair of claws), and impresses a lion's face symbol of victory face (kirttimukha) (Munandar, 2012).

**Study of Buddhist Temple**

Based on its architectural form, temples in Central Java can be further divided into two patterns with different religious backgrounds, namely Hindu temples and Buddhist temples. Hindu and Buddhist temples have several similarities, including the vertical division of buildings in the form of foot, body, and head, which can always be found, namely the foot, body and head of the temple. (Atmadi, 1988).

Based on the vertical division of architecture both in Hindu and Buddhist temples actually symbolizes layer 3 of the world, namely the world of badness, the world that is rather good, and the world of full virtue. This is stated explicitly in the temple building, especially in terms of the application of ornaments, because there are ornaments that typically describe a particular world.

**Study of Ornament**

Ornaments come from the word "ornare" (Latin) which means to decorate. Ornaments also mean that art components are added for decoration purposes (Gustami, 2008). Objects that can be decorated with ornaments are objects in the form of handicraft products, including household items, ceramics/pottery, clothing/fabrics, furniture, and architectural components (Sunaryo, 2009). From that definition, clearly places ornaments as works of art that are made to be devoted to or support a particular purpose of a product, precisely to add the aesthetic value of an object/product.
Architectural Ornaments of Temple

The function of the temple as a place of worship of gods or ancestors is identical to the elements of ornament that decorate some or all parts of the temple. The ornament element which is a facade in the temple building is not only a visual decoration element, but also contains certain meanings according to Hindu-Buddhist principles and the era of temple erection. In its realization, the placement of ornaments cannot be placed arbitrarily.

There are certain reasons based on the principles of Hinduism and Buddhism. Placement of the ornament also produces a specific meaning, the difference in placement of ornaments will result in different meanings. The embodiment of ornamental forms can be physically different, in terms of Hindu and Buddhist temple architectural styles.

According to (Istari, 2015), ornaments on the temple can be divided into six motifs including geometric, floral, fauna, human, cosmos, and creation / imaginary motifs. Besides those kind of motifs, ornaments are also divided into three techniques of embodiment of temple ornaments which can be realist / naturalist, stylization / composition, and combination / creation.

Whereas according to its character, ornaments can be divided into passive and active. Passive, that is, the ornament only functions to decorate (aesthetically), which is active, in addition to decorating an object, it also supports other things on the object such as determining its strength (structural).

Architectural Ornaments of Javanese Architecture

There are two kinds of ornaments can be found in Javanese houses, there are constructional decoration and non-constructional decoration. Construction decoration is a decoration that blends with the building. While ornaments that are not constructional are decorations that can be separated from the building and do not affect the construction of the building.

Ornaments found in traditional Javanese houses are generally constructional, so they are always one with the building (Dakung, 1981). All ornaments found in traditional buildings, both public buildings and individual ones, in addition have artistic value as well as spiritual values (Slamet, 1985).

After that, enter the stage in the field by observing to collect documentation of ornaments at Sewu Temple based on previous background research.

The last step is analyzing the findings by mapping Sewu Temple ornaments based on their location and shape, then comparing and matching Sewu Temple ornaments (empirical) with Javanese architectural ornaments (theoretical).

Results and Discussion

Candi Sewu is the second largest Buddhist temple in Central Java, which is older than Borobudur Temple. Sewu Temple was built at the end of the 8th century which is thought to be a royal temple and one of the centers of religious activity which was quite important in its era, whereas it was seen from its location not far from Prambanan Temple that at that time two major world religions namely Hinduism and Buddhism were side by side peacefully.

The Candi Sewu complex consists of 1 Induk temple located in the middle of the area, 4 pairs of Apit temples located in the four corners of the wind, and 240 Perwara temples that surround the temple area.
Both the Induk temple, the Apit temple, and the Perwara temple are decorated with a variety of beautiful and attractive ornaments. Ornaments on the temple become interesting to be investigated further because of its role as the origin of the development of architectural ornaments in the archipelago. This development will be reviewed by researchers by comparing the ornament of Sewu Temple architecture with the background of Buddhism and ornaments of Traditional Javanese Architecture with Islamic background, in terms of the shape, pattern of ornamental placement, and the meaning of each ornament.

At the foot of the temple there is a series of relief ornaments depicting the purnakalasa motif (flower vase decoration), as well as the "statue" of the lion at each corner of the meeting between the foot and the structure of the ladder. In addition, on the outer side of the stairs cheek with a makara shaped tip, there are reliefs depicting a yaksa, kalpawreksa, and purnakalasa shaped like sankhas. To reach the surface of the batur that forms a hallway, there are about 2 m wide stairs equipped with stair cheeks. The base of the stairs cheek is decorated with makara, a dragon's head with its mouth gaping wide, with a Buddha statue in it. The outer cheek wall of the stairs is decorated with giant sculptures in the form of Kalpawreksa.
Figure 4. Kalpawreksa sculpture motives

The process of analyzing architectural ornaments in Sewu Temple is done by mapping the types of temple ornaments and types of Javanese architectural ornaments.

| Type of Ornament | Nusantara | Temple | Javanese | Candi Sewu | Position |
|------------------|-----------|--------|----------|------------|----------|
| Geometric        | Pilin     | Tumpal | Tumpal   |            |          |
|                  |           |        | Kawung   |            |          |
|                  | Meander   | Meander| Swastika |            |          |
|                  | Rozet     |        |          |            |          |
|                  | Tempel    |        |          | ✓          | Body     |
|                  |           |        |          |            |          |
|                  | Profil Moulding | ✓ |          |            | Foot     |
| Floral           | Purnakala-sa | Padma | ✓        | ✓          | Body     |
|                  | Uthpala    |        | ✓        |            | Body     |
|                  | Kumuda     |        |          |            |          |
|                  | Kalpataru  | Kalpataru| ✓      |            | Body     |
|                  | Sularan    | Lung-lungan| ✓    |            | Body     |
|                  | Saton      |        |          |            |          |
|                  | Wajikan    |        |          |            |          |
|                  | Nanasan    |        |          |            |          |
|                  | Tlacapan   |        |          |            |          |
|                  | Kebenan    |        |          |            |          |
| Fauna            | Aves       | Upper world | ✓        |            | Head     |
|                  | Mammals    | Earth world | ✓       |            | Body     |
|                  | Reptils    | Down world  | ✓        |            | Foot     |
| Human            | Genital Organ|       | Mask     | ✓          | Foot     |
|                  |            |        | Eye      | ✓          | Body     |
|                  |            |        |          |            |          |
|                  | Whole body |        |          | ✓          | Foot     |
|                  |            |        |          | ✓          | Body     |
| Cosmos           | Kala       | Kala   | ✓        |            | Body     |
|                  | Makara     | Makara | ✓        |            | Foot     |
|                  |            |        |          | ✓          | Body     |
|                  | Kemuncak   |        |          | ✓          | Head     |
|                  | Relung     |        |          | ✓          | Body     |
|                  | Jaladwara  |        |          | ✓          | Foot     |
| Type of Ornament | Nusantara Temple | Javanese | Candi Sewu | Position |
|------------------|------------------|----------|------------|----------|
| Gana             |                  |          |            | Body     |
| Kepetean         |                  |          |            | Foot     |
| Praba            |                  |          |            | Body     |
| Gunungan         |                  |          |            |          |
| Panah            |                  |          |            |          |
| Mega             |                  |          |            |          |
| Mendhung         |                  |          |            |          |
| Banyu Tetes      |                  |          |            |          |
| Fantasy          |                  |          |            |          |
| Antefix          |                  |          |            | Head     |
| Medallion        |                  |          |            | Foot     |
| Guirlande        |                  |          |            | Body     |
| Pilaster         |                  |          |            | Body     |
| Relief           |                  |          |            | Body     |
| Stair Tongue     |                  |          |            | Foot     |

Geometric ornaments of Javanese architecture such as pilin, tumpal, kawung, meander, and swastika are not found in Candi Sewu Architecture. Geometric motifs are only beginning to develop in the Hindu Era which can be seen in Prambanan Temple, which is after the Buddhist Era, so it is estimated that geometric motifs of pilin, tumpal, kawung, meander, and swastika have not appeared in the Buddhist Era.

**Figure 5.** Geometric motives of Javanese Architecture adapted from Slamet, 1982

While the geometric ornaments found in Sewu Temple are in the form of geometric patches and molding profiles. The paste motif on the Sewu Temple is found on the body parts of the temple to decorate the wall with a repetition of a circle in which there are simple flower carvings.

**Figure 6.** Geometric motives tempel of Candi Sewu Photo by the author, 2019

Floral ornaments of Javanese architecture were found in the Sewu Temple Architecture, but the floral ornaments of Javanese Architecture developed or distilled increasingly diverse forms.
In addition to its stylized form, the ornamental meaning of flora motifs in Javanese Architecture also developed along with the Islamic religion which developed in the era of Javanese Architecture.

![Floral motives of Javanese Architecture adapted from Dakung, 1981](image1)

Figure 7. Floral motives of Javanese Architecture adapted from Dakung, 1981

Flora ornaments that appear on the Sewu Temple in the form of retirement are vases filled with flowers, lotus or lotus flowers, vines or plants and flowers that spread, and *kalpataru* or *kalpawreksa* trees.

![Figure 8. Floral motives of Candi Sewu Photo by the author, 2019](image2)

Figure 8. Floral motives of Candi Sewu Photo by the author, 2019

Fauna ornaments of Javanese architecture that represents / depicts three levels of the world, namely the upper world (sky), the middle world (land), and the underworld (water) are always found in Sewu Temple Architecture and have not undergone changes in layout.

![Figure 9. Fauna motives of Javanese Architecture adapted from Dakung, 1981](image3)

Figure 9. Fauna motives of Javanese Architecture adapted from Dakung, 1981

Fauna motif ornaments that depict three levels of the world according to the three world divisions of the temple. In Sewu Temple, the underworld is symbolized by makara, namely the dragon's head with its mouth wide open and the Buddha statue in it, makara is located at the end of the stairs entering the main temple. Makara is a vehicle of a god that means repellent. The middle world is symbolized by a lion found on the lower body of the temple. Whereas the upper world is symbolized by a human-bodied eagle that stands on two sides of the temple's head. The garuda motif symbolizes the ancestral spirit that goes to heaven or can also symbolize the vehicle of Lord Vishnu, so that the garuda motif has the sacred meaning of the upper world.
Human ornaments of Javanese architecture are not found in Sewu Temple Architecture, Javanese architecture tends to depict intact human ornaments while the architecture of temple ornaments tends to depict human ornaments as a whole.

Cosmos ornaments of Javanese architecture are found in several parts of Sewu Temple Architecture, but the ornamental forms of Javanese Architecture also experience the development or distillation of increasingly diverse forms.

Fantasy ornaments / Javanese architectural creations are rarely found in Sewu Temple Architecture, ornaments of Sewu Temple architecture are more varied compared to Javanese architectural ornaments which aim to reduce the ornamentation of living things in buildings.
Conclusion

From several findings that have been obtained at the stage of field observation and analysis, it can be concluded that the ornaments of non-living creatures and non-cosmos are not found much in Sewu Temple Architecture. The architecture of Sewu Temple tends to have many ornaments of flora, fauna, humans, and cosmos. While the ornaments of Javanese architecture have more geometric ornaments and creations. Ornaments of living things and cosmic ornaments in Javanese architecture have undergone a development or distillation so that the ornaments possessed by Javanese Architecture are far more diverse than the ornaments of Sewu Temple Architecture.

This is also influenced by the religious background of the era/era in which culture and architecture developed. Sewu Temple architecture was born in the era of Buddhism while Javanese Architecture was born in the era after, namely after the entry of Islamic teachings in the archipelago so that there were differences from the results of cultural acculturation between Buddhism and Islam. The findings prove the statement (Dakung, 1981) that the decoration of flora and fauna in Javanese Architecture is distilled because in Islamic teachings the depiction of naturalist living things is prohibited.

However, there are interesting findings to be investigated further, fauna ornament always found the of Javanese Architecture in Sewu Temple Architecture which did not experience a change in placement on the structure of the building. The fauna ornaments represent the three levels of the world and human life in accordance with the teachings of Buddhism and Javanese philosophy. The form of depiction of ornamental fauna in Javanese architecture does not seem to have many changes compared to the fauna ornament found in Sewu Temple ornament even tends to be the same.

In addition to fauna ornaments, Kala and Makara ornaments also did not experience changes in shape and layout. Kala and Makara ornaments on Javanese Architecture and Sewu Temple Architecture also have the same meaning, namely Kala which is located at the top of the door as a repellent for reinforcements and Makara which is located on the right and left side of the door as a "pair" of Kala.

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