

Sacred Signs and Forms of the Modern Mosques

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ABSTRACT

The existence of a sign on the building is very important because it communicates the message of the building to the observer and user. With the sign, a building can be known as its functions. Not only the sign, but the form of the building also shows the function in it. Therefore, a sacred building like a mosque should also need sacred signs and forms. This study aimed to explore sacred signs and forms of modern mosques. This study used Peirce's Semiotics approach and concept of form-function-meaning relation. The results of this study indicate that some modern mosques have strong sacred signs and form, and some are not. The results of this study can be the beginning of further studies (development studies) and a reference source for studies of sacred signs and the form of the other sacred buildings.

Keywords: *Form, function, modern mosque, sacred sign, sign*

1. INTRODUCTION

In the development era of engineering technology, especially building material technology, there have been many variations of architectural forms, including the architectural form of the mosque. In various major cities in this country, the architectural form of the mosque appears with a variety of styles, which sometimes it does not convey a message to observers and users that it is a place for Muslims worshipping. Among these, even, do not have sacred signs and forms that can convey the message that the building is a mosque, a sacred building.

Different from the modern mosques, the traditional mosques (such as "Javanese mosques" style or "Walisanga mosques" style), which are even widely available throughout the country, have powerful sacred signs and forms [1]. On the one hand, modern forms may have presented mosques that are innovative and not monotonous, but on the other hand, the sacred factor that is needed for a mosque is neglected.

Sacred signs and forms of religious buildings are vital. The sacred sign will tell the observers and visitors that near the "sacred sign," there was a religious building (e.g., mosque or church). The existence of a sacred sign also assures observers and visitors of the intended building. So it is with the sacred form; it will immediately tell the function of the space enclosed by the sacred form of the building.

An object can be seen and achieved by the observer by observing its position against anything outside of itself. These positions can be seen and achieved from a broader scope, such as city scope, to a narrower scope, such as site, building, and space scope [2, 3, 4].

The existence of a sacred sign is based on the normal view of observers from a certain distance of the building. This visibility can be grouped into categories: long distance, medium distance, and short distance. Long-distance visibility is usually required for buildings whose services

cover the scope of the city, medium distance for buildings within the scope of the environment and site, and short distance for building details.

For traditional religious societies, something sacred is associated with great things. The mountain is considered sacred because it is high. Such conditions, up to now, still apply to religious buildings. The forms of buildings that are considered sacred are marked by something high. In this study, the highest forms of buildings or parts of mosque buildings are considered sacred forms.

This study aims to explore the sacred signs and forms of modern mosques in two major cities in Indonesia: Jakarta and Bandung, and their supporting cities, which were built in the early modern period (around the 1950-1970s) and the millennium (since 2001-present). Consideration sets these two periods: first, the early modern period (for the Indonesian people) is the period after the Nation's Independence and tries to equalize with other nations; one of them is by "putting tradition under the table"; second, the millennium period is the peak period of globalization in all fields, including in the field of architectural engineering.

Based on history, famous mosques built in the early modern period, including the Istiqlal Mosque, Jakarta (1963-1978, architect Silaban), Al-Azhar Mosque, Jakarta (1953-1958), Sunda Kelapa Mosque, Jakarta (1960-1970, architect Gustaf Abas), and Salman Mosque, Bandung (1963-1972, architect Achmad Noe' man). Famous mosques built in the millennium, including Bani Umar Mosque, Tangerang (2007-2008, architect Fauzan Noe' man), Al-Irsyad Mosque, Parahyangan City, Bandung (2009-2010, architect Ridwan Kamil), Mosque Al-Azhar Summarecon, Bekasi (2012-2013, architect Ridwan Kamil), and Al-Saffar Mosque, Purwakarta (2014-2017, architect Ridwan Kamil). Selected case studies: Istiqlal Mosque, Salman Mosque, Bani Umar Mosque, and Al-Irsyad Mosque. Istiqlal.

In this study, the study cases are mosque of Istiqlal, Salman ITB (Institut Teknologi Bandung), Bani Umar, and

mosque of Al-Irsyad, Istiqlal Mosque and Salman Mosque represent the early modern period. On the other hand, the Bani Umar Mosque and Al-Irsyad Mosque represent the millennium. The four mosques were designed by different architects.

Essential issues in this study are: first, how the forms of the modern mosque buildings; and second, how the forms of the sacred signs in modern mosque buildings. The analysis used Peirce's semiotic approach and the concept of form-function-meaning relations. These approaches are the most suitable for answering the problem of the study. The discussion consists of: theoretical review, exploration of the buildings and analysis, and conclusions.

2. THEORETICAL REVIEW

2.1. Signifier and Signified

The term "semiotics" comes from the Greek word, *semeion*, which means sign. Semiotics means the study of signs [5]. Semiotics and semiology have the same meaning: the study of signs. The first term was put forward by Charles Sanders Peirce, a logician, American, and the second term were put forward by Ferdinand de Saussure, a linguist, Swiss. The two of them did not know each other about what they were doing at the time. Saussure did not know Peirce's theoretical concepts about signs, and vice versa, Peirce was not familiar with Saussure's structural linguistic concepts.

According to Saussure, linguistic signs consist of "signifier" and "signified". "Signifier" is a meaningful sound: what is said or heard and what is written or read; it is a form of sign language. Meanwhile, "signified" is something meaning or purpose that is behind what is said or heard or written or read; it is an aspect of the meaning of language signs. [6]. Saussure said the unity relationship between the signifier and the signified was arbitrary.

For example, one time, at a street intersection, there was a traffic light there, the lights were turned red. Then this red light is a signifier. What is the meaning or purpose of the red light for a motorist who wants to cross? The meaning or intention is that the driver must stop the vehicle. In this last case is signified. So in one red light sign, there is a signifier and signified.

2.2. Peirce's Semiotic

According to Peirce, a sign is not a structure (Saussure's semiology), but a cognitive process derived from what the senses can capture. Therefore Peirce's semiotic is also called pragmatic semiotic. Peirce sees the sign as "something that represents something". The first "something" - the "real" - is a "representation" called Representamen (R), while the "something" that is in cognition is called an Object (O). The process of

interpreting the relationship between representamen and objects is called Interpretant (I) [7,8].

Based on the relationship between the Representamen (R) and Object (O), Peirce distinguishes signs: icon, index, and symbol. An icon is a sign that contains a similarity between the Representamen (O) and the Object (O). For example, a geographical map (R) is an icon of the actual geography of the region (O). An index is a sign that contains a phenomenal or existential attachment between the Representamen (R) and the Object (O). For example, footprints on wet ground (R) are an index of someone who has passed there (O). A symbol is a conventional sign (general agreement or agreement of the general public) and arbitrary.

Peirce's semiotic triadic (Representamen, Object, and Interpretant) at a glance is seen as a translation of the Ogden and Richards triangles [1923]. Ogden and Richards examine language signs from three sides, namely, symbol, thought, and referent [9]. Peirce also distinguished three levels of meaning: Firstness (first), that is, when a sign is interpreted in principle only; Secondness (second), when the sign is interpreted individually; and Thirdness (third), when the sign is interpreted as a permanent convention [10].

In this study, the most appropriate sign is the index. Sign of index, which is a sacred sign and form of the mosques, can be considered as representamen (R), and mosque functions can be considered as objects (O). The meaning of the relationship between representamen (R) and object (O) requires interpretation (Interpretant-I) [Figure 1].

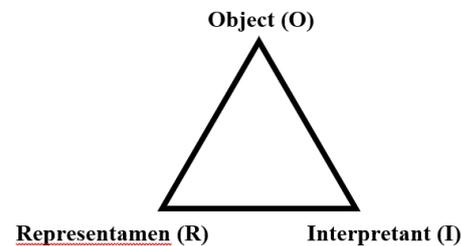


Figure 1 Peirce's Semiotic Triangle.

2.3. Relation of Form-Function-Meaning

The relation of function-form-meaning is one of the important themes in the study of architecture. It was started by Marcus Vitruvius Pollio (around the first century BC), who stated that all buildings must be built concerning durability (*firmitas*), convenience (*utilitas*), and beauty (*venustas*) [11]. David Smith Capon then tested the *Vitruvius Trium*. Capon concluded, there are six categories in the principles of architecture (principles of good architecture), which are grouped into primary and secondary categories, namely: function, form, meaning as primary categories, and context, construction, spirit as secondary categories. [12]. Purnama Salura & Bachtiar Fauzy developed the concept of the function-form-meaning rotation. Every architectural design product must give priority to the elements of function-form-meaning.

These three elements form a triangle shape, which is always in a state of change [13].

The concept of the form-function-meaning relation is used as a theoretical approach to understanding the relationship between sacred signs and the form of the mosque buildings and their functions. The revealed meaning is the first level meaning: Firstness (Functional meaning).

Explanation of the application of Peirce's semiotic approach and the form-function-relation is as follows [Figure 2]:

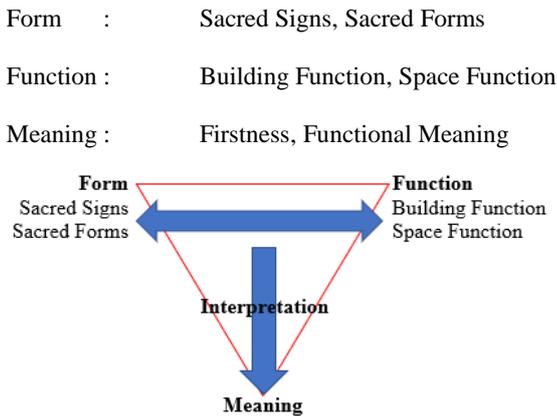


Figure 2 Diagram of Framework Analysis

3. EXPLORATION AND ANALYSIS

3.1. Istiqlal Mosque

The Istiqlal Mosque, located in the center of Jakarta, covers an area of 9 ha and has a capacity of 200 thousand worshippers; it is a state mosque. The main hall of the mosque is covered with a 45-meter half-ball dome roof. The form of the mosque is a cube with a dome roof in the middle. In the middle of the dome's roof is a sleek, quite tall round iron; at its peak, there is a crescent-shaped metal plate. On one of the mosque site, there is a tall, slim round minaret; at its peak, there is a high, slender, round iron construction. The total height of the minaret is 96,6 meters.[Figure 3,4,5].

In the first step, observers and users will look for signs that can indicate the location of the mosque building in the city scope. The minaret that is approaching 100 meters in height has been seen from quite a distance. The general public has also recognized that the minaret is a part of the Istiqlal mosque. So people can already guess that near the minaret there is the Istiqlal mosque building. In the next step, the observer and the user will find where to pray in congregation. He will look for a sign, and if not found, he will pay attention to the form of the building, the form of the building, which is large and tall. He already felt that he found the place when he saw the sign in the form of a tall metal with a crescent-shaped metal plate at the peak. The general public also understands that the shape of the

crested is one of the symbols of Islam. His conviction became stronger after seeing that the tallest part of the building was the semi-circular dome. So under the dome roof, worship space is located.

In this case, the minaret and the metal crescent plate, which is on the dome's roof, are sacred signs. Furthermore, the form of the half ball dome roof covering the main hall of the mosque is a sacred form.

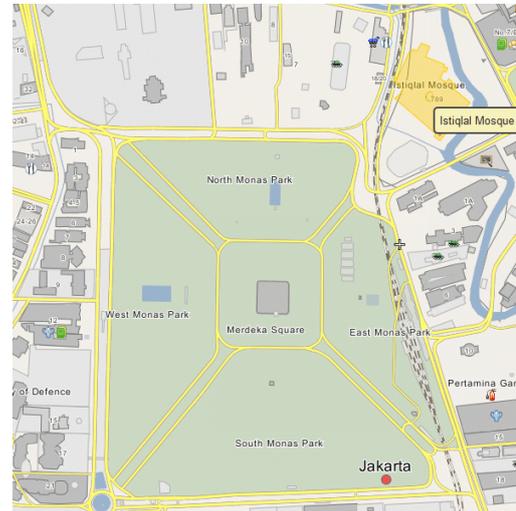


Figure 3 Location of Istiqlal Mosque: Central Jakarta [Wikimapia, 2019]



Figure 4 Exterior of Istiqlal Mosque (left) and Minaret (right) [Photo: Ashadi, 2018]



Figure 5 Interior of the Main Hall of Istiqlal Mosque covered by domes roof [Photo: Ashadi, 2018]

3.2. Salman Mosque

Salman Mosque is a campus mosque, which is part of the ITB (Institut Teknologi Bandung) campus. The mosque, covering an area of around 7500 m² and has a capacity of around 2000 people. The architecture of the Salman Mosque is not only a breakthrough but also unique. Unlike other mosques in Indonesia in the early 1970s, this mosque started the trend of mosque architecture without a dome, with a flat roof. The form of the mosque is really like a cube. On the front yard (southern), there is a minaret that is not so high, formed like a menhir; at the top, there is a loudspeaker [Figure 6,7,8].



Figure 6 Location of Salman Mosque: ITB Bandung [Wikimapia, 2019]



Figure 7 Exterior of Salman Mosque [Photo: Ashadi, 2018]



Figure 8 Interior of the Main Hall of Salman Mosque covered by flat roof [Photo: Ashadi, 2018]

For someone who has never visited before, it will not be easy to find the Salman Mosque. Even though it has a minaret, the mosque complex is still not visible from a

distance that is not too far away, because the minaret does not stand out among the surrounding environment, even blocked by lush trees. The minaret of Salman mosque cannot be a sign. Someone also feels confused to determine the main hall of the mosque because there is no part of the building that stands out (higher). So it can be said that the Salman mosque does not have both sacred signs and sacred forms.

3.3. Bani Umar Mosque

The Bani Umar Mosque is a mosque of the pride of the people of Tangerang. Like the Salman Mosque, the Bani Umar Mosque does not have a dome roof. This mosque can accommodate around 1600 worshippers. At the rear (western), there is a minaret as high as 50 meters. The form of the minaret is a square, tall, and slim. At the top of the minaret, there is an Arabic word of Allah, which made of a metal plate. [Figure 9, 10, 11].

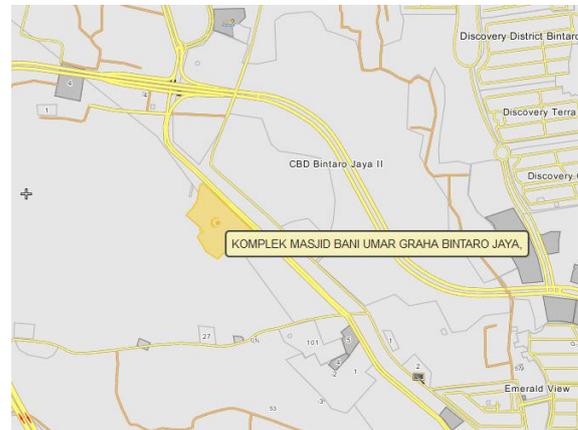


Figure 9 Location of Bani Umar Mosque: Bintaro, South Tangerang [Wikimapia, 2019]



Figure 10 Exterior of Bani Umar Mosque [Photo: Ashadi, 2018]



Figure 11 Interior of the Main Hall of Bani Umar Mosque covered by flat roof [Photo: Ashadi, 2018]

Within the scope of the surrounding environment, the minaret of the Bani Umar Mosque is visible; it is a sign that there is a building that functions as a mosque. This sign is reinforced by the Arabic word Allah on the top of the minaret. The Arabic word Allah made of a metal plate is also found on the roof of the mosque, which is relatively flat.

The Arabic word Allah is a symbol of Islam. Furthermore, the most important Islamic symbol is the mosque building. So, it can be said that the Arabic word Allah is a sign of the existence of a mosque.

In this case, the minaret and the metal crescent plate, which is on the mosque roof, are sacred signs. Moreover, the form of the flat roof covering the main hall of the mosque is a sacred form. Although the roof of the building is flat, the existence of the Arabic word Allah on it makes the mosque's cube form a sign that it covers the main hall. The staircase trap at the front to go up to the second floor is also a sign that he is directing someone to the main room; he also pointed out that the main room was on the second floor.

3.4. Al-Irsyad Mosque

The Al-Irsyad Mosque was built on an area of 1 Ha, which became an inseparable unity with the Al-Irsyad Satya Islamic School (affiliated with the Al-Irsyad Al-Islamiyah Boarding School of Singapore) an international Islamic school in Kota Baru Parahyangan. The mosque building can accommodate 1500 worshipers—the mosque is in the form of a simple cube. In one corner of the yard, there is a minaret that is not so high, in the form of a square cross-section. At the top, there is a mini globe. From the outside, a flat-roofed mosque can be seen; when, in fact, the mosque roofed the form of a kampung whose slope is very gentle and is covered by walls around the building. So that the mosque looks flat at the top. [Figure 12,13,14,15].



Figure 12 Location of Al-Irsyad Mosque: Kota Baru Parahyangan, Bandung [Wikimapia, 2019]



Figure 13 Exterior of Al-Irsyad Mosque [Photo: Ashadi, 2015]

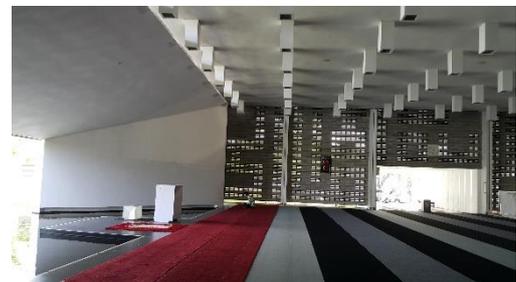


Figure 14 Interior of the Main Hall of the Al-Irsyad Mosque covered by flat roof [Photo: Ashadi, 2015]



Figure 15 Exterior of Al-Irsyad Mosque [Photo:<http://www.kotabaruparahyangan.com/fasilitas/d>]

etail/10/masjid-al-irsyad-satya, accessed 10 August 2015]

Al-Irsyad Mosque has absolutely no signs in the form of Islamic symbols, except for only one: the surface of the outer wall or the facade of the mosque in the form of a concrete block that forms Islamic calligraphy - As-Shahadah sentence. As-Shahadah sentence (I testify that there is no GOD except ALLAH, and I testify that Muhammad is Messenger of ALLAH) is an Islamic symbol.

Like the minaret of Salman Mosque, the minaret of Al-Irsyad has no sacred elements, which indicate that there is a mosque. As well as the form of the mosque building, there was no protruding part, like he was taller than the other parts. So it can be said that the building of the Al-Irsyad Mosque does not have sacred forms.

4. CONCLUSION

Of the four mosques in this study, the Istiqlal Mosque, which was a state mosque and was built in the early modern period, had very strong sacred signs and form. The sacred signs are the minaret and the symbol of the crescent made of metal plate material, and the sacred form is the half-spherical dome roof. Sacred signs also belong to the Bani Umar Mosque, which is a city mosque or neighborhood mosque, and was built in the millennium, i.e., the minaret and the symbol of the Arabic word "Allah" from metal plate material. Meanwhile, the Salman Mosque and the Al-Irsyad Mosque did not have any sacred signs and forms. In Peirce's semiotic theory, the signs on the Istiqlal Mosque and the Bani Umar Mosque are Index Sign and Symbol Sign. The results of this study can be used as an exit point for subsequent studies, both improvement and development, special studies of sacred signs in religious buildings, and their effects on functions in it.

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