



# Interpretation of the Meaning of Mosque Architecture : A Case Study Mosque 99 Cahaya in Lampung, Sumatera Island, Indonesia

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## Abstract

This research traced the relationship that exists between the expressions of mosque architecture with the meaning created. The method used for this research is: Firstly, recording building which is based on the theory about the scope of the building. Secondly, described the entire composition and building properties. Thirdly, interpreted the meaning that is created both on the outside and in the view of the space inside. Based on the results of the analysis, it can be concluded that the outside architectural form of the mosque tends to be interpreted as an abstract monument. While it's inner space interpreted as a shelter that has nothing to do with its function as a religious building. This research is expected to give theoretical contribution to the knowledge of architecture that is by formulating new method to interpret expression of architectural form in general and specifically on the mosque architecture. While in practice, this research could be used as a reference in designing mosque architecture. In addition to scientific and architectural practices, this research could be used as a source of knowledge and offered an alternative perspective for the wider community in appreciating the work of architecture

**Keywords:** *Meaning, Form, Mosque Architecture*

## 1. Introduction

The religion of Islam is expected to bring grace and peace to the whole earth. Mosque is a building for Muslims to worship congregationally. In its development, the architecture of the mosque as one of the cultural artifacts has always been influenced by the local values of the community, the politics of the local authorities, and the development of technology[1]–[3]. Based on that, the shape of the mosque that has created today becomes very diverse.

Currently, there are many mosque architecture that tend to be similar to other buildings such as office, museum, monument, or even sculpture. Variations of the building of this mosque is widely publicized in mass media and given praise for its unique shape. This varied form of mosque is often used as a reference for designing other mosques. It is because the appreciation and praise obtained from mass media.

It is believed that every form of architecture created is always born out of the need for space to accommodate specific activities[4], [5]. Human as user, will always gave meaning to relation between activities[6], [7] with created space. Humans also always gave meaning to the relation of space with the enclosure elements[8]–[10]. The main function of mosque architecture is to accommodate ritual prayer activities in congregationally. The conformity of mosque architecture with ritual worship activities is what is given meaning. This conformity is believed to be capable of bringing its congregation to the realization that they

entered a sacred place, where God resided as the center of orientation[11].

Until now, research that has been discuss the architecture of mosques generally discuss about the historical aspect and development of typology of mosque architecture[12], [13]. It can be said that there is no research that aims to reveal the meaning of the mosque's architectural appearance which is associated with the basic requirements of worship rituals in congregation. Therefore, this issue becomes important to be examined more deeply. The benefits of this research were: Firstly, a deep understanding of the relationship between the expression of the mosque's architectural form and its created meaning. Secondly, an understanding of new methods for interpreting the expression of mosque architecture. Thirdly, as a reference and source of inspiration for practitioners in designing mosque architecture. Fourthly, as a source of knowledge for the wider community and decision makers in the construction and renovation of the mosque.

## 2. Material and Methods

The Mosque 99 *Cahaya* is designed by architectural experts, Andra Matin Ahmad and Dhanie Syawallah in 2017 in Tulang Bawang Barat District, Lampung, Indonesia (e.g Fig 1). Andra Matin is a prominent architect in Indonesia who is often awarded for his creative and novelty works. Mosque 99 *Cahaya* was determined as a case study because of its very unique shape. The mosque is planned to become a local icon. The architect wants to design a mosque that is different from other mosques. It is

known that there is no special provision in designing mosque buildings. The architectural form of this mosque is designed to resemble a monument or post-modern style monument. The architect chose Islamic symbols that are symbolic figures which is important in Islamic philosophy[14]. Below are the results of re-drawing the Mosque 99 Cahaya (e.g. Fig 2-8)



Fig. 1. Map of Indonesia (above) and Tulang Bawang Barat (below)

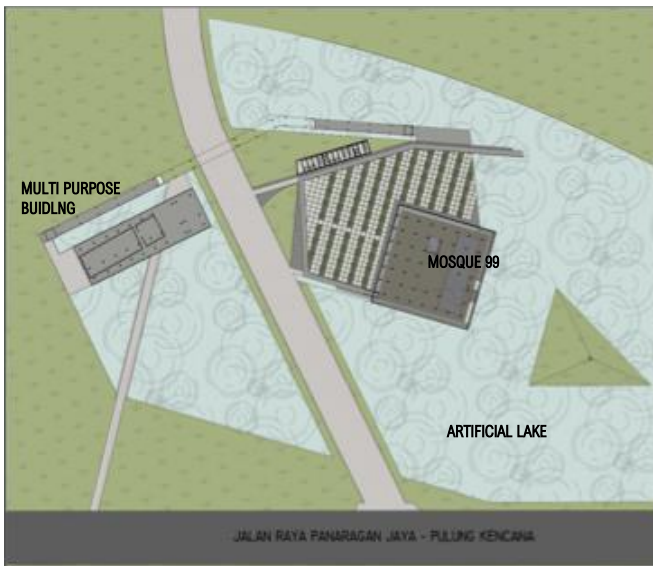


Fig. 2. Site Plan

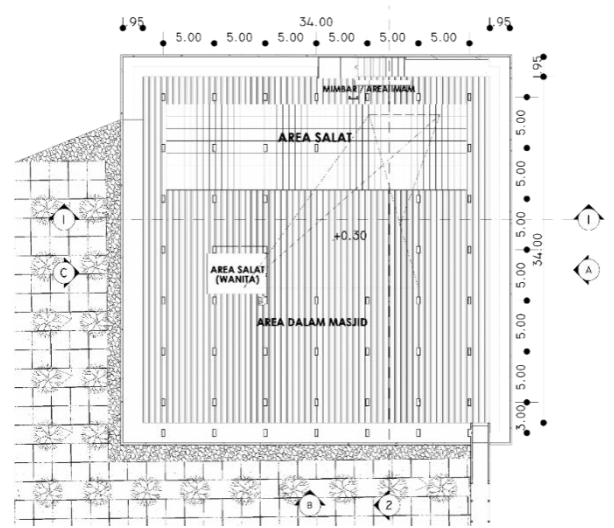


Fig. 3. Floor plan of Mosque 99 Cahaya

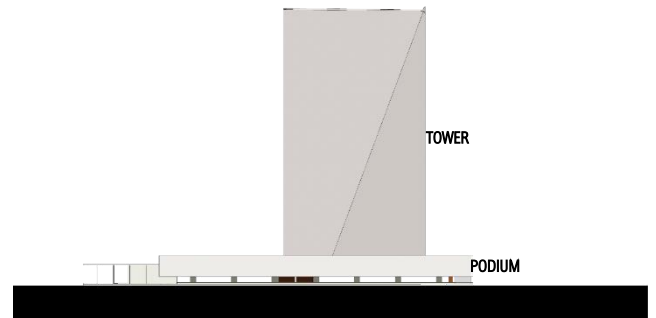


Fig. 4. View A



Fig. 5. View B

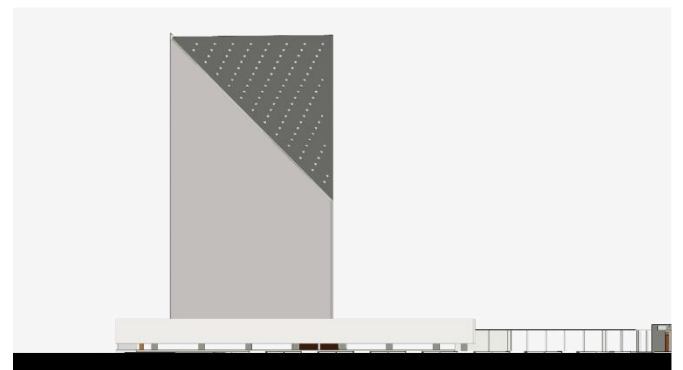


Fig. 6. View C



Fig. 7. Section 1

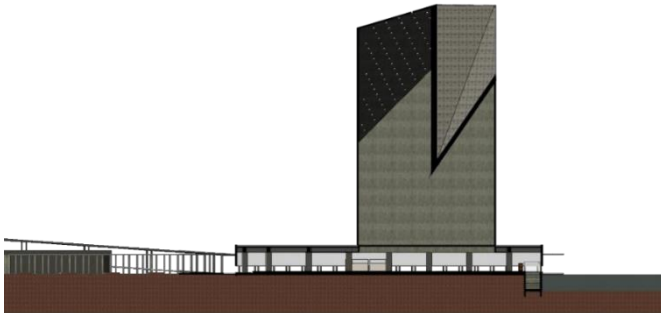


Fig. 8. Section 2

This research is based on an approach that puts forward the rotation of function-form-meaning in architecture[15]. Steps to analyze the case study arranged in order: Firstly, recorded the building on each and every scope. It was realized that a building cannot be separated from its environment. Thus, building was recorded using a scope-theory that starts from the scope of the environment, the scope of the site, the scope of the form - the scope of building, to the scope of the shape[16].

Secondly, described all elements of the building based on aspects of composition and property. The composition can be understood as an arrangement or configuration. Property consists of the basic shape, color and texture of the surface elements of the building. All elements of the building traced whether dominated by aspects of property or composition. And then analyzed whether the composition and properties mutually support or just mutually exclude.

Thirdly, interpreted the meaning presented by the dominance of the expression of the composition or property. Interpretation of meaning is based on the theory of meaning classification. There are five classifications of meaning. Namely: (1) perceptual meaning that tends to be universal and based on an understanding of hierarchical orientation; (2) cultural meaning (tradition) based on human understanding of certain traditions; (3) ideological meanings based on human understanding of the results of certain conventions (for example, religious symbols). The classification of meaning can also lead to a deeper and more personal level. That is (4) poetic meaning. The shape of the building is not only able to provide information to the observer but also presents a new experience; which was the emotional experience when an observer encounters with the Divine. The deepest layer is (5) the existential meaning. On this layer, building and place are fused. Both raise specific characters associated with religious rituals. The characters appear constantly and timelessly.

### 3. Results and Discussion

The whole form of the mosque building can be seen observed from the highway. This road is the only access to the tread area of the mosque. The shape of the mosque consists of two parts,

namely the tower and podium. In the property aspect, the whole shape of the mosque is dominated by gray which is the exposed concrete material. On the aspect of composition, verticality scale of the tower dominated the podium role (e.g. Fig. 9). Yet all the activity of praying is in the podium.

*Interpretation of the Perceptual Meaning:* The tower roof dominated the appearance of a pentagon which has different angular angles if in each direction. This resulted in the orientation of the tower direction is not clear. The front-back-right-left orientation becomes relatively the same. Thus there is no hierarchical priority. Empirical observations show that the tower has a monumental scale. Monumentality is important to express the religious expression that human beings are very small compared to the house of God. However, without a clear hierarchical orientation of direction and priority, religious expression is difficult to achieve. The shape of the tower in the mosque more shows the expression of monuments or abstract sculpture.

*Interpretation of the Meaning of Tradition:* The surrounding environment is a residential transmigrate whose shape is dominated by the form of a saddle roof with a material covering the clay tile roof. Inside the site there is a two-story building which is dominated by the shape of the architectural saddle roof (e.g. Fig. 10). The roof shape is a dynamic arrangement of gable roofs. Referring to the environmental context, the shape of the tower displays the expression of another form of its surroundings. The appearance of the monumentality of the tower's form managed to become an accent in its environment. Although its expression is more as an abstract monument that is very alien from the tradition of its environmental form.

*Interpretation of Ideological meaning:* Simple geometry shapes and exposed concrete materials are often associated with modern building styles. Modernism initially departs from the ideology of effectiveness and efficiency of industrial material use. The tower displayed exposed concrete expression that does not refer to pure geometry. The shape of the tower is an abstract conventional sculpture that does not show the ideology of the efficiency of modernity. The expression of a universal Islamic ideology such as the symbols of calligraphy pattern or the moon star sign of the mosque is not found. In the ideological layers, it can be interpreted that this building is a sculpture that seems to breathe modern architecture by displaying the expression of concrete material.



Fig. 9. Overall Shape of Mosque 99 Cahaya as viewed from site entrance



Fig. 10. Comparison between the shape of Sesat Agung (left) and the mosque (right)

Interpretation of perceptual, tradition, ideological meanings, indicates that this mosque tends to be associated as an abstract monument or sculpture not a religious building. The meaning of Poetic and Existential is based on the interpretation of the three layers of meaning that have been described. On the poetic side, in general the mosque should be able to present a new experience of the sacrality of religiosity. This mosque shows no sacred expression.

Architecture always begins with activities; all activities are believed to have a specific character arising from central motion and or linear motion. The main area of the mosque which is the prayer room in the podium, has a square plan of  $34 \times 34$  meters. Judging from the nature of motion, the square shape tends toward the center. Such shapes generally have a major orientation as well as a hierarchical priority at the center of the building. These forms are very suitable for gathering activities. This centered motion character is in contrast to the motion of praying activities that lead to the *Qibla*.

*Interpretation of Perceptual Meaning:* When performing a prayer, the congregation is required to face the *Qibla* and be in a complete line. The movement of prayer activity that tends to be linear, certainly very different from the motion on *tawaf* which is concentric (the pilgrims surrounding the Ka'bah as center). The congregational prayer in the mosque requires pilgrims to face the *Qibla* and be in the line of *saf*. This congregationally prayer rules required the arrangement of space that tends to be linear with the main orientation toward the mihrab as a sign of *Qibla* direction.

In this mosque, the shape of a square-shaped prayer room with a light hole located relatively a bit to the center strengthens the orientation toward the center of the building. Not to the direction of the *Qibla* which should be the main orientation when praying. The four sides of the prayer room in the podium section tend to be similar and have no real barrier or visual filter from outside the prayer room. Mihrab which has the highest hierarchy as the center of orientation does not exist. The absence of a mihrab element as an orientation marker leads to the prayer space being unable to display its religious expression. Instead of as a prayer room, this building is more properly interpreted as a shelter on a large scale.

*Interpretation of the Meaning of Tradition:* The prayer room is dominated by a spherical grey wall made of exposed concrete material. The screw wall has an almost identical arrangement, which is massive at the top and opens at the bottom (1.25 meters high from the floor) to show the view toward the artificial lake. On the traditional layer, it can be interpreted that this building is a shelter with a monotonous look (tends to be similar on all four sides).

*Interpretation of the Meaning of Ideology:* Expression of Islamic religious ideology is generally shown by the use of colors, geometry, and calligraphy and arabesque are agreed as sacred symbols. In this mosque, the architect applies the numbers in al-quran to be applied in the design. For example, a  $34 \times 34$  meters size is chosen as the size of the prayer room on the grounds that 34 is the number of prostrations in prayer. The congregation, which was consisted of ordinary people is not necessarily aware of this, so it is feared that the application of that number has no effect in presenting the religious experience for the congregation. More easily visible symbols are calligraphic symbols (e.g. Fig. 11) and 99 light holes in tower roofs as a representation of 99 names of Allah (*Asmaul Husna*) (e.g. Fig. 12). It is unfortunate that the selection of this symbol position actually weakens the orientation toward the *Qibla* wall. In the ideological layers, the interpretation of the prayer room is a space for shelter that tends to be monotonous with an unrecognizable Islamic symbol attached to its appearance.



Fig. 11. Calligraphy on The Ceiling

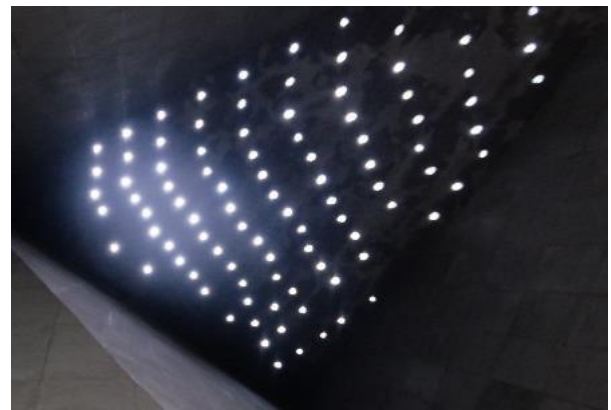


Fig. 12. The light hole as a representation of the 99 names of Allah (*Asmaul Husna*)

Interpretation of the meaning of perceptual, tradition, ideology, shows that the prayer room in this mosque tends to be associated as a shelter which is covered by exposed concrete that is identical with the industrial tradition, not religious buildings. Thus, almost similar to the interpretation from its outward appearance that its poetic and existential meaning cannot be represented by the expression of the prayer space.

#### 4. Conclusion

Based on the analysis conducted, it can be concluded that: Firstly, this research has succeeded in formulating new method to evaluate mosque architectural form based on classification theory of meaning.

Secondly, the results of the analysis show that the outward expression of the case study is interpreted as an abstract monument that is unable to display religious expression. While the expression of the prayer room interpreted as a shelter that tends to be monotonous with a symbol of Islamic attached to the appearance which is very difficult to recognize. It can be said that the expression of the appearance of the outer architectural form and the inner space is unable to display the sacred expression ideally displayed by any religious buildings.

Thirdly, a deep understanding of the relationship between the mosque's architectural form and the interpretation of meaning is very useful in evaluating the shape of the existing mosque as well as to design other mosques. This study also positioned mosque architecture on the development of mosque architecture that tend to be more diverse in the context of global development

## References

- [1] F. Achmad, *Arsitektur Masjid*. Yogyakarta: Benteng Pustaka, 2009.
- [2] H. P. Khurri, *History of the Arabs*. Jakarta: Serambi, 2013.
- [3] S. Yulianto, *Arsitektur Masjid dan Monumen Sejarah Muslim*. Yogyakarta: Gadjah Mada University Press, 2006.
- [4] A. Sidharta Muljadinata, A. Antariksa, and P. Salura, "The role of localities in karsten's works in architecture and city of Semarang," *IOP Conf. Ser. Earth Environ. Sci.*, vol. 126, no. 1, p. 12007, Mar. 2018.
- [5] B. Alsolami, M. R. Embi, and W. I. Enegbuma, "Structural equation modelling assessment of personal and social factors on Hajj crowding among African pilgrims in Mina," *Int. J. Eng. Technol.*, vol. 7, no. 2, pp. 127–133, 2018.
- [6] D. Napitupulu *et al.*, "Analysis of Student Satisfaction Toward Quality of Service Facility," *J. Phys. Conf. Ser.*, vol. 954, no. 1, p. 12019, Jan. 2018.
- [7] A. S. Ahmar *et al.*, "Modeling Data Containing Outliers using ARIMA Additive Outlier (ARIMA-AO)," *J. Phys. Conf. Ser.*, vol. 954, no. 1, 2018.
- [8] P. Salura, "The confusing language of building façades observed along ciumbuleuit road in Bandung," *J. Lang. Lit.*, vol. 4, no. 2, pp. 101–105, Nov. 2013.
- [9] S. Dutta and M. Roy, "Rural Urban Classification (RUC) and its impact on funding pattern for urban development in the context of Indian cities," *Int. J. Eng. Technol.*, vol. 7, no. 1–4, p. 20, Jan. 2018.
- [10] K. Bansal, "Structural retrofitting in historic buildings – the case of Hearst Greek theatre, California," *Int. J. Eng. Technol.*, vol. 7, no. 1–4, p. 1, Jan. 2018.
- [11] A. I. Kahera, L. Abdulmalik, and C. Anz, *Design criteria for mosques and Islamic centers: art, architecture and worship*. Elsevier Architectural Press, 2009.
- [12] S. Akkach, *Cosmology and architecture in premodern Islam: an architectural reading of mystical ideas*. State University of New York Press, 2005.
- [13] A. Endro, "Relasi Spasial Antara Kegiatan Ritual Ibadah Berjamaah Dengan Arsitektur Mesjid di Bandung, Jawa Barat," Universitas Katolik Parahyangan, 2016.
- [14] A. J. Virginia, "Pemaknaan Ekspresi Bentuk Terhadap Penerapan Ruang Spasial Bangunan Masjid Islamic Center Tulang Bawang Barat," Universitas Katolik Parahyangan, 2017.
- [15] P. Salura and B. Fauzy, "The Ever-rotating aspects of Function-Form-Meaning in architecture," *Int. J. Basic Appl. Sci. Res.*, vol. 2, no. 7, pp. 7086–7090, 2012.
- [16] S. Purnama, *Arsitektur yang Membodohkan*. Jakarta: Gakushudo, 2015.