

# Journal of Development and Integrated Engineering



Journal homepage: https://ejournal.upi.edu/index.php/jodie

# Architectural Philosophy of the Al-Kamil Mosque Building in the Jatigede Reservoir, Sumedang City: Applying the Lotus Flower Shape to the Mosque Dome

Putri Yastine Nurlestya\*1, Sri Handayani 2

<sup>1, 2</sup> Master of Architecture, Faculty of Technical and Vocational Education - Indonesian Education University, Bandung, Indonesia

\*Correspondence: E-mail: putriyastine@upi.edu

# **ABSTRACT**

Jatigede Reservoir is a tourist development destination in Sumedang City, one of the newest of which is the Al-Kamil Mosque which is located on Panenjoan Hill, Sumedang City. The design of this mosque was conceptualized by West Java Governor Ridwan Kamil. This research aims to identify the philosophy of architectural form in the Al-Kamil Mosque, Sumedang City by exploring the symbolization of the form and visual characteristics of the application of the tulip flower shape applied to the mosque dome. This research uses a qualitative descriptive method by identifying, comparing, and tracing characteristics through conceptual documents of the Al-Kamil Mosque, especially in the form of idea sketches, planning documents, and observations of the physical mosque building. So it can be concluded that 1)With a period composition that has an approach to the process of a blooming lotus flower, it signifies the vision and mission of Sumedang City, 2) A dome that rises high, the shape of the dome of the Al-Kamil mosque is an application of the shape of a lotus flower that is in the bud, the shape of this lotus flower can be interpreted as a symbol of gratitude like the philosophical meaning of the lotus flower, namely abundance, and prosperity, 3) The shape of the canopy of this mosque building has an approach to the shape of a flower crown, the function of this lotus flower crown is the same as

#### ARTICLE INFO

#### Article History:

Submitted/Received 3 Agsts 2022 First Revised 20 November 2022 Accepted 4 July 2023 First Available online 1 December 2023 Publication Date 1 December 2023

#### Keyword:

architectural philosophy, Al-Kamil Mosque, jatigede reservoir, lotus flowers the canopy at the Al-Kamil mosque, namely to protect mosque congregation who are praying or visiting, 4) The color of this mosque is given as white, which means clean and holy, as people who enter the mosque are clean and holy.

Copyright © 2023 Universitas Pendidikan Indonesia

#### 1. INTRODUCTION

Jatigede Reservoir is a tourist development destination in Sumedang City. The discourse on building Jatigede Reservoir to become the 2nd largest reservoir in Southeast Asia was an initial idea from the time of President Soekarno. This tourism development discourse was only realized during the administration of President Susilo Bambang Yudhoyono (SBY) in 2008 and was only formalized during the administration of President Joko Widodo in 2015. (Aminullah, 2020). In 2020, the regent of Sumedang City, H. Dony Ahmad Munir, stated that there would be seriousness in developing Jatigede Reservoir tourism as a Tourism Economic Area (KEK). The vision of Sumedang City is "The realization of a prosperous, religious, advanced, professional and creative Sumedang society (SIMPATI) in 2023". One of the tourist destinations currently under construction is the Al-Kamil Mosque and the Kujang Twin Towers, a pair of bridges connecting the mosque and the towers which have become iconic for Waguk Jatigede, Sumedang City. (sumedangkab.go.id, 2021). The design concept for the Al-Kamil Mosque is taken from the analogy of the shape of a lotus flower which is applied to a mosque dome.

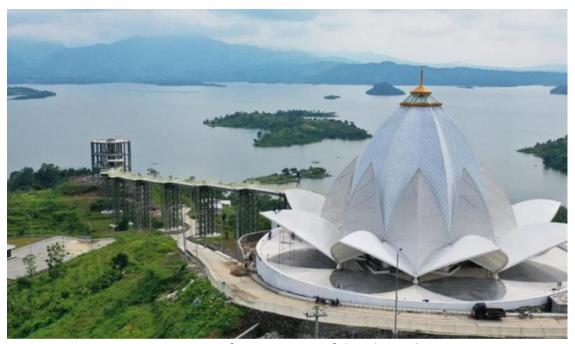
The Al-Kamil Mosque, which is located in Jatigede District, Sumedang City, has become a new tourist destination in West Java. This mosque is being widely discussed mostly on social media, due to the aesthetic shape of the building and its natural views. Tourists are amazed by the architecture of this mosque, it can be seen from the aerial view that the mosque looks like a blooming white flower bud. Apart from the worship area, This mosque is suitable as a place for photos and recreation with the family. Apart from the beautiful shape of the mosque building, There is a cool view of the Jatigede Dam from a height, very suitable for enjoying the eye-soothing view. The Governor of West Java hopes that the new tourist destination will match the aspirations of the local community. and have an impact on economic growth, especially in the Sumedang City area(Suhana, 2022).



**Figure 1**. Perspective of the Al-Kamil Mosque and the Kujang Saangkat Tower Source:jabar.tribunnews.com 2022



**Figure 2**. Progress of construction of the Al-Kamil Mosque Source: PT Indi Daya Karya Contractor Documentation for 2021



**Figure 3.** Progress of construction of the Al-Kamil Mosque Source: twitter:@ridwankamil

The application of architectural symbols for mosque buildings is a message that is communicated through the form of mass compositions with conceptual ideas. Architects have the desire to invite ordinary people to know about their work by communicating through form. Therefore, understanding and using semiotic theory is a study of the relationship between indications and the meaning of messages from the meaning of symbols (Dharma,

2016) (Gunardi, 2021). This concept of meaning has attracted the attention of the disciplines of communication, psychology, anthropology, and sociology, so understanding meaning is one of the oldest philosophical problems in history. (Wijaya, 2019) (Waani, 2019). As published by West Java Governor Ridwan Kamil, the design concept for the Al-Kamil Mosque uses the analogy of the "lotus" flower as an iconic representation of the Jatigede Reservoir, Sumedang City. The analogy is one of the forms of approaches used in the architectural design stage process (Octaverine, 2021). In choosing the analogous form of this lotus flower composition, the lotus flower is white, because white lotus means purity of mind and tranquility of human nature and spiritual perfection, which is very suitable as a characteristic of an Islamic house of worship which is applied to the Al-Kamil mosque in Sumedang City. The initial concept of this idea was a proposal from the Governor of West Java (See Figure 2) and the planning was developed by PT. Gumilang Sajati.



Figure 3. Sketch of design ideas for the Al-Kamil Mosque and the Kujang Saangkat Tower Source: Sketch of West Java Governor Ridwan Kamil 2020

In the sketch, there are several clues in the form of keywords written as explanations of conceptual ideas, including the form of a mosque composition whose application to the dome is taken from the analogy of a lotus flower in the process of blooming. The choice of mass compositions from this flower is because Sumedang City, especially the Jatigede Reservoir area, shows the development of the Tourism Economy (KEK) in this area so the half-blooming lotus flower shows the development process of the Semah Village area, Panenjoan Hill, Sumedang City.

# **Research purposes**

This research aims to identify the philosophy of architectural form at the Al-Kamil Mosque in Sumedang City by tracing the symbolization of the form and visual characteristics of the application of the flower shape applied to the mosque dome. This has been widely mentioned as a philosophical inspiration which is considered a development process in an area in the

city. Sumedang is in the Jadigede reservoir area which is developing towards a Tourism Economic Zone (KEK). With the implementation of the lotus flower building period, it is hoped that a form of inspiration can be found that underlies the creative design of the Al-Kamil mosque building as a reference for architectural design approaches in the future. Symbols are objects, events, speech sounds, or written forms that are given meaning by humans(Saifuddin, 2005) (Harris, 2018).

#### 2. LITERATURE REVIEW

#### 2.1 Lotus Flower

The lotus flower or what can be called the lotus flower is a plant that lives in water. This plant is often confused with the Lotus Flower, although the two are not the same. Several similarities only depend on their living habitat, namely above water. Lotus flowers produce a fragrant aroma using wide leaves that float on the surface of the water. This beautiful flower has become a symbol of purity. Traditionally, the lotus plant (Nelumbo nucifera) has been widely used to treat various diseases, (Romadanu, 2014) This lotus flower has a certain philosophical meaning, namely:

- A. This white lotus flower means purity of mind and comfort, this characteristic is taken from pure human nature and as spiritual perfection.
- B. The red lotus flower means selfless love, passion, compassion, and kindness.
- c. The pink lotus flower means the highest and most honorable place.
- D. The blue lotus flower has the meaning of being a source of knowledge.

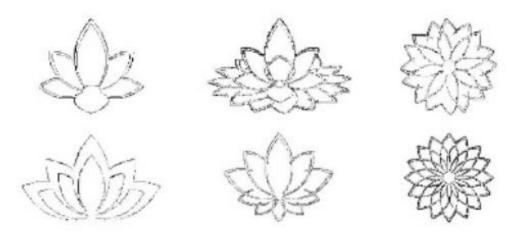
Other knowledge that is considered to be a belief in the lotus flower is believed by the Egyptian people. The lotus flower is considered a symbol of control of the mind and spirit that puts aside materialistic behavior in life to achieve the perfection of heart and soul. In Indonesia, this plant is known as the lotus flower, and in English, it is called Indian lotus, sacred lotus, and bean of India. (rimbakita.com, 2019).

The lotus flower is a representation of spirituality in our lives. The lotus flower represents/symbolizes clarity of heart and mind. Some people believe that the lotus flower is a symbol of strength, luck, life, birth, and beauty. Let the soul turn into a lotus flower, this is the noblest act of everything in this world. Letting this soul turn into a lotus flower, is the manifestation of true consciousness, and letting this soul turn into a lotus flower, because it is the most beautiful elevation of the soul in this world. (times/lin, the epoch).

The architectural approach of the Al-Kamil Mosque refers to the white lotus flower because the lotus is white meaning purity of mind, calmness of human nature, and spiritual perfection, which is very suitable as a characteristic of an Islamic house of worship.

Reporting from a short story written by Raden Denis Indrawan in August 2013 entitled "Lotus Flower Girl", the short story tweet wrote "I like lotus flowers, they can grow even in dirty water and can even make dirty water clear," he answered without saying a word. turned towards me(cerpenmu.com, 2013). This article explains how meaningful this flower is that it can make everything dirty become holy.

The lotus flower is one element of the variety of ornamental flowers. Lotus was known in ancient Egyptian times which was a sacred plant in ancient Egypt, which is a symbol of the sun, beauty, and purity. (Schiffer, 2019). Beauty is part of the science of form, but over time it has become an essential part of human life and the way humans view beauty has matured so that it always presents a philosophical vibration. (Herawati, 2015).



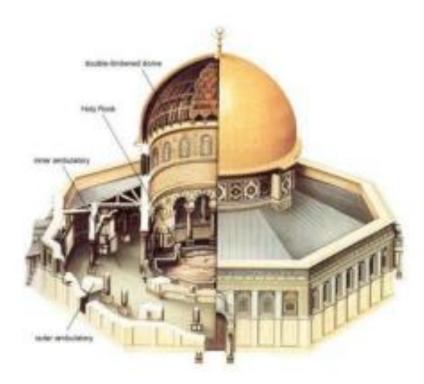
**Figure 4**. *Lotus Ornaments in Egypt* source: (ElNashar, Zlatev, & Ilieva, 2016)



**Figure 5**. White Lotus Flower Source: oilpedia.id

# 2.2 Mosque Dome Shape

The mosque dome was first built by Roman residents in 100 AD. Before the formation of the rooms needed as supporting pillars in each of their houses. Then the Romans discovered a new concept and inspiration from the process of building domes, which at that time domes were only intended for their great temples. The use of the dome was initially to differentiate the position of the mihrab, the position of the imam, which was crucial in the Umayyad era, was a form of space of its own, and the shape of the dome was chosen as a differentiator for the roof of the mihrab.(Retnoasih, 2017).



**Figure 5**. Dome of Al-Sakhra or Al-Quds Source: Islamic Art and Architecture, 2011

For the first time, the dome shape was discovered in the Pantheon building in Rome, Italy (27 BC). The shape of the building is the first Islamic architectural building to use a dome, namely Dome Al-(Rock, Dome of, 691).

#### 2.3 Use of Domes in Indonesia

The dome shape in Indonesia is dominant as the roof element of mosque buildings. To change the shape of the mosque's dome roof, the process is more radical and direct. Because there are formations that are taken from temples in Indonesia, the legacy of the Sriwijaya kingdom, so assimilation of buildings is rare and even very few can be found. The appearance of the dome shape on the island of Java can be seen in the mosques built after the independence generation. When compared with mosques outside the island of Java, the island of Java is relatively slow in developing the dome shape, because the mosque on the island of Java is strongly influenced by the history of the mosque inherited by the Wali Songo on the north coast of Java. The adoption of a new cultural form, namely the ancient Javanese mosque dome, has an important role in the development of mosques on the island of Java(Retnoasih, 2017).

#### 3. METHODOLOGY

This research uses a qualitative descriptive method by identifying, comparing, and tracing characteristics through conceptual documents of the Al-Kamil Mosque, especially in the form of idea sketches, planning documents, and observations of the physical mosque building, so that conclusions can be drawn whether the philosophical form of the Al-Kamil Mosque has been revealed. the shape of a lotus flower as often published in various media. In studying and exploring the transformative expression of the Al-Kamil mosque building, identification was carried out on the architectural parts of the mosque building, namely: 1) Typology of

building mass, 2) Dome Shape, 3) Canopy, 4) Material Color. The architectural parts of the mosque building were chosen as the physical elements of the building to be studied because they have specific characteristics that started from the ideas sketched in the sketch. then compared with the concept of architectural transformation based on sketches of ideas and visual characteristics originating from the source of inspiration for the idea of lotus flowers and abundance and prosperity from Sumedang City.

# 4. DISCUSSION

The identified visual characteristics are based on the inspiration of the lotus flower

1. Building Pe

# Identification of the Architecture of the Al-Kamil Mosque

#### Information

# 1. Building Period Typology (Lotus flower blooming process)



Figure 1a Source www.flickr.com



Figure 1b

The Al-Kamil Mosque was taken from the building period of the basic shape of a blooming lotus flower.

# Dome Shape (Lotus Flower)

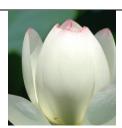


Figure 2a Source www.flickr.com



Figure 2b

The shape of the dome of the Al-Kamil mosque resembles the shape of a lotus flower bud

# 3. Canopy (Lotus flower crown)



Figure 3a



Figure 3b

The lotus flower canopy takes the basic shape of the lotus flower crown which is blooming. The flower crown functions as protection from pollen and pistils, the same as the function of the canopy as protection

# 4. Material Color (pure white)

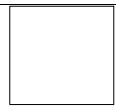


Figure 4a



Figure 4c

The application of white in buildings where white is sacred is the same as in Islamic houses of worship.

DOI: https://doi.org/10.17509/jodie.v3i2.48707 p- ISSN 2798-2246 e- ISSN 2798-2165

# 4.1. Building Mass Typology (Lotus Flower Blooming Process)

Typology can also be interpreted as a concept that sorts a group of objects according to similarities in basic characteristics, similar to what Ching, FDK (1979) stated, that there is a tendency to group elements in a random position, both according to the compactness of their placement., as well as the visual characteristics they have. He expressed this when he found that almost all buildings generally always include repetitive elements such as columns and beams which repeat themselves following a certain modularity.(Suharjanto, 2013) The building period typology of the Al-Kamil mosque is basically a lotus flower, this can be seen from the shape of the building which resembles a lotus flower (Figure 1A). The shape of the lotus flower was chosen because it symbolizes appreciation and prosperity as stated in the vision and mission of Sumedang City, namely "Creating a Prosperous, Religious, Advanced, Professional and Creative Sumedang Society by 2023"(diperta.sumedangkab.go.id, 2020). From the vision and mission of Sumedang City, it can be seen that the city has developed and needs to be appreciated. The composition of the mass of lotus flower buildings which are currently undergoing the expansion process is under the philosophy of the development vision and mission of Sumedang City. A prosperous society shows a good condition, the condition of a society in which it is prosperous. A welfare state is a country that provides extensive social security benefits such as state health services, post-state service, sick and unemployment benefits, and so on. (Christopher Pass, p. 691). Religion shows that a person understands his religion, or what kind of truth he understands, or draws his heart from that belief and considers it to be the primary truth. Advanced means indicating that the city of Sumedang is prosperous from an economic perspective. This professionalism and creativity signifies that all people have a high artistic spirit and rely on the high level of expertise they possess. This entire vision and mission is related to the process of blooming the lotus flower which essentially changes for the better.

# 4.2. Dome Shape (Lotus Flower)

The typical characteristic of mosques in general is that they have a dome, but in designing a mosque the dome is not a benchmark for the requirements for building a mosque. The use of domes in mosques on the island of Java cannot be separated from the development of Islam in Indonesia. The dome on the mosque in Pulan, Java is a culture from outside. This happens because the residents of the island of Java adhere quite firmly to their local wisdom. The meaning of a separate dome develops according to the needs of the mosque itself, such as a symbol of gratitude, a medium for preaching, and so on(Shabrina, 2017). The shape of the dome of the Al-Kamil mosque is an application of the shape of a budding lotus flower. The meaning of this dome-shaped lotus flower can be interpreted as a symbol of gratitude, like the philosophical meaning of the lotus flower, namely abundance prosperity(rimbakita.com, 2019).

# 4.3. Canopy (Lotus Flower Crown)

The canopy is a part of the mosque that functions the same as the roof as a protector or cover for the building, but this canopy is used to protect parts of the building that are not the core building. The use of canopy at the Al-Kamil mosque is located around the mosque's lobby area, which consists of 7 (seven) sections. The canopy used is made from a white membrane. This canopy is installed in the lobby area of the mosque. In terms of flower anatomy, this canopy resembles the crown of a lotus flower that is in the process of blooming. The crown is the decoration on all parts of the flower. Flower crowns have beautiful and attractive colors. Apart from being a decoration that beautifies the whole plant, the flower crown has another important function, namely to protect the flower's genitalia (pollen and pistil). The flower

crown functions to protect the pollen and pistils(rimbakita.com, 2019). The function of this lotus flower crown is the same as in the canopy at the Al-Kamil mosque, namely protecting mosque congregations who are worshiping or visiting.

# 4.4. Material Color (Holy White)

White is a positive color, the white personality represents the basic qualities of flowing water and going with the flow(Setiawan, 2014). If you see the color white in your mind, it immediately leads to the meaning of purity, holiness, and peace, or the connotation of beauty for women and handsomeness for men.(Abd, 2021). White means clean and holy, as if people enter the mosque in a clean and holy condition(Bahri, 2019). This white color connection is the function of the lotus flower which can make dirty water clearer. This white lotus flower can live in mud and even when the land is dry, this plant can still survive(Anas, 2014). As has been mentioned, the meaning of the white lotus flower means purity of mind as well as tranquility in human nature and spiritual perfection(rimbakita.com, 2019).

# 5. CONCLUSION

The lotus flower as a philosophical identity that was appointed as the basis for the concept of the architectural form of the Al-Kamil mosque building cannot be separated from the sacred meaning of the flower and color. The lotus flower is also considered to have a contextual philosophy that symbolizes the perfection of love as well as abundance and prosperity. As seen in the architectural expression of the Al-Kamil Mosque building in the building typology, dome shape, canopy, and material color. The typology of the building period with the basic shape of a lotus flower in the process of blooming is a clear visual characteristic of the application of the shape of the Al-Kamil Mosque. The choice of mass compositions from this flower is because Sumedang City, especially the Jatigede Reservoir area, shows the development of the Tourism Economy (KEK) in this area so the half-blooming lotus flower shows the development process of the Semah Village area, Panenjoan Hill, Sumedang City.

- a. With a period composition that has a process approach to the lotus flower blooming, this signifies the vision and mission of Sumedang City.
- b. The dome that rises high, the shape of the dome of the Al-Kamil mosque is an application of the shape of a budding lotus flower, the shape of this lotus flower can be interpreted as a symbol of gratitude, like the philosophical meaning of the lotus flower, namely abundance and prosperity.
- c. The shape of the canopy of this mosque building has an approach to the shape of a flower crown. The function of the lotus flower crown is the same as the canopy at the Al-Kamil mosque, namely to protect the mosque congregation who are worshiping or visiting.
- d. The color of the Al-Kamil mosque is white which means clean and holy, as the congregation who enters the Al-Kamil mosque are all clean and holy.

#### References

- Anas, A. (2014). Kuan Im Symbol in Temple (Mahayana Buddhism) South China. URNA. 3(1). 98-108.
- Aziz, A. (2021). SEMIOTIC REPRESENTATION OF THE QURAN (White Symbol Analysis). MUMTAZ: Journal of Al-Qur'an and Islamic Studies. 5(1). 58-68.
- Bahri, N. F. (2019). Roland Barthes' Semiotic Analysis of the Buton Mosque in Baubau City, Southeast Sulawesi. Rupa Journal. 4(1). 46-53
- Christopher Pass and Bryan Lowes, Collins. Complete Dictionary of Economics, trans. Tumpal Rumapea and Posman Halolo (Jakarta: Pustaka Erlangga, n.d.), p. 691.

- Dharma, A. (2016). Semiotics in Architecture. In URL= http://staffsite. Gunadarma. air conditioning. id/augs\_dh/. Retrieved December (No. 8).
- Gunardhi, Y., Handayani, S., Permana, AY, Widaningsih, L. (2021). ARCHITECTURAL PHILOSOPHY OF AL-MOSQUE MISHBAH: Icon-Index-Symbol Arsemiotic Studies. ZONING Architectural Journal, 4, 283–294.
- Haris, A., Amalia, A. (2018). MEANINGS AND SYMBOLS IN THE PROCESS OF SOCIAL INTERACTION (An Overview Communication). Journal of Minutes 29(1), 16-19.
- Herawati, A. (2015). BEAUTY AS A SPIRITUAL ELEMENT FROM TRADITIONAL ISLAMIC PERSPECTIVE. KAWISTARA, 5(2), 99-220.
- Octaverina, GL, Anisa. (2021). Study of Analogical Architectural Concepts in Museum Buildings. Seminar National Science and Technology 2021. 1-6.
- Retnoasih, SH, Fimandhani, SW (2017). THE MEANING OF MOSQUE DOMES ON JAVA. ARCADE: Journal of Architecture, 1(2), 41-46.
- Romadanu, Rachmawati, SH, Lestari, SD, (2014). Testing the Antioxidant Activity of Lotus Flower Extracts (Nelumbo Nucifera). FISHTECH, 2(1), 1-7.
- Saifuddin, Achmad Fedyani. 2005. Contemporary Anthropology. Kencana. Jakarta
- Schiffer, LR, Suprapti, Atiek, Rukayah, RS, Nugraha, Yudi. (2019) The Influence of Acculturation on the Meaning of Lotus Buga Ornaments in the Mihrab of the Sang Cipta Rasa Mosque in Cirebon.
- Scientific Journal of Design and Construction. 18(2). 124-129.
- Setiawan, Y. (2014). Perfection of Love and Color Coded Personality Types. Persona: A Psychological Journal Indonesia, 3(1), 90-96.
- Suharjanto, G. (2013). RELATIONSHIP OF TYPOLOGY WITH FUNCTION AND FORM: BUILDING CASE STUDY MOSQUE. ComTech 4(2), 975-982.
- Waani, J. O. (2012). Theories of Environmental and Architectural Meaning. Matrasan Media, 9(1), 21–25.
- Wijaya, K., Wibowo, H., and Permana, AY (2019). Identity of the Paralon Village Area in the Settlement
- LOTUS (nurjayantilotus.blogspot.com)
- https://nevadagopcaucus.org/arti-bunga-lotus/
- https://regional.kompas.com/read/2020/12/05/19534271/ambisi-sumedang-jadikan-waduk-jatigede-wisata-bisnis-dunia-ingin-kalahkan?page=all
- https://sumedangkab.go.id/berita/detail/gubernur-pastikan-masjid-al-kamil-jatigede-cepat-diresmikan-2022