A Study on the History and Development of the Javanese Mosque
Part 1: A Review of Theories on the Origin of the Javanese Mosque

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Abstract
This paper aims at critically reviewing a number of theories and previous studies on the origin of the Javanese mosque. Some theories have been put forward by Dutch archeologists and historians since the 1930s, and were subject to debate until 1960s. Beyond this time, the debate was continued by an Indonesian archeologist in 1962/1963 and a French scholar in 1985. All of these theories will be reviewed as there are some doubts and unclear parts. The problems of each theory will be explained and discussed. Based on this review and critique, the most reliable theory will be asserted with new arguments and some evidence from Javanese temple reliefs.

Keywords: Southeast Asia; origin, Javanese mosque; Dutch; tiered-roof

1. Introduction
Islam is the second-largest religion in the world. This religion has many adherents stretching from Spain and West Africa eastwards as far as China and Southeast Asia.

Indonesia has the largest number of Moslem population, not only in Southeast Asia but also in the world. The majority of Indonesian Moslems live on the island of Java. Hundreds of old timber mosques constructed from the 15th to 19th century still exist in this island and are evidence that Java is one of the significant islands in the spread of Islam.

The old timber mosques in Java are not only significant in understanding the history and spread of Islam but also in identifying the development of mosque architecture. The Javanese mosque appears to be a unique building type or of independent architectural style when compared to mosques of other areas in Moslem countries. Hence, the origin of the Javanese mosque have always been discussed and pointed out in arguments by previous scholars.

Studies on the origin of the Javanese mosque were conducted primarily by Dutch, French and Indonesian scholars. Unfortunately, a number of hypotheses and studies discussed in this topic are still incomplete and remain unclear, as well as subject to debate.

This study will not provide a new theory of the origin of the Javanese mosque, as it would require further careful study. This paper aims at critically reviewing all of the theories and previous studies on the origin of the Javanese mosque. Based on this review and critique, the paper will conclude with the most reliable theory.

‘Theory’ in this paper refers to the opinions or hypotheses on the subject that have been put forward between 1930s and 1960s by Dutch archeologists and historians such as K. Hidding, J.P. Rouffaer, W.F. Stutterheim, G.H. Pijper and H.J. de Graff. The debate was followed by the Indonesian archeologist, Sutjipto Wirjosuparto, in 1960s and the French scholar, Claude Guillot, in 1985.

Beyond 1985, not many scholars presented new theories and just followed one of the previous theories. Although some scholars have written articles on mosque architecture in Java including its origin, they did not develop an argument or provide any evidence. These types of articles are excluded from this study.

The main sources for this study are documents discussing the origin of the Javanese mosque in terms of books, papers and articles. Due to the fact that some earlier theories were misunderstood by several scholars that followed, the original sources become significant to clearly understand the opinions and arguments of each theory.

2. The Javanese Mosque
The Javanese mosque differs fundamentally from mosques as constructed in other Moslem countries. This Indonesian type originated in Java, so that one might refer to it as the Javanese type.

The distinct characteristics of the Javanese mosque has been described in detail by Pijper (1947), as follows:
1. its ground plan is a square;
2. it does not stand on poles, as does the old Indonesian dwelling and the smaller Indonesian prayer house (Javanese: langgar; Sundanese: tadjug; in Bantam: bale) but on an elevated

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massive fundament;
3. it has a pointed roof, consisting of from two to five stories, narrowing upward;
4. it has an extension to the western or northwestern side, provided for the mihrab;
5. it has a veranda, either on the front or on the side also, called by the Javanese surambi or siambi, and by the Sundanese tepas masjid;
6. the open space around the mosque is enclosed by a wall with only one entrance, a gate in front.

In fact, many scholars present other descriptions of the Javanese mosque. Although some scholars may have a slightly different view, the characteristics of the Javanese mosque will be summarized in general as follows. It only asserts the important characteristics of the Javanese mosque.

The original plan of the Javanese mosque is a square building, covered with a roof that may consist of a number of stories, and finally ends in an ornamented top. The symmetry is only broken by a small niche, which indicates the direction of Mecca called the mihrab. The pyramidal roof of the Javanese mosque is generally two to five stories high. The three-stacked pyramidal roof is the most frequently found in Java. This roof type is used in almost all of the Great (Agung) Mosques in Java built until the 19th century. The Agung Mosque of Banten (1565) is an exception. This mosque has a five-storied roof with the three topmost being equally small. Francois Valentijn, who visited Banten in 1694, stated that the mosque is provided with five stories or roofs. Another example of a mosque with the five-storied roof in Java is shown in a description and old picture of the Japara Mosque by the traveler Wouter Schouten in the 17th Century. Besides the roof, another ancient fixed characteristic of mosques in Java is a wall surrounding the enclosure. Wherever one finds the pure type of the Javanese mosque, this wall is to be found, separating the temenos from the profane soil.

In many cases, such as the mosque complex of the Wali(saint) or state founder, there is a cemetery complex that is usually located behind or beside the mosque. Some mosques have two or three cemetery complexes and the surrounding wall extends to cover not only the mosque but also these cemetery complexes.

Another main characteristic of the Javanese mosque is its principle structure. The main structure of the Javanese mosque uses timber master-columns (saka guru) in the center of the main prayer hall to support the upper-hipped roof. The number of saka guru are usually four, but sometimes six or eight and occasionally only one (saka tunggal). This principle structure together with the pyramidal stacked roof provide the tall interior space and sets up a powerful vertical axiality. This strong central and vertical axiality act as counterpoint to the direction of qibla, provide duality in orientation in the Javanese mosque.

The best examples for describing the Javanese mosque are the Agung Mosques of Yogyakarta and Surakarta in the province of Central Javanese, dating back to the eighteenth century. These two great mosques are modeled on the first great mosque on the northern coast of Java, the Agung Mosque of Demak (1478).
Other important elements are the veranda (surambi) and the minaret, but these two elements are later additions to the architecture of the Javanese mosque. For instance, the east verandas of the Demak Agung Mosque, Yogyakarta Agung Mosque, and Surakarta Agung Mosque were built in 1845, 1804 and the Pakubuwana II period (1830-1875) respectively. Now, this veranda is usually built in front of nearly every mosque in Java.7

The history of the minaret in Java is comparatively recent. The oldest mosques have no minaret (Pijper, 1947, p.278). Ancient Java does not have a tradition for tall buildings such as the minaret and there are also no evidence of this in Javanese temple reliefs.

3. A Critical Review of Existing Theories and Previous Studies

Several hypotheses on the origin of the Javanese mosque were put forward by Dutch scholars since 1930s to 1960s. Discussion of the hypotheses was followed by an Indonesian and France scholar until 1985. The hypotheses can be classified into two main categories:

1. Theories based on theological (religious) interpretations. They include Hidding’s (1933) and Rouffaer’s (1930s) theories.
2. Theories based on empirical studies. In this category, they are divided into two different areas. First, theories that mention that the origin of the Javanese mosque was developed from local buildings. They are Stutterheim’s (1935), Pijper’s (1947), and Wirjosuparto’s (1962/1963) theories. Second, theories that mention that the origin of the Javanese mosque was developed from foreign buildings. They are Graaf’s (1947/1948, 1963), and Guillot’s (1985) theories.

3.1. Theories Based on Theological (Religious) Interpretation

The earliest theory came from K. Hidding in the article Het bergemotief in eenige godsdienstige verschijnissen op Java in 1933.8 In this article, Hidding suggested that there were some possibilities to relate the high rising roof form of mosques in Indonesia with the sacred mount. He considered that it was theoretically possible that the old-fashioned mosque was inspired from mount form.

Hidding’s assumption was also referred to in Graafís paper De Oorsprong der Javaanse Moskee in 1947-1948. Graaf noted and suggested in his paper, that the Javanese mosque was derived from mount form. There are, as a matter of fact, clear indications that the idea of a mount was something holy and sacred to the Hindu-Javanese that were living at that time. In his dissertation, the Tantu Pangelaran (p. 27), dr. Th. Pigeaud wrote that appearance of the Mahameru have been considered as more than an ordinary mount or even as the seat of the gods, a centre the world, and a fixed point in universe.9

Another his argument was pointed to the settings of some mosques are in water. They reinforce this equalization with the world of mount. These lay in the world sea, therefore in water. This is similar to P.A.J. Moojen’s interpretation that the position of meru is in within a pond of the island of Bali.10

The researcher J.P. Rouffaer tried to argue in religious thinking even more, beyond searching the construction work of the building. He considered that the Javanese mosque arised from a Buddhist building, as mentioned in Prapantja’s Negarakertagama (expenditure of H. Kern, 1919, p. 254).11 He may have found this argument, but the basis of his hypothesis was seen infirm.

To comment on these theories, I would argue that the dilemma with any religious interpretation to architectural problems is that it is always unrealistic. In other word, every metaphysical interpretation is not enough to relate on to physical aspect. This means that there is a gap between religious thinking with architectural problems in physical terms. The hypotheses are not easy to accept, because they are only based on spiritual thinking and do not provide real evidence.
3.2 Theories Based on Empirical Studies

A Dutch historian, G.H. Pijper, in his paper *The Minaret in Java*, in *India Antiqua* (1947) stated a strong hypothesis. Based on the distinct characteristics of the Javanese mosque as described above, he concluded that the Javanese mosque is not a foreign structure brought to this country by Islam missionaries from overseas, but an ancient native one adapted to the requirements of the Moslem worship.\(^\text{12}\)

He proposed many arguments. For example: the square ground plan is well known from the many structures of Hindu-Javanese art, the *Candi*, still founded in Java. It is not difficult to see in the raised massive foundation of any mosque, remnants of the base of the *Candi*. The roof of the mosque, consisting of several stories and ending in a point that is crowned by a peculiar adornment, clearly indicates that it originated in the pre-Islamic period.

The archeologist W. F. Stutterheim, in his book *Leerboek der Indische cultuuregeschiedenis*, Vol. 3, *De Islam en zijn komst in den archipel*, 1935, pp. 137-307 and the second in 1963, *The Origin of The Javanese Mosque*, in JSEAH Journal of Southeast Asia History, pp. 1-5.\(^\text{14}\)

Based on his arguments, however, the following may be brought forward:\(^\text{15}\)

1. The *fighting-cocks-court* is a profane, almost heathen building. A pious Moslem would not lightly perform his prayers inside such a structure.
2. The *fighting-cock-court* has no stories.
3. We only know of the *fighting-cocks-court* from Bali; perhaps they may also have existed in the same design in Java. We know nothing about the rest of Indonesia. How could it therefore be possible, that a building which is only to be found in a comparatively small area, should have been initiated in the whole of Moslem Indonesia?

Graaf asserted that it is more acceptable that the Indonesian mosque, in its simple as well as in its more luxurious form, was brought to Indonesia by Islamic merchants, which, following the international trade route, spread from North Sumatra on to the Moluccas. He compared another remarkable evidence, which is that the oldest Moslem graves such as those at Pasei in North Sumatra and at Gresik (*Grissee*) in Java displayed a strong resemblance to similar graves at *Gudjarat*. In many cases, the stones themselves were made overseas and sent ready for use to Indonesia.

Graaf suggested that, firstly, we must search for the pattern of the Indonesian mosque in the same country where these tombstones came from. A mosque in Malabar must be critically examined, although it is not square but only rectangular, and has a multi-storied roof, each one smaller than the one underneath it. In the top stories, children received religious instructions. Secondly, he also suggested to consider the square wooden mosque of Kashmir (Srinagar).

In critically reviewing Graaf’s theory, we must check the original statement of Stutterheim at first. Graaf misunderstood in his paper and wrote the Stutterheim’s theory that the Javanese mosque must derived in its form from the fighting cocks-court (now *wantilan*), which are still found in Bali.

In fact, in the original text, Stutterheim wrote: “Large community hall, existing from a terrace floor with resting on styles, from an odd number of deepening existing

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The meru in the Besakih temple complex in Bali, 2000, photo by author.

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Fig.6. The *meru* in the Besakih temple complex in Bali, 2000, photo by author.
roof, on Bali as hanenklophaan in, by inserting partitions tusschen the styles and introducing being still arranged in this a specific niche to the west used to serve as a mosque16. Conceivably, it may true that the word of hanenklophaan means fighting-cocks-courts in Bali, but this building is only an example in Stutterheim’s hypothesis that the mosque should be derived from de groote gemeenschapshal (large community hall).

Secondly, the statement that fighting cocks-court in Bali is profane is unacceptable. In fact, cock fighting in Bali is a religious event, as blood offerings to the hungry earth spirits. In these purification rites, cockfights are sacred and occur in sacred places. Because cockfights are considered a sacred activity, gambling is forbidden at religious cockfights. But there are other cockfights where gambling takes place secretly in village back lanes or in family compounds, to exorcise malevolent spirits.

Thirdly, the statement that the building has no stories is also in doubt. In fact, it has two or three-tiered pavilions and is often found adjacent to the village temple. This building has been called Wantilan since the 19th Century. It is a new building type in Bali, which is adapted to Balinese traditional principles.17

It usually has solid coconut wood columns and chunky proportions for the base, plinth, and roof trussing. In Bali, it is originally to serve not only for the fighting-cocks-courty but also to be used for community activities such as meetings, political rallies, or dance performances held as part of village temple festivals.

Beyond Graaf’s theory, there were no other Dutch scholar who discussed the origin of the Javanese mosque. The discussion was continued by an Indonesian archeologist, Sujipto Wirjosuparto. He is the first Indonesian scholar who proposed a hypothesis on the origin of the Javanese mosque.

Wirjosuparto published as an article entitled Sedjarah Bangunan Mesjid di Indonesia, in al-Manak Muhammadiyah, 1962/1963. In his article, he did not agree with Graaf’s theory that the origin of the mosque must be sought from the same country where these tombstones came from (India). He aligned with Graaf’s hypothesis for several reasons:18

1. The plan of a mosque in Malabar is rectangular and a mosque in Teluk (Sumatera) is square.
2. While a mosque in Malabar does not have water moat around it, a mosque in Teluk does.

The similarity of these two mosques was only in the tiered-roof, so the hypothesis could not be accepted by Wirjosuparto. He suggested that the origin of the Indonesian mosque form might be derived from the pendapa building in Java. Some of the reasons were that it was square in plan, and if we added walls as an enclosure, it seemed to be a mosque. Moreover, if the orientation was directed to Mecca and added with the mihrab, it became completely similar to a mosque. For the tiered-roof, he compared it to the Javanese traditional house Joglo.19

Wirjosuparto’s theory requires more evidence, because the building name of pendapa in Javanese is derived from the Sanskrit word mandhapa, which has resemblance with part of an Indian Hindu temple. Although it is square in plan and built on the ground, this building is considered as an ‘element of addition’. The pendapa is not as the most important element in the complex of the traditional Javanese house, kraton (palace), or Hindu temple in India.

The hypothesis of the Joglo also remains unclear. Although it is true that the Joglo’s roof is multi-storied, but it is not a pyramidal roof. This type of roof has a beam on top of the roof (called molo), so that the roof does not finally end in a point at its topmost.

In 1985, the French scholar Claude Guillot published an article, La Symbolique de la Mosquee Javanaise, in Archipel 30, Paris, 1985. He had examined temples that are tiered in form (Gedong Sanga, Siwa-Prambanan, Bina-Dieng), and the form of the old Japara Mosque. He tried to compare these to the wood and stone architecture in India and China. He concluded that the Javanese tiered-roof form is derived from the strong influences of stone architecture of India and wooden architecture of China.20 Another opinion is that meru (tiered-roof) of the mosque could be derived from Javanese ‘Cungkup’ (tomb building) in Islam.21

We need more evidence to accept these opinions. If the hypothesis is true, the problem lies in which one is argued to be the earlier existing building, the Islamic tomb building or the mosque? There is no evidence that the Cungkup building is earlier than the mosque in Java. The tradition also shows that the roof of the Cungkup building is not tiered, with only the Giri Cungkup in East Java as an exception.

4. Concluding Remarks
Each theory still has its weaknesses. Even though it still contains some problems and is subject to debate,
but in this conclusion, I try to divide between those theories that are most reliable and unreliable.

Based on this review and critique, the reliable theory on the origin of the Javanese mosque should be derived from a local public or community building type that exists in this area. Some evidence can be found as archaeological proof from the relief of *candi* or temple in Java, such as in the Borobudur temple relief (see Fig. 8).

This relief shows that some public buildings in Java have already existed for a long time. Ancient Java has already the tradition of buildings for people gathering. Probably, the latest development of this community building can be seen today such as the *pendapa* in Java and the *wantilan* in Bali.

Java also has a tradition of tiered-roof buildings. We can check this on several Javanese temple reliefs, such as the reliefs on *Candi Jago* from the Singosari period and *Candi Sukuh* from the Majapahit period.

Hence, the reliable theories are Piiper, Stutterheim, and Wirjosuparto’s hypotheses, even though each theory need further studies. The most reliable is Stutterheim’s theory, which states that the origin of the Javanese mosque should be derived from the local community building, without mentioning a specific building. To make a definite theory of the origin of the Javanese mosque still needs further careful study. Not only does it need historical or archaeological evidence, but an architectural point of view as well.

The most unreliable theory is Graaf’s hypothesis that the Javanese mosque may be derived from the same country where these tombstones came from (India), such as the mosque in Malabar or Kashmir (Srinagar). The other theories are also unreliable.

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**Endnotes**

1 Pijper: 1947, p. 274-275.

2 Pijper: 1947, p. 275.

3 Graaf, 1963, p.1.

4 Valentijn, 1726, p. 215 and also Pijper, 1947, p. 276.

5 Wouter Schouten, 1676, p.39.

6 Pijper, 1947, p. 276.

7 The function of the veranda or *surambi* is not only as an extension of the praying area but also frequently to accommodate social activities, such as a meeting place, Islamic celebrations, etc. It may be seen as an effort to separate secular activities from spiritual activities. It indicates that some Javanese still consider prayer as a sacred activity that requires a special place and is separate from social activities.

8 K. Hidding, 1933, p. 469.

9 Graaf, 1947-1948, p. 301.

10 P.A.J. Moojen, p. 87, plate LXXIV.

11 Graaf, 1947-1948, p. 290.

12 See Pijper,1947, p. 275.

13 Pijper, 1947, p. 275.

14 The two publications, even though they may have similar titles in meaning, but their contents are not exactly the same. In *De Oorsprong der Javaanse Moskee* (1947-1948), he provided quite many more samples of Javanese mosque and discussed several previous hypotheses. In *The Origin of Javanese Mosque*, (1963) he only focused to criticize Stutterheim’s theory of derivation, and created other possibilities on the origin of the Javanese mosque that developed from foreign buildings.

15 Graaf, 1963, p. 3.

16 See the original text: *De groote gemeenschapshal, bestaande uit een terras-vloer met een op stijlen rustend, uit een oneven aantal verdiepingen bestaand dak, op Bali nog als hanenkloppbaan in gebruik, werd door het invoegen van wanden tusschen de stijlen en het aanbrengen daarin van een naar het Westen gericht nis geschikt om als moskee te dienen*. See W. F. Stutterheim, 1935, p. 137.

17 Gelebet, 1978, p. 118.

18 Wirjosuparto, 1962, p. 68.

19 Wirjosuparto, 1962, p. 69.

20 Guillot, 1985, p. 8-11.

21 Guillot, 1985, p. 11.