

ALTERNATIVE TO DOME AS A SYMBOL OF *MASJID* And It's Influence in Indonesian *Masjid* Design

Julaihi Wahid ¹ and Bambang Karsono ²

¹ Assoc. Prof., B.Arch., M.Arch., PhD., is a lecturer at the School Of Housing Building and Planning, Universiti Sains Malaysia, 11800 Pulau Pinang (e-mail: julaihi@usm.my).

² A PhD Candidate at the School Of Housing Building and Planning, Universiti Sains Malaysia, 11800 Pulau Pinang (e-mail: myvolkswagen74@yahoo.com)

Abstract. The existence of domes perhaps originating from the arid Mesopotamian region, where timber were scarce and the sun bake mud bricks were easily available and became common construction materials. The dome construction techniques developed from the arch action through a doubly curved plane and employed to facilitate spanning without shutters. This was the main source of brick constructional techniques of early Islamic times. In contrast, the early Indonesia's *masjid* (mosque) dated since 1400s derived its form and construction techniques from those of pre-Islamic religious and noble buildings in the archipelago, such as *pura* (temple), *keraton* (royal palace) and traditional house. Timbers as basic material for the construction in a given setting in Indonesian Archipelago were commonly used by the local people. In 1881, after a bitter war against the Acehnese, the Dutch introduced an alien form for a *masjid* which was strange to Indonesian culture. The dome structure was imported from India for the construction of the *Masjid Baiturrahman* in Banda Aceh that has been many years 'considered as inappropriate for religious purpose'. Ironically, the usage of this so-called alien form has now spread throughout every cities and villages. Paradoxically, any newly built mosque without a dome may be considered incomplete. The gist of this paper is to explore the application of dome as a roof covering and its influence on the design of *masjid* in Indonesia. This paper also traces the significant of these elements in conjunction to the modern era of architectural extreme and unlimited design discourses.

Keywords: *masjid*, *dome roof*, *symbol*.

1. Dome as a Symbol of Masjid

It is no doubt that domes which are flourish in Islamic world and have become symbols to the *masjid's* roof are expressively developed to establish the identity of Islamic houses of worship. Arguments from scientists about dome's shape which flourish in Islamic world are influenced by building materials and techniques i.e. bricks are not fully true. For example: Dome of Rock (687) which was known as the one of early Islamic monument, has a gold dome and the dome's structure was not build from brick which was usually found in Byzantium. The dome's frame was built from wood and covered by copper sheet. This point out that the existence of dome at Dome of Rock is not influenced by the logic of building techniques and materials but has been deliberately chosen to express a holy place and differentiates it from other buildings.

According to Islamic historian and *hadits*, *masjid* in the era of Rasulullah SAW was an unpretentious building which had inner-court in the middle of building and was enclosed by clay wall. Roof stretched along a length of the wall and was supported by a line of columns inside the building. Rasulullah SAW's house was clinked out in one of *masjid's* wall. At present, this pattern has been developed into one of *masjid's* type which is known as a hypostyle i.e. *masjid* which has many columns stretch along a length of the wall to support roof and left open space as an inner-court in the middle of building [Al Faruqi, 1986].

Although in the era of Rasulullah SAW the identity of a *masjid* did not appear clearly yet, but Rasulullah SAW already gave a direction about the importance of that identity. As a person who conveyed a new religion, Rasulullah SAW realized greatly the importance of the knowing identity to differentiate it from previous religion. He once said that any moslems who wore clothes resembled to the Jews monks, were regarded belonged to them. However, Allah SWT already put in order the way to cover out the *aurat* or dressing according to Islamic way in Al-Quran, one of the goals is to recognize easily as a Muslim [QS. Al Ahzaab, 59].

The same enthusiasm happened in *masjid's* design. By the time Rasulullah SAW determined the way to call out Muslims to pray (*sholat*) in *masjid*, He also stressed not use the way which had been used by previous religions. He then told Bilal to reverberate *adzan* from the higher place to call out moslems to pray (*sholat*). From this activity, then flourish various shapes of minaret which has become a dominant identity besides dome.

Al Quran and Hadist do not put in order about the choice of dome as a symbol of *masjid*. That choice develops based on rational consideration about the need of identity so that it is easy to recognize. Christians did not develop the dome's shape as the church's identity, because geometrical shape such as: dome, cannot provide the vertical expression. Therefore the dome's choice as a symbol of *masjid* can fulfill the need of identity which differentiates it from other religion house of worship. Besides the dome's shape gives the strong impression with the result that it is easy to recognize even from a distant place.

One hadist tells: 'a moment a disciple of Rasulullah SAW will do *sholat* in the desert, Rasulullah SAW told him to stick down a cane near the *sujud* place, which cannot be step over by someone'. The story above has a deep sense; a stuck cane in the wide desert can change the unlimited space and define it become temporary abstract space, so that the man can do *sholat*. A place where the cane stuck becomes a center point for an imaginary dome space, and center point functioning as a vertical axis for imaginary dome above the man who is performing *sholat*. Perhaps it can explain why in contemporary hypostyle *masjid* with a small dome is always placed above the *mihrab*.

A deep abstract consideration, perhaps because there are so many verses in Al Quran express about the sky, earth and the command to observe stars and why the sky is placed higher. It evokes Muslims to become very aware about their *fitrah* as a caliph in the world also to be familiar with the universe. Although the sky has long distance from the earth, but in the Muslim's perception it is very close to them because it is similar with a giant dome. Imagine while a Muslim is doing *sholat* and then prays in the desert at mid-night, he lifted the palms of his hands, so he feels that he is in the embrace of a giant sky dome which is limited by the horizon. Rasulullah SAW himself often prayed, by lifting the palms of his hands up to the sky and hoped Allah SWT answered his wishes [QS. Al Baqarah, 144].

2. The Influence in Indonesia.

The choice of roof shape for *masjids* in Indonesia are varies. It is proven by the various shapes of roof that are used i.e. angle roof, dome, and even flat roof. However according to the observation which has been made, shows that the dome shapes are developed dominantly compared with other shapes. It can be seen on new *masjid* developments which become use dome as their roof, or modification from storied roof (*tumpang roof*) become dome roof. The modification is usually made by changing the top of *tumpang* roof with a light and small stainless steel dome or changing the lower of *tumpang* roof with the wider stainless steel dome.

The efforts to establish a dome's *masjid* strongly happen in outside of Java Island, because the Islamization process outside Java is more radical and direct. It is proven by very few *candi* (Hindu or Buddhist temples) from Sriwijaya era are remain. Another reason is that the cultural attitude outside Java is easy to accept a dome's *masjid*. For example: Masjid Raya Baiturrahman Banda Aceh, the early *masjid* had *tumpang* roof but the *masjid* was burned out by Dutch in Aceh war (1873). In 1881, after a bitter war against the Acehnese, the Dutch re-built the *masjid* with new design and introduced an alien dome's shape for a *masjid* which was strange to Indonesian culture at that time. The dome structure was imported from India for the construction of the new *Masjid Baiturrahman*. In Banda Aceh that has been many years 'considered as inappropriate for religious purpose'. Ironically, the usage of this so-called alien shape has now spread throughout every cities and villages. Paradoxically, any newly built *masjid* without a dome may be considered incomplete.



Figure 1: Masjid Raya Baiturrahman, re-built 1879 by Dutch after Aceh War. The origin had storied roof (*tumpang roof*) which well known as a symbol of Masjid at that time.
(source: <http://www.sabili.co.id/>)



Figure 2: Masjid Raya Baiturrahman, 2 extended domes were built in 1935 by Dutch and other domes were built by Indonesian government in 1967.
(source: authors)

Many dome's *masjids* which have high architectural value are found in Sumatera Island. In North Sumatera province are noted: Masjid Raya Al-Mahsun (1909), Masjid Raya Labuhan Deli (1824) dan Masjid Azizi Langkat (1896). All of them are designed by Dutch's architect and influenced deeply by Moghul India style. Many materials include its dome was imported from India and Italy. However several *masjid* was built by local people, such as: Masjid Raya Syekh Burhanuddin (1670) in West Sumatera province. This *masjid* use a fusion between a steep angle roof and finest dome use local materials are applied. In Sulawesi Island, Masjid Poso in

Middle Sulawesi province also built by local people and uses a fusion between *tumpang* roof and dome. The effort to adding dome on the top of angle roof has been made by giving transitional shape between dome and angle of *tumpang* roof and it was used wood as a structural material. It is convinced that *ulama* (Muslim religious leader) influentially take place in emerging the dome roof in the design of local people's masjid. Few *ulama* at that time pilgrimage to Mecca for *haji* and during their staying in Mecca they obtain and absorb the lesson and understanding about the dome shape as a part of religion symbol for Islamic house of worship. Then by the time they back home, they brought the dome comprehension to Sumatera.



Figure 3: Masjid Raya Labuhan Deli built, in 1824. (source: authors)



Figure 4: Masjid Azizi Langkat, built in 1896. (source: authors)



Figure 5: Masjid Agung Bandung circa 1880, built by Dutch, basically has 3 stories roof (*tumpang* roof) as a symbol. (source: Pusat Studi & Dokumentasi Masjid Nusantara, 2000)



Figure 6: Masjid Agung Bandung in recent time totally changed and use 3 domes and 2 minarets as a symbol. (source: authors)

To compare with the outside of Java Island, *masjids* in Java are late in a process of adoption of dome shape. Perhaps that is because the influences of several historical *masjids* as an inheritance of Wali Songo in north coastal of Java and *keraton masjids* (palaces *masjids*). *Keraton masjids* usually are located in strategic place, i.e. in the *alun-alun* (downtown). Majority of historical and *keraton masjids* have three storied angle roof and called as *masjid tumpang tiga* (masjid with three storied roof), therefore *masjid tumpang tiga* as if the only one symbol of

masjid in Java. However the desire of some people to express dome in their *masjid* was happens straightly, i.e. in the extension of Masjid Sunan Kudus, which uses dome on its roof; Masjid Agung Bandung, the early *masjid* has three storied roof, by the time it is renovated and expanded the roof has been changed with dome until recent times.

The urging to dome in Java clearly pronounced in the *masjids* which were built in the beginning of independence era. For example: Masjid Istiqlal in Jakarta built as a monument for gratitude to Allah SWT for independence's bestow. Clearly, Masjid Istiqlal shows and expresses the dome as a symbol. Other significant masjids in this era are noted: Masjid Al-Azhar in Jakarta and Masjid Syuhada in Yogyakarta, both is used dome as a symbol.



Figure 7: Masjid Istiqlal Jakarta. (source: authors)

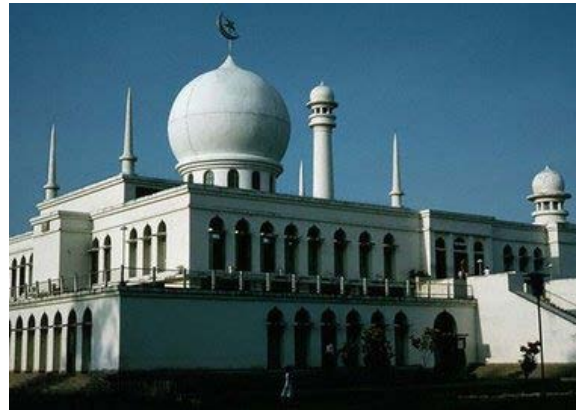


Figure 8: Masjid Al Azhar Jakarta, onion dome is applied. (source: authors)

At the end of 2nd millennium, the design of dome in several *masjids* in Java was moving better and mature. Masjid Agung Surabaya, which was built in this era, has better design in the elaborating of roof shape and texture of dome. The roof is combination between *tumpang* roof and dome. Dome's texture was made from small colored mosaics which is success help giving new image in architectural culture of the Islamic world. Because basically Islamic architecture never satisfied to neglected a plain surface without increases the quality of its appearance

In the beginning 3rd millennium the design of *masjid* in Java strongly influenced by dome as a symbol. Like in Banda Aceh, it takes many years to consider dome as appropriate for religious purpose, then after adaptation process, the usage of dome shape has now spread throughout every cities and villages in Java. However, the great and beautiful *masjid* has been finished in 2006 in Depok (a city near to Jakarta). Its name is Masjid Dian Al Mahri, or popular named as *Masjid Kubah Emas* (Gold-Dome *Masjid*). This great *masjid* can accommodate more than twenty thousand people and located in *Islamic Centre* area. The masjid has 5 domes, such as: 1 as a main dome and others as small domes. All of them were covered by gold with the various thicknesses, i.e. 2 until 3 millimeter and also covered by crystal mosaics. The shape of main dome is look like Taj Mahal's dome, with 25 meter high and 20 meter wide of diameter.



Figure 9: Masjid Agung Surabaya, combination between dome and *tumpang* roof are applied. (source: authors)



Figure 10: Masjid Dian Al Mahri (Gold Dome Masjid) Depok, it is a contemporary *masjid* design in Indonesia, started build in 1999 and finished in 2006. (source: authors)

3. Conclusion

The wish to use dome as a symbol of *masjid* exist in Indonesia since the doctrine of Islam was entering this country. In the beginning, dome roof introduced in several *masjids* in Sumatera Island by 2 (two) influences. First is by local people, by few *ulama* (Muslim religious leader) which was pilgrimages to Mecca for *haji* and during their staying in Mecca they obtain the lesson and understanding about the dome shape as a part of religion symbol for Islamic house of worship. Then they brought the dome comprehension to Sumatera. An example for this process is Masjid Raya Syekh Burhanuddin (1670) in West Sumatera province. Second is by Dutch, who have been colonizing Indonesia for approximately 350 years. Dutch brought along the dome shape and applied it as a roof for several early Dutch's *masjid* design in Sumatera Utara province and almost all of their design was strongly influenced by Moghul style.

In Java Island, *masjids* designs are late in process of adoption of dome shape. Perhaps it is because the influence of several historical *masjids* as an inheritance of Wali Songo in north coastal of Java and *keraton masjids* (palaces *masjids*). In the beginning of independence era, the urging to dome in *masjid* design in Java was begun clearly pronounced. Although it takes many years to consider dome as appropriate for religious purpose, but after adaptation process, the usage of dome shape has now spread throughout every cities and villages in Java. However, at the end of 2nd millennium and at the beginning of 3rd millennium the application of dome in *masjid* design in Java was moving better, matures and it is become precedents to another island and province outside Java, even Sumatera. To be concluded that in the future, the usage of dome as a symbol in *masjid* design in Indonesia will tends to spread out widely. This is because the trend of *masjid* development which has happen and also the influence of global information about Islamic world which received by people through media. That information increasingly strengthens the people's perception for dome as a symbol of *masjid*.

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