

Integrating Islamic Aspect for Achieving Local Wisdom Principles Design in Roof Shape of Mosque, Case Study: Demak Mosque

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Abstract- The development of Islamic religion in Indonesia has a long history. Acculturation of cultures becomes one of interesting things to discuss. Demak Mosque is one of them, it is one of the oldest mosque on Java island. The uniqueness of this mosque is from the building form and the history. This mosque has the uniqueness form of building and also its history. The building form has a strong local culture functioned as mosque. This study aims to determine the aspects of Islamic values contained in the roof of the Mosque Demak form that associated with local wisdom values. The method used is correlational, used to obtain explanation of linkage between Islamic value with local value wisdom in Demak Mosque. This method is used to know clearly of both relationship, then the wisdom to be taken to be used in the future. This study uses qualitative research with descriptive analysis to explain the influence of the relationship of the two variables in the object of study to fit with reality. The research result shows that application of the local wisdom value(s) on the roof of Demak Mosque can not be released from Islamic value as an alignment. The Islamic value on the roof of Demak Mosque as an alignment to the function as a worship place. To apply the local wisdom value(s) that has been adapted with Islamic values.

Keywords— Demak mosque, Local wisdom, Islamic Value, Roof shape of mosque

I. INTRODUCTION

Since the beginning, the process of Islamization has indeed shown a high appreciation of local wisdom / culture [1]. The development of Islam in Indonesia is marked by the existence

of a mosque. Demak is one of the centers of the spread of Islam on the island of Java, the historical evidence that is still strong today is the great Demak mosque [2]. Mosques can also be understood with a building that represents the physical aspects of Islamic culture [3]. The mosque as a place with a spiritual worship function and other more complex functions related to the development of the Islamic community in the area. The development of mosque architecture itself has undergone many changes with a variety of expressions of understanding from time to time. One of the variations that inspired several mosque styles in the archipelago is the understanding of the value of local wisdom.

Various forms of local cultural heritage are opportunities to learn local wisdom to overcome various problems faced in the past [4]. Local wisdom is interpreted with wisdom in using ideas of equality, in other words in harmony with the value of locality [5]. In its application to mosque architecture is reflected in the accuracy of local culture and Islamic values which can also be used as a strategy for Islamic *da'wah* to be easily accepted in the local community. the benchmark used is the ability to absorb and process local culture with an adjustment to the value of Islam which is used as the main foundation. This is expressed in various aspects of its architecture. So that mosque architecture is not only symbolic and historical but also an element of local culture.

One of the mosques with the value of local wisdom is the Demak Mosque. Although the Great Demak mosque was founded in the 15th century, it is unfortunate that information about the construction of the Demak mosque is still confusing

[2]. The building of mosques in Indonesia shows the acculturation (mixing) of the culture of the local community [6]. The architectural style of the Demak Mosque contains local Javanese elements with Islamic influence and Hindu culture as a reflection of the value of its local wisdom. One of the results of its integration is in the form of a composition on the roof of the mosque. The philosophical value of *histris* is the main reference in the design of the roof, so that pyramid roofs formed with *mustaka* at its peak, which until now is still maintained and even influences architectural forms in several mosques in Malaysia, Brunei and the southern Philippines. So the wealth of local wisdom becomes a fertile land to be explored, discourse and analyzed considering the factors of cultural development occur so rapidly [5].

This research was conducted with the aim to explore aspects of Islamic values contained in the roof of the Demak Mosque which are related to the value of local wisdom. Data collection was carried out with literature studies. The analysis and discussion were carried out by studying Islamic values on Hindu culture and local Javanese wisdom on the roof formation of the Demak mosque. The benefit of the research is to train social sensitivity and increase architectural insight by knowing the form of local wisdom in the Demak Mosque.

II. METHOD

This research was carried out on the building of the Great Mosque of Demak which is located in the *bintoro* village, Demak, Central Java. The Great Mosque of Demak is a mosque left behind by the Wali Songo preaching on the island of Java. A symbol that was built to become a living heritage and served as a monument to Islamic power in Java. This mosque cannot be separated from the adaptation to the Javanese traditional environment, which adopts the formation of a traditional *joglo* house. In addition to being adapted to traditional *joglo* houses, the mosque building is also inseparable from the new Islamic values carried out as a step or a starting point in conducting *Syiar Islam da'wah*. The values of Javanese architecture that are still thick in the mosque make this mosque as a reflection of past historical remains that are still preserved to this day. This mosque still has cultural elements of local communities, which are then integrated with Islamic values.

This research is included in qualitative descriptive, which is used to clearly identify the case of the relationship of the two variables to be studied, then the positive value is taken. The focus of the method used is correlational, in which this method is used to determine whether there is a relationship between two variables or how the relationship between the two variables studied. The type of data used in this study according to the type of source includes secondary data. Secondary data is data in the form of literature collected from previous research and other reliable sources, such as books.

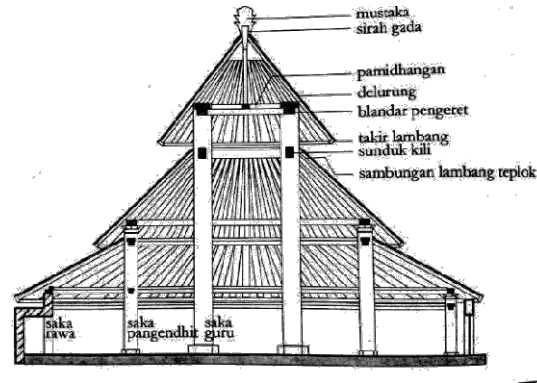
III. DISCUSSION

In essence the so-called mosque is not only fixated on buildings with special functions as places of worship only. But as at the time of the Prophet Muhammad, the mosque had a complex function and even became the center of people's civilization. Besides that the definition of place of worship explained in the hadith of Muslim history is "The earth for every Muslim is a mosque" and "It has been made for us this earth as a place of prostration and its condition is holy". But in the context of the current mosque can be said to be a physical form of the existence of Islam in a society.

Demak Mosque is the oldest mosque in Java Island which was built by the trustees in 1474, namely in the Demak Sultanate (Avianti Afand). Not only serves as a place of worship, this mosque is also functioned as a place to deliberate on social, political and cultural issues, so that it not only accommodates vertical activities (*hablumminallah*) but also becomes a forum for establishing community relations (*hablumminannas*).

The process of building the Demak mosque was also through a plural process involving the surrounding community in its implementation, as was done in the construction of a Javanese house. The architects were the eight Islamic polar trustees in Java who described the development plan and set a measure for the construction of structural elements. They also determine who must work on the component and determine when to install and enforce the next building. The guardian helpers get the supporting pillar (*saka pangendhit*). Most spiritual elite ranks; (preachers, ulama, etc.) work to build edge poles (*saka rawa*). Worldly rulers (regents of royal relatives, and nobles) were given the task of fastening and supporting beams. The dukes who carefully studied in this chapter prepared the main blocks while the royal and noble relatives prepared secondary beams along with cover and ridge [7].

Finally, the shingle roof cover was not assigned to certain parties, but was prepared by a public contribution (*sami urunan kewala*), apparently by the general public in general [7]. Even if viewed only as a superficial surface that closes this building, it actually plays a structural role that is far more important. The planning of the polar guardians seems to be planning schematic hierarchies of power with peaks (foundations). Worldly administrators connect the main supports to one another, and rely on them and their ultimate authority. The nobles also form a supportive footing and the framework that forms the next in hierarchy. Following this hierarchy is the member of the bureaucratic and military elite, whose function is to strengthen the structure of the State and its limits are its responsibility. Then the last non-present people as an anonymous mass where "only contributions" to cover the surface of the structure and give its mass / weight.



Picture 1. Tajug Lambag Teplok building.

Source : drawn by Revianto B. Santosa

After the hierarchical process is planned, there is a historical philosophical meaning contained in the composition of the shape of the Demak Mosque Roof made of shingles. the prototype took the composition from the joglo roof which was then stacked three symbolically based levels of three levels in the realm of *iman*, *islam*, *dan ihsan*. The other part is the roof buffer in the form of *soko* which also has three types. This is related to the relationship in a social status.



Picture 2. Roof of the Demak mosque.

Source : photo by A. Fanani

The shape of the roof used in the Great Mosque of Demak is a roof formation in Javanese traditional houses. Form a pyramid roof with poles as a support structure, in traditional Javanese architecture called *pendhapa*. Based on the shape of the roof, the *pendhapa* has the types. On the main roof of the building of the Great Mosque of Demak with a *tajug* roof shape three-tiered resembling a pyramid, this type of *pendhapa* is called the *tajug lambang templok* building [7].



Picture 3. Comparison of Tajug Roof Forms on *Pendhapa* and Demak Mosque

Source: Analysis, 2018

The roof of the *pendhapa* is often thick and massive; but it seems that this mosque is only supported by several pillars, namely thirty-six pillars. An example is a 961 square meter structure that supports three stacking roofs of the mosque. The four main pillars of the *pendhapa* are usually regarded as the main key to the structure, but as seen from the "structural" virtue of the mosque it seems to be a bit more compromised.



Picture 4. Roof Conut of Demak Mousque

Source: Analysis, 2018

The shape of the roof of the mosque is a three-tiered *tajug* roof, with a rectangular cross section and a shingle roof cover. The roof shape of the *tajug* consists of three levels of conical upward composition. Accompanied by the form of *limasan* roof as a complement to the building of this mosque.

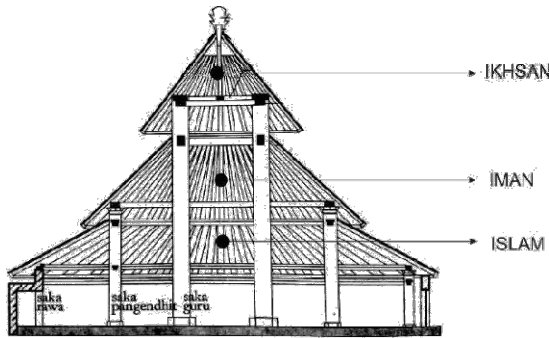
In the twentieth century, the great physical structure of the *pendhapa* attracted a Dutch architect, Ir. H. Maclarin Pont. In his series of writings, it was explained that the weight of the roof itself produced a balancing voltage against the pillars needed for the overall structural integrity. The roof gives stability to the pillars as the pillars support the roof.



Picture 1. The roof philosophy of the Demak mosque.

Source: Ahadi, 2018

The integration of Islam in the mosque building as a basic concept is found in the concept of the level of Islam on the three levels of the roof. Consists of faith, Islam and *ikhshan*. These three levels of roof represent the spiritual level of Islam, namely the first level representing the Faith, the second level representing Islam, and the third level representing *Ikhsan*. The three levels of the roof are supported from the bottom by three types of supporting poles or can be known as *soko guru*, *soko pengandhit* and *soko rawa*.



Picture 2. Mosque Roof Level
Source: Analysis, 2018

The lowest roof is named Faith. Faith is the main foundation for human life. Because, in various aspects of life, we must have strong faith, because faith is our guide in living life. Having a strong man means having a strong grip so that our lives are not shaken. From this faith rose to the second level, namely Islam. From this mosque itself initially did not have a dome. Why is Islam at the second level? Because by having strong faith we can hold fast to our belief that is *Islam*. Go up to the top level, namely the third level "*ihsan*". Here the conical roof upward we are reminded so that as an *ihsan* who has strong faith and religion can become an *Ikhsani* who is a religious soul, always closer to Allah SWT.

In addition, the pillar / pillar as part of the structure that supports the roof is divided into three types which are distinguished in placement and loading as follows:

No.	Jenis Soko/ Tiang	Perletakan dan pembebanan
1.	<i>Soko Guru</i>	As the core support of the Demak mosque building and the origin of the guardians. The loading on the pillar of the <i>soko guru</i> is the loading of mustaka on the third or highest level roof. It means that <i>kyai</i> and <i>ulama</i> are the support of the people who become the reference center.
2.	<i>Soko Pangendhit</i>	It is a support that surrounds the fourth of <i>soko guru</i> and becomes a support from the composition of the second or Middle level roof, which comes from donations from the government and nobility and the sultanate symbol at that time. The loading is as a support from the second pyramid roof. In this case the two pillars of <i>soko</i> also function to support the <i>soko guru</i> in non-core buildings. So that wisdom was

		learned that the government Together with Kyai and Ulama worked together in building the Ummah
3.	Soko Rawa	The latter is a support from the composition of the first or lowest roof of the foyer and the roof outside the Demak Mosque which symbolizes the Existence public in the whole social system.

IV. CONCLUSION

From this research, it can be seen that the process of building a mosque is similar to the traditional house construction process in general, which is plural in its implementation. All levels of local society participate to be involved starting from the elite to the people. The designers of the Demak mosque have also set and planned for the distribution according to the hierarchical concept which is similar to the concept of structure in the Demak mosque. According to the division, it is also according to the task assigned to help build the mosque.

In addition, the roof of the Great Mosque of Demak shows that mosques in Islamic beliefs do not have to be vaulted, by raising the local wisdom of the mosque demak provides a lot of images that Islam is not always a hard religion and must follow the teachings of the Arabs. Lifting the building of Java into the house of worship can be one of the acculturations that can be accepted by the community, and could be one of the parts of the propaganda of the guardians at that time

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