

Correlation Between the Mosque and Traditional House Architecture in Kudus, Indonesia

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ABSTRACT

The spread of Islam and the rise of the cigarette industry that began in the nineteenth century are two factors that influence the transformation of mosque and traditional houses in the old city center of Kudus. This study aims to find out how the correlation between the architecture of the mosque Menara Kudus and traditional houses in the city of Kudus. The object of the study is first, the mosque Menara Kudus, and secondly, the traditional house around the mosque, which is type of single and type of series. The method used is a combination of historical documentary and architectural descriptive with survey technique. The analysis should be viewed within the framework of Javanese culture. The results of the study show that in general the traditional house architecture has no significant correlation with the architecture of mosque Menara Kudus, but it has more significant correlation with traditional Javanese house architecture.

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1. Introduction

Since the 1800s, the city of Kudus in Central Java has reached an economic level above the regional average in other parts of Indonesia. Besides the history of Kudus along with its founder, Sunan Kudus, the existence of the clove cigarette industry has raised the city of Kudus to the entire archipelago. Apparently the religion of Islam and the activity of clove cigarette industry are two main factors which become the foundation of standing and development of Kudus city. The religion of Islam that became the spirit of Kudus community, according to history, has existed in Kudus region since the 1500s. Historic and monumental buildings in Kudus that can still be seen today, such as mosque, minaret, and residential buildings, are clearly inseparable from the two factors above [1][2][3].

The prosperity of Kauman (the village around the mosque) society has caused a drastic and fantastic cultural change. This also affects the physical aspects, especially in the design of the mosque and the house. So it is not surprising that the bodily appearance of these buildings is very different from what is found in other areas of Java.

Then the question: is there any correlation between mosque building and traditional house in Kudus? To answer it, of course not easy, considering the mosque building has a different architectural rules compared with residential buildings. But the interesting thing is the mystery of the early existence of the mosque and traditional houses in Kudus and the transformation of the two types of buildings to their present form, and the

extent to which the correlation between the two buildings.

Not a few Scientists who have done a good study of the mosque Menara Kudus and traditional house in Kudus. But so far the study of the two objects is done separately. This study was conducted in an integrated manner

2. Material and Methods

Kudus is one of the Dati II Regions in Central Java Province. Kudus is located on the southern hillside of Muria, bordering on the west by Dati II Jepara, to the south with Dati II Demak and Dati II Grobogan, and to the east with Dati II Pati. The distance from the provincial capital, Semarang, to Kudus is approximately 51 km to the east, the distance from Demak 26 km to the east, the distance from Jepara 38 km to the south, and the distance from Pati 24 km to the west. Kudus is located between 110 36 ' and 110 59' East Longitude and between 6 51 ' and 7 16' South Latitude, with a height 55 meters above sea level. The area is approximately 422.21 km², the southern part of the lowland for rice fields, the northern part of Muria mountain slopes [4][5].

The growth and development of Kudus, as in other inland cities, is the impact of the long road of Anyer-Panarukan by Governor-General Daendels in 1808-1811 AD. The construction of a highway of no less than 1000 km is an important infrastructure for development Modern cities in the land of Java. Van den Bosch as

Governor of forced cultivation since 1830, administratively began to open areas of plantation with railway transport network [6]. Kudus which according to Hartingh was a "dead city" in the 18th century, the next century has reappeared as an important trade center of textiles and rice [7].

The rapid growth of the clove cigarette industry between World War I and World War II enabled the emergence of a number of Indonesian brands whose owners were known as "clove kings", a rare manifestation of Dutch rule. Despite fluctuations, in the last years before World War II the clove cigarette industry reached the highest level of production. Conditions that weaken the clove cigarette industry in Kudus occurred during the Dutch re-occupation of Indonesia in 1945-1949 AD [8].

The old town center of Kudus is the area marked by the existence of the old mosque building of Menara Kudus and the surrounding settlements. The mosque Menara Kudus has links with a figure who spread Islam in Java in the 15th and 16th centuries, namely Ja'far Shadiq or known Sunan Kudus [9][10][11]. The settlements around the mosque, associated with the rise of clove cigarette industry in the 19th and 20th century.

Based on the inscription above the *mihrab* of the mosque, the year of the founding of the mosque was 1549 AD by a figure named as *kadhi* of mosque was Ja'far Shadiq. The name of the mosque according to the inscription is Almanar or Al-Aqsa Mosque, while the place where the mosque is called Al-Quds which later by the Javanese people call it Kudus and its mosque better known as masjid Menara Kudus [12][13]. In the southeast of the mosque there is a minaret that is more like a temple [14][15][16][17]. Admiral Antonio Hurd in his expedition from Jepara to Kediri in 1578-1579 AD had stopped at Kudus and admired this minaret [18]. Building materials used both in mosques and minaret are red bricks; so did the walls around the mosque. The orientation of the mosque's complex and its minaret is to the west; Exactly 9 degrees (based on the Compass gauge) from the east-west axis to the north.

Mosque Menara Kudus is a complex that occupies an area of about 0.5 hectares, in which, in addition to the mosque building, there are also stone minaret, and the tomb of Sunan Kudus along with its gates. The complex of mosque Menara Kudus is surrounded by brick walls as high as 2 meters. The uniqueness of the mosque Menara Kudus is the existence of a minaret building that resembles a temple building. In addition, the mosque also has the bentar and kori gates.

The mosque building has *wudlu* place, first veranda, second veranda, inner veranda, *pawestren*, and main hall. From the east, we pass through the bentar gate to arrive at the first veranda. The first veranda is covered by a dome-shaped roof. Then the second veranda is covered by a two-layer *kampung* roof. Among the first and second veranda there is the first kori gate. To the west of the second veranda is the inner veranda. The roof of the inner veranda is *limasan* shape. To the north of the inner veranda is a *pawestren* (place of women's prayer) and a woman's *wudlu* place. *Pawestren* is covered by a two-layer *limasan* roof. To the south of the inner veranda is men's *wudlu* place. To the west of the inner veranda is the main hall covered by

a three-layer *tajuk* roof. The roof is supported by *soko guru* construction. In the main hall there is a second kori gate. The shape of the second kori gate is smaller than that of the first kori gate. At the front of the main hall there is a mosque *mihrab*.

The construction of a three-layer *tajuk* roof of mosques Menara Kudus is very interesting. Roof construction is supported by 4 *soko guru* and 4 pillars on the outside of *soko guru*. *Soko guru* does not reach the top of the roof, only to the lowest part of the roof (first layer) and supports horizontal beams (*blandar-pengeret*) and vertical beams that are included in "truss" system. The 4 pillars of *soko guru* were octagonal shapes; At the top made ornament with *kapitel* shape, while the bottom is *umpak* shape.

The second kori gate, which is in the main hall, has a hole and a doorway in its center. The door is decorated with carvings (not translucent) with the dominance of geometric motifs, in the form of *tumpal* at the top and bottom, and the rhombic shape in the middle of each door. On the right and left of the door are ornaments of stone carvings that have flower motifs and plant leaves in a four square rectangular shape frame with standing position. On the right and left edges there are reinforcement pillars. At the head is made up of three levels, and the top is shaped like a crown. At the edge of each level there is *gegodeg*, which is in the form of ornaments that form sticking up. *Gegodeg* decoration is also found on the head of the first kori gate. On the exterior of the mosque's prominent building is the crown (*mustoko*) at the top of the three-layer *tajuk* roof.

The orientation of the mosque building is clearly represented by the position of the gate of bentar (as main entrance), first kori gate, second kori gate, and *mihrab*. These four important elements are located on a straight line pointing towards Qiblah. After the measurement with the compass, showing the orientation to the direction of 9 degrees deviate from the west to the north.

The most monumental building is a minaret that looks like a temple. The minaret building is divided into 3 (three) parts, namely the foot, body, and head. Overall, the shape of the buildings from three sides: east, south, and north look the same. On the western side of the building, there are trap stairs leading to the bottom of the minaret hole located more or less in the middle of the minaret body.

At the foot of the minaret there is a repetition of decorative ornament rectangular shape, the number on each side is also the same, but in the middle placed diamond-shaped ornaments, and at both ends there is a *tumpal*. In the middle of the body of the building, on the three sides there are empty niches, while on the west side there is the door of the hole. At the head of the minaret building in the form of a building that has a rectangular floor plan with a two-layer *tajuk* roof. Above the top of the building is placed a wooden floor. On the four sides are placed 4 pillars, plus 4 pillars in the middle; So the total is 16 pillars. Each pillar measures approximately 10 x 10 cm. At the top of the pillars are mounted horizontal double beams, whose functions clearly strengthen and rigid pole construction. The upper horizontal beam is called *blandar-pengeret*. While the lower beam is called *sunduk* and

kili-kili. The size and shape of the four beams is no different from the pillars. At the top of the roof there is a crown-shaped or *mustoko* ornament.

In the center of the old city of Kudus, around masjid Menara Kudus, there are traditional houses that are "spectacular" because almost all parts of wooden houses are filled with carvings. In contrast to other traditional Javanese houses, the traditional house of Kudus has come up with its unique shape [19][20][21][22]

House building especially in the old city of Kudus really very interesting. The building, known as the traditional house of Kudus, even has a background that is also not the same as traditional Javanese houses, both roof form and space organization. The first time that is clearly visible physically is the form of a high *joglo* roof and slightly tapered up. Local people call it *joglo pencu*. Along the roof and along the meeting of the four areas of the roof is usually given the ornaments with the shape sticking up, from a distance looks like a fish fins.

Spatial order of traditional house in Kudus classified simple, which includes *jogosatru*, *senthong*, *pawon*, and bathroom. *Jogosatru* has the meaning of guarding from the opponent's (attack or evil), serves as a living room [23]. In this space there are one or two pillars called *sanggah*. *Senthong* is the space in the traditional house of Kudus. In the middle of *senhong* there are four *soko guru* which become the main supporters of the structure and construction of *joglo* roof. In *senhong* there is *gedhongan*, a room or cubicle measuring approximately 3m x 4m or 3m x 5m, located in the middle and somewhat backward. *Gebyok* of *gedhongan* face filled with carvings with various motives. *Pawon* means kitchen. Traditional houses of Kudus generally have large *pawons*; so it can be divided into two, namely *pawon alit* (small) serves as a place to cook and dining room and *pawon ageng* (large) serves as a family room; which was initially also to receive female guests. At the top of the *pawon*, usually also functioned as a warehouse, a place to store rice or rice granary. *Pawon* location can be on the right and or left, coinciding with the building of the core house with different roof structures and construction; Generally in the form of a *kampung* roof or something that says the form of *gajah ngombe* roof. The bathroom generally blends with the well and is separated from the house; in front of the *pawon*. If there are two *pawon*, on the left and right of the core house, then the location of the bathroom in front of the active *pawon*, which serves everyday.

The main structure and construction of the traditional house of Kudus are 4 pillars of *soko guru* located in the center of *senhong* which supports the *brunjung* on it. The cultivation under the *brunjung* as a compartment has a form of four rectangles where in all four corners there are pillars. In the form of the roof *joglo pencu*, in addition to 4 pillars of *soko guru* there are also 14 pillars of followers or *pengarak*. The main pillars of *soko guru* deliberately left plain, as well as *umpak*. The four *kapitel* -shaped ornaments on the pillars are given ornaments in the form of an eight-star formation layer or known as *ragamaya*, which is between the beams of *blandar-pengerer* and beams of *sunduk-kili-kili*. At the ends of the eight horizontal beams there is an ornament with a *tumpal* motif. Most

of the traditional houses of Kudus, especially in the Kauman village (*kampung Kauman*) oriented to the south or precisely deviasi 9 degrees to the west.

Based on the above description, the analytical framework is built on the following factors. First, the historical factor of the mosque and traditional house; secondly, the similarity factor of architectural aspects of mosque and traditional house, such as forms, element, spatial order, ornament, and orientation.

Object of study, that is first, Mosque Menara Kudus which include mosque building and its minaret; second, traditional houses in the village of Kauman (village around the mosque), by taking two samples, namely the traditional house belonging to haji Muhid and belonging to haji Syafei. The determination of the sample is based on the type of house and the richness of the carvings that may be considered representative of the traditional house. The first sample, the house belonging to haji Muhid representing the type of single house, and the second sample, the house belonging to haji Syafei representing the type of house series.

For the search activity used approach, that is combination of method of historical search documentary and architectural descriptive method with survey technique. The survey was conducted in two types, namely library survey and field survey (directly to the study objects). Because of the nature of the study which requires emphasis on the factual descriptive, then in the stage of data collection is also conducted interviews with competent sources. In order to find out relation between object of building of mosque Menara Kudus and traditional house of Kauman, correlation approach is done by comparing the two objects in a certain period where both are considered ever "live" side by side.

The analysis is done within the framework of Javanese culture. Analytical steps to find correlations between the architecture of mosque Menara Kudus and traditional houses are as follows. The first step, determining the same historical period between the building of a mosque and a traditional house through historical search. Second step, finding the similarities between mosque building and traditional house through architectural descriptive within the Javanese cultural framework which includes architectural forms and elements, ornament, and building orientation [Figure 1].

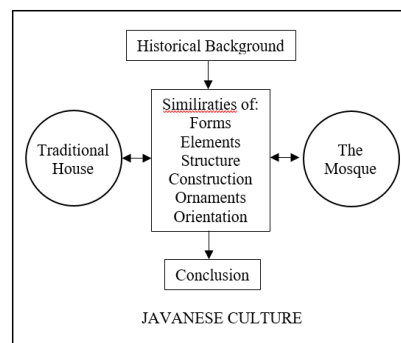


Figure 1: Schematic Diagram of Analysis Framework

3. Results and Discussions

From the previous section review, it is necessary to compile evidences of the year of the events relating to the existence of the buildings in the mosque complex of Menara Kudus, and traditional house of Kudus in Kauman village, by tracing the events that caused the change of social structure of Kudus community in particular and the people of Java in general; as a first step of analysis.

The year 956 H or 1549 AD, which is contained in the inscription above the mihrab of the mosque Menara Kudus is one of the evidences considered valid until now; year which shows the construction of the mosque. In the year 1685 AD, the roof of building minaret was repaired which may have been damaged. In the first kori gate on the veranda of the mosque, there is a description of the year 1215 H (at the east) and 1727 Saka (at the west) both pointing to 1800 AD. [Figure 2; Figure 3].

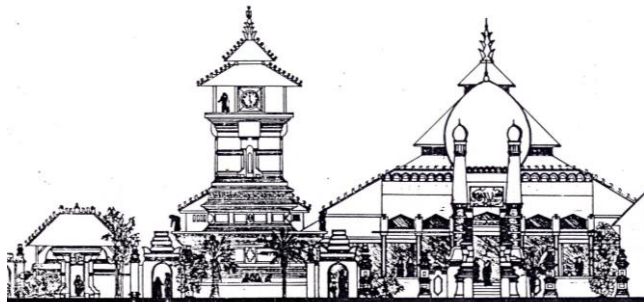


Figure 2: Mosque Menara Kudus

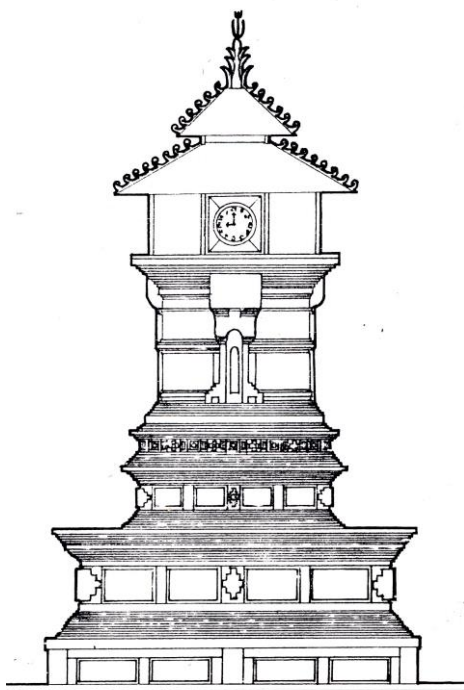


Figure 3: Minaret of Kudus

In 1870, the Dutch Colonial imposed a liberal system, opening up opportunities for foreign private parties to invest in the territory of colonies. Since then the influence of Europe began to flood the archipelago, especially the island of Java, including Kudus. In this year also, in Kudus, began to be introduced and popularized clove cigarettes. That was the golden era of the indigenous people of Kudus through the trade of cigarettes. Until the 1920s indigenous entrepreneurs were still successful before Chinese entrepreneurs began to take part in the production and trade of cigarettes, which gradually began to compete and even before 1945 began to shift indigenous entrepreneurs.

Far to the north of Kudus, precisely in Jepara, at the end of the 19th century there has been an intensive "go international" process of Jepara art craft. In 1898 AD, many orders came from Europe, after Jepara carving products were included in the exhibition in Amsterdam. European motifs began to affect the decoration of Jepara carving. There is a similar condition between Kudus and Jepara in the late 19th century and the beginning of the 20th century AD, on the one hand the indigenous communities of Kudus experienced a significant increase in the economic sector with clove cigarettes, while Jepara significant progress also in the field of carving. Both of which are manifested in the traditional house of Kudus.

From the above description, it can conclude that the traditional house of Kudus, covered with *joglo pencu* and decorated carvings in the interior, built after 1749 AD and before 1920 AD or 1945 M. It covers two periods, the first period from 1749 AD until before 1870 AD and the second period began in 1870 AD until before the 1920s or until 1945 AD. The period that could be considered to represent the existence of two objects together began after 1749 AD and ended before 1920 AD or 1945 AD.

For the next step of analysis is to find the similarities between the building of the Mosque Menara Kudus and the traditional house of Kudus based on aspects of architectural forms and elements, ornaments and decoration, and orientation, in the Javanese culture framework.

The form of traditional house of Kudus, which is covered with *joglo pencu*, clearly has nothing to do with the form of the mosque and the minaret, each with a three-layer *tajuk* roof. The form of traditional house of Kudus house mimics the style of Javanese traditional house with a *joglo* roof belonging to the native rulers, the regents [24]. The existence of differences or elevation peil floor, possibly also mimic what happens to the building of *pendapa*. In the concept of Java, the height of a place reflects a sanctity, honor, and dignity; so then came the term *sitinggil*, high ground. The customs of the palace are still inherent in the daily life of the native rulers. By displaying monumental buildings in the form of *pendapa* and "noble" houses which generally have *joglo* roof have made this group of people have a privileged position in the eyes of their people. The high sense of prestige among the people of the *pendapa* buildings and buildings of the regents may have disturbed the Muslim merchants who feel successful. That is by matching or if possible beyond what the native rulers have; anyway, they are actually financially richer than the native rulers.

Traditional houses in the first period, as well as early generations that may have been more developed by people with links to native rulers, on the other hand have created prestige rivalries for later traditional dwellings built by merchants Muslims whose family members may have become modernist saints and for those who have succeeded in their economic sector. The presence of a high wall of walls surrounding the house may be one way of distinguishing between modernist Islamic groups on the one hand and Islamic ruling and non-modernist groups, as well as groups that are merely business oriented on the other. The latter group may be seen from the expression of his house which has a *gebyok* arch, such as the house belonging to haji Syafei. [Figure 4; Figure 5; Figure 6].

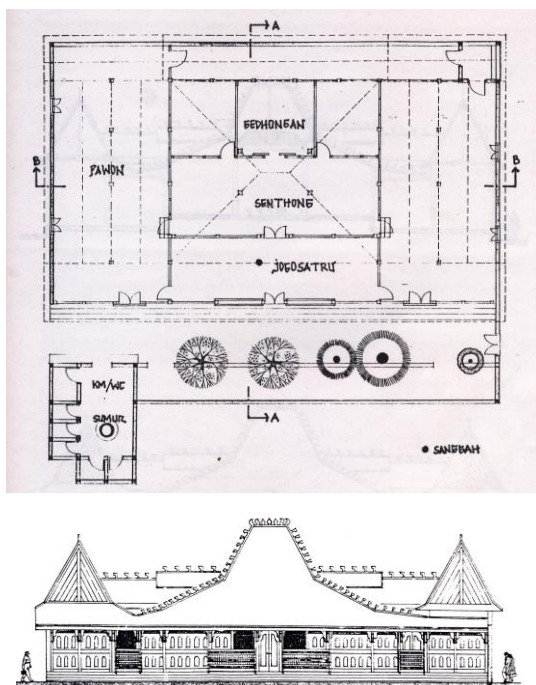


Figure 5: Elevation of Muhid House

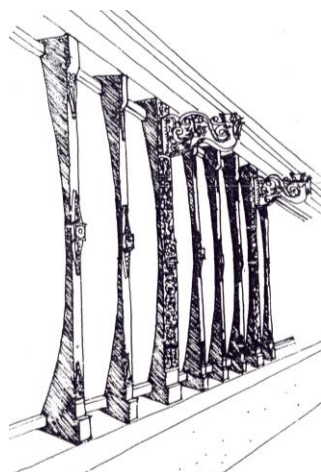


Figure 6: Gebyok of Syafei House

The structure and construction of traditional house of Kudus has a correlation with traditional Javanese

buildings southern. The main structure is the position of the *soko guru* in the center of the building, which is reinforced with eight horizontal beams at the top, following the shape of the *pemidhangan*. Then followed by the pillars and the beams of *blander pengarak*. The thing that distinguishes is the existence of *jogosatru* with its *sanggah*. Completion of roof construction that shade *jogosatru* requires precision; not just the usual *sor soran* as is often found in other traditional Javanese buildings. Probably among the traditional house buildings throughout the archipelago, only in Kudus should have a *sanggah*. It is indeed structural due to the pattern of space that changed from the customs of other traditional Javanese house, so there must be a *sanggah* as the main *blander* reinforcement. [Figure 7; Figure 8].

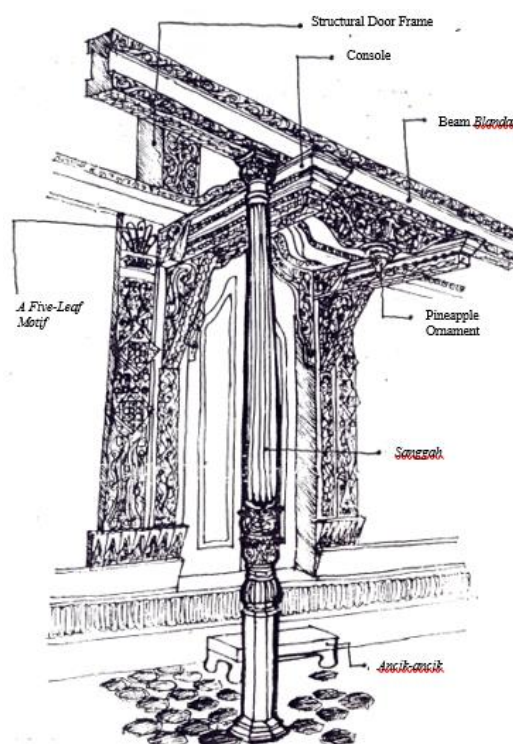


Figure 7: Jogosatru of Traditional House

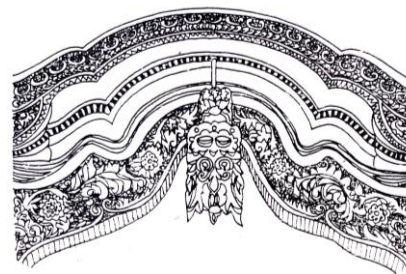


Figure 8: Pineapple or Bee Hive Ornament

Ornaments in the form of decorative wood carvings in traditional house of Kudus basically have motives carved from the original Javanese culture. Then

develop along with the arrival of foreign cultures such as Hinduism (and Buddhism), Islam (Middle East), China, and Europe. The new culture does not eliminate but is synchronized with the old culture, so that the original Javanese culture is still visible.

Indigenous Javanese ornaments that fulfill the spatial areas of the traditional house of Kudus are dominated by the motives of plant *sulur-suluran*; young leaves with stems and flowers. In the Hindu era the plant species were *kalpataru* and lotus, and in the Islamic era, the type of plant was jasmine. Geometric motifs, such as straight and curved lines (S); meanders and swastika; square plots, rectangles, triangles, rhombic shape; although the concept is more aptly owned by Islamic culture, but the motifs have also been known by ancestors of Javanese people since old time; it is a genuine Javanese culture [25]. Apparently there has been cultural syncretization between native Java (animism and dynamism), Hinduism (and Buddhism), and Islam [26][27][28]. In certain parts of the carving there are forms that originated from foreign cultures, especially China and Europe. Like the ornamental carvings of dragons, derived from Chinese culture, and the carvings of crowns and trophies come from European culture. While the ornament of birds is a product of genuine Javanese culture. [Figure 9].

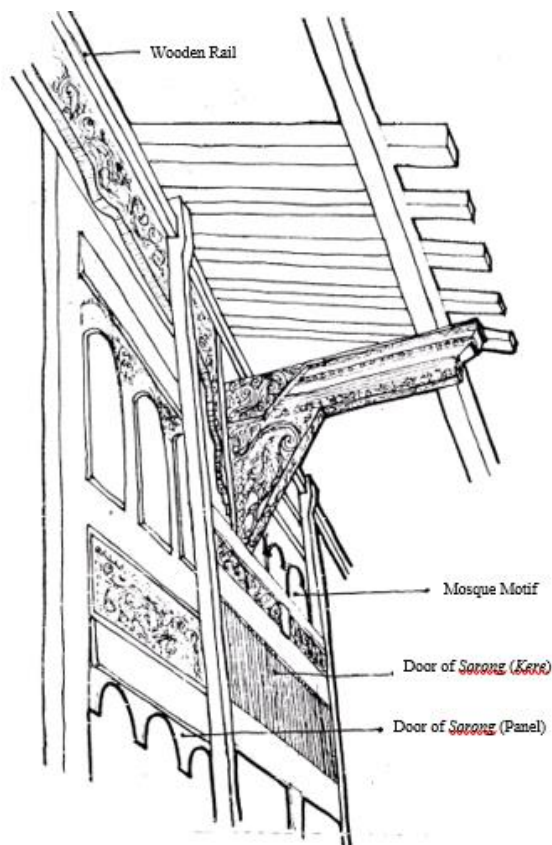


Figure 9: Sorong Door of Traditional House

But overall, judging from the way of presenting the carvings on the wooden areas which have led to discontinuity of the carving motifs that take place,

namely in the form of modules or compartments that motives of various decorations are not continuous to each other, then there are strong allegations that the influence of Islamic culture is very dominant. In one compartment there should be no sphere of space left (wasted space), because it includes one waste; or there is an understanding that in one compartment must be fulfilled so that the devil has no place. In Hindu (and Buddhist) cultures, as can be seen on the walls of the Prambanan or Barabudur temples, the ornaments are presented in compartments where the motifs are continuous with each other.

From the carved motifs raised by each traditional house of Kudus when observed it was not the same with each other. Of the two samples of the house (belonging to haji Muhid and haji Syafei) which are the subject of study is clearly visible differences in the presence of motifs carved in the room of the house. It is therefore very open for Scientists to examine the carved motifs of all remaining traditional house of Kudus in an effort to identify the initial conceptions of the design of each house, and then to sort into groups based on the pattern of carvings that are considered "one clump". And from here also can be identified groups of traditional houses based on the periods mentioned above.

The main structure and construction of the traditional house of Kudus are four pillars or *soko guru* supported *joglo pencu* roof. The four pillars are on the *umpak*. Both of *soko guru* and *umpak* are not very ornament. While *pendapa* or other traditional Javanese houses, at the *umpak* is decorated with flora motifs and at pillars decorated with ornaments stylized motifs from Arabic "Muhammad" or some as a *merong* motif. Although poorly decorated, the pillars of *soko guru* have ornaments similar to those found at the pillars of minaret building roof, ie at the lower and upper ends of *tumpal* motifs, in the center of the *tumpal* motif of a single piece; this is possible because the surface area of pillars *soko guru* wide enough.

The tapered angles at the meeting of the four fields of the *soko guru* pillars are made flat; so that the middle cross section of the pillars, between the top and the bottom is not square, but octagonal. This is similar to the pillars of the minaret roof and most other traditional Javanese buildings. The completion of the pillars of the *soko guru* and horizontal stabilizers at the top of the pillars, the cross-section of the beams at the edges of which are rectangular and in the middle, between the *tumpal* motifs at the ends of the beam in the shape of the octagonal, from the original Javanese culture. At the top of each pillar *soko guru* there is a decorative *kapitel* shaped eight-star motif, called *ragamaya*. *Ragamaya* ornaments are also found in the roof of minaret building. In other Javanese traditional buildings, in general, the shape of the *kapitel* is in the form of a rectangular arrangement, and sometimes under it a newly placed eight-star motifs is simpler. *Ragamaya* decoration looks more complicated. The possibility of this ornament is the development of indigenous Javanese culture.[Figure 10].

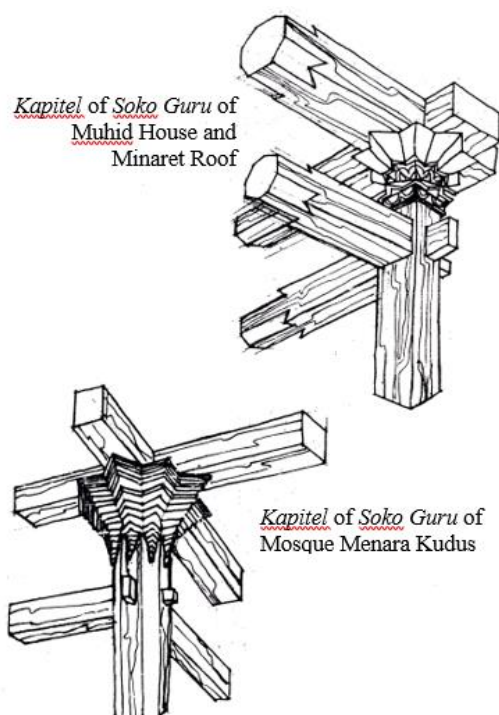


Figure 10: *Kapitel of Soko Guru*

Gebyok in front and center of the traditional house of Kudus in the form of panels in compartments with a rectangular shape (standing position) is added curve near the semicircle above it (plane in plain, not carved), which later became known as mosque motif. This motif is clearly influenced by the arch elements in the mosque building which was again a trend at that time. In other words, mosque motives come from Islamic culture (Middle East).

Invisible ornaments are decorative with various motifs on the roof of traditional houses of Kudus. In general, ornaments are made from the same material with the roof covering material, namely pottery. Its placement is lined almost along the ridge and the fourth meeting of the roof covering area. At the top of the roof, in the middle, placed ornaments with a motif *gunungan* or *makutho*, then on the right and left placed in a row, ornament with a cock or bird motif or puppet or elephant, up to the entire meeting of the four areas of the roof. The shape is almost the same as the *bungkak* (form sticking up) on the top of mosque and minaret roof. Between the ornament shapes sticking out in the traditional house of Kudus with the ornament of the shape sticking out at the mosque building mentioned above on the other hand, there is a barely visible difference. In traditional houses, ornaments with a sticky shape upward is a stylization of a *cengger*, where the direction of sticking up is to the outside or backward and the shape of sticking up is not pointed. While the ornaments on the roof of the mosque with its shape sticking up is the shape of the segment or part of a *makutho* located on the roof top. This ornament seems to be placed on a roof that has a point where it is placed *mustoko*. There are two *mustoko* models, first at the top like a crown surrounded by stuck forms consisting of segments or sections, the direction of the sticking up into or forward. Second, the *mustoko* model, at the top is a crown-shaped shape surrounded by emblematic forms consisting of segments or parts of the sticking up direction outward or backward. The sticking up shape of both models is taper. On the other hand, in the southern part of Java, on the roofs of traditional houses; in the center of the top is placed an ornament with a *makutho* or *gunungan* motif, and at the right and left ends, and at the meeting places between two fields, a tapered shape is sticking inward (as a segment of the *makutho*). And from the reliefs of Borobudur temple, seen the houses of antiquity, on the roof there is also an ornament with a pointed shape sticking in at the ends of the roof, flanking a *makutho* or *gunungan*. There seems to be no binding provision in the use of decorative motifs on the roof of traditional Javanese buildings; all aiming to beautify the building. What distinguishes between the ornament of the roof of traditional buildings, both houses and mosques, in Kudus, with the southern part of Central Java is the placement of the lined. Therefore, it is possible that the arrangement of ornaments lined up

in traditional houses of Kudus follow the pattern of decoration that is on the heads of the two kori gates that are now inside the mosque.

Most of the traditional houses of Kudus are facing south, precisely 9 degrees from the north-south axis of the compass to the west. According to local informants, the orientation of traditional houses of Kudus is based on religious factors, both on Sunan Kudus's personality and the figure of Queen of the south coast, Nyai Rara Kidul. The belief in the supernatural power possessed by these figures may have penetrated into the minds of Javanese society in general and Kudus community in particular. However, some informants also stated that traditional Javanese traditional house orientation were more due to climate factors.

The existence of deviation on the orientation of the building, ie 9 degrees to the west clearly as a result of the pattern of settlement environment that has been formed nicely at that time. The pattern that occurs in the Kauman settlement environment leads to a grid pattern with the complex of mosque Menara Kudus as its master. The orientation of the mosque complex is 9 degrees from west to north, so the house building around the mosque complex, which appears simultaneously or afterwards, follows the pattern of the direction of the mosque's axis. Not with the direction of the west-east and north-south axis, but has experienced a deviation of 9 degrees. [Figure 11].

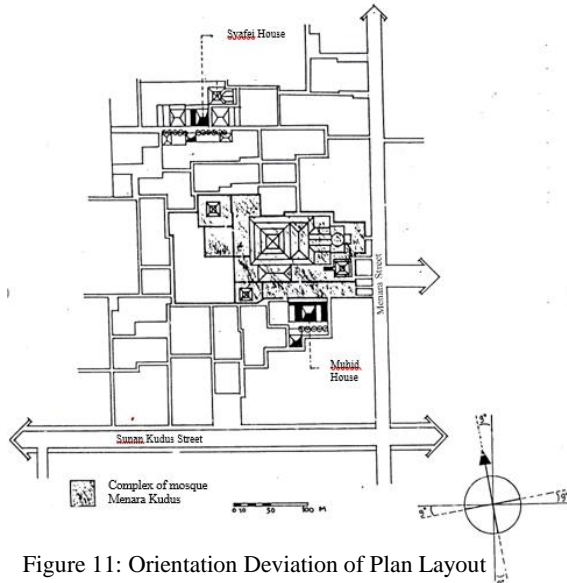


Figure 11: Orientation Deviation of Plan Layout

4. Conclusion

Appearance of exterior shape between mosque building and minaret, on one side with traditional house building on the other side there is no correlation. The physical form of the house building takes the form of a traditional Javanese house, *joglo*, with its construction principles. One thing that distinguishes the principle of Javanese *joglo* house, the roof construction in *jogosatru*. One element of the house, namely the existence of three

entrance holes, possibly associated with the entrance into the area of the mosque, namely the middle door, the first kori gate, and two side doors on the right and left in the form of smaller kori.

Ornament shaped mosque motif at *gebyok* divider space in the house possibly follow the architectural elements on the mosque building dominated by the shape of the arch. Overall, decoration motifs, based on Genuine Javanese elements enriched by Hindu (and Buddhist), Islamic, Chinese and European influences. There are some motives that must follow the rules of Islamic teachings with the stylation. Ornaments on the roof of the house in the form of a *cengger* stroke form cocker that is placed in a row may have a correlation with *gegodeg* contained in the heads of the two great kori.

Direction facing the house to the south is likely more for climate reasons. While the deviation of 9 degrees to the west is as a result of settlement patterns that have been formed around the mosque of Menara Kudus where the mosque's own building oriented toward 9 degrees from west to north.

In general, one basic conclusion can be drawn that the existence of similarity or equality of architectural elements between the building (complex) of the mosque of Menara Kudus with the traditional house of Kudus, especially in Kauman area, is more due to cultural linkage, especially Indigenous culture, Hindu Javanese and Islam, where the three are neatly syncretized which is displayed in the form of ornaments. Thus, even if it is considered that there is an architectural correlation between mosques and traditional houses, it does not mean that the presence of mosque architecture has influenced or influenced the presence of traditional house architecture, but has become a logical consequence of the cultural transformation of Kudus community at that time. The first cultural transformation occurred in the original culture by the infiltration of elements of Javanese Hindu culture. The second cultural transformation occurs when the Islamic culture also enrich the original culture that has been infiltrated elements of Javanese Hindu culture. So, basically the architecture of the mosque and traditional houses depart from the original architecture.

This study provides further research opportunities, one of which is the motive aspect of the carving of traditional house of Kudus. From the carved motifs raised by each traditional house of Kudus when observed it was not the same with each other. Of the two samples of the house (belonging to haji Muhid and haji Syafei) which became the object of study is clearly visible differences associated with the presence of motifs carved in the room of the house. It is therefore very open for Scientists to examine the carved motifs of all remaining traditional houses of Kudus in an effort to identify the initial conceptions of the design of each house, and then to sort into groups based on the pattern of carvings that are considered "one clump". And from here also can be identified groups of traditional houses based on the periods mentioned above.

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