# VARIATION OF SPATIAL ORGANIZATION ON JAVANESE TRADITIONAL HOUSE: COMPARISON BETWEEN THE HOUSE OF ABDUL KAHAR MOEZAKKIR WITH TYPICAL JAVANESE TRADITIONAL HOUSE

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**ABSTRACT:** Prof. K.H. Abdoel Kahar Moezakir was one of the prominent figures of Kotagede. He tends to be simple, humble, and religious. This can be seen from his house that was destroyed in 2006. This research was able to be done with the help of data from another research of the PPAr students of UII who are working on the reconstruction and revitalization of the house. Direct, Indirect Observation, as well as Interviews were used in order to gather the data for the research. With the help of both, the interview and the on-field observation that were done, The floorplan of the late house of Abdul Kahar Moezakkir. Albeit from looking at the two floorplan there are not any big difference made in the spatial organization between his house, there are some minor changes in the placement and size of the building itself. The changes made in the house of Abdul Kahar Moezakkir can be seen through the spatial organization, and the changes of use of space, such as from a private area to a public area. These changes that he made could be related to his personality, which is humble, likes to help, and simple in the way of living.

**Keywords:** Abdul Kahar Moezakkir, Javanese traditional house, Kotagede, Spatial Organization, Universitas Islam Indonesia

#### **INTRODUCTION**

Kotagede is an old city located in the southern part of Yogyakarta which is administratively located in the city of Yogyakarta and Bantul Regency. Before the establishment of the city, it was once a forest named Mentaok, east of the Gajawong River. During the last quarter of the 16th century, the ruler of the Islamic Kingdom of Pajang, about 100 kilometers to the east of this site, was awarded the forest to Ki Ageng Pemanahan, one of his courtiers who successfully put down a rebellion. Pemanahan opened the forest with his son Danang Sutawijaya, who was also an adopted son of the ruler. A settlement was established and the Mataram name was given because Pemanahan himself was called Ki Gede Mataram, "Lord of Mataram". Islamic reform emerged during the first quarter of the 20th century. The City of Kotagede was one of the places that acts as a pioneer of Islamic teachings in Indonesia. There are a lot of prominent Islamic figures that comes from Kotagede. These religious figures founded a religious group called Syarikatul Mubtadi to educate the Kotagede people about the 'true' Islamic way of life, which later becomes a bigger Islamic organization called Muhammadiyah. This reform aims to introduce rationality and Islamic teachings into Kotagede society, which is considered superstitious.

Prof. K.H. Abdoel Kahar Moezakir was one of the prominent figures of Kotagede. He was born on April 16, 1907, in Kotagede, Yogyakarta. He started his education at the Muhammadiyah Selokraman Elementary School (SD) in Kotagede, but only reached grade two. then he continued his further education at the Jamsaren Solo Islamic Boarding School while studying at the Mambaul Ulum madrasah. In addition, he completed his further education at the Tremas Islamic Boarding School in East Java, the last place of his formal education in Indonesia. Dissatisfied with his education in Indonesia, in 1925 Abdul Kahar left Indonesia for Cairo, at the age of 16. In Cairo he entered Darul Ulum - a new faculty at Fuad University (now Cairo) - and graduated from this University at advanced degrees in Islamic Law, Education, Arabic and Judaism in 1936.

He is well known as one of the members of BPUPKI or (Badan Penyelidik Usaha-Usaha Persiapan Kemerdekaan Indonesia), One of the 9 "Panitia Sembilan" who made the Jakarta charter, one of the founders of Islamic University of Indonesia and being the first of Rector UII, and one of the figures that encourages the Muhammadiyah movement in Yogyakarta. On November 8, 2019, he was awarded the title of National Hero by the President for his service in establishing the country. Prof. Abdul Kahar tend to be simple, loyal, and religious figure. This can be seen from his house that relates to his personality, mainly from the way he uses his house, and used some parts of it to help his neighbours. The house of K.H. Abdul Kahar Moezakkir is located on the RW 08 of Purbayan, Kotagede.

After he died on 2 December 1973, the house is not continuously used by his children. In 2006, Yogyakarta was struck by a heavy earthquake which also affect this building. Due to this earthquake, most of the building parts has collapse, and only leave the "Dalem" of the house. Due to this a research topic for the reconstruction and revitalization of the house arises. The research was then done by the PPAr (Program Pendidikan Profesi Arsitek) students of UII. After some researches was done by the PPAr students of UII in order to do the reconstruction and revitalisation of the house, the layout was able to be found. From the results, it can be seen that the house has a comparative difference with a typical traditional Javanese house. This is due to the traditional Javanese house's layout that is able to adapt, according to the needs of space wanted by the owner. The house of Prof. K.H. Abdoel Kahar Moezakir is a unique take on the Javanese house architecture, and one of a historical place that needs to be kept in order to respect history. These also raises some questions, such as:

## **RESEARCH QUESTION**

- What are the differences between Prof. Abdul Kahar Moezakkir's house and a regular Javanese house in terms of its spatial organization?
- What are the reasons for the changes in the spatial organization of a regular Javanese house?

# LITERATURE REVIEW

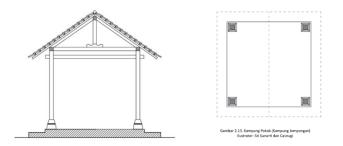
Kotagede is one of the remnants of Javanese cities that survived the process of transformation and modernization in Indonesia. (Gregorius Sri Wuryanto Prasetyo Utomo M.Arch). Most of the houses in Kotagede are still maintaining the traditionality of Javanese vernacular architecture. This means that most of the houses uses the Javanese house spatial organization where the house's parts are divided by functions with the *omah* acting as the center. Omah is a Javanese word meant for home, or family residence. in the past, Omah traditional style was generally the preferred choice for core groups. Based on the shape of the roof, there are four types of traditional Javanese houses. These are Joglo, Limasan, Kampong and Panggampe. Joglo is the most complex and sophisticated roof type in terms of structure and engineering, while Panggamgpe is the simplest roof type. Each type has several variations, for a total of 26 variations. Such also exist in Kotagede. omah in Kotagede is still strongly influenced by the typology of traditional Javanese houses and can be divided into several styles according to the type of roof. Kampung, Limasan, Joglo style. The type of house selected is determined by the socioeconomic class/level of the occupants. Today, as social systems become more mixed, this practice is becoming increasingly obscure. Omagh Kampung is the simplest type and is characterized by a saddle-shaped roof. It was usually built by commoners, especially peasants who lived outside palaces and urban areas, and rural people who moved to cities to live together in the same condominiums of nobles or royal officials who acted as landlords (Magersari - concept). In ancient royal capitals like

Kotagede, the Kampung style choice was initially avoided as it was seen as less suitable for the rank of courtiers once considered prestigious.

The construction of Kampung style houses was used only as an extension of the main building, such as the Gundock and other annex building models. A more sophisticated roof style than Omagh Kampong is the Limasan style, characterized by long ridges and a pyramidal shape with sloping roofs on all four sides. Limasan is a relatively standard form of the middle class. This style of home was often chosen for its mediocre quality. It is authoritative enough and not as straightforward as the Kampong style, but less expensive than the Joglo style.

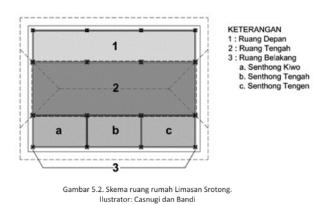
The highest level and most sophisticated traditional Javanese house style is Joglo style. A characteristic feature of this type is the peaked roof that rises in the middle of the so-called Burundjung. Therefore, Joglo is called Tikeran (Tikel means broken) because the roof is broken due to the difference in angle of the roof plane. Joglo is the ideal kind Traditional Javanese house residence. This type of building has a very sophisticated structural system and structure and requires more specialized materials than other types. H. Posts required for tall, straight, long logs. There are many variations of the Joglo building type such as Joglo Lawakan, Sinom, Pangrawit, Mangkurat Ageng, Semar Tinandu. Joglos, which have their own authoritative value, were usually erected by aristocrats, royals, or other officials associated with the interests of the kingdom. Therefore, it is understandable that joglo-roofed houses in Kotagede are usually owned by people of high socioeconomic status.

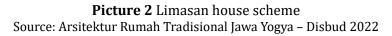
From the data taken from the research of the PPAr students, it can be seen that the house of K.H. Abdul Kahar Moezakkir have some differences from a regular traditional Javanese house, that is in the form of combination of shape and spatial arrangement. Based on the last research, it can be seen that the house of Abdul Kahar Moezakir has the pendopo shape of Kampung, while also having a limasan shaped ndalem, and a spatial arrangement that is closest to Joglo.



**Picture 1** An example of Kampung-shaped house Source: Arsitektur Rumah Tradisional Jawa Yogya – Disbud 2022

A kampung-shaped house simplest plan is rectangular with four pillars, two of the roof area is rectangular, meeting on the top side closed with bubungan or wuwung, while two open sections on either side of the êmpyak meeting roof, and triangular in shape, are covered with a kéyong lid of plank or woven bamboo (gêdhèg). On the basis of the name and the simplicity of its shape, the house form of kampung used to be mostly used by rural people.

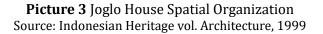




Meanwhile, A limasan-shaped main house is not much different from the kampung form house, except that the house in the shape of limasan has the space that can be wider and more numerous. The main house itself consists of 3 main area, the front room, middle room, and the back room. The back room itself consist of three smaller rooms which are the senthongs, the left, middle, and right.



Gambar 7 Pola Tata Ruang Rumah Tradisional Jawa (Sumber: Indonesian Heritage vol. Architecture, 1999)



Since the house of Abdul Kahar Moezakir has the closest spatial arrangement to a Joglo, this means that the house itself will consists off several parts of building, each with their own functions. The most front, Pendhapa, is a space for activities that are formal in nature. For example, receiving guests, ceremonies or performing arts. Located at the front of the house. The access point is generally before the pendhapa, but sometimes access can be through the side of the house or on the slope. Behind of it is followed by the Pringgitan, the space between Pendhapa and Omah Njero. Derived from the word ringgit which means wayang. This space is often used as a place for shadow puppet shows / arts / public activities. From there, there is the Omah Njero, sometimes called Omah-Mburi, Ndalem Ageng or Omah. Omah for Javanese people means a house to live in, which includes the meaning of domesticity. Senthong-Kiwa and Senthong-Tengen, are beds or sometimes storage areas for rice and farming equipment. Senthong- Tengah, often also referred to as Boma, Pedaringan or Krobongan. The layout pattern of a traditional Javanese house, the location of Senthong-

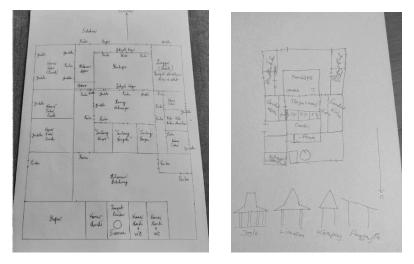
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Tengah is deepest. Senthong-tengah is the central space of a traditional Javanese house. Sometimes it functions as a "showroom" for the family of the occupants of the house. In addition, Senthong Tengah is a sacred space where family ceremonies/rituals are carried out.

Usual Traditional Javanese houses have an orientation facing north and south, so they can face each other. However, this is different from traditional Javanese houses in Kotagede. The traditional Javanese house in Kotagede has a south orientation only. The southern orientation is believed to be a form of respect for the Goddess of the South Sea or known as Nyai Roro Kidul. This was done as an effort to protect the Mataram Palace in Kotagede (Nakamura, 1983). As a result of this southern orientation, the traditional Javanese houses in Kotagede are back-to-back. This southern orientation also has an impact on access to traditional Javanese houses in Kotagede. If the position of the house is on the edge of the road, then access is in the form of Regol and goes straight to Pendhapa. The next entry is in Longkangan with access in the form of Regol on the west and east sides of the house. Longkangan functions as an access point that is used together in a row of traditional Javanese houses. Based on its orientation, traditional Javanese houses in Kotagede house and east sides of the house a linear pattern (Ikaputra, 2019).

#### **RESEARCH METHOD**

This research used the qualitative approach in order to answer the research question. This research was able to be done with the help of data from another research of the PPAr students of UII who are working on the reconstruction and revitalization of the house. Direct, Indirect Observation, as well as Interviews were used in order to gather the data for the research. This research was conducted in Kotagede, to be more exact on the Purbayan district. The place that is researched in order to gather on-field data is the house of Abdul Kahar Moezakkir, located on RW 08 of Purbayan, Kotagede, while several interviews were done with each of the respective interviewees. The two interviewees or source persons for the interviews are, Mrs. Siti Jauharoh, the daughter of Abdul Kahar Moezakkir, and Mr. Charris Zubair. These interviews were done as one of the ways to found out the spatial organization of the destroyed house.



**Picture 4** Drawn floorplan by the interviewees (Left: Mrs. Jauharoh; Right: Mr. Charris) Source: Restorasi & Pengembangan Rumah Prof. KH. Abdul Kahar Moezakir, 2022

From the interviews, a floorplan was able to be drawn by the description of both the source persons. From both of the floorplans, there are several differences in the spatial organization. This leads to the choice of picking which plan to be used in order to reconstruct

the new floor plan of the house. After some considerations, the floor plan drawn by Mrs. Jauharoh was chosen, due to her being more related, and have a lot more attachment to the house, rather than Mr. Charris. In order to create a concrete, and usable floor plan, an on-field observation, where the site and remains are measured was done while also using the traditional Javanese house spatial organization, and the floor plans from the interviews as a basis for the observation.

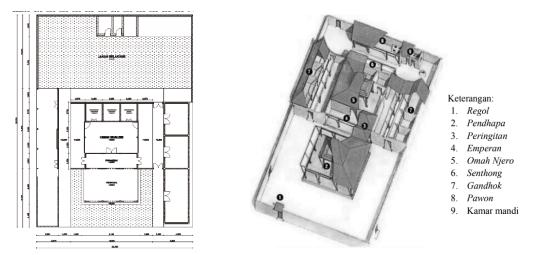


**Picture 5** On-field Observation by the PPAr students Source: Restorasi & Pengembangan Rumah Prof. KH. Abdul Kahar Moezakir, 2022

The measurements of the site, and the remains are used in order to know the dimensions of each of the house placement of the site, and the drawn floor plan can be turned into a real floor plan. During the on-field observation, the remains of the house's foundations were able to be seen, which are then matched with the spatial organization of the drawn floor plan based on the shape, measurement, and placement of the room, and the remains. After the observation, a measured drawing of the house was done using a BIM application, and the measured floor plan was able to be completed.

### DISCUSSION

With the help of both, the interview and the on-field observation that were done, The floorplan of the late house of Abdul Kahar Moezakkir has been found. Albeit from looking at the two floorplan there aren't any big difference made in the spatial organization between his house, there are some minor changes in the placement and size of the building itself. The first one is the pringgitan, where in a traditional javanese house, it is part of its own building, and has a sizeable dimension, when seen in the Abdul Kahar Moezakkir's house it is really small, and is directly connected to the Omah Ndalem.



**Picture 6** The house of Abdul Kahar Moezakkir's floor plan (left); Joglo house spatial organization

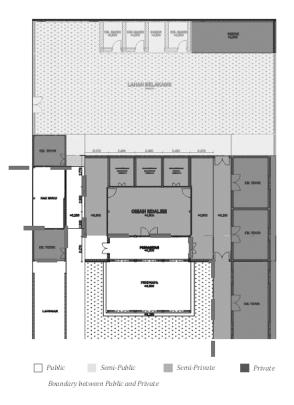
This might be related to his personality, where he is close to his neighbours, so that there is not a lot of privacy between each others. Another minor change in the building that can be seen from the floorplan is the location of the pawon, and bathroom area, where on the regular javanese house, the bathroom is located on the left side of the pawon, in the house of Abdul Kahar Moezakkir, it is swapped. Where the pawon is on the left side of the bathroom. This change was made due to the right side of the backyard, that was often used as a recitation place for the people, and Abdul Kahar Moezakkir himself didn't want his guests that comes for recitation to directly sees the bathroom from the place of reciting.

Some use of the rooms in the house also changed, where in a regular traditional javanese house, the senthongs are used for bedrooms, in the house of Abdul Kahar Moezakkir, only the right side of the senthong is used as a main bedroom area, that is used by the women. Meanwhile the use of the right senthong is changed, where most of it are used as a langgar for praying, and a place with bookshelves that acts as a public library for not only Mr. Kahar himself, but for the people of Kotagede as well.



Picture 7 The outer wall of the house before destroyed

Another changes that happen in the house can be in the form of the use of space as a public area. An example of the change between the private and public area can be seen on the outer walls of the house itself. Where its height is only half of normal walls, and especially with the walls located on the senthong tengen of the house, which makes it completely viewable from the outside. Since the original function of Senthong Tengen is as a place for man's bedroom which is a private space, the removing of the wall means that the place has changed its function from a private space into a public area.



Picture 8 Boundary between Public and Private inside the house

From this picture, we can see the differences between the public and private areas of the house. The definition of a private area is a place that is completely secluded from the public view, and only designate for the use of each respective person, meanwhile the semi-public area means that it is accessible for all of the people who lives there. Meanwhile, the Semi-Public area means that it is available for public use, with the permission of the house's users, and the public areas means that the area is available, and completely visible for the public. From this picture, the Private areas of the house are the men, and women's bedrooms that are available on both of the Sentheng. The Semi-private area consists of the Omah Ndalem components, and the Pawon on the far back. Meanwhile, the Backyard area was used as a semi-public area, while the Library, Langgar, Pendhapa, and Front yard act as a public space. When being compared to other Javanese traditional houses, the house of Abdul Kahar Moezakkir's placement of the private, and non-private areas are not as linear an ordinary Javanese house. For example, the man's bedroom located on the Senthong Tengen are divided with public area. This is due to the placement of the men's bedroom that was only built on the 1970s, while being used fully as a public area before it, functioning as a langgar and library for public use. The house of Abdul Kahar Moezakkir itself also have a lot of semipublic area, such as the backyard that was used as a recitation place for the people, which mainly focused below the women's bedrooms on the Senthong Kiwa. The house of Abdul Kahar Moezakkir also has a Pringgitan that is different from a regular Javanese house, which in this case, it is not as a whole building component, rather connected between the pendhapa, and the omah dalem. This also connects it to the Senthong Tengen area, where Mr. Kahar usually used to receive his guests.

# CONCLUSION

Prof. K.H. Abdoel Kahar Moezakir was one of the prominent figures of Kotagede. He was born on April 16, 1907, in Kotagede, Yogyakarta. Prof. Abdul Kahar tend to be simple, loyal, and religious figure. This can be seen from his house that relates to his personality, mainly from the way he uses his house, and used some parts of it to help his neighbours. Located

on RW 08 of Purbayan, Kotagede, the house of Abdul Kahar Moezakkir is closest with the joglo spatial organization concept, while the main house or Dalem is in the shape of Limasan. Meanwhile, the pendhapa that it had was in the shape of kampung. This can also be related to his way of living that is said to be simple, humble, and likes to help the people.

Due to an earthquake happened in 2006, the house was destroyed, leaving only some parts of it, which rises a research topic for the reconstruction and revitalization of the house arises. That was then done by the PPAr (Program Pendidikan Profesi Arsitek) students of UII. From it, this research of comparation between the house of Abdul Kahar Moezakkir, and a traditional javanese house can be done. The changes made in the house of Abdul Kahar Moezakkir can be seen through the spatial organization, and the changes of use of space, such as from a private area to a public area. Some of the places that are supposed to be used as a private space in a normal Javanese house are instead being used as a semi-private, or public areas, such as the Senthong Tengen that becomes a library and langgar, as well as the backyard that becomes a recitation place for the public. From these examples, We can see that he likes to help in improving the way of living of his neighborhood by spreading more knowledge, and giving them space to improve in Islamic teachings.

#### REFERENCES

- Ju, S.R., Kim D.Y., Santosa, R.B. (2018). Dualism in the Javanese House and Transformation With focus on the houses of Kotagede, Yogyakarta
- Ju, S.R., Kim, D.Y., Santosa, R.B. (2018) Dualism in the Javanese House and Transformation With focus on the houses of Kotagede, Yogyakarta, Journal of Asian Architecture and Building Engineering
- Maulana, A., Fangestu, A., & Adro, M. K. (2022) Restorasi & Pengembangan Rumah Prof. KH. Abdul Kahar Moezakir
- Nakamura, M. (1983). The Crescent Arises over the Banyan Tree
- Purwanto, A. (2021). Teritorialitas Transformasi Spasial Rumah Tradisional Jawa Studi Kasus – Kotagede, Yogyakarta
- Santosa, R.B. (2007). Kotagede: Lives Between Walls
- Supriyadi, B., Sudarwanto, B., Werdiningsih, H. (2012). In Search of the Power of Javanese Culture against the Cultural Urbanization in Kotagede, Yogyakarta-Indonesia
- Suwito, Ir. (2021). Arsitektur Rumah Tradisional Jawa Yogyakarta
- Utomo, G.S.W.P. (2014). Culture of Dwelling and Production of Space in the Post Disaster Urban Transformation Processes (Case Study: Kotagede, Yogyakarta - Indonesia)
- Utomo, G.S.W.P. (2014). Culture of Dwelling and Production of Space in the Post Disaster Urban Transformation Processes (Case Study: Kotagede, Yogyakarta - Indonesia)