

# Conservation of Historic Buildings

## Case Study of Mondorakan Street Kotagede Yogyakarta Indonesia

*Sumardiyanto Resosumarto*

Ir., M.Sc

Atma Jaya Yogyakarta University Indonesia

### Abstract

This paper describes the attempt of conserving the historic buildings in Mondorakan Street Kotagede Yogyakarta Indonesia. Kotagede was the centre of Islamic Mataram Kingdom which was founded in the mid of 16<sup>th</sup> Century. However, the historical and cultural values have been neglected in developing the area for many decades. As a result, it lost its historical and cultural identity. Tectonic earthquake which hit Yogyakarta and its surrounding in 2006 damaged most building in the area. This event, surprisingly, became the turning point of developing awareness among local people on the importance of conserving their historic buildings. Assisted by a team from Atma Jaya Yogyakarta University, and in cooperation with Kanthil Foundation the local people attempted to produce their own idea of the future of the area. This cooperation has succesfully attract attention of local government to give their fund to finance the reconstruction. As a result, the face of Mondorakan street is reborn with the old facade but with new function. Until now the team and local people still work hand in hand try to find and attract more funding bodies to finance the project.

### Introduction

#### Background

Mondorakan Street is one of four main streets in Kotagede district. Kotagede district is located about 6 kilometres to the south east of Yogyakarta Indonesia. Kotagede, which means “big city” was founded by Ki Gede Pemanahan in 1577 as the centre of Islamic Mataram Kingdom. As a centre of the Kingdom, this city was built on phylosophical basis called “*catur gatra tunggal*” (the unity of four elements). The four elements are **palace**, **mosque**, **square** and **market**. Although in the beginning of 17<sup>th</sup>

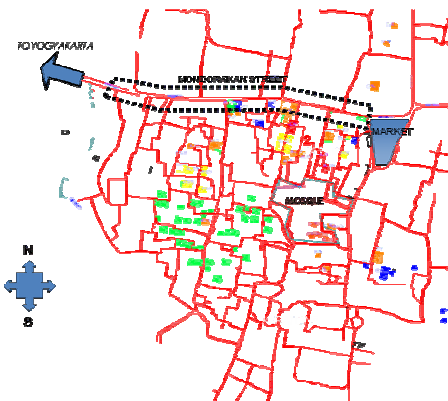


Figure of Map of Kotagede Area

Century the centre was moved out to Plered (about 6 kilometres to the south of Kotagede), Kotagede remained as a centre as it had a big market. However, now only the mosque and the market are left. The palace has been converted to royal graveyard and the square to residential area.

Mondorakan Street, which is wounding from Tegalendu in the west to the Kotagede market in the east, used to be the most prominent street. It can be seen from the fact that the buildings along side this street have experienced very dynamic changes. It can be said that the area around this 700 metres long street has been the battle ground of many social forces. Among other social forces existed in this area are Royal Family (who built big houses), Kalang People (a community of very rich people who built some beautiful houses), and Muhammadiyah People (who built school buildings and mosque to express their mission to purify the Islamic principles from the influence of local tradition). Since this street ends in the Kotagede market, naturally it grows as commercial area. This has changed considerably the facade of the buildings along side the Mondorakan Street. The street that initially built as a pedestrian street is now crowded with many kind of vehicles (car, motorcycle, tricycle, horse drawn cart, and bicycle).

The 5.9 in Richter scale earthquake on May 27, 2006 which hit Yogyakarta took more than 5.800 lives and destroyed buildings and infrastructures in Yogyakarta including those are in Kotagede. A lot of buildings in Mondorakan Street collapsed. In response people reconstruted their houses to meet their need of shelter without considering the historical or cultural value of the building and its surrounding. As a result the facade of Mondorakan Street completely lose of its identity.

**Function of the buildings**

Commercial function dominates the buildings in Mondorakan street. In north side there are 37 commercial buildings, 3 residential buildings, 2 educational buildings and only 1 social building. While in the south side there are 22 commercial buildings, 10 residential buildings and 1 social building.

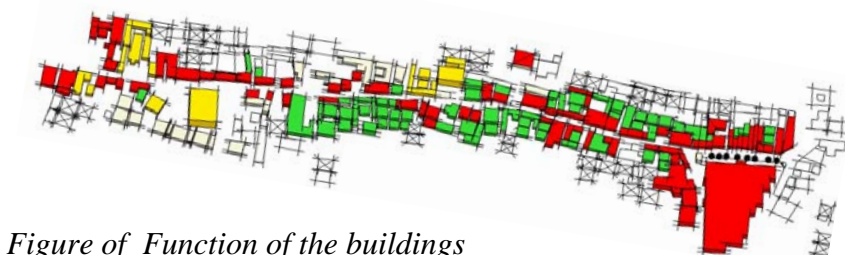


Figure of Function of the buildings



Pictures to show the Mondorakan street before the earthquake



Pictures of buildings damaged by the earthquake 2006

The red colour indicates the commercial function, green colour indicates residential function and yellow colour indicates social function.

### The Age of Buildings

In north side of Mondorakan street there are 22 new buildings and 17 old buildings (more than 50 years old). The number of new buildings bigger than the old ones since the new ones have smaller parcel as the result of subdivision of the old building parcel. In south side of the street there are 11 new buildings and 19 old buildings.

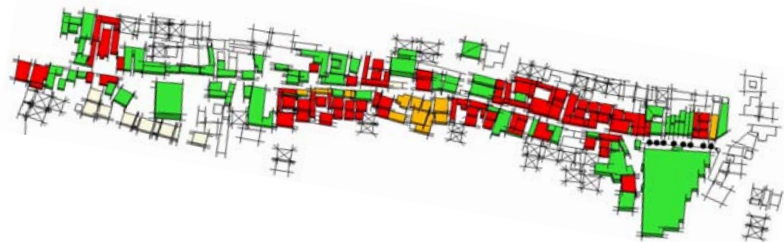
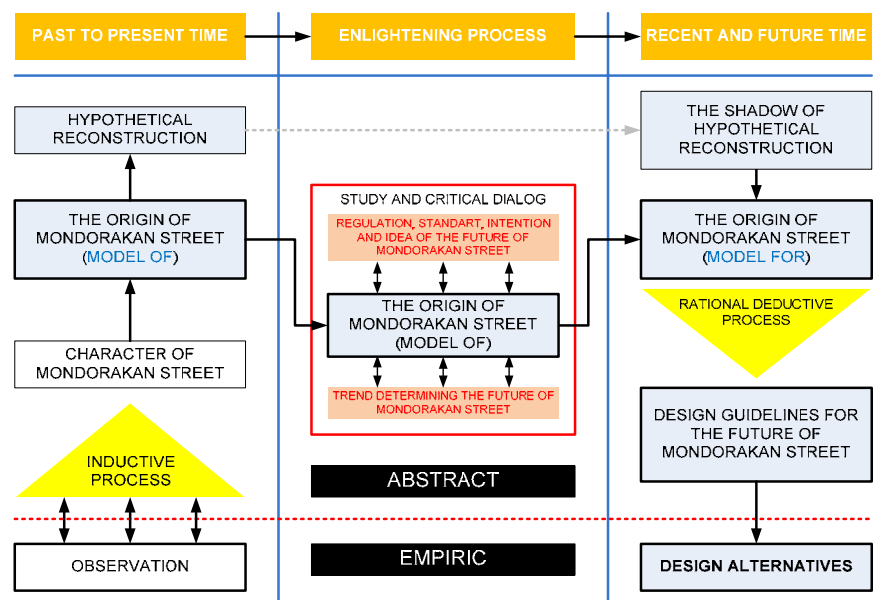


Figure 3. Age of buildings

The red colour indicates than 50 years old buildings, yellow colour indicates between 25 and 50 years old buildings and green colour indicates less than 25 years old buildings.

### Analysis

The analysis of this study uses a framework developed as follows.



#### Step One (Backward Step)

A deep and intensive observation was done in the first place. This includes interviews, literature review, and on site observation. This

phase was very hard since the documentation was poor and the team could not find historical actors. Inductively the character of Mondorakan Street could be figured out. This helps to develop the origin of the Street as a model of what the street looked like initially. Then a hypothetical of the street was developed using the computer software.

## LAND PARCEL

### 1. The initial layout of land parcel (before 1905)

The initial layout of land parcel can be seen in the Figure 4. There are some rows of parcels. Each parcel was about 400 square metre. There are some groups of parcels in which compound houses were built. One group of parcel was owned by one family. Between groups there are alleys to give access to the parcel in second row. The three big houses in the north side were owned by the Royal Family. All of buildings were traditional building with the roof shape called “joglo”.

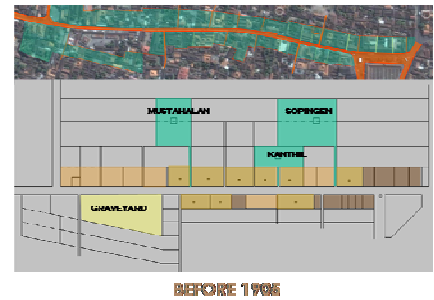


Figure of Land Parcel Arrangement Before 1905

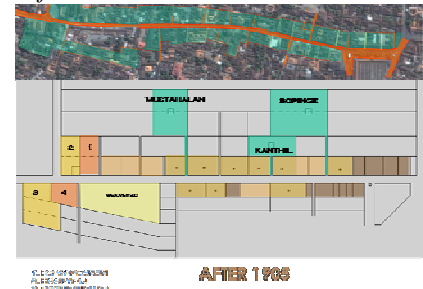


Figure of Land Parcel Arrangement After 1905

### 2. The influence of Kalang People (after 1905)

When Kalang people was allowed to build their houses in the east side of Gajahwong river, they started to construct beautiful houses. These houses can be found in four parcels in the left side. Only three of them are left and used as Silver Shop and Restaurant. The Proyodranan House was completely damaged by the earthquake.

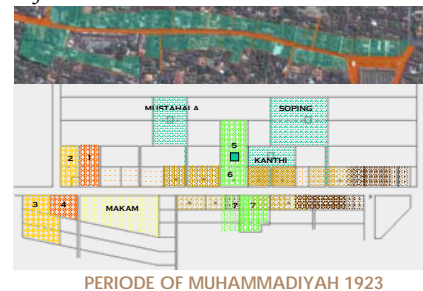


Figure of Land Parcel Arrangement After 1923 (Muhammadiyah Period)

### 3. The influence of Muhammadiyah People (after 1923)

When Muhammadiyah people were allowed to enter the Mondorakan street they built their own school and mosque. These buildings did not follow the traditional building regulation. It can be noted that Muhammadiyah is moslem movement to purify the principles of Islam from the influence of local tradition.

## BUILDING ARRANGEMENT

### 1. Single house

Each Javanese traditional house had 4 main buildings: Pendopo (as public area), Dalem (as private area), Pawon (kitchen) and Gandhok (pavilion). Pendopo is in front, Dalem is inside, Pawon is in behind, and Gandhok are in both sides.

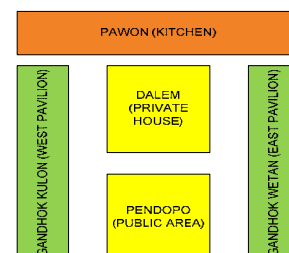


Figure of Single house

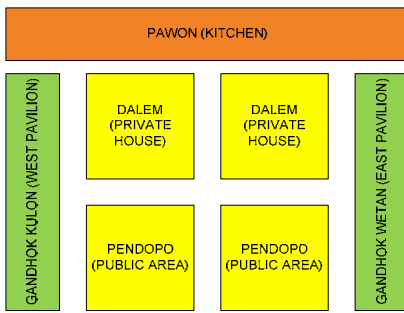


Figure Compound house

## 2. Compound house

When there are more than one house and owned by one family then the houses were built in compound house. Basically the compound house has the Pendopos, Dalem and Pawons. However there is only one gandhok in left side and one more in right side.

## 3. Building facade

The building facade follows the building regulation in Kotagede. According to the traditional building code the orientation of all houses are to the south. Buildings in the north side of street will be added commercial space. It means that initially the north side of Mondorakan Street consists of building facades and the south side of the street there was no facade since it was part of Pawon (Kitchen).

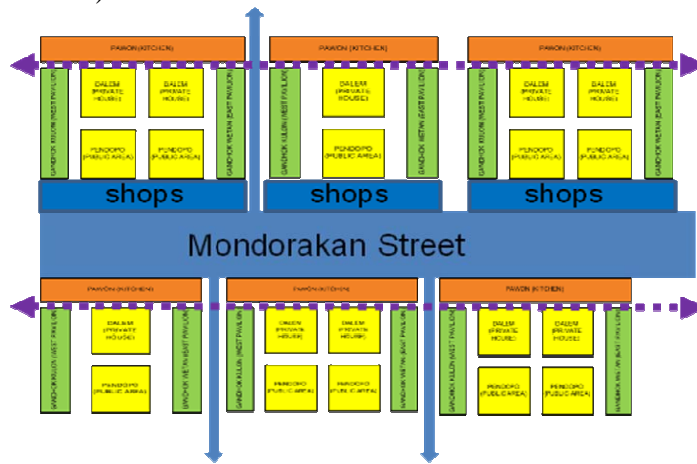


Figure of building arrangement in Mondorakan street

## VALUES

Based on the findings in this phase, some values of Mondorakan street can be stated as follows.

- Cultural value
- Historical value
- Architectural value
- Economic value
- Social value
- Commemorative value
- Archeological value

## Second Step (Enlightenment Process)

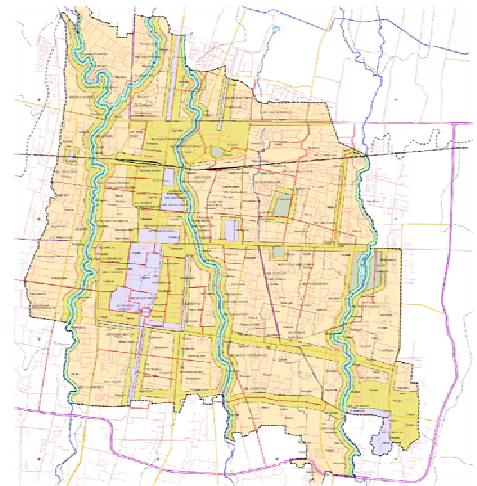
The second phase is the exploration of the future of Mondorakan street. A critical dialog between the origin of Mondorakan street and the intention of Kotagede district as well as the trend determining the future of Mondorakan street itself was developed.

In Yogyakarta Urban Development context, Kotagede is designated as one of protected areas. The specific function for this area is cultural and tourism activities.

Some changes have also been experienced within the Mondorakan street itself, such as changes in function, changes in physical setting, and traffic volume.

### Step Three (Forward Step)

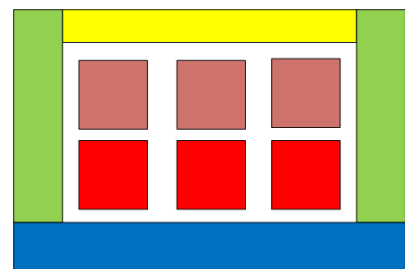
As a result of study in the step two, a model of the future of Mondorakan street can be produced. By using this model then the guidelines for the future of Mondorakan street can be formulated and developed in the third phase. Design alternatives can be produced based on the guidelines.



## CASE STUDY

### Case study 1

This is the case of shop building which is located in front of the Kotagede market. It was built in 1930s as a single big shop. However then it was inherited and divided into 6 small shops with different owners. The figure at the top is simulation of the building facade before the earthquake in 2006. The figure underneath represents the condition after the owner finished in reconstructing their shops after the earthquake. Apparently they did not pay any attention to the unity of the building. Some of them reconstructed into two storeys shop, some reconstructed still in one floor. However, following the discussion with the team then local people were guided to express their idea. Since based on the historical tracery, the big shop building always had two gable roofs at their edges, the first design was made with the two gable roofs as can be seen in the following picture. But then the owner of shop number three from the left stated that he did not want to reconstruct his shop in that way. Finally the design was changed and it can be seen in the following picture.



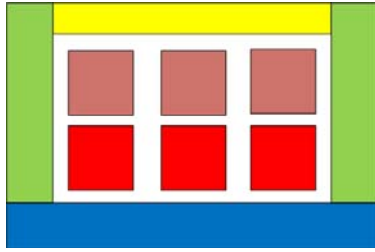
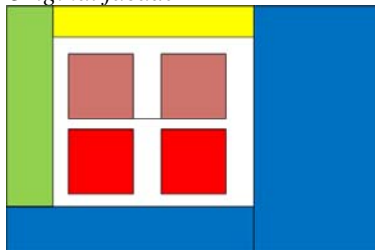
Initial building layout



After self-reconstruction



Proposal of intervention

*Original facade**Existing condition*

## Case Study 2

This building is also located in front of Kotagede market. The building was initially a compound house consists of three houses. When it was inherited than the building in the right constructed as a single shop and changed the composition of the roof shape. Only one gable roof is left. Based on deep interview with the local people who still have memory of the past, the team tried to reconstruct the initial design of the building. As it is stated before, the big building like this should have two gable roofs at each top. As a result a new gable roof is added in the new design. So in order to find its original facade the computer drawing simulation is utilised. This method try to convince people that they will not lost anything and in the contrary they will find something more



## Proposal

### 1. Maintenance

Since almost all buildings in Mondorakan Street have changed both in its function and its form, some adjustments have to be made. However it is impossible to restore all of the buildings. Some buildings need to be selected based on their condition and their feasibility to be conserved. For the time being the team focuses on compound houses which usually owned by relatively rich people and have beautiful design of facades.

### 2. Conservation and Restoration

In the long run, conservation should be made for all area of Kotagede. It means that the study about space, building, and activities in the past have to be done. However for the short and medium time frame the conservation of Mondorakan street, with special case to the facade of the buildings should seriously be made as good as possible. Some buildings which are in very bad

condition need to be restored. Particular attention should be paid to the buildings in south side. As it is stated before the building facade of the south side of the street was innitially kitchen and people usually construct the kitchen with less quality. It became problematic when they converted the kitchen into the facade of buildings.

### **3. Addition for modern facilities**

Although Mondorakan street was initially built for pedestrian and horse drawn cart, now the condition has changed. Mondorakan street is busy street with various type of vehycles passing by. And worsely there is no pedestrian ways. In order to create more convenient and comfortable places to walk a pedestrian way is introduced. The space for this pedestrian ways uses the space between the new facade and the shop front which is more or less 2.5 meters wide.

## **Method**

### **Information**

As stated before that the information around the innitial design of buildings in Mondorakan street is very poor. To collect data and information the team have to find resource person who really lived in the area. This is not easy because in many cases they do not put enough attention to the change of their physical setting.

### **Research**

Grounded research is considered the most appropriate for this study. Although this will be time consuming, but this if very effective since in an informal atmosphere, local people in Kotagede usually could give important information regarding their physical setting. Sometimes member of team have to have a long chatting to dig more and more information.

### **Survey**

Field survey was done to confirm the information of the resource person. Sometimes the resource person could give an accurate information but sometimes they could not.

### **Design**

The design was developed based on the principle guidelines and the specific initial design of every building. This work is probably the most enjoyable part since the team was equipped



with computer to produce the design. This work was also very attractive for architecture students to take a part.



### Budget

The budget is the most crucial part of this work since there is no legal back up for this work. What have been done so far mostly rely on charity basis. From the local government there is no special budget allocated for this work. They provided Rp. 285,000,000,00 (equivalent to USD 22,500) to construct about 75 meter long shop facade and restoration of market facade.



### Process

Since basically this work is initiated by local people, done by local people and will be used by local people the process goes slowly. The team acts as catalisator and enabler.

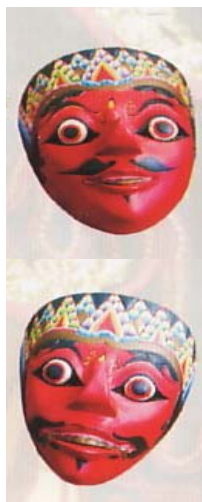


## Results/Current Status of the Work

The study and the work are still in progress. The team try to find other objects in Mondorakan Street which are feasible for conservation and restoration. Design alternatives are produced in cooperation with the local people. Discussions with local people are being held to sosialize the importance of conserving the buildings which have significant cultural and historical values. At the same time some proposals have been made to attract funding bodies both in Indonesia and abroad.

## Discussion & Conclusions

The 2006 earthquake can be called blessing in disguised since it became the turning point for conserving the Kotagede area and Mondorakan Street alike. After having been neglected for many decades now awareness of the importance of conserving the historic buildings to safe guard their cultural values grows. The cooperation between the team and Kanthil Foundation as well as the local government should be appreciated. Some lessons were learned in the process of both study and reconstruction. But the statement of one of local people after the completion of the reconstruction was probably express the lessons learned: *"In fact, when the development (reconstruction) is done with serious study and deep consideration in its cultural and historical aspects, a lot of lesson can be learned."*



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