Characteristics of Chinatown-Indies Architecture in Semarang Petudungan Street Row House

Fitri Dwi Indarti a, Mellisa Putri Syah a, Isna Pratiwi b

a Department of Architecture, University of Muhammadiyah Semarang, Semarang, Indonesia
b Architecture Engineering, Faculty of Engineering, Semarang State University, Semarang, Indonesia
*fitridwindarti@unimus.ac.id

Abstract. Semarang Chinatown is one of the villages with unique characteristics in Semarang City. Until now, Chinatown still exists, is inhabited, and is active as an economic center. Chinatown continues becoming one of the most important residential and trading centers in Semarang's crowded and busy city. Chinatown is synonymous with trade because most of the people run trading businesses. Chinatown is one of the settlements famous for its unique typology.

Petudungan Street is one of the roads in Semarang Chinatown that connects the main road of Mataram with Semarang Chinatown. This road is located directly adjacent to the Semarang River. House buildings in this area are one of the main factors in the formation of the environment both on a macro and micro scale. The row house buildings in this area have a Chinatown-Indies style because these residential buildings found many things that reflect the creativity of acculturation of Chinese and local cultures. Like having a roof supported by a wall on the edge with openings on the roof. However, the façade has a local influence that manifests itself in the panel openings in the form of panel doors.

Keywords: architecture; Chinatown-Indies; Chinatown; Semarang

1. Introduction

Semarang Chinatown is one of the villages with unique characteristics in Semarang City. In 1740, after the Dutch colonial government concentrated on Chinese settlements in Chinatown, commercial activities were considered bustling in Chinatown across the Semarang River waterway. Meanwhile, most locals make a living by farming, bringing their produce to Chinatown and Johar Market via MT. Haryono Road (Mataram Street). The road became congested with Chinese and indigenous trade, which led to the emergence of villages focusing on ethnicity and livelihood around MT. Haryono Street.[1]

Until now, Chinatown still exists, is inhabited, and is active as an economic center. Chinatown continues growing to become one of the most important residential and trading centers in Semarang's crowded and busy city. Chinatown is synonymous with trade because most of the people run trading businesses. The function of the area is characterized by buildings in it which are mostly residential houses as well as shops.

Petudungan Street comes from the word "tudung" which is a wide hat made of bamboo. In this place in the mass, it was widely produced and became the center of selling hoods which in the 18th century were imported from Jepara.[2] This area in the past was an ethnic Chinese exile area in Semarang which was built and planned by the Dutch and aimed to facilitate supervision of the movements of ethnic Chinese in Semarang. Petudungan Street is one of the roads in Semarang Chinatown that connects the main road of Mataram with Semarang Chinatown. This road is located directly adjacent to the Semarang River. With various interesting things mentioned above, it raises interest to carry out deeper discussion and research on the architectural typology that exists in houses along Petudungan Street so that it can be found the characteristics of houses along Petudungan Street and how the form of
change that occurs. One of the houses that is still in its original condition is a residential house located on Petudungan Street No. 144.

In general, the site of this residence is a Row House located on Petudungan Street of Semarang with a strategic position because it is close to the T-junction of MT. Haryono Street and Petudungan Street. Petudungan Street is one of the roads in Semarang Chinatown that connects the main road of Mataram with Semarang Chinatown. This road is located directly adjacent to the Semarang River. Based on the structure of Semarang City, MT. Haryono Street is the main street in Semarang City. With various interesting things from Chinatown and Petudungan Street in particular, there is an interest in the architectural characteristics of Row House located in the area.

1.1 Semarang Chinatown

Semarang Chinatown is one of the Cultural Heritage Sites that plays a role in creating the identity of the city of Semarang, therefore as a historical area, Semarang Chinatown needs to be protected. To avoid uncontrolled changes and damage caused by society or damage to buildings, it is necessary to carry out conservation efforts.[3] The uniqueness and privilege of Semarang Chinatown as an Indonesian Heritage can be seen in the symbolization of ethnic Chinese residences that are different from other Chinatown areas. The symbolization of ethnic Chinese residences in the region is the result of a blend of Chinese architecture mixed with Malay architecture. The combination of architecture can be seen in the characteristics of buildings in the form of row houses, both shop houses and residential houses where the shape of the roof has Chinese architecture but in the details of the façade there is a diversity of architecture that affects it.[4]

1.2 Petudungan Street

Petudungan Street is one of the roads in Semarang Chinatown that connects the main road of Mataram with Semarang Chinatown. This road is located directly adjacent to the Semarang River. With various interesting things mentioned above, it raise an interest to carry out further discussion and research on the architectural characteristics of the houses along Petudungan Street.
1. Year 1710

At first, this settlement was the original settlement of ethnic Chinese residents with the form of traditional Chinese ethnic houses, but over time some traditional houses began to undergo repairs and restoration so that some houses became incompatible with the initial form of the house when it was first built. This residential building belongs to residents who live linearly on Petudungan Street Semarang until it ends at Mataram Street Semarang.

The development of the village is only in the northern area of Petudungan Street. It is mentioned that this area is the initial possibility of the development of Chinatown in the region. Meanwhile, in the eastern part of the Semarang River in the 1700s there were no settlements. There is also the development of indigenous villages in the Petudungan to Jagalan area which according to the story that the Petudungan area connects to the Mataram Street. This indigenous village is increasingly crowded, the residents themselves come from Jepara and sell their wares in stalls with the type of head covering (tudung).
2. Year 1990s

The history of the development of Petudungan Street began at the end of the 19th century, the Semarang River became shallow and boats could no longer pass through the entire river. Instead of rivers that have become canals, roads such as Pekojan Street, Petudungan Street, and Kranggan Alley became important transportation infrastructure and structures for the development of subsequent settlements.

In ancient times when it was first built according to the results of interviews the shape was a unit without a roof divider (ridge), so it looked as if this downward economic type house was integrated between one house and another. This is due to the beginning of the construction of this house which was intended as a horse stable. With only a simple gable roof without ridges, this house became a mass dwelling (block) where the tendency to live in groups appeared.

Then on this site, a residential house was built with a plot that used to have a width of ± 7 meters with a tread length to the back of ± 16 meters. Then the distribution of lots by fellow family members is carried out. In this case, the homeowner shared it with a cousin of his grandfather. The width of the plot per building at this time is ± 3.5 meters with a tread length to the back of ± 16 meters so it is the smallest house module compared to other houses on Petudungan Street with a tread length to the back of ± 16 meters.

The existence of the house after the division of plots, between Petudungan Street No. 114 and Petudungan Street No. 116 located to the east of the house does not cause the addition of another ridge in the middle of the roof. The resulting visual impact is that house No. 114 with house No. 116 have a roof that looks integrated so that both look like one part of the house.
1.3 Ethnic Chinese Residence

Parsetter dwellings are determined by the city/area plan. In dense urban areas, Chinese houses are usually narrow to the back and consist of two floors. The house is usually a row house with a gable roof that connects with its neighbors.[5]

This type of residence is divided into two types:

a. These houses are two- to three-row houses that have a small elongated shape.

b. The houses were originally built into large blocks of houses, but in development, they were divided by the number of descendants equally and due to changes in ownership.

Figure III Typology of Residential Houses (image by Pratiwo)

A striking feature of Chinese houses in Indonesia that is immediately recognizable is the roof. Acculturation of local culture and technology produces a variety of roof shapes, such as villages and pyramid roofs. The floor plan of a traditional Chinese house is rectangular with rooms surrounding a rectangular open courtyard. As well as the main family altar is located straight behind the vestibule.[6]

2. Methods

The research was conducted using Qualitative Methods with a rationalistic approach. This research will be revealed by the problems raised, namely to reveal the characteristics of row houses located on Petudungan Street No. 144 Semarang Chinatown. Broadly speaking, the research method to be carried out is as a flowchart below:

![Research Process Scheme](image by Author's analysis)
The research was carried out through several stages:

a. Literature Study
   Literature studies are carried out as an initial stage in research to obtain the needed literature related to research. Literature Studies are conducted by reviewing literature, research reports and important documents related to the characteristics of ethnic Chinese houses.

b. Building Survey
   This stage is carried out to find out the real conditions that occur in the object of research when the survey is carried out.

c. Analysis of Architectural Characteristics and Components
   This stage describes the analysis of the components or architectural elements of the object of study.

d. Report Making
   The last stage carried out is the preparation of reports and the fulfillment of the output of the research.

3. Results and Discussion

3.1 Architectural Style

Architectural styles from a region tend to be adapted to the local environment and use local materials, with few telling why buildings take the form they do. The socio-cultural life of society is the background to the physical formation of an environment, where one of the variables of socio-cultural life is culture itself.[7] Chinatown is a settlement that is predominantly inhabited by the Chinese community whose position is outside China's territory with a very distinctive stable identity.[8] This building has a Chinatown-Indies style because this residential building has many things that reflect the creativity of acculturation of Chinese and local culture. The shape of the floor plan in Chinese architecture always applies the principle of symmetry and balance and has a clear order. This building has a roof that characterizes this style in the form of a roof supported by a wall on the edge with openings on the roof. In addition, the façade of the building gets local influences which are manifested in panel openings in the form of panel doors.

3.2 Building Condition

This residential house on Petudungan Street No. 114 is a house that belongs to the category of poor people's residences (lower class category). The shape of the composition of the time, in the beginning, was a unity building between two houses (plots), where each plot module has a width of ± 7 meters with a tread length to the back of ± 16 meters. This type of house module is the smallest compared to other houses located along Petudungan Street. According to the interviews, although all four sides of the house are covered by brick walls, this house was made with the purpose of mass lodging (blocks) to live in groups. Unlike blocks in traditional Javanese houses in general, blocks in traditional Chinese houses still value privacy (Confucian philosophy) so there are still brick walls as the scope of the outer skin of the house). The purpose of group life can be seen in the similarity of building typology between house no. 114 and other houses next to it.

At present this building has not changed much since on this site a residential house was built. The composition of the period that distinguishes this building in the present and the past of this building lies in the area of its plot.

The width of the plot per building at this time is ± 3.5 meters with a tread length to the back of ± 16 meters so it is the smallest house module compared to other houses on
Petudungan Street. The reason for the reduction of plots is the increasing need for a place to live on this Petudungan Street so the houses that used to have a width of ± 7 meters were divided into ± 3.5 meters per plot.

The distribution of plots is usually done by fellow family members. In this case, the homeowner shared it with a cousin of his grandfather.

The brick wall that once surrounded the house covering an area of ± 56 meters² was divided by a partition wall dividing the plot in two. Partition walls use brick walls, the reason for using this brick material is the prioritization of privacy between one family and another family by the Confucian philosophy that characterizes traditional Chinese houses.

![Figure V Top View of Layout Past and Top View of Layout Present](image by Author's analysis)

The courtyard in this house is located in front of the building (main entrance) with the concept of L and I arrangement formation and inner courtyard on the inside. The existence of the main door facing south which according to the feng shui of the house is a good arrangement. The arrangement is symmetrical between the left and right sides of the house to create a balanced and clear order.

According to the interviews, at the beginning of this house was built the first floor consisted of bedrooms, kitchens, dining rooms, toilets, family rooms, warehouses, living rooms and worship altars. On the second floor, there are bedrooms and a warehouse.

Traditional Chinese houses are synonymous with courtyards and axes of symmetry. The division of the axis of symmetry has been carried out with the house Petudungan Street No. 116. This is because these two houses were once one house divided by partitioned walls. Judging from house Petudungan Street No. 114 alone, there is no symmetry in this house. The courtyard is located at the front of the house (main entrance). The main door is located in the southeast part of the house. The arrangement of the house today on the first floor consists of a bedroom, kitchen, and dining room which also functions as a family room, two bathrooms,
children's bedrooms, and an altar of worship. On the second floor now it is only used as a warehouse considering that this family has a lot of space to put things.

3.3 Building Appearance
The façade of this building along the front façade of the building is closed with folding doors in the form of wooden panels that can be opened entirely façade. Ventilation is above the door in the form of holes in the wall plane and in the form of patterned breezeblock in the wall plane.

There are not many ornaments in this simple type of house.

The shape of the roof of this house only consists of a simple gable roof with a curved ridge without decoration or ornaments on the left and right sides of the house.

![Figure VI View of House Building Row Petudungan Street](image)

(photograph by Author's documentation)

a. Floor
The original floor in the form of tiles has changed to 30x30 cm green motif ceramics, while the KM / WC area floor uses 30x30 cm white and yellow motifs.

![Figure VII Floor](image)

(photograph by Author's documentation)

b. Wall
The wall uses a masonry structure with a wall ceramic finish measuring 20x30 cm as high as 180 cm on the interior of the building. Similarly, in the kitchen and bathroom areas, the walls use a 20x20 cm ceramic finish in gray and white colors installed at 150 cm.
c. Ceiling and Roof

The ceiling uses white plasterboard material by highlighting the support frame between modules as an ornament and the roof support structure frame uses a simple wooden building frame.

The shape of a simple gable roof with a curved ridge without decoration or ornaments on the left and right sides of the house is due to the economic class that exists in this house and also the owner of this house. This curved ridge with a simple geometric pattern aims to separate one house from another house next to it. The shape of the roof and ridge is the simplest type when compared to other types of roofs on other houses on Petudungan Street. The shape of the roof is included in the nganshan category where it is a type of roof supported by a wall on the edge.

The existence of the house after the division of plots, between the Petudungan Street No. 114 and No. 116 buildings located to the east of the house did not cause the addition of a ridge in the middle of the roof. The resulting visual impact is that house Petudungan Street No. 114 with house No. 116 has a roof that looks integrated with each other so that both look like one part of the house.
d. Doors, Windows, and Bouven

![Figure XI](image1)

Panel Doors Seen from Front and Back and Doors Inside the Building

(photograph by Author's documentation)

The front building façade is dominated by the location of doors that get local influences which are manifested in panel openings in the form of panel doors. In harmony with the panel doors on the front façade, the doors located inside the building are also made of wood with glass fillers in the middle.

![Figure XII](image2)

Jendela

(photograph by Author's documentation)

Wooden window sills with glass fillers in the middle. The window uses an iron trellis as a safety.

![Figure XIII](image3)

Bouvenlight

(photograph by Author's documentation)
Bouven light is in the form of a rectangular hole arranged parallel to the front panel door. The existence of bouven light in the front area has a function as a circulation of lighting and air.

e. Ornament

The condition of the color and ornaments of the house Petudungan Street No. 114 is still the same as the beginning when it was built where there were not many ornaments in this simple type of house. This is due to the lack of economic conditions from homeowners so unique ornaments that usually exist in traditional Chinese houses are not applied to this house.

There are several simple ornaments in this residence including white ceilings with square modules with wooden frames and ventilation holes in the form of boxes with a simple arrangement and prioritizing function with little aesthetic value.

4. Conclusions

From the discussion of the history of the residential building of Chinatown, it was built in 1970 so it is more than 53 (Fifty-Three) years old.

When viewed from its historical value, the Chinatown Residence building is one of the buildings that played a role in the history of the development of Semarang City settlements. The area where this residence is located, namely Petudungan Street is an ethnic Chinese exile area in Semarang that was built and planned by the Dutch which aims to facilitate supervision of the movements of ethnic Chinese in Semarang. Petudungan Street is one of the roads in Semarang Chinatown that connects the main road of Mataram with Semarang Chinatown.

In terms of building style, the Chinatown Residence building has a mixed building style between Chinatown-Local, which is a style that has developed a lot in buildings in Chinatown. The layout of the building still uses Chinese spatial layout and seen from the structure of the building is still under the influence of Chinese style. However, elements such as doors, and windows have been influenced by local styles of wood without ornament. This style has developed into the hallmark of Semarangan architecture.

References


