

Issues of Authenticity: Conservation of Chinatown Architecture in Ketandan Village, Yogyakarta, Indonesia

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Abstract

Ketandan also known as the Chinatown is a village in the center of Yogyakarta City inhabited by the Chinese ethnic community. Ketandan is a cultural heritage of Chinese architecture in Yogyakarta and has experienced architectural transformations over the years. Now there are efforts to conserve the significant buildings and therefore, it is important to support the conservation of architecture in the Ketandan village.

This research used a qualitative method which involved identifying authenticity, as well as damage and handling of the building components. Data were collected through field surveys, documentation, and measurement of the buildings. Subsequently, it prepared developing plans for reconstruction and restoration, as well as plans for changes and additions to the components.

Referring to the 2018 Master Plan for the Maintenance and Development of the Ketandan Cultural Area, which is one of the plans for the maintenance and development of culture according to the Regional Regulation of the Special Region of Yogyakarta Number 3 of 2017, there are 18 lists of houses planned for revitalization. Revitalization as an effort to develop Chinatown Village by constructing and arranging buildings with Chinese architectural styles is one of the strategies for creating the Kraton–Maliob

Based on the values of cultural heritage buildings and readiness to build based on survey results and discussions with Ketandan community leaders, 5 (five) priority revitalization plans were determined based on cultural heritage building values, namely: (1) Ketandan 5 and 7 Shop Houses; (2) Kwan Nio Tio Shop House; (3) dr. Nugroho House; (4) UD Liong Shop House; and (5) 41 Shop Houses. Meanwhile, based on the readiness to be built, namely: (1) Kwan Nio Tio Shop House; (2) Ketandan 5 and 7 Shop House; (3) 41 Shop House; (4) UD Liong Shop House; dan (5) Windiastuti Shop House.

Keywords: Conservation, Chinatown Architecture, Village, Ketandan

Introduction

Ketandan Village is a Chinatown area located in the center of Yogyakarta. The name Ketandan was derived from the word "*ka-tandaan*", which means the home of the tax collectors. In the past, village was the residence of families of tax collectors. Since the reign of Hamengku Buwana I in 1756, a Chinese captain was appointed to manage various needs within the community and to collect tolls, opium as well as market taxes. The financial and economic

conditions of Yogyakarta palace significantly improved during the reigns of Hamengku Buwana I and Hamengku Buwana II, mainly due to revenue from toll and market taxes. This indicates that the presence of the Chinese community has a significant role in the economic aspect of Yogyakarta Sultanate. Based on this history, Ketandan is categorized as a *Kraton* Cultural Heritage Area, as stated in the Yogyakarta Special Region Governor Regulation No. 75/KEP/2017, dated March 20, 2017. As part of the *Kraton* Cultural Heritage Area, Ketandan requires arrangements that complies with the preservation rules. This research is essential in supporting the preservation and arrangement of the building facades in Ketandan in order to make it an example of a Cultural Heritage Area with Chinese architectural characteristics.

The Law No. 11 of 2010 concerning cultural heritage states that preservation is a dynamic effort to maintain cultural heritage and its value through protection, development, and utilization. According to ICOMOS New Zealand Charter (2010), conservation is the process of understanding and caring for places to safeguard cultural heritage values. Conservation is based on respect for the material, association, meaning, and use of a place. It requires a careful approach and necessary work to maintain authenticity and integrity, ensuring that the place and its values can be passed down to future generations. The Burra Charter (1999) defines conservation as the maintenance of a place to preserve its cultural significance. It also forms the basis of preservation activities.

Chinatown in cities usually consist of rows of houses, which also serve as shops (shop houses). These single-roof houses typically do not have a yard, and in the middle of each, is usually an open space without a roof. Chinese houses are characterized by the pointed shape of the roofs at the ends and the carvings on the pillars. Every Chinatown always has one or two temples (*klenteng*). The temple buildings have a distinctive shape and rich Chinese ornamentation. One form of Chinese culture that can still be found in any Chinatown is the building style, emphasizing Chinese culture in the curved roof form. The roof shape found is almost similar to that of southern China. Most Chinese immigrants who came to Indonesia were from the South China Provinces, particularly Guangdong and Fujian (Lilananda, 1998).

Ketandan Village is a historical area with significant old buildings. In general, there are three types of buildings in the village, namely those with Chinese, Dutch, and Javanese architectural styles. This demonstrates the acculturation of the architecture of Ketandan Village. The area is located East of the Tugu - Keraton axis, administratively in Ngupasan Village, Gondomanan District (Fig. 1).



Fig 1: Ketandan Village

Source: Author, 2023

The Research Problem

This research aims to determine the importance of preserving architectural identity, both local and resulting from acculturation, especially amidst the development of building functions that are followed by changes in the building forms. The demand for functional development also drives changes to the spatial arrangements and building appearances changes. The research problem is that the efforts of identifying architecture in Ketandan Village, which was created through a combination of traditional Chinese architecture and its acculturation with the local culture (Javanese) are inadequately understood. This research intends to provide that to help the conservation activities in Ketandan Village. To measure revitalization priorities using the following criteria: Important score. Has essential historical, scientific, educational, religious, and cultural values; Authenticity and Integrity. The façade elements are still original, and not much has been added; Characteristics of Form and Facade. There are distinctive architectural elements; Structural Damage Conditions. The condition of the facade structure is not feasible.

Theoretical Background

Architectural uniqueness depends on the response and utilization of environmental resources that reflect the relationship between people and Nature. Therefore, architecture reflects the diversity of cultures as well as the relationship between people and Nature. The psychological needs of building occupants are the main factors in designing architectural spaces (Snyder, 1984). These factors are related to how the occupants understand the shape of the space or the building, how they can meet their needs, and how they reflect their lifestyles and symbols. Buildings, as symbols, can serve as a medium for communicating the existence of an individual or a particular social group, whether consciously or unconsciously (Rapoport, 1977).

Heritage buildings have a connection with the core values they embody, depending on the three axes, namely people, place, and time, as well as the environment from which they are formed, with their buildings having the characteristic of a cultured society. There are several strategies to maintain the value of heritage buildings, and this includes the reuse to preserve their architecture as well as aesthetic and economic values (Al-eqaby et al., 2023).

Architectural changes often occur in buildings that require adaptation to environmental, functional, and aesthetic developments. Building changes also provide an opportunity for owners or users of the building to meet their needs through the architectural change processes. It can create dynamic architectural spaces to enhance environmental quality and aesthetics (Asefi, 2012). It also involves economic, social, and cultural factors at varying scales, although fundamentally unique and cannot be generalized, they are related to the added value of the building (Kurniati et al., 2022). Adding contemporary value to heritage buildings can make them part of the global economic development (Barrera, 2013).

In the modern context, the challenge of preserving historical values is the difficulty of connecting tradition and modernity without the support of the local government (Heldak; Soroczynska, 2019). On the other hand, cultural heritage assets owned by the individuals have problems with funding to maintain their existence as cultural heritage buildings (Prasidha et al., 2020). Changes in architectural form do not occur spontaneously but gradually following the needs and desires of the occupants. Traditional architecture can accommodate new functions because it is considered flexible enough to change according to the economic status and needs of the occupants (Hamid & Eltahir, 2014). The economic factors and the occupants' needs are referred to by Sassateli (2007) as a consumerist society because the way of life and social identity are driven by consumptive behavior.

The statements indicate that changes in lifestyle and social conditions can drive the architectural changes made by the owner or occupants of a building. Vernacular architecture can change to accommodate new needs (Jagatramka et al., 2021). In traditional societies and cultures, geographical space is understood as a force in articulating a place as well as existential footing for identity and a sense of ownership (Dayaratne, 2020). Reviving traditional cultural traits, but not in a rigid way, can offer freedom, new ways of building, thinking, and new activities (Dayaratne, 2020). On the other hand, a building's architectural style is often

identified as a symbol of a region (Clarke & Crossley, 2000). From these statements, it can be concluded that changes in architectural forms are an effort to accommodate new needs. Spatial adaptation aims to achieve harmony between the occupants and a place believed to improve their lives (Afroz, 2012).

Vernacular architectural forms have become standardized in traditional societies with a long cultural history. In Chinese society tradition, *feng-shui* serves as a means of personalization (self-personification), or a way to express one's individuality in a building suitable only for the occupant (self-identification). Connected to the human cosmology traditional philosophy as the universe center, *feng-shui* makes the location of a suitable building for the ego-centered universe. This central point of the universe can influence the occupant's life in the future. According to cosmological thought, the macrocosm transformation into a microcosm of habitation results in the standard basic plan of the *si-he-yua*. The symmetrical main axis of a building symbolizes the dynamic balance of the *yin-yang* universe and intersects with the axis mundi line leading to the North-South cardinal points. The symbol of the universe axis connecting the earth and the fixed point of the North star with an imaginary line starts from the courtyard box of *si-he-yuan* type plan.

The square-shaped floor plan represents the earth under the traditional philosophy that the earth is square-shaped, and the sides of the floor plan facing the four cardinal directions visualize the division of space into four segments. Traditional Chinese cosmology depicts the sky as a round dome divided into four segments following the cardinal directions. This concept follows various philosophical beliefs, such as the *yin-yang* philosophy, the five elements of *wu-xing*, the symbols of the dragon-tiger representing the four mythological animals ruling over the sky, and the division according to the 3x3 square *luo-shu*. The floor plan of a simple 3-Jian dwelling is the basic module of folk housing, with an odd number of units usually taken to maintain symmetry along the main axis. A simple house plan is commonly referred to as "one empty room and two chambers" (*yi-tang-er-nei*), or "one bright and two dark" (*yi-ming-liang-an*) (Zhou et. al, 2002).

One important characteristic of traditional Chinese buildings is that they are constructed on a raised podium, with the surface level higher than the surrounding ground level. The height of the *tai* surface is related to the building function. In traditional Chinese architecture, building materials, such as wood, bamboo, and ceramics are mainly non-permanent. Using these materials reflects the understanding that buildings are not eternal, just like people with limited lifespans. More permanent materials, such as stone, are used only in tomb buildings, with the belief that the human spirit will continue to live on after death.

The upper part of the building is made of wood. The wooden frame is a strong and stable self-standing structure. The walls are partitions and do not bear the structural load (non-bearing all, curtain wall). The roof is a massive construction. The use of materials tend to be over-designed in dimensions because Chinese architecture relies heavily on the weight of the construction mass to obtain stability and strength. The mass weight in the structure is expected to provide resistance to wind and earthquakes. In traditional Chinese building construction, wind bracing frames are not commonly known, nor are triangular *vakwerk* rafters that are known today. Wooden construction has proven to withstand major earthquakes due to the highly flexible knots in the wooden structure. From the historical research of Chinese architecture, it turns out that the dimensions evolution of *dou-gung* and columns have become more economical in terms of materials (Liang, 2005).

In the construction of the saddle roof with *kopwand*, the gable wall, and the *shan-qiang* wall also function as a firewall. The side edges of the wall are made much higher than the roof surface next to it, and this shape aims to prevent the spread of fire through the wooden roof structure when a neighboring building catches fire. The addition of height to the side wall (*kopwand*, *shan-qiang*) is higher than the *wuwungan* line and the roof plane. Usually, the top of the wall is decorated (Fig. 2). The decorations at the end of the *shan-hua* wall differentiate the social status of the occupants.

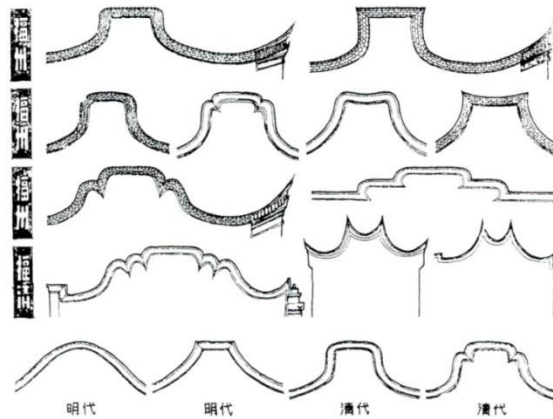


Fig 2: Shape of the side wall (*kopwand*)
Source: Knapp, in Kustedja (2014)

The variety of ornaments found on the side walls symbolize beliefs and good hopes (immortal, Buddhist) (Fig.3).

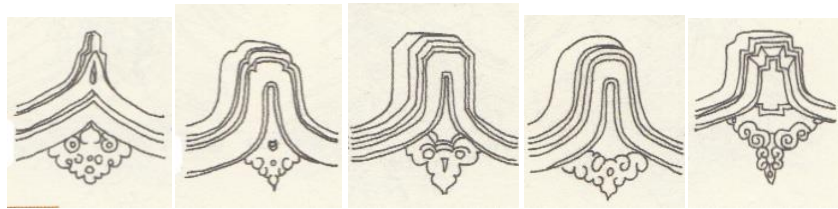


Fig. 3: Symbols of fire/south, metal/north, wood/east, water/west, and earth/center Source: Knapp, in Kustedja,2014)
Source: Knapp, in Kustedja,2014)

In Chinatown Semarang, several buildings represent early and distinct Chinese architecture. The roofs have a saddle shape and are circular. The *Tou kung* console is visible on the support of the second-floor foyer, and there is a curtain purlin on the roof terrace (Sudarwani et al., 2023). The primary considerations for preservation by Rahardjo (2013) are outlined in his ideas regarding assessment, typology of values, and ranking for cultural heritage management, while the explanation is as follows: 1) Historical value consists of figures and events, 2) The value of science consists of discoveries, the emergence of new varieties, the application of new technologies, and the emergence of new species, 3) Cultural values consist of identity and art, 4) Educational values are explained as objects that have the potential to be able to provide knowledge and inculcate moral values for children and adults, 5) Political values and critical historical events in historical and ancient heritage objects can be considered significant if compatible with current political priorities. This multiple meaning can be used to increase public attention in efforts to protect and preserve, 6) Economic value consists of functional and revitalization value, and 7) Integrity value includes design, physical environment, materials, and artistry. Based on this review, it can be concluded that preserving cultural heritage buildings requires criteria and a priority scale of handling.

Research Methods

This qualitative research was conducted in Ketandan village, Yogyakarta City, Indonesia. The data were obtained through observation and interviews (Leedy; Ormrod, 2001), and photo/ documentation. The research employed direct observation of building forms and various ornaments. The interviews were conducted to obtain information about the history of the building from the owners/occupants (Fig. 4). A documentary survey was used for deductive reflection of observation results. Documentation of five buildings was carried out to describe the condition of the building, the changes that occurred, and the elements left unchanged.

Based on the Master Plan for Maintenance and Development of Ketandan Village Cultural Heritage Area, Yogyakarta Special Region Cultural Office, 2018, 18 (eighteen) buildings were planned for revitalization. These buildings are: (1) Mamuning Shop House; (2) Windiastuti Shop House; (3) Tam Yuan Chuan Shop House; (4) Anton Hidayat Shop House; (5) Berkah Jaya Shop; (6) Kwan Nio Tio Shop House; (7) Ketandan Wetan No.29 Shop House; (8) Ketandan Lor No.21 Shop House; (9) Ketandan Lor No.56 Shop House; (10) dr. Nugroho Shop House; (11) Secodiningrat/Tan Jin Sing Capiten House; (12) UD.Liong Shop House; (13) 41 Shop House; (14) Permata Gold Store Shop House; (15) Ketandan Kidul No.2B Shop House; (16) Aisha Cosmetics Shop House; (17) Matahari Gold Store Shop House; (18) Mustika Sakti Gold Store Shop House. Resource persons from community leaders in the Ketandan area provided several input criteria: (1) historical value, age of the building, the distance between buildings that are close enough, and shape and authenticity of the building. (2) consideration of the authenticity of the building, materials, colors, and characteristics, not removing existing elements and not adding elements that were not there before. Based on these criteria, buildings 5 and 7 (Shop House). Buildings 22, 24, and 26 were chosen because they have a history related to Secodiningrat's home (the building used to be Secodiningrat's stables). After discussing with community leaders, it was decided to choose building number 5 and 7 (Shop House). While building numbers 22, 24, and 26 cannot be selected because there are problems contacting the owner.



Fig. 4: Discussions with the occupant and public figures at Ketandan Village.
Source: Author, 2023



Fig. 5: List of Houses in Kampung Ketandan
Source : Master Plan for Maintenance and Development of Ketandan Village Cultural Heritage Area, Dinas Kebudayaan Daerah Istimewa Yogyakarta, 2018

Evaluation

The rating scale determines the development priorities of the 18 (eighteen) buildings on the list. By using the primary considerations of preservation by Rahardjo (2013) regarding assessment, typology of values, and ranking for cultural heritage management as well as input from the Ketandan community. Then it can be explained as follows: (1) Historical value consists of figures and events. (2) The value of science consists of discoveries, the emergence of new varieties, the application of new technologies, and the emergence of new species. (3) Cultural values consist of identity and art. (4) Educational values are explained as objects that have the potential to be able to provide knowledge and inculcate moral values in children and adults. (5) Political values and critical historical events in historical and ancient heritage objects can be considered vital if compatible with current political priorities. This significant meaning can be used to increase public attention in efforts to protect and preserve. (6) Economic value consists of functional and revitalization value. And (7) Integrity value or integrity value consists of design, physical environment, materials, and artistry.

Development priority is based on the rating scale: 1. Very Low; 2. Low; 3. Moderate; 4. Height; 5. Very High. The following values are used:

Table 1: Priority Based on Cultural Heritage Building Values.

Source: Author, 2023

No	Buildings	Criteria				Total	Revitalization priority
		Important score. Has essential historical, scientific, educational, religious, and cultural values.	Authenticity and Integrity. The façade elements are still original, and not much has been added.	Characteristics of Form and Facade. There are distinctive architectural elements.	Structural Damage Conditions The condition of the facade structure is not feasible.		
1	Mamuning shop house.	1	3	2	2	8	7
2	Windiastruti Shop House.	1	2	4	4	11	4
3	Tam Yuan Chuan Shop House.	1	4	3	2	10	5
4	Anton Hidayat Shop House.	1	3	3	2	9	6
5	Berkah Jaya House.	1	1	2	1	5	7
6	Kwan Nio Tio Shop House.	3	3	5	5	16	2
7	Ketandan Wetan 29 Shop House.	1	3	4	3	11	4
8	Ketandan Lor 21 Shop House	1	4	4	2	11	4
9	Ketandan Lor 56 Shop House.	1	1	2	2	6	8
10	dr. Nugroho House	1	3	5	4	13	3
11	UD Liang Shop House	2	4	5	2	13	4

12	41 Shop House	2	4	5	2	13	5
13	Permata Shop House	1	1	2	2	6	8
14	Ketandan Lor 28 Shop House	1	1	2	2	6	8
15	Aisha Accesoris Shop House	1	2	4	2	9	6
16	Matahari Golld Store Shop House	1	3	4	2	10	5
17	Mustika Sakti Gold Store Shop	1	3	4	2	10	5
18	Ketandan 5 & 7 Shop House	5	4	5	3	17	1

Revitalization priority order:

- (1) Kwan Nio Tio Shop House
- (2) Ketandan 5 and 7 Shop House
- (3) 41 Shop House
- (4) UD. Liong Shop House
- (5) Windyastuti Shop House

Table 2: Priority scale based on readiness for revitalization.

Source: Author, 2023

No	Buildings	Criteria					Total	Revitalization priority
		Function. It is still functioning correctly as a house or shop	Location. Close to: 1. Office of the Governor of the Special Region of Yogyakarta 2. Jalan Margo Mulyo 3. Secodiningr at Culture House	Number of Floors. The fewer the number of floors, the less area to be revitalized	Cultural Heritage Building Values	Existing Survey Accessibility. Ease of access and survey of existing buildings		
1	Mamuning shop house.	5	4	3	8	3	23	9
2	Windiastuti Shop House.	3	5	3	11	5	27	5
3	Tam Yuan Chuan Shop House.	3	4	5	10	3	25	6
4	Anton Hidayat Shop House.	5	3	3	9	5	25	7

5	Berkah Jaya House.	4	2	5	5	3	19	18
6	Kwan Nio Tio Shop House.	5	3	5	16	5	34	1
7	Ketandan Wetan 29 Shop House.	2	2	5	11	2	22	12
8	Ketandan Lor 21 Shop House	1	2	5	11	2	21	13
9	Ketandan Lor 56 Shop House.	4	2	5	6	4	21	14
10	dr. Nugroho House	2	4	3	13	1	23	10
11	UD Liong Shop House	5	2	3	13	5	28	4
12	41 Shop House	5	3	3	13	5	29	3
13	Permata Shop House	3	3	3	6	5	20	15
14	Ketandan Lor 28 Shop House	3	3	3	6	5	20	16
15	Aisha Accesoris Shop House	5	3	3	9	5	23	11
16	Matahari Gold Store Shop House	3	3	3	10	1	20	17
17	Mustika Sakti Gold Store Shop	4	3	3	10	5	25	8
18	Ketandan 5 & 7 Shop House	4	5	3	17	4	32	2

Revitalization priority order:

- (1) Kwan Nio Tio Shop House
- (2) Ketandan 5 and 7 Shop House
- (3) 41 Shop House
- (4) UD. Liong Shop House
- (5) Windyastuti Shop House

Five buildings that are a priority for revitalization are as follows:

A. Kwan Nio Tio Shop House

Kwan Nio Tio Shop House is located on Ketandan Lor Street No. 58. The building consists of one floor and combines Chinese as well as Dutch architectural styles. The typical feature of the Dutch-style Kwan Nio Tio shop-house is the stepped gable and the gable window on the tympanum plane. The upper front part has a geometric pentagon-shaped rooster. Currently, the building facade has four folding doors with bovenlicht above it and is adorned with stained glass. Moreover, the walls of the building are plastered with exposed stone, and there is a galvalume canopy.



Fig 6: Kwan Nio Tio Shop House in 1930 and 1973

Source: Occupants, 2020

According to Fig 5, from the year 1930, the Kwan Nio Tio Shop House facade part has an open terrace as the living room with grand pillars, and the walls appear to be painted in a bright color white. There are doors and windows after the terrace. From 1973, a small part of the house as shown from the side has no visible grand pillars. There is a concrete canopy pulled by a steel cable and an open terrace. The facade damage of Kwan Nio Tio Shop House are as follows (Fig. 7):



Fig. 7: Identification of Facade Damage of the Kwan Nio Tio Shop House

Source: Author, 2023

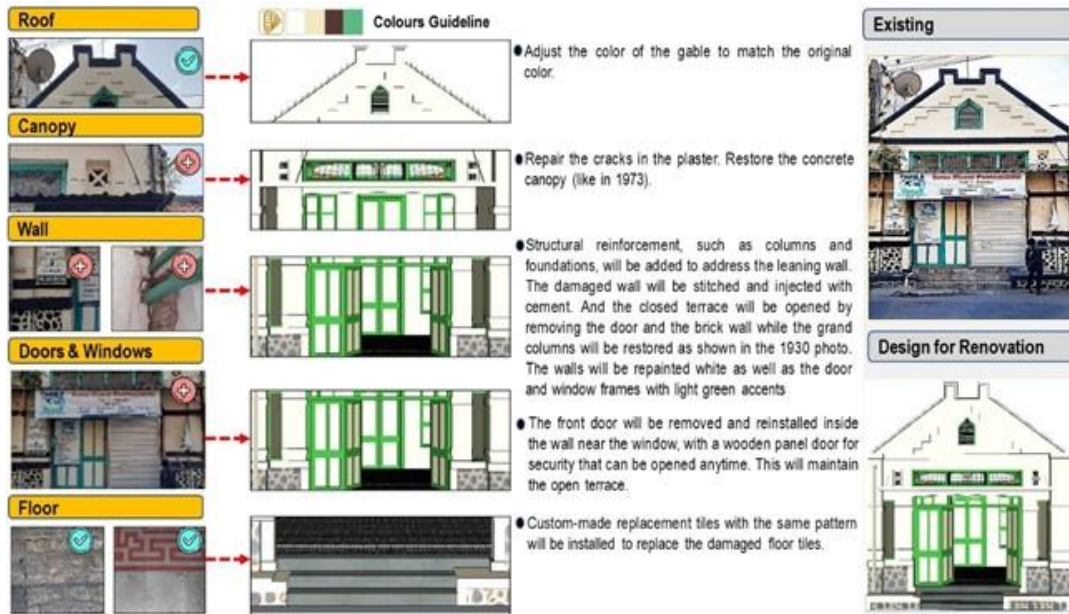


Fig. 8: Proposed Renovation for Kwan Nio Tio Shop House
Source: Author, 2023



Fig 9: Renovation Design for Kwan Nio Tio Shop House
Source: Author, 2023

B. Ketandan 5 and 7 Shop House

Ketandan 5 and 7 Shop House is located on Ketandan Kidul Street. Based on discussions and agreements with the community, this building was included in the list of buildings to be revitalized to replace the Secodiningrat / Tan Jin Sing Capiten House building, which the DIY Culture Office had previously renovated. Ketandan 5 and 7 Shop House is a building with Chinese architectural nuances consisting of 2 (two) floors. The condition of the building, when viewed from the front, is still quite well maintained. In its current state, this building functions as a gold shop. The facade damage identification results of Kebunan 5 and 7 Shop House are shown in Fig 10.

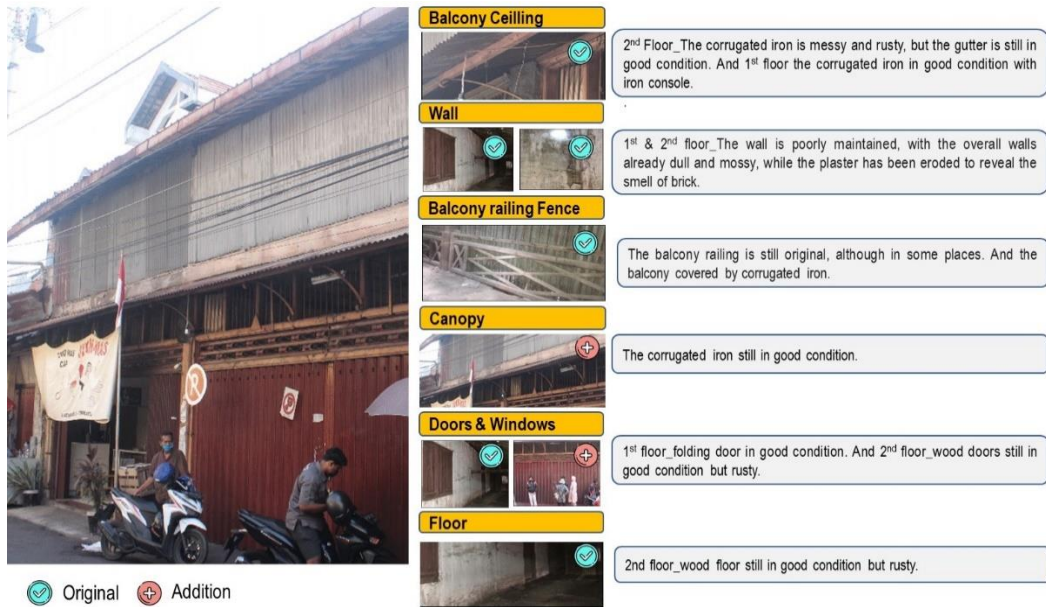


Fig. 10: Identification of Facade Damage of the Ketandan 5 and 7 Shop House
Source: Author, 2023

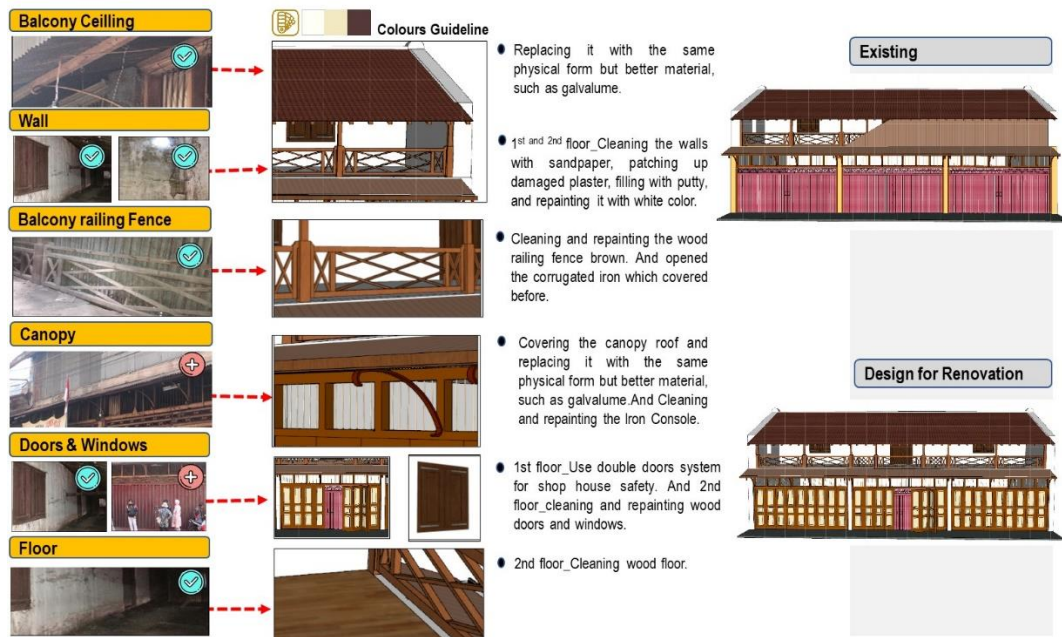


Fig. 11: Proposed Renovation for the Ketandan 5 and 7 Shop House
Source: Author, 2023

C. The Shop House 41

Shop House 41 is located in Hook, between Lor Pasar and Ketandan Kidul Streets. According to the owner (Lauw Kok Tiang), this building, also known as Tan Bing Thay and Yo Ing Lan's house, has been occupied by their family since 1928, which is the first generation to live in the house. This period was contemporaneous with the construction of the Beringharjo market in 1925. Like other houses in the area, the house has a duplex model and two floors, while the roof has a saddle model as well as a ridge with a typical Chinese pattern. There are several variations of floral or flora motifs on the window grilles and each building has an altar offering to ancestors.

Currently, the first floor of Shop House 41 is used as a grocery store, while the second floor is used as a residence and warehouse. The facade damage identification results of Shop House 41 are shown in Fig 12.

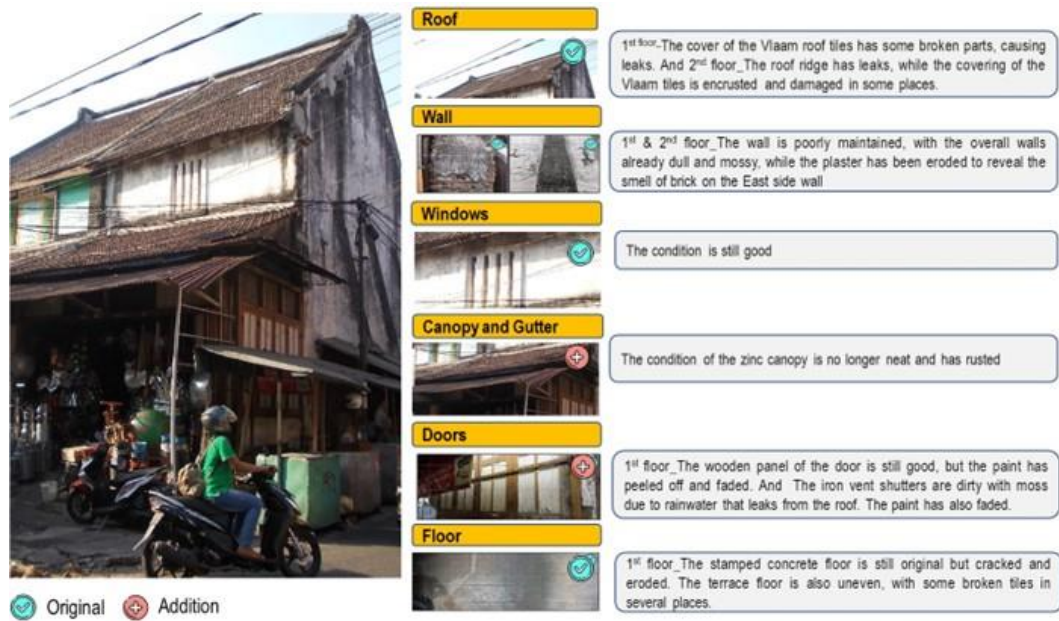


Fig. 12: Identification of Facade Damage of the 41 Shop House
Source: Author, 2023

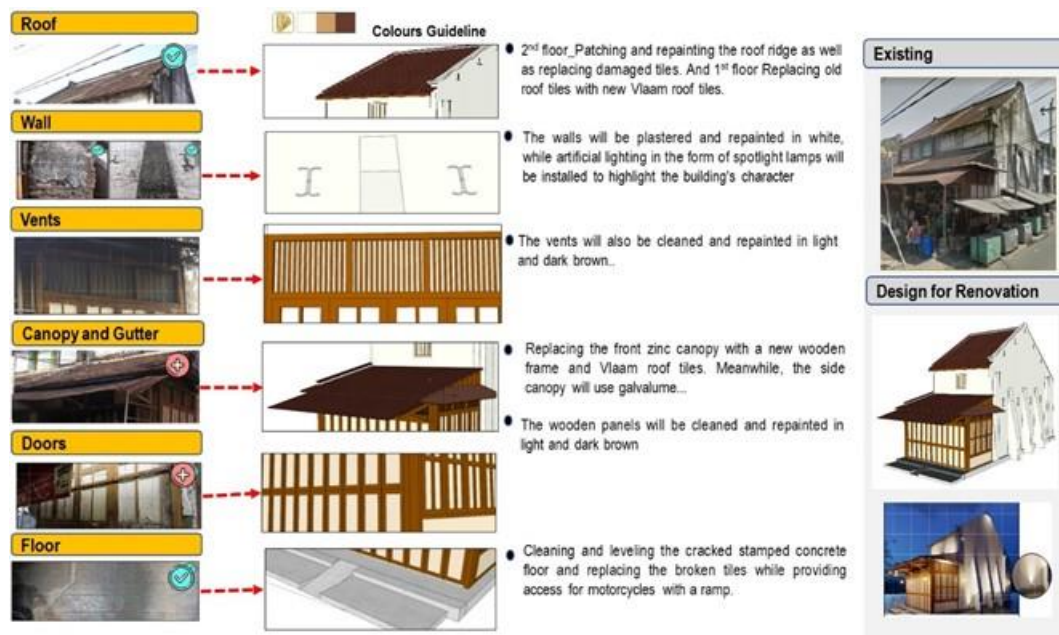


Fig. 13: Proposed Renovation for the 41 Shop
Source: Author, 2023



Fig. 14: Renovation Design for Shop House 41
Source: Author, 2023

D. UD. Liong Shop House

Liong Shop House is located on Lor Pasar Street, with a Chinese architectural style, and consists of two floors. The first floor is a grocery store, while the second is a warehouse. The damages to the Liong Shop House facade is shown in Fig 15.



Fig. 15: Identification of Facade Damage of the Liong Shop House
Source: Author, 2023

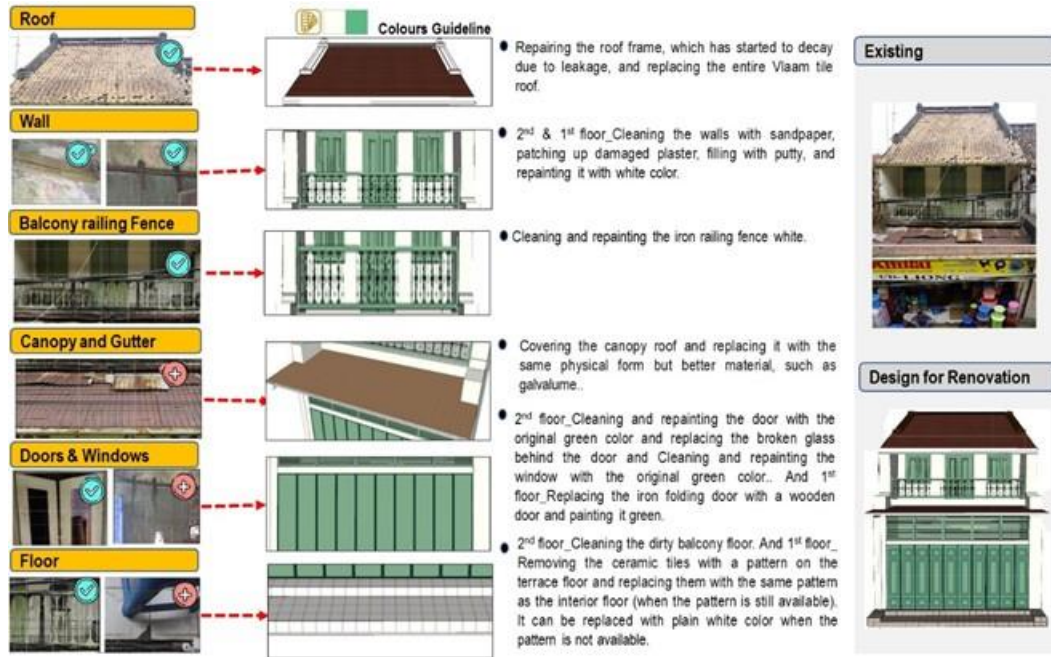


Fig. 16: Proposed Renovation for Liong Shop House
Source: Author, 2023



Fig. 17: Renovation Design for UD.Liong Shop House
Source: Author, 2023

E. Windyastuti Shop House

Windiastuti Arjonosurjo shop house is located on the corner of Ketandan Lor No.7 and Suryaatmajan Street. This building is a fusion of Chinese and Dutch architectural styles. It consists of two floors, with the first currently used as a shop and the second as a warehouse. The facade damage for the Windiastuti Arjonosurjo shop house are shown in Fig 18.



Fig. 18: Identification of Facade Damage of the Windiastuti Shop House
 Source: Author, 2023

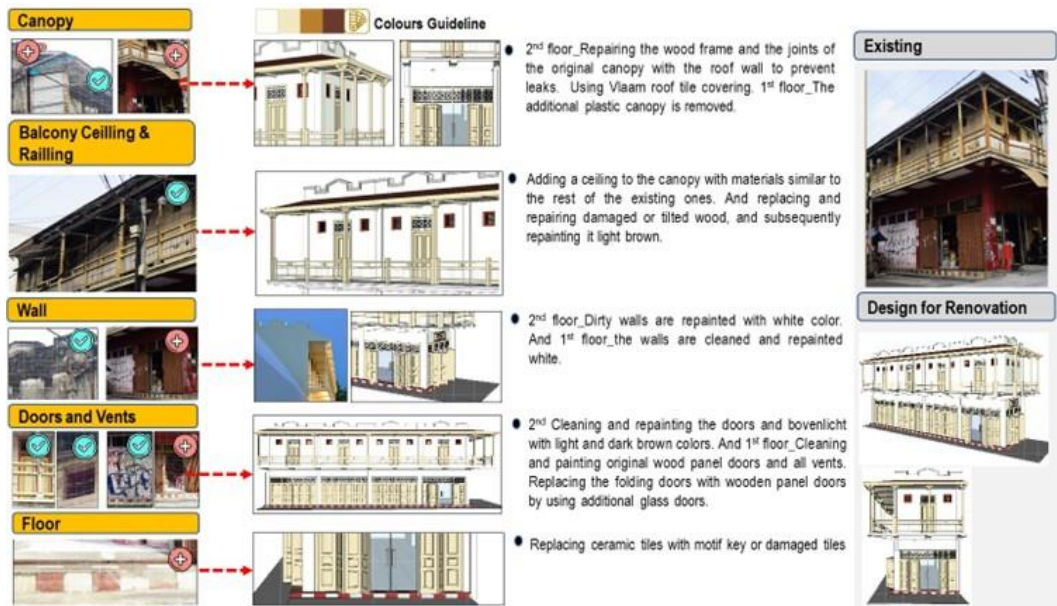


Fig. 19: Proposed Renovation for Windiastuti Shop House
 Source: Author, 2023

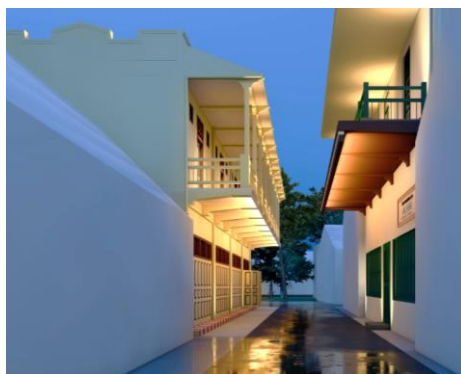


Fig. 20: Renovation Design for Windiastuti Shop House
Source: Author, 2023

Conclusions

Based on the discussion above, the following conclusions can be made about each building: Revitalization as a preservation effort is made by arranging facilities with Chinese architectural styles. This preservation is one of the strategies for developing the Kraton and Malioboro Areas as tourism areas based on culture and urban life. Based on the values of cultural heritage buildings and their readiness to be revitalized, as well as based on survey results and discussions with local community leaders, five priority buildings were determined, as follows.

- (1) Ketandan 5 and 7 Shop House
- (2) Kwan Nio Tio Shop House
- (3) Dr. Nugroho House
- (4) UD Liong Shop House and
- (5) 41 Shop Houses.

Meanwhile, based on the readiness to be built, they can be ordered as: (1) Kwan Nio Tio Shop House; (2) Ketandan 5 and 7 Shop House; (3) 41 Shop Houses; (4) UD Liong Shop House and (5) Windiastuti Shop House.

Recommendations

Recommendations for Practitioners

Ketandan Village has buildings characterized by Chinese architectural style that has been acculturated with local architecture. Its existence as a Kraton Cultural Heritage Area supports cultural tourism which has made the preservation of the building to be important. Although commercial activities have caused changes in the appearance of the buildings, the characteristics of Chinese architecture, especially on the side walls (*kopwand*), decorations, doors, and windows, can still be found. Therefore, architects are encouraged to maintain building elements as a characteristic of Chinese architecture and highlight them again as core elements.

Recommendations for Further Research

These findings require further research. The factor of changes in the appearance of buildings caused by the increasing trading activities is only one of the factors influencing the dynamics of Chinese architecture in Ketandan Village. As a result of the increasing scarcity of non-durable building materials (wood) and the widespread use of modern materials (lightweight steel), there is an urgent need for research on the use of modern materials in Chinese architecture in Ketandan Village without neglecting the aspect of its philosophical values.

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