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## FASADE TYPOLOGY ANALYSIS, CASE STUDY KESAWAN STREET, INDONESIA

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### ABSTRACT

Heritage area redevelopment is being widely carried out by many cities from outside and within the country. This is supported by the development of the times and the need for describing old city buildings that are characterized by the people of today's world. While the Medan city government still seems to need a push in taking care of its colonial heritage buildings. This can be seen from the number of heritage areas that are not managed and damaged even to be replaced with new buildings. Based on the observations of researchers, the location in Medan city with old city buildings that can be used as an architectural tourist area is the Kesawan Jalan Ahmad Yani area. This research study is based on the typology of the facade consisting of roof, color, doors, windows, height, columns, building ornaments. The purpose of this study was to examine the physical condition of the old city area of Kesawan. This research used the qualitative method, data collected by observation. The conclusion of this study is the condition of the facade of the building studied such as roofs, colors, doors, windows, columns, height, and ornaments are still important factors that support the identity of the old city area of Kesawan Medan, but in a state of concern because modern forms have begun to dominate.

KEYWORDS: Kesawan, a typology of facades, identity

## 1. INTRODUCTION

Currently, many domestic cities and even abroad have done the formation of sustainable cities. This is done to save the cultural sites and uniqueness of their city. Cities with strong characteristics can also have an impact on the ease of getting investors and partners from abroad both from the government and students [7]. The identity of a region is created through the reciprocal relationship that occurs between the observer and his environment or the mental picture that arises in the observer's mind about his environment [4]. The unique shape of the building will make the building have a character so that it will make people interested in visiting the building even many times [16]. The development of a city



### ISSN 2581-5148

Vol. 4, Issue.6, Nov-Dec 2021, p no. 144-156

with diversity in it makes a place important to live in because it can improve the quality of life of its people [3].

The arrival of architects to the Dutch East Indies brought a change in new architecture using existing motifs in the Netherlands, but still using traditional motifs in Indonesia [1]. The characteristics of the building shape of the Kesawan area are mostly similar to buildings in Europe with typologies of rowdy buildings and street-oriented corner buildings with Dutch Colonial architecture. Dutch Colonial architecture itself is a design style that is quite popular in the Netherlands in 1624-1820 [13]. The presence of the historical heritage of the Kesawan area is the identity of the trading area that still stands and becomes part of the life of the people of Medan [5].

Other Western cultural influences from Kesawan are also seen in the use of large columns, which are reminiscent of classical Greek and Roman architectural forms. The entrance is located right in the middle, flanked by large windows on both sides. Colonial-style buildings in this area are manifestations of cultural values displayed by the shape of roofs, walls, doors, windows, and the form of ornaments with high quality as building decorating elements

## 2. LITERATURE RESEARCH

Typology emphasizes the classification of the similarity of characteristics or totality of specificity created by society in a period or period bound to a built environment that is the interaction and activity of society that gives rise to a space of interaction [9]. Facade is an exterior or face contained in the building [12]. Facades can also be used in conveying a cultural state when the building was built, the facade reveals the criteria of order and arrangement, and plays a role in providing creativity in ornaments and decorations [15]. As for the elements that must be considered in researching the building's facade through Proportion of buildings (Proportion of openings, location of the entrance, size of doors, windows, material, color of buildings), Composition of building mass (Height of buildings, borderlines, composition of mass shapes), Architectural Style (Ornaments, Columns) the roof, color, doors, windows, height, columns, ornaments of the architectural style of the building [2] and to improve the image of Kesawan can be seen through roof, color, doors, windows, height, columns, ornaments of the architectural style of the building [14].

The existence of old buildings in the city of Singapore, Malacca, Penang, is also arguably a success because the building is maintained and has a function in each building so that it can attract foreign tourists. Singapore itself has since been found to experience heterogeneous urban development due to the influence of the growth of people from ethnic Malays, Chinese, Indians, Srilangka, Arabs to Europe, especially in the Kampoeng Glam area. Currently, the entire Kampoeng Glam area is formed from the formation of the area and typology of the character of old buildings lined with various facades that are still maintained and maintained conditions in accordance with the character of the culture preserved [6].



### ISSN 2581-5148

Vol. 4, Issue.6, Nov-Dec 2021, p no. 144-156

From this statement, it can be known that heterogeneous building typology is commonly used. With differences in function and physical form between office and commercial buildings but still on the typological architectural characteristics of existing building facades make the city area has its own identity to be used as an attraction for tourism and architectural education, especially by domestic and foreign researchers to build the identity of the Old City. While currently in the Kesawan area on Ahmad Yani street many old buildings are not managed and worse slowly the building undergoes a change in the facade in terms of window elements, doors, and ventilation that lead to a modern form that can eliminate the identity of the building even though this physical characteristic is one of the artifacts and landmarks of the city of Medan.

Main data dan secondary data will be blended to become the factual condition at the site. Secondary data can't directly become the factual condition, must be compared or combined with main data from the observer, because there could be different perspectives or points of view from the users/visitors who responded to a situation, and its observer's job to choose and put it in the right path. Then the facts will be analyzed with the theories taken to get the finding to answer the problem.

## **3. METHODS**

## **3.1 Determination of research area**

The research area that will be studied is the Kesawan Jalan Ahmad Yani Medan area. Researchers chose samples of old and new buildings that can influence in building the identity of the area on Ahmad Yani Street Kesawan because as an Old City area there are many typologies of various building facades as the oldest area in Medan city and has a history of the formation of residential space structures that are unique in culturally and physically so that buildings in this area can be used to build the identity of the old city.

## **3.2 Method of Analysis**

In analyzing research problems using qualitative descriptive in the form of emphasizing the current building facade that has characteristics, researchers interpret the data obtained through surveys and observations. Interpreted data and methods of determining the collection of data based on theory. The analysis of the typology of the façade of buildings in the old city center of Medan is as follows.



## ISSN 2581-5148

Vol. 4, Issue.6, Nov-Dec 2021, p no. 144-156

Typologycanbe consisting of aperture proportions, the composition of mass shapes, Architectural StyleRoof shape, color, doors, windows, columns, height, and building ornaments- Research articles - Plot map of cities neighborhoodsElements that must be considered in researching the facade of the building include the following [2]: Proportion of buildings (Proportion of openings, location of the entrance, size of doors, windows, Material, Color of buildings, Composition of mass shapes), Architectural Style- Plot map of cities neighborhoods- Adjust cad images according to the conditions on the ground that have been observed- Adjust cad images according to the conditions on the ground that have been observed- Photographing the buildings, Composition of building mass (Height of buildings, Borderlines, Composition of mass shapes), Architectural Style- Photographing the building the building the together between building the building the				
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	Typology can be classified through function, geometry, and style [8] Elements that must be considered in researching the facade of the building include the following [2]: Proportion of buildings (Proportion of openings, location of the entrance, size of doors, windows, Material, Color of buildings), Composition of buildings, Borderlines, Composition of mass shapes), Architectural	Building facade consisting of aperture proportions, the composition of mass shapes, Architectural	Roof shape, color, doors, windows, columns, height, and	<ul> <li>Research articles</li> <li>Plot map of cities neighborhoods</li> <li>Adjust cad images and make changes according to the conditions on the ground that have been observed</li> <li>Photographing the building and being put together between buildings using</li> </ul>

Table 1: Analysis	Method Table
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## 4. RESULTS AND DISCUSSIONS

This research area is the oldest area in the city of Medan and becomes a tourist and research place for students because the old buildings make this area has its own identity. In the Kesawan Area currently  $\pm$ 50% dominated by the function of shop houses (shophouses) and some private offices that carry out their activities starting from the morning around 7:30 am to 17:30 pm. Activities in the area are several sports shops (selling sports equipment), musical instrument stores, shoe stores, furniture stores, barbershops, hotels, electronics stores, minimarkets, restaurants, offices, banks and residences.



## ISSN 2581-5148

Vol. 4, Issue.6, Nov-Dec 2021, p no. 144-156

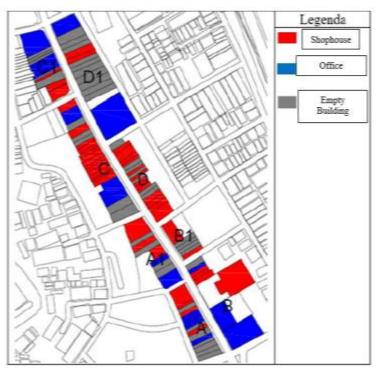
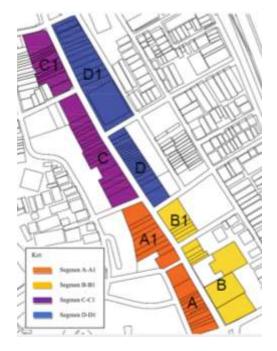


Figure 1. Building function

This research area will be divided into eight segments namely segment A, segment A1, segment B, segment B1, segment C1, segment D, and segment D1. The division of this segment is done to make it easier to identify the typology of building facades in the Kesawan area. Here is a picture of each segment on Ahmad Yani Kesawan Street



**IJESSR** 



ISSN 2581-5148

Vol. 4, Issue.6, Nov-Dec 2021, p no. 144-156

### **Figure 2. Division of Segments**

### 4.1 Roof

The roof on the building along the Ahmad Yani street segment uses a flat concrete roof of 51 units, a gable roof of 42 units, and a hip roof of 10 units. Some buildings use gable roofs or hip with red tile roof material, especially in historic buildings such as roofs on PT Jasindo Building at segment D1, the roof of the Tip Top building at segment C and the roof of the Tjong A Fie building at segment B.



Figure 3. Roof

### 4.2 Color

The color of the building along the Ahmad Yani street segment uses white 51 units, gray 4 units, beige 6 units, brown 10 units, yellow 8 units, green 5 units, orange 5 units, pink 1 unit, black 1 unit, and blue 1 unit. The use of this color is used in buildings along with segments of old buildings such as Lonsum, and Bank Mandiri Building. The use of white and beige is quite harmonious when seen at a glance through this area. But unfortunately, if viewed more carefully with walking or using a bicycle will be seen the use of different building colors. In addition, it has also begun to appear in some buildings that have black patches and paint that wears off on the building. While in new buildings there are still many who use other colors in each segment, especially at the D segment.



## ISSN 2581-5148

Vol. 4, Issue.6, Nov-Dec 2021, p no. 144-156



Figure 4. Color

## 4.3 Door

Doors on the building along with the Ahmad Yani street segment use 38-unit pattern sliding steel doors, 37 units of folding steel doors, 14-unit wide folding wooden doors, 1 unit arc-shaped glass doors, 7-unit folding glass doors, 1-unit grit glass wood doors, 2-unit wooden doors. The use of glass doors is usually used in new buildings such as in Bank Syariah Indonesia (BSI) building at segment A1 and some old buildings to keep up with the times. The use of sliding steel doors is also used as the first layer before the main door. This is because of the use of this door as a security enhancer, especially to buildings that sell sports equipment and musical instruments. Doors with wood elements are still visible and found in some old buildings such as in buildings around TipTop buildings at Segment B.



## ISSN 2581-5148

Vol. 4, Issue.6, Nov-Dec 2021, p no. 144-156



Figure 5. Door

### 4.4 Window

Windows on the building along with the Ahmad Yani street segment use swing windows 18 units swing grit windows 16 units, swing trellis windows 3 units, nako windows 7 units, dead windows 23 units, jalusi windows 8 units, awning windows 10 units, sliding glass windows 6 units. The use of dead windows and glass is usually used in new buildings. Some buildings do not have windows such as buildings that sell sports equipment and musical instruments such as those at segment D buildings. This is because the use of the face on the building is used as a place to place advertisements/banners store names. Some old buildings are still visible using folding wooden windows with carved ornaments on some buildings in this segment of the area. But some old buildings were rebuilt using dead glass windows. The use of lead glass windows to keep up with the times as in new buildings at segment C.



## ISSN 2581-5148

Vol. 4, Issue.6, Nov-Dec 2021, p no. 144-156



Figure 6. Window

### 4.5 Columns

Columns in the building along the segment of Ahmad Yani street use plain columns 6 units, plain columns form arcade 38 units, vertical pattern column 11 units, horizontal pattern column 3 units, Tuscan column 3 units, composite column 1 unit, ceramic column 8 units. The use of columns forming this arcade is usually used for pedestrians in old buildings along the Ahmad Yani street segment. In the columns of this building are several buildings that use large columns with detailed lines such as the old Building of London Sumatra at segment C1, Bank Mandiri building at segment B, and Bank BNI building at segment C. The use of large columns is intended to give a magnificent impression on the building. For the use of columns in new or modern buildings more do not use any more details on the column so that it looks plainer.



Figure 7. Column



ISSN 2581-5148

Vol. 4, Issue.6, Nov-Dec 2021, p no. 144-156

## 4.6 Height

The height of the building along the Ahmad Yani street segment is mostly uneven between the buildings next to the building with a height of 2 floors with 47 units and the height of the building is more than two floors with sixty-one units. The height building in this segment of the area consists of between two floors to five floors. The Buildings located in the corner of this segment are mostly taller than the building in the middle and this case can be seen in all segments of this area. And several segments show high-low dominance in this region such as at segment C and segment D.



Figure 8. Height

## 4.7 Ornaments

Ornaments in the buildings along with the segment use 17 gable ornaments, 12-unit wall ornaments, arch or arc ornaments on 20-unit windows, 5-unit balustrade ornaments, Nok Acroteire ornaments/ rooftop decorations 1 unit, and Bouvenlicht ornaments/ventilation holes 1 unit. Ornaments in some buildings in this segment still maintain the authenticity of colonial architectural styles as seen at segment B of Tjong A Fie building with Chinatown architectural style and some buildings with gable decoration ornaments on the roof of the building as elements of building roof decoration can be seen like in the Bank Danamon building, Office of Analisa, London Sumatra Office and several other buildings. But today there are still many old buildings that are abandoned and feared to disappear from this area. This happens because the old buildings that exist along this segment of the are not all well maintained. Some new buildings are built in a modern style by not following the colonial style anymore. Some modern architecture buildings in this area have also left ornaments as the identity of the region. This new building also does not have harmony with the other building such as the color and material of the buildings at segment D and some buildings cover the face of buildings with ceramic materials such as Hotel Kama at segment B1.



## ISSN 2581-5148

Vol. 4, Issue.6, Nov-Dec 2021, p no. 144-156

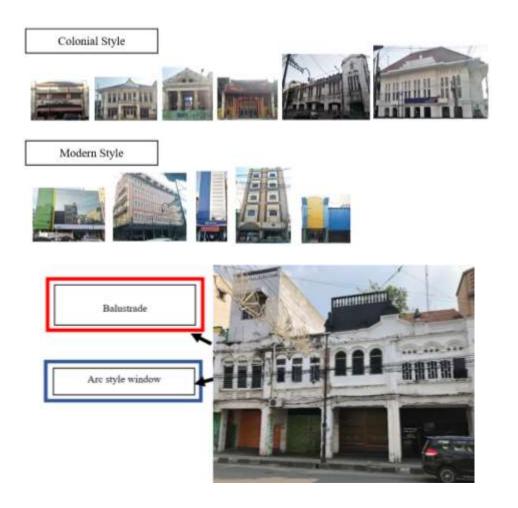


Figure 9. Ornaments and Architecture building styles

## **5. CONCLUSIONS**

Based on the typology of the building's facade that has been done, it can be concluded that the roof on the building along Ahmad Yani street mostly uses a horizontal concrete roof. While the colors of the building along Ahmad Yani street mostly use white. Doors on buildings along Ahmad Yani street mostly use sliding steel folding doors with diamond or trellis patterns. Windows on buildings along Ahmad Yani street mostly use dead windows and glass windows. Columns on buildings along Ahmad Yani street is mostly use plain columns in arcades. The height of the building along Ahmad Yani street is mostly uneven between the buildings next to the dominant height of the building more than 2 floors. Ornaments on buildings along segments use arch ornaments or arcs on windows and gable ornaments on the roof of the building.

The basic shape of a kesawan building structure is a rectangle with backward-facing orientations. this shape is still maintained because from the beginning of the formation of the Kesawan area as the center



ISSN 2581-5148

Vol. 4, Issue.6, Nov-Dec 2021, p no. 144-156

of the city and the function of trade. Tall buildings begin to wake up wildly as the function of the building changes, creating an uneven visual impression.

The existence of colonial-style buildings is a form of cultural values displayed by the shape of roofs, walls, doors, and windows and the form of ornaments with high quality as elements of decorating the building, other Europe cultural influences are also seen on the large pillars with classical Greek and Roman architectural forms [13].

This Kesawan area in terms of the physical characteristics of the building is still quite awake because some old buildings survive and some buildings in this segment of the Kesawan area still maintain the authenticity of colonial architectural styles. For this reason, this research can be used as a picture that buildings in this area still have characteristics that can still be saved by making repairs from damaged buildings and not making changes in physical shapes that are not necessary or out of context from the identity of the Old City. So that Kesawan can get serious attention in its conservation efforts. This is important to be used as an effort to reintroduce the old city of Medan which has a clear character and is also strengthened by the increasing number of old building photography activists.

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Vol. 4, Issue.6, Nov-Dec 2021, p no. 144-156

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