

Study of Various Types of Aesthetic Elements on Architectural Styles Facade of Church St. Yusuf Cirebon

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ABSTRACT

St. Yusuf's Church, located in Cirebon City, is included in one of the oldest catholic church colonial buildings in West Java with functions as a gathering place and a place of worship for Christians. The church has an interesting facade in every part, starting from the roof, walls, and columns, and not too much use of such complicated ornaments. The facade of St. Yusuf's Church certainly has a variety of types that affect the appearance of the facade in terms of aesthetic elements used as supporting elements and characteristics of a facade which is usually found in all colonial buildings in Indonesia. The various aesthetic elements on the facade of St. Yusuf's Church are categorized into three parts: the head, body, and legs, which are then influenced by architectural styles. This study aims to identify various architectural styles on the facade elements of church buildings in the colonial era with development. The research was conducted using a qualitative descriptive analysis method by tracing the aesthetic elements on the facade of the building against the theory of architectural style. The study's results showed that several types of aesthetic elements on the facades of Church buildings were included in colonial styles, indische empires, and Romanesque with gothic and art deco touches.

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Keywords: Facade, Church, Aesthetic Elements, Architectural Styles

1. Introduction

Colonial architecture is a term for the architectural style developed in Indonesia during the Dutch occupation.

This style of design is from the desire and efforts of Europeans to create colonies such as their home country. The design did not correspond to its original form due to climatic differences, lack of material availability, and differences in engineering in the colonized Countries. Finally, they obtained a modified form resembling their state's design [1]. Dutch architecture style brought from Europe began to be influenced by local culture (primarily Javanese) and tropical environmental /climatic conditions. The architectural formations brought by the Dutch adapted to the environment and produced a different look.

Colonial architecture leaves traces of various concepts with their specialties both in form and historical value. One characteristic that stands out in Dutch colonial-era buildings is the facade of the building. The powerful architectural elements with the play of details, ornaments, and textures can be enjoyed. In Dutch Colonial buildings, several types affect the appearance of the facade; these types can be seen from several elements commonly used as facade support, namely gevel / gable, gevel toppen / gable top decoration, tower/tower, acroteria number/rooftop decoration, pseudo-dormer / chimney, windwijzer / wind pointer, variety of decoration on the body of the building, and balustrade. In this case, one of the colonial buildings that is often found using the facade element is the building of a place of worship in the form of a Church.

Indonesia also has many colonial buildings, one of which is the oldest Catholic Church in West Java. It stood majestically in its time, namely the Church of St. Yusuf, located on Yos Sudarso Street, Lemahwungkuk, Cirebon City. St. Yusuf's Catholic Church has an interesting and straightforward facade with a Romanesque architectural style that does not use intricate ornaments like the Gothic architectural style but still looks magnificent and elegant [2]. The facade at the front of the Church of St. Yusuf Cirebon is characteristic is the cross at its peak.



Information:

- a. Church of Santo Yusuf
- b. Hall of Santo Yusuf Church
- c. Sectarian Room
- d. Priest's House
- ■ ■ ■ ■ Yos Sudarso Street
- ■ ■ ■ ■ Pengampon Street

Source: (<https://www.bing.com/maps>, 2021)
 Figure 1: Block Plan of St. Yusuf's Church Cirebon



Source: (Author, 2021)
 Figure 2: St. Yusuf's Church Cirebon Current Condition

In order to find out and identify the various types of architectural styles on the facade elements, it can be studied through research on aesthetic elements contained in buildings supported by theories based on literature and observations of objects study in the field.

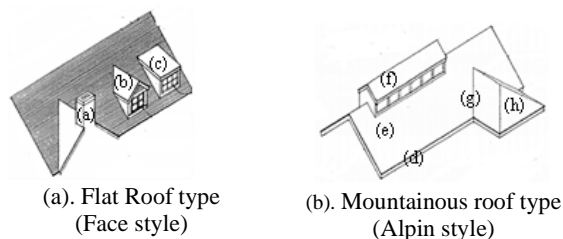
2. Material and Methods

2.1. Components of Facade Element

A facade represents or expresses different aspects that appear and can be observed visually. In the context of urban architecture, the facade of the building is not only two-dimensional but is three-dimensional, which can represent each of these buildings in the interests of the public (city) or vice versa [4]. For this reason, the components of the observed building facade elements include:

2.1.1. Element of The Head Section

The facade elements in the head include the roof and the building suffix. There are two types of roofs, namely the flat roof type (face style), which is more often found, and the mountainous roof type (alpine style). The roof is the upper part of the building. The roof suffix in the context of the facade here is seen as the boundary of the building with the sky. The skyline, formed by the rows of facades and figures of its buildings, can not only be seen as a barrier but as an object that holds the secrets and collective memory of its inhabitants [5].



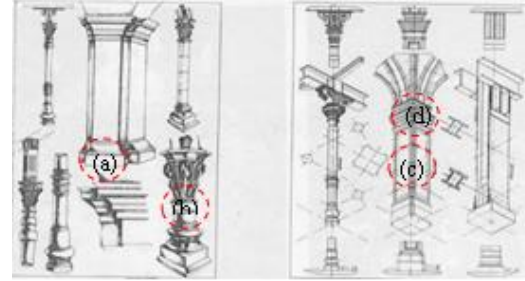
Information:

- a. Link dormer
- b. Gable dormer
- c. Shed dormer
- d. Lis plank
- e. Saddle Model
- f. Roof Monitor
- g. Jurai
- h. Shield

Source: (D.K. Ching, 1995)
 Figure 3: Facade Elements on the Roof of the Building

2.1.2. Element of The Body Section

The facade elements contained in the body include entrances, openings on walls, and columns. The entrance, an element of self-declaration from the occupants of the building, is used as a sign of transition from the public part (exterior) to the private part (interior). The openings on the walls, which function as a light source for the interior space, are also building openings that allow views from the inside out of the building. The columns have a relationship with the ground and should carry this load themselves which should be enough to be given higher consideration to these two properties [4].



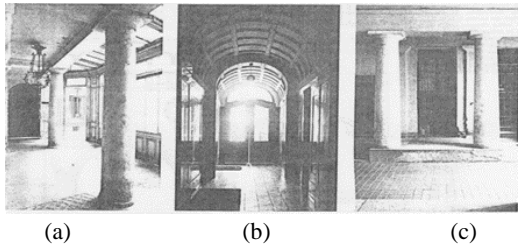
Information:

- a. Pedestal columns
- b. Base column
- c. Shaft Column
- d. Capital columns

Source: (D.K. Ching, 1995)
 Figure 6: Elements on the column

2.1.3. Element of The Leg Section

The facade elements found at the foot of the building include stairs [5]. The staircase is a vertical element of the entrance to the building, which allows a person to go up and down from one floor to the next floor.



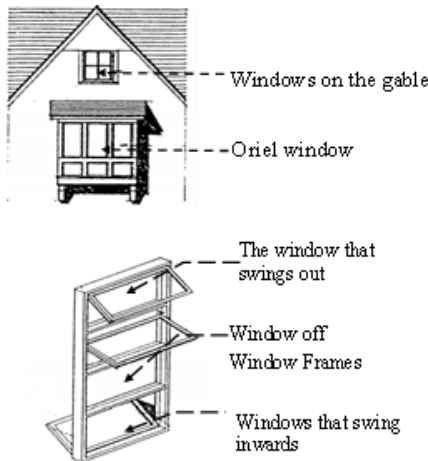
Information:

- a. Pillar
- b. Hallway with arch at the top
- c. Two pillars located in front of the entrance

Source: (Krier, 1983)
 Figure 4: Entrance

2.2. Materials

Material is composed or made by material [6]. Material is defined as raw materials processed by industrial companies that can be obtained from local purchases, imports, or processing carried out by themselves [7]. Some materials that affect the visual appearance of the facade of the building can be seen in table 1.



Source: (D.K. Ching, 1995)
 Figure 5: Elements of window openings on the facade of buildings

Table 1 Types of Materials

No.	Material Types	Material Characteristics
1.	Brick	<ul style="list-style-type: none"> • Pairs made of clay • Rectangular shape • Hardened by drying or burning
2.	Concrete	<ul style="list-style-type: none"> • Like an artificial stone • A mixture of cement and water mineral aggregates to bond the entire mass
3.	Ceramics	<ul style="list-style-type: none"> • One type of non-corrosive hard clay • Nonconductive material • Formed by ionic bonds of metal but not metal
No.	Material Types	Material Characteristics

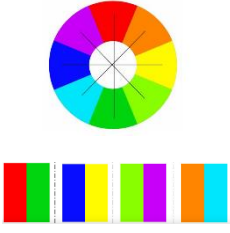
4.	Glass	<ul style="list-style-type: none"> Fragile yet hard material Transparent or permeable by light Produced by combining silica together with flux and stabilizer
5.	Metal	<ul style="list-style-type: none"> Including Types of Metal, gold, silver, or copper Substances Solid and numerous are characterized by opacity, conductivity Sparkle occurs when cracking
6.	Paint	<ul style="list-style-type: none"> Solid Pigment Mixture For protection and decoration
7.	Plastic	<ul style="list-style-type: none"> Synthetic or natural organic ingredients Has molecules that can be formed, extruded
8.	Stone	<ul style="list-style-type: none"> It has a solid mineral substance that is formed naturally by the action of heat or water that occurs.
9.	Wood	<ul style="list-style-type: none"> It is the most abundant fiber of substance obtained from the trunk and branches of trees under the bark

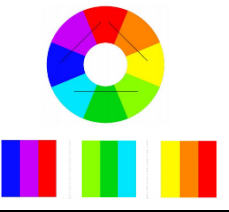
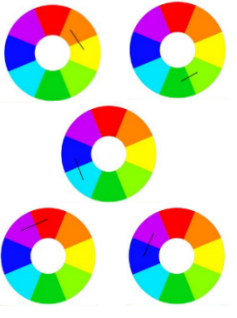
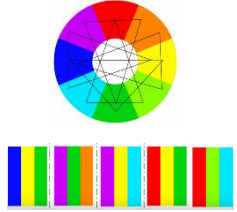
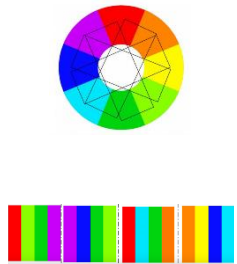
Source: (D.K. Ching, 1995)

2.3. Color

Color is a phenomenon that occurs due to the presence of three elements, namely light, object, and observer (it can be an eye or a measuring instrument) [8]. The definition of color is a particular spectrum that exists in perfect light and has various types [9], which can be seen in table 2.

Table 2 Types of Colors

No.	Color Types	Description
1.		Complementary colors are colors obtained by drawing straight lines across each other and opposite each other in a color scheme.

No.	Color Types	Description
2.		This analog color is a color with serene properties to get comfort.
3.		This monochrome color is a color that matches the colors beside it.
4.		This analog color is a color with serene properties to get comfort.
5.		Tetradic color is a color obtained from within the color scheme by drawing a line into a rectangular shape. In the rectangle, the color is obtained in its intersection.

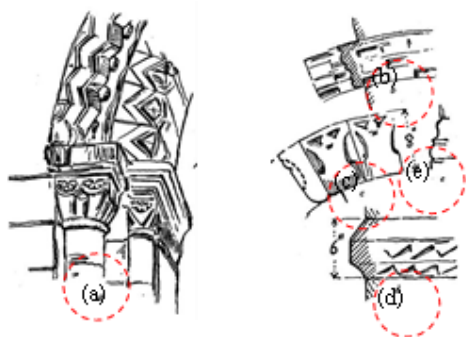
Source: (Ardiani, 2015)

2.4. Architecture Style

Architecture is part of the culture, while culture is man's work. Since the post-modern era, many architects have debated this style, which means things related to a feature, such as culture, figures, etc. [10]. Each building has a particular style or period that starts from construction because, considering any architectural style, we cannot ignore certain material boundaries [11].

2.4.1. Romanesque Architecture Style

The first 'Romanesque' building in the English city of Cambridge was Saxon and Norman, where the arch shape was used for the entrance alley section or for openings such as doors and windows, and this was a form of one of the Romanesque styles.



Information:

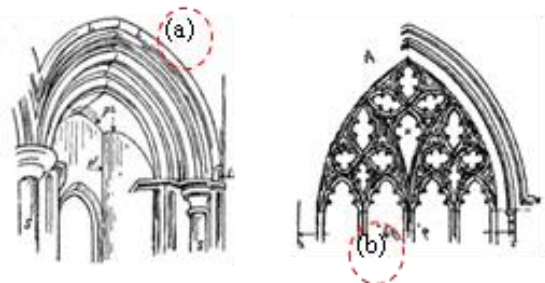
- a. Chancel arch
- b. External arch
- c. External rings
- d. External Rings
- e. Shaft and Base

Source: (Theodore, 2009)

Figure 7: Curved shape on the details of the gate ornament

2.4.2. Gothic Architecture Style

The gothic beginnings can look very good in the advantages of the Ely Cathedral, which has curved and pointed windows. Gothic architecture is an identic style with the shape of arches and pointed domes.



- a. Ornament on the apex
- b. Ornment/motif on the glass

Source: (Theodore, 2009)

Figure 7: Ornaments on the entrance gate

2.4.3. Art Deco Architecture Style

Art Deco emphasizes geometric elements, stability, speed, and perfection. Art deco has several characteristics. Namely, a mixture of traditional materials with technology, the materials commonly used are stainless steel, aluminum, glass block, limestone, terrazzo, marble, and terracotta; there are also sun motifs, flowers, shapes of people and animals from ancient Egypt are often applied, the use of soft pastel colors, and finishing furniture with varnish, deco paint, silver, chrome, and gold [12].

2.4.4. Colonial Architectural Style

The colonial architecture of the archipelago began in the 16th century to the 1800s. When Indonesia was still referred to as the Nederland Indische (Dutch East Indies) under the rule of the Dutch trading company, the VOC [11], the urban buildings of the Dutch in this period were still in the Dutch style where in shape they tended to be long and narrow, the roof is steep, and the front wall is multi-story. In the 19th century, the Indische Empire Architectural Style (1870-1900) flourished in the Dutch East Indies and was popularized by General HW Daendles [14]. After the Period of Indische Empire Architecture, there was a Transitional Style (1900-1920). A transition style is a form of modern architectural compromise that developed in the Netherlands then and adapted to Indonesia's tropical climate. After that, there was the Indo-European Style period (1920-1940), also called Nieuwe Bouwen. The application of this style is adapted to the local climate and technological level [13].

2.5. Methodology

This research method uses a descriptive method of analysis carried out descriptively and qualitatively by discussing data on various types of aesthetic elements on the facades of Church buildings and theories about

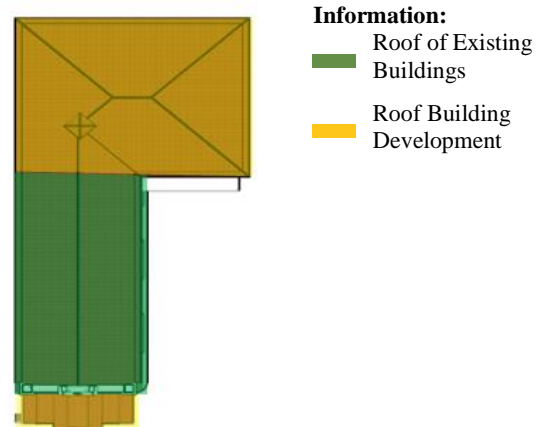
architectural styles sought through literature studies. Stages were carried out in this study through several studies, which included analysis of aesthetic elements of building facades on the building's head, body, and legs. The aesthetic elements of the facade are traced to their design with style applied to the design of the facade of the Church building related to materials and colors. The results of this study can be seen as various types of aesthetic elements to the architectural style used in the facades of Church buildings.

3. Results and Discussions

St. Yusuf's Catholic Church is the oldest in West Java, designed by a European architect named Gantz Slotz and inaugurated in 1880. The church building has undergone some developments in the front, rear, and side masses of the building but retains the original facade of the Church building. This church building consists of 4 facade sections with some simple aesthetic elements that are visible on the head, body, and legs.

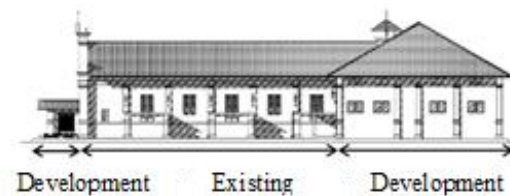
3.1 Aesthetic Elements of the Head Facade to the Architectural Style

The aesthetic element of the head section contained in the facade of the church of St. Yusuf Cirebon consists of several elements on the roof. The roof of the Church building has undergone some development at the front and rear of the existing building as shown in figures 9 and 10.

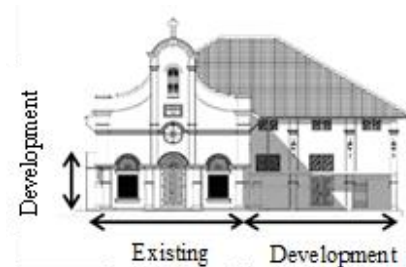


Source: (Author, 2021)

Figure 9: The layout of the roof of St. Yusuf's Church building is viewed from above



(a) Left side view



(b) Front side view

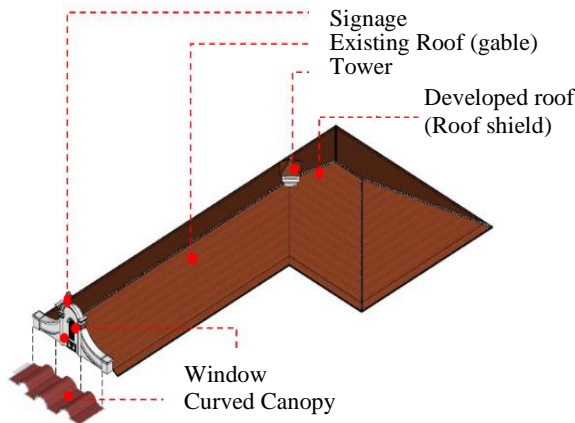
Source: (Author, 2021)

Figure 10: Facade of St. Yusuf's Church Cirebon

3.1.1 Roof Shape

St. Yusuf's Church Cirebon has a mountainous roof type (alpine style) using a combination of a saddle tap and shield roof, at the front of the gable roof ended by a masonry wall / am pig [5]. The shape of this roof is not steep because it has an angle of 30° as seen in figures 11 and 12. in accordance with the climatic conditions

of Indonesia which only recognizes two seasons, namely the rainy season and the dry season, so that such a roof shape is the style of **Indische Empire Architecture** [14].



Source: (Author, 2021)

Figure 11: Isometry of the Roof Shape of St. Yusuf's Church building



Information:

- a. Curved combination roof and flat in development section main entrance
- b. Gable roof in the existing section
- c. Shield roof in the development section back area

Source: (Author, 2021)

Figure 12: Roof Shape of the Building viewed from above

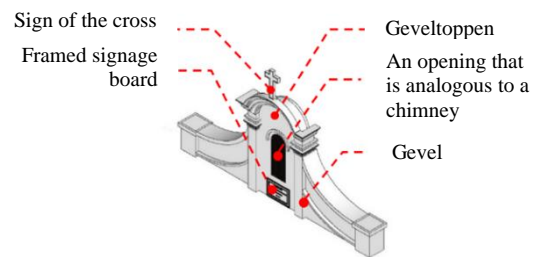
3.1.2 Roof Elements

a. Signage

The Signage element in St. Yusuf's church serves as a signpost of the identity of a building with other buildings. St. Yusuf's Church has two signs, including a sign that forms the symbol of the cross and signage in the form of a frame, as shown in figure 13. The sign that

forms the cross symbol is above the top of the gavel toppen, while the signage that is a frame and equipped with letters is at the bottom of the gavel right in the window opening, which is analogous to a pseudo-chimney as ventilation that is useful for air circulation.

The type of material used on the cross-signage elements uses concrete printed in the form of a cross with a white paint finish and given a little black color on each edge line, while the material used on the framed signages uses wood.

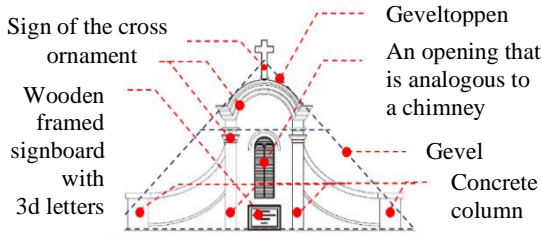


Source: (Author, 2021)

Figure 13: The location of the sign on the gavel

b. Gevel

The Gevel element in the building of The Church of St. Yusuf Cirebon is located on the front facade, where the back of the gevel has a saddle-shaped main roof. The gevel in this church building tends to be triangular, supported by four columns, and has some ornaments that are not too complicated, such as Picture 14.



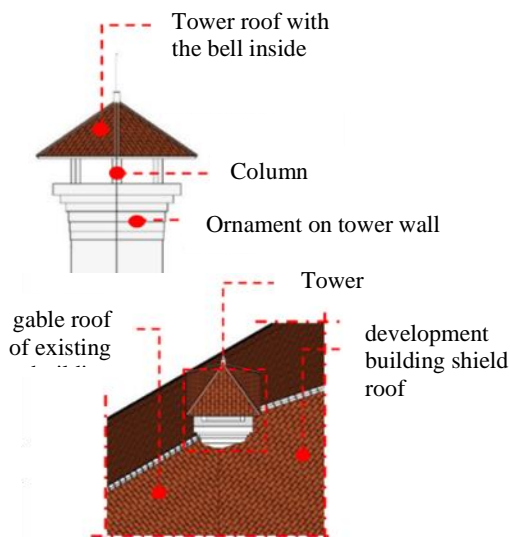
Source: (Author, 2021)

Figure 14: Gevel on the front facade of St. Yusuf's Church Cirebon

Several types of materials are used in this gevel element, including the walls on the gevel using bricks with paint finishing, columns, and ornaments on the gevel tend to use concrete with the dominant color white shown in figure 14.

c. Towers

The church building of St. Yusuf Cirebon has a tower used as a bell holder. The bell serves to break the time of worship. In figure 15, the roof of the Church tower is in the shape of a pyramid supported by four columns that are not too large, where the location of this tower is right at the top of the roof, meeting between the gable roof and the shield roof, but the tower in the church is not too high so that the tower does not interfere with the shape of the other roofs.



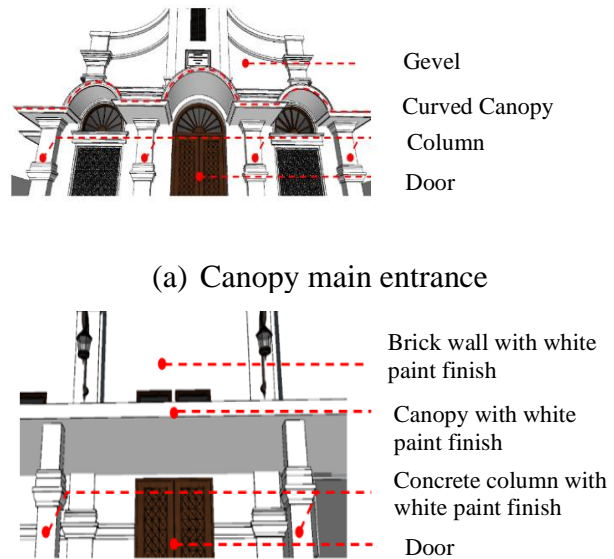
Source: (Author, 2021)

Figure 15: The tower at the top of the roof of the church building of St. Yusuf Cirebon

The types of materials used in the tower elements include the walls use bricks with a white paint finish, the wall ornaments use stucco carved in such a way as in figure 15, the columns use concrete, and the roof covering uses a precarious made of clay with a brown-reddish color is an analogous color that gives the impression of a sense of comfort [9].

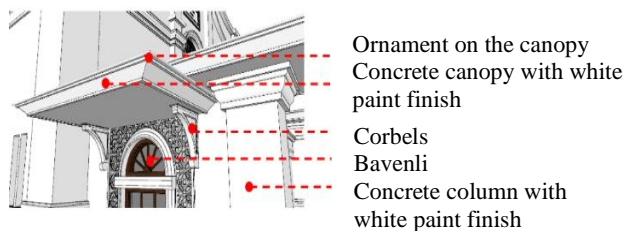
d. Canopy

At the entrance of the St. Yusuf's Church building, there are two different models and shapes of canopies, namely arch, and flat shapes. The canopy model with an arched shape is in the main entrance of the building, where there are three arches on the canopy, which are supported by four columns, with the largest arch being at the main door, as shown in figure 16(a), while the canopy with a flat shape model is in the side entrance which is the development of the front area and the back area. The canopy with a flat shape on the side entrance of the rear area is supported by columns, as shown in figure 16(b), while in the side entrance, the front area is only supported by two corbels /elbows, as seen in figure 16(c).



(a) Canopy main entrance

(b) Rear side entrance canopy



(c) Front side entrance canopy



(d) Photo of the location of the type of canopy

Source: (Author, 2021)

Figure 16: Types of Main Entrance Canopies, Side Entrance Front Area and Back Area of the Building

The material on the canopy in church buildings tends to use concrete with a white paint finish. There are less complicated ornaments on the canopy located in the development part of the front area, such as in Figures 16(a) and 16(c). The arch-shaped canopy model has a roof cover in the form of a metal sheet.

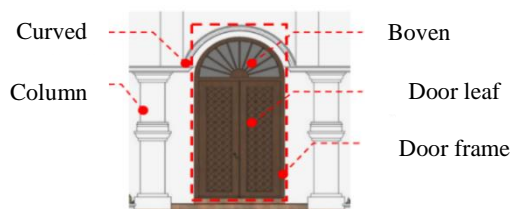
The roof of St. Yusuf's Church in Cirebon is included in the Colonial Architecture style because this element emphasizes the vernacular elements of Dutch architecture in the form of gvels, towers, and openings analogous to pseudo-chimneys [13]. At the top of the geveltoppen, there is also an ornament with a cross symbol that strengthens the colonial architectural characteristics on the roof elements of the Church.

3.2 Aesthetic Elements of The Facade of the Building Body Parts Against the Architectural Style

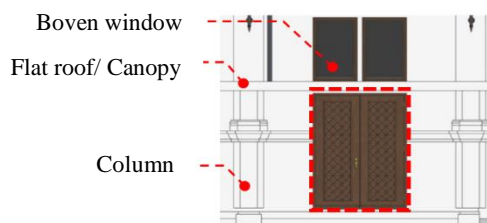
The aesthetic elements of the body parts in the facade of the church of St. Yusuf Cirebon consist of several building elements, namely the gate or entrance, walls, columns, and openings on the walls/windows.

3.2.1 Elements at the Entrance

The entrance element found in St. Yusuf's Church has two entrances, including the main entrance located in the front area of the building, as shown in figure 17(a), and the side entrance, which is in the back area of the development building as shown in figure 17(b), where from to the two doors it has the same height, namely 3,75 meters and 2 m wide ether divided over 2 door leaves.



(a) main entrance of the front area



(b) Rear side entrance area



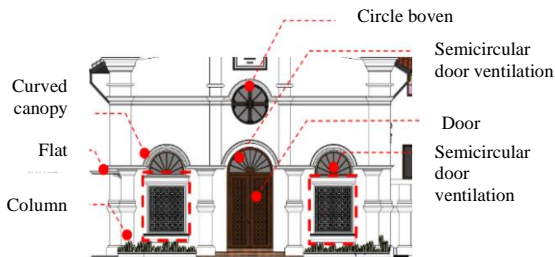
(c) Photo of door's location on the building

Figure 17: Types of Elements The main entrance and side entrance of the Church Building

However, the main entrance of the front area and the side entrance door of the back area of the building both have slightly different shapes. The top of the main door of the front area of the building has a Boven with a semicircular shape, as in figure 17(a). As shown on the door side entrance, the back area does not have a Boven semicircle, as in figure 17(b). The elements at the entrance of this building use the Transition Architecture style from the Indische Empire style to Modern Colonial architecture [15], where the building door material uses teak wood with a brown boxes motif and the upper part of the main door which is semicircular using stained glass material [5].

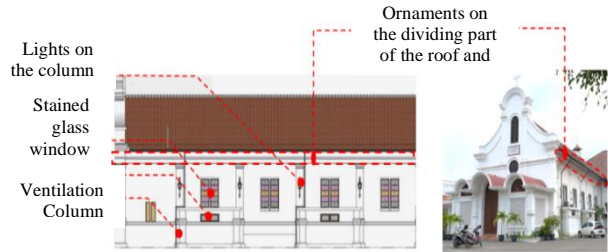
3.2.2 Elements On the Wall

The Wall Element, found in the church of St. Yusuf, uses a few motifs or ornaments that are generally widely used or applied to colonial buildings [4]. These ornaments are located on the front view of the building and the side view of the building. On the front view of the building, there are decorative ornaments that are not too complicated, as in figure 18, while on the side view of the building, there are ornaments on the barrier between the roof and the wall, as shown in figure 19.



Source: (Author, 2021)

Figure 18: Ornaments on the front view of the building



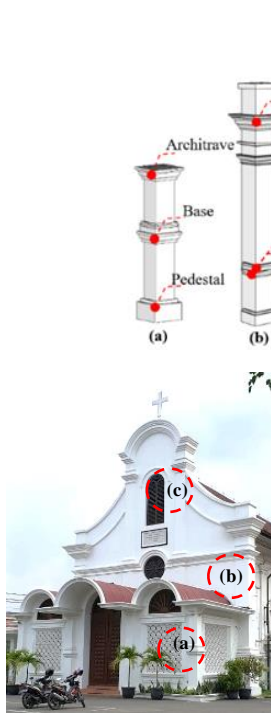
Source: (Author, 2021)

Figure 19: Ornaments on the side view of the building

The use of ornaments in the building affects the beauty of the facade of the building in the Indische Empire style, which applies colonial architectural elements in the form of decorative ornaments on the part between the roof and walls of the building. The material used on the wall is in the form of bricks with a plaster finish, which is then painted white. This predominance of white gives a monumental impression of the style of the Indische Empire that had developed at that time [14].

3.2.3 Elements in Column

The Column Element found in the church of St. Yusuf also uses motifs or ornaments located in several parts of the column, including at the top of the column, the middle of the column, and in the pedestal part of the column [5], as shown in figure 20.



Source: (Author, 2021)

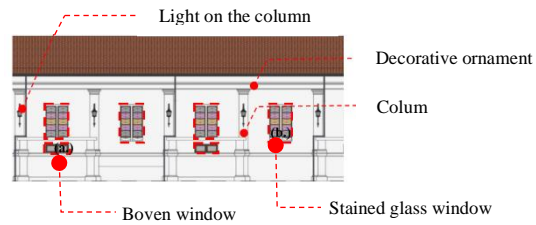
Figure 20: Ornaments on the column

The columns in this building have a square shape with a size of 90cm x 90 cm and 50cm x 50cm, with a white paint finish. The elements on the columns of this church building use the Colonial Architecture style with the Neo-Classical style oriented towards the classical architectural style, where there is an ornament located at the top of the column, middle and pedestal columns [15].

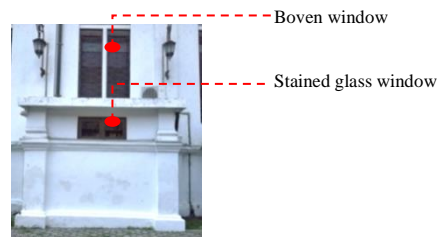
3.2.4 Elements in Window Openings

The Window Elements found in the church of St. Yusuf are located on the left side and right sides of the building [5]. The windows on the facade of the building have large and tall size, so it adds a vital element of verticality due to the height of the windows being higher than the door. The window has a rectangular shape, as shown in figure 21. In the front view of the building, there is also an opening on the facade located above the main entrance, which is

circular and rectangular with a semicircle at the end of the top, as shown in figure 22.

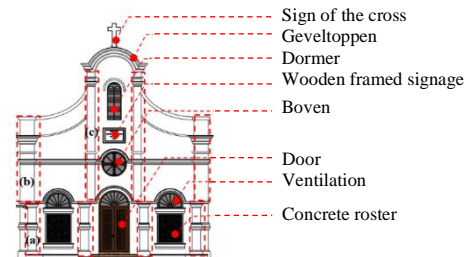


a. Window on the rear side area

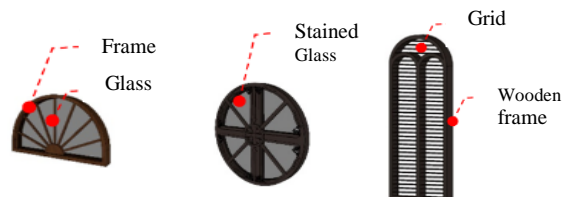


Source: (Author, 2021)

Figure 21: Window openings on the side view of the building



b. Window on the front area



Source: (Author, 2021)

Figure 22: Window openings on the front view of the building

The window material used in buildings is stained glass or stained glass with wooden sills. The color used on the window frame matches the color of the entrance. Of all the elements on the body, the building has an Indische Empire,

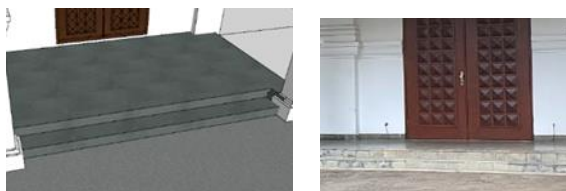
Romanesque, and Gothic touches on the wall/window openings [11]. It can be seen from the ornaments on the walls it is not too crowded with decorations, such as buildings in the Gothic style. So, this building has a Romanesque style with a slight Gothic touch on the windows.

3.3 Aesthetic Elements of the Facade of the Foot of the Building Against the Architectural Style

The aesthetic element of the leg part contained in the facade of the church of St. Yusuf Cirebon consists only of elements of steps [5]. The staircase element on the facade of St. Yusuf's Church is in the main entrance and side entrance areas of the building, where this step serves as a path to enter the church building, as shown in figure 23.



(a) Steps at the main entrance of the building



(b) Steps on the side entrance of the building

Source: (Author, 2021)

Figure 23: Elements at the foot of the Church Building of St. Yusuf Cirebon

The finishing material used on the steps at the main entrance uses terracotta brown ceramics, while the steps on the side entrance use gray terrazzo ceramic finishing. The foot elements in the building of St. Yusuf's Church use art deco style, seen in the selection of finishing materials on the steps of the main entrance and side entrance using terracotta ceramics and teraso in

figure 26. The ceramics have geometric shapes mounted parallel, and a standard shape pattern [12].

4. Conclusion

From the results of this analysis, it can be implied that the church of Santo Yusuf Cirebon is the oldest colonial building in West Java that functions as a place of worship for Christians and has interesting aesthetic elements with simple ornaments in each appearance of the facade. The aesthetic elements in the facade display are divided into the building's head, body, and legs, where each part is adjusted to the architectural style. Several roof elements in it are influenced by the Colonial Architecture styled by using molded concrete, bricks, and elements on the body influenced by several styles, including:

1. The elements on the doors and walls use the Indische Empire style with co-late teak wood material and bricks with a paint finish in the form of plaster painted in white. These elements on the columns use Colonial Architecture with concrete material and white paint finishing.
2. Element on the window openings uses a Romanesque style with a Gothic touch and window material, namely stained glass and brown wooden sills.

The elements on the legs consist of steps that use Art Deco styles with brown terracotta ceramic material and gray terrazzo ceramics.

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