

Utilization of Colonial Buildings into Business Houses in Semarang

Ratna Hardianningrum ª*, Retno Rizkia ª

^a Department of Architecture, University of Muhammadiyah Semarang, Semarang, Indonesia * ratnahardian@unimus.ac.id

Abstract. Colonial buildings that still survive today are the main attraction because they have high characteristics and historical value. Colonial buildings are one of the cultural heritage that needs to be maintained. The existence of colonial residential buildings must be maintained and utilized commercially as one of the solutions to survive. Maintenance of old colonial buildings is not easy, it needs to be quite expensive due to the age of the building and the need for rejuvenation. Heirs or owners of colonial buildings must maximize the building commercially, one of which is on the building on Jalan Beringin Sekayu Semarang by making it a business house. This colonial building has not yet entered the cultural heritage building. Still, it has the potential to enter the cultural heritage building in the future judging from the history and appearance of the building's façade.

The use of colonial residential buildings in business houses needs careful adjustment and arrangement because of the existence of 2 different functions. Residential houses are private zones that require the privacy of homeowners and their families, while business premises are public zones that can be accessed publicly and must reflect professionalism to be trusted by clients and must increase employee productivity. Comfort as a home and professionalism in a place of business are not easy to do without good planning. Planning must not change the total face of the building so that the historical value of the cultural heritage is not lost. Spatial adjustments must also be made by considering aspects of function, comfort, and professionalism. Without good planning, colonial buildings that have historical value, and cultural heritage characteristics will be lost and buildings cannot function properly with disruption of activities as residences and places of business.

The research was conducted with descriptive qualitative research methods through field observation, interviews, and literature studies. Research needs to be done so that colonial buildings can survive as cultural heritage and be used properly with adjustments due to their function as a residence as well as a place of business. The results of the study can describe the changes or adaptations that occur due to the use of colonial buildings of residential houses in places of business. These changes and adaptations include the appearance of the façade, zoning area, and circulation.

Keywords: Utilization, Colonial Building, Business House, Semarang

I. Introduction

Colonial buildings are Dutch heritage buildings that are still found in Indonesia, especially in the city of Semarang, Central Java Province. Development of urban areas where on Jalan Beringin Sekayu Semarang have found many restaurant and office buildings. This colonial residential building located on Jalan Beringin I no 8 Sekayu Semarang is unique because of the characteristics of colonial buildings among the onslaught of modernization of buildings around the area. This colonial building has also been utilized not only as a residential house but also as a place of business. The existence of these colonial buildings that still survive today can be a special attraction because they have historical value and become a cultural heritage that needs to be maintained and preserved their existence.

The criteria for cultural heritage buildings in Article 5 of Law number 11 of 2010 area. 50 (fifty) years old or more b. represents a style period of at least 50 years old c. has special

meaning for history, science, education, religion, and/or culture and d. has cultural value for strengthening the nation's personality.[1]. Although currently the building has not been registered as a cultural heritage building, all criteria can be included in the building. The building owner has not registered the building as a heritage building with certain considerations. The role of the government is very important to be able to provide understanding and explain the benefits that can be obtained by owners of cultural heritage buildings. Some colonial buildings have not yet entered the cultural heritage building, so it is feared that colonial heritage buildings in the area have disappeared.

Currently, the building has undergone a function adjustment which was originally a residential house turned into a business house. Colonial buildings used for business premises independently will have an influence on the environment in creating a new atmosphere in the Dutch colonial building environment. The development of business activities in colonial buildings must be planned a good management of colonial buildings so that the building is maintained sustainably and maximizes its function as a residence and place of business but does not interfere with activities.[2]

I.I Colonial Buildings

Colonial buildings adopt colonial architectural style which is defined as buildings with architectural styles combining Western and Eastern cultures. From 1624 to 1820, the *Dutch Colonial* style was the preferred design style in the Netherlands. The colonial architectural style originated from the desire of Europeans who were in charge of the colonies to create colonies as if they were their home countries. However, due to several factors such as differences in climate, lack of availability of building materials, and technical differences, the shape of the design could not exactly match the original, so a modification was obtained that resembled the design in their home country. [3]

Colonial architecture comes through the work of Dutch architects and is intended for Dutch people living in Indonesia, in the period before independence. The architecture that was present in the early post-independence period was more or less influenced by colonial architecture. In addition, there is also the influence of the desire of architects to differ from existing colonial architecture. [4]

Colonial architectural style in Indonesia according to Handinoto (2012) is divided into three, namely; Indische Empire (18th-19th centuries), Transitional Architecture (1890-1915), and modern colonial architecture (1915-1940).

A. Indische Empire style (18th-19th century)

According to Handinoto (2008), this architectural style was introduced by Herman Willen Daendels while serving as Governor-General of the Dutch East Indies (1808-1811). Indische Empire Style (Imperial style) is an architectural style that developed in the mid-18th century to the end of the 19th century. This architectural style began in the suburbs of Batavia (Jakarta), the emergence of the style was due to a culture in the Netherlands that mixed with Indonesian culture and a little Chinese culture. Milano in Handinoto (2012) reveals the architectural characteristics of the Indische Empire, among others:

- 1. The floor plan is fully symmetrical, in the middle there is a "central room" consisting of the master bedroom and other bedrooms. The central room is directly related to the terrace Achter Galerij).
- 2. The terrace is usually very spacious and at the end there is a row of columns in the Greek style (Doric, Ionic, Corinthian).
- 3. The kitchen, bathroom/WC, warehouse, and other service areas are separate parts of the main building and are located at the back.
- 4. Sometimes beside the main building there is a pavilion used as a guest bedroom.

Vol I (I), 2024, 23-33

B. Transitional Architectural Style (1890-1915)

According to Handinoto (2012), transitional architecture in Indonesia lasted very short, namely from the end of the 19th century to the beginning of the 20th century between 1890 and 1915. The transition from the 19th century to the 20th century in the Dutch East Indies was filled with changes in society due to the modernization of discoveries in technology and the political policies of the colonial government. The characteristics of transitional architecture according to Handinoto (2012), among others:

- 1. The floor plan still follows the Indische Empire style, with full symmetry, the use of a perimeter terrace, and the removal of Greek-style columns in appearance.
- 2. Gevels in Dutch architecture located on the banks of the river reappear, adding a romantic impression to the appearance and making a tower at the main entrance, as found in many Calvinist churches in the Netherlands.
- 3. The shape of gable roofs and shields with tile covers is still widely used and uses additional construction as ventilation on the roof (dormer).

C. Modern Colonial Architectural Style (1915 - 1940)

According to Handinoto (1993), modern architecture is a protest made by Dutch architects after 1900 over the Empire Style style. Dutch architects with academic education began to arrive in the Dutch East Indies, they got an architectural style that was quite foreign because the Empire Style architectural style that developed in France did not get a welcome in the Netherlands.

Modern Architecture has the following characteristics:

- I. Floor plans are more varied, according to creativity in modern architecture.
- 2. The form of symmetry is avoided a lot, the use of terraces around buildings is no longer used, instead often used light retaining elements.
- 3. The building looks more reflective of Form Follow Function or Clean Design.
- 4. The shape of the roof is still dominated by gable or shield roofs, with tile or shingle covering materials.
- 5. The building uses concrete construction, using a flat roof made of concrete material that has never existed in previous times.

According to Handinoto in his book (1996) the characteristics of colonial buildings are as follows: I. Gable/level, located in the visible part of the building, is triangular and follows the formation of the roof. 2. Tower, various shapes, ranging from round, square, or slender quadrangle, hexagon, or other geometric shapes, 3. Dormer/Pseudo chimney serves for air conditioning and lighting. In its native Holland, dormers are usually towering and used as chambers or chimneys for fireplaces. 4. Tympannon/Wind-fed lamp, is a symbol of prechristian times manifested in the form of a tree of life, horse's head, or sun wheel. 5. Ballustrade, A balustrade is a fence usually made of cast concrete used as a balcony guardrail, or building deck. 6. Bouvenlicht / Ventilation hole, Bouvenlicht is an opening on the face of the building that serves to meet the needs of health and thermal comfort. 7. Windwijzer (Wind indicator), is an ornament placed on the roof nok. This ornament serves as a wind direction; 8. Nok Acroterie (Rooftop decoration), located at the top of the roof. This ornament was once used in farmhouses in the Netherlands and is made of reed leaves. 9. Geveltoppen (Decoration of the top of the front roof); - Voorschot, triangular and located at the front of the house. [5]

According to Handinoto (2006), the character of transitional architecture has a gable and shield construction, tile roof covering, the use of ventilation on the roof (dormer), a high roof shape with a large slope between 450-600, the use of arch shapes, Greek order columns have begun to be abandoned, columns have used wood and concrete, shoulder walls, brick and

wood main building materials and the use of glass (especially on windows) is still very limited. Visual characteristics of modern colonial architecture (1915-1940) according to Handinoto (2006), among others: using a flat roof made of concrete, using horizontal level, starting to use cast iron, beginning to use glass in large quantities, the use dominant white color, walls only function as coverings and the use of glass (especially on windows) that are wide enough.[6]

I.2 Business House

The phenomenon of the use of residential houses in business places is increasingly rife in big cities including the city of Semarang, Colonial residential buildings can also be used as business houses by the regulations of Article 49 paragraph (1) of Law number 1 of 2011 concerning Housing and Settlement Areas, the use of houses can be used as business activities on a limited basis without endangering and not interfering with residential functions. [7]

The definition of a business house according to Handa S. Abidin is: "A business house or more often called a place of business is a place used for trading activities, industry, production, service business, storage of documents related to the company, as well as storage or exhibition activities of goods, including residential houses that are partly used for these activities".[8]

I.3 Function Adaptions

Residential houses that experience changes in function, due to business or economic influences are referred to as productive homes. The function of the house must be able to accommodate two different activities, including household activities and production activities. Utilization of space in the house for business activities so that the community can benefit from the business so that the house as a place of residence can also be used as a source of livelihood or source of income. [9]

With the use of residential houses into business houses, of course, you must pay attention to some aspects of the relationship between colonial buildings as cultural heritage so that adjustments are needed that are not easy, although the function changes are not allowed to change the total façade of the building. If you replace building components, if one day it is returned to the original it can still be done.

Another form of adaptation to the new function is the addition of space or buildings. To maintain harmony with cultural heritage buildings, the architectural style of additional buildings should be contextualized to the style of conservation buildings so that they can be harmoniously side by side. Therefore, the design of a new building must be harmonious respond to its environment, and be an intermediary with its environment. By paying attention to the condition of the surrounding building, the community, and local culture and using materials derived from where the architecture will be built.[10]

The easiest part of the building to see is the face of the building or the façade of the building. The style of a building is largely determined by the façade of the building. For example, the façade of a traditional building will be different from the façade of a colonial building. The characteristics and forms of the elements of the two buildings will be different and each element will not apply to other buildings. [11] Function adaptation must pay attention to the appearance of the building façade, it is not allowed to replace the building façade if it cannot be returned to its original.

I.4 Purpose and Principles of Preservation

The purpose of preservation is to restore a colonial building as a cultural heritage that must be maintained and preserved. Preservation can be used without changing the overall façade of the building, but can change its function as needed. The act of preservation must have a clear purpose linked to the underlying principles. Principles of Preservation include: : a. Building understanding.

When cultural heritage buildings are damaged, preservation actions must be carried out in one stage after another which in the process often takes a lot of time. This is because the characteristics of one building with another building must be different. Each building has its uniqueness and characteristics, even though it is in the same environment. So no equal preservation measures are taken on different buildings.

b. Minimal intervention.

This principle aims to preserve as much as possible the original building materials contained in cultural heritage buildings. Whatever happens at the time of preservation and alteration, the authenticity of the building must be strictly maintained as much as possible. Minimal intervention is one form of implementing sustainable construction to maintain the value of building cultural heritage. [12]

c. Reversibility.

This principle is based on the realization that conservation actions often have to be carried out with historical and technical conservation data that have not been obtained perfectly to save the heritage building from destruction.

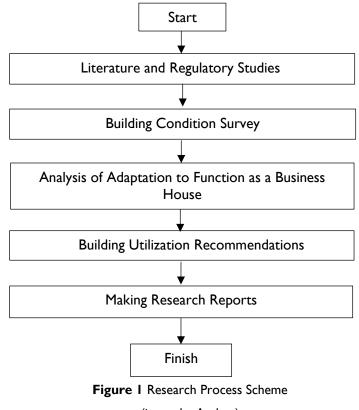
The principle of reversibility or re-replacement becomes a reference when changes in cultural heritage buildings must be:

- I) Can be restored as before, if technically possible.
- 2) Can accommodate future intervention actions if needed.
- 3) Does not rule out the possibility of subsequent access to all evidence relating to the building.

To avoid uncontrolled changes and damage from the community or damage to buildings, it is necessary to preserve cultural heritage buildings. Although the colonial building on Jalan Beringin Sekayu Semarang has not been registered as a cultural heritage, maximum preservation must be pursued so as not to become extinct. Preservation is needed to protect historical buildings in Semarang City from the incessant development of the city, including controlling the development of the area so as not to lose its historical and cultural identity.

2. Methods

The research was conducted using Qualitative Methods with field review research designs and literature studies (laws and regulations, scientific books) on the use of colonial buildings in business houses. Broadly speaking, the research method to be carried out is as the flowchart below:



(image by Author)

The research was conducted through several stages, namely:

I. Literature and Regulation Studies

Literature and Regulation 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 use of colonial buildings in business houses. Meanwhile, the regulatory study is carried out by reviewing the applicable laws and regulations related to the divorce of cultural heritage buildings and the use of residential houses into business houses on a limited basis.

- 2. Building Condition 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.
- 3. Function Adaptation Analysis
 - This stage analyzes the adaptation of functions due to utilization as a business house which must be described and documented properly.
- 4. Recommendations for the Utilization of Functional Buildings This stage recommends how to use the building to be fit for function, both as a residence and as a place of business, and trying to preserve it by restoring the original form of the colonial building which is the cultural heritage and has historical value.
- 5. Research Report Generation

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

3. Results and Discussion

The Colonial Building on Jalan Beringin I No 8, Sekayu, Semarang based on photo documentation of the owner of the house in 1974 functioned as a residential house. Colonial-

Journal of Architecture and Urban Studies Vol 1 (1), 2024, 23-33

style building with Gable/level, located in the visible part of the building, triangular that follows the formation of the roof, the existence of towering towers / towering towers in the form of slender boxes, the presence of tympannons / winded / canopies, the presence of bouvenlicht / ventilation holes, bouvenlight is an opening on the face of the building that serves to meet the needs of health and thermal comfort, the presence of nok acroteria (rooftop decoration), located at the top of the roof, Geveltoppen (Decoration of the top of the front roof); -Voorschot, triangular and located at the front of the house. [5]



Figure 2. Colonial Building on Jalan Beringin I No 8, Sekayu in 1974 (image by Documentation of Resource Persons)

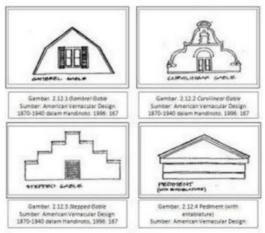


Figure 3. Types of Colonial Building Gavel (image by Handinoto, 1996)

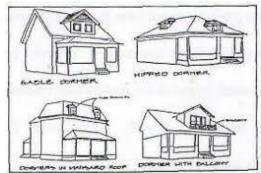


Figure 4. Detail of Dormer Elements of Colonial Buildings (image by Handinoto, 1996)

Changes only some parts of the doors and windows were replaced and the roof of the tower was damaged due to the age factor of the building. The use of colonial residential buildings into residential houses, with the consent of the family, the building is also used as a place of business (office & workshop/production place) engaged in design consultants and contractors of Architecture, Interior, and Furniture work. The underlying factor is used as an office because of its strategic location on Jalan Beringin Sekayu which is the center of Semarang and the ease of access to achievements.



Figure 5. Zoning Area (image by Field Survey, Author)



Figure 6. Office Entrance and Workshop/Production Area (image by Field Survey, Author)



Figure 6. Office Staff Work Area and Lounge & Meeting Room (image by Field Survey, Author)

Journal of Architecture and Urban Studies Vol 1 (1), 2024, 23-33

This colonial building is located on the land of Banyan I street hook so that it can maximize the appearance on both facades, where the front façade is an office as well as a workshop/production place and the side façade is a residence. Zoning space clearly shows the separation between office/business zones and residential houses. The office/business zone is in front and the residence is in the side area. The circulation path is separated between the office and the residence, and has different entrance access, the office enters through the front door, while the residential house enters through the side door, so as not to interfere with each other's activities.



Figure 7. Front View (image by Survey. Redraw Author)

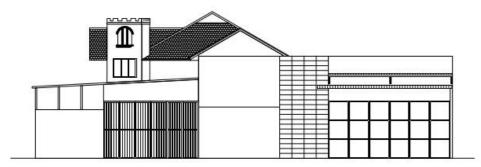


Figure 8. Side View (image by Survey. Redraw Author)

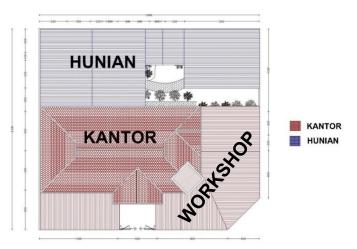


Figure 9. Siteplan (image by Survey. Redraw Author)

The circulation in the colonial building that functions as a business house has a separate concept between residential and office/workshop. So that each activity, both residential and office, can run well according to its function. There is a clear separation between home and business. Employees or guests do not have access to the residential area because it is separated by a glass door that is always locked and only the owner can access it. The glass door serves as the boundary of the dividing area between the residence and the place of business. The owner uses a glass door divider to make it easier to supervise activities in the office/business area and residential areas.

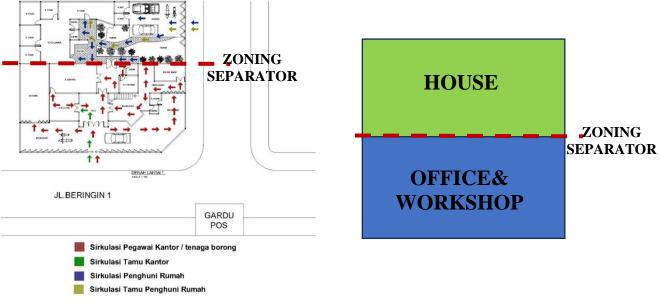


Figure 10. Siteplan and Zoning Area (image by Survey. Redraw Author)

4. Conclusions

Colonial buildings that adapt their function to become business houses can be utilized optimally without disturbing residential and business activities by paying attention to the following aspects colonial buildings have the characteristic beauty of buildings that must be preserved because they are cultural heritage and have high historical value, function utilization requires adaptation and adjustment of space patterns to suit needs without changing the face of the building façade, there is a clear zoning separation between the home area and the office /business area so that it does not interfere with each other's activities, and there is a clear separation of circulation between residence and place of business. Employees cannot access residential areas, only owners can access residential areas and office/business areas.

References

- [1] Law on Cultural Heritage, "Law No. 11 of 2010," 2010, Accessed: Sep. 03, 2023. [Online]. Available: https://peraturan.bpk.go.id/Home/Details/38552/uu-no-11-tahun-2010
- [2] Antonius Ardiyanto; Rudianto Susilo; Valentinus Suroto; Hudi Prawoto, "Colonial Buildings," Proceedings of the National Seminar on Populist Architecture, 2017, Accessed: Sep. 03, 2023. [Online]. Available: chromeextension://efaidnbmnnnibpcajpcglclefindmkaj/http://repository.unika.ac.id/15666/2/Bangun an%20Kolonial.pdf

- [3] Y. Sahmura and H. Wahyiningrum, "IDENTIFICATION OF THE STYLE AND PERIODIZATION OF COLONIAL ARCHITECTURE OF THE ARCHIPELAGO IN CULTURAL HERITAGE BUILDINGS (CASE STUDY: BETHESDA POLYCLINIC, SEMARANG)." [Online]. Available: http://ejournal.undip.ac.id/index.php/modul
- [4] N. Tamimi, I. S. Fatimah, and A. A. Hadi, "TYPOLOGY OF COLONIAL ARCHITECTURE IN INDONESIA," *Vitruvian Journal of Building and Environmental Architecture*, vol. 10, no. 1, p. 45, Oct. 2020, doi: 10.22441/vitruvian.2020.v10i1.006.
- [5] Handinoto, Architecture and cities in Java during the colonial period. 2010. Accessed: Sep. 03, 2023. [Online]. Available: https://opac.perpusnas.go.id/DetailOpac.aspx?id=160370#
- [6] A. Ashadi, Modern Civilization and Architecture. 2017. Accessed: Sep. 03, 2023. [Online]. Available: https://www.researchgate.net/publication/314307919_Peradaban_dan_Arsitektur_MODE RN
- [7] Law Article 49 paragraph I No I of 2011, "Law on housing and residential areas," 2011, Accessed: Sep. 03, 2023. [Online]. Available: chromeextension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.bphn.go.id/data/documents/11u u001.pdf
- [8] Rts. F. I., Eko N. Nursina Afriyana, "Arrangement for the Construction of Houses and Shops or Shophouses in Jambi City Based on the Concept of Urban Spatial Planning".
- [9] A. Arisngatiasih and M. Muktiali, "Patterns of Space Utilization in Home-Based Businesses (UBR) in the Beard Batik Cluster of Pekalongan City," *Journal of Area and Environment*, vol. 3, no. 3, p. 175, Dec. 2015, doi: 10.14710/jwl.3.3.175-188.
- [10] N.- Soewarno, "Harnessing the Potential and Beauty of Colonial Buildings through Building Function Transfer Case Study: Heritage the Factory Outlet on JI Riau Bandung," *Journal of Green Engineering*, vol. 4, no. 3, pp. 133–144, Nov. 2020, doi: 10.26760/jrh.v4i3.133-144.
- [11] A. Sudikno, "Facade Typology of Dutch Colonial Dwelling Houses in Kayutangan-Malang," 2008. [Online]. Available: https://www.researchgate.net/publication/315619040
- [12] S. Erik Susanto, I. Hidayat, D. Widianto, and Albertus Kriswandhono, "Implementation of Sustainable Construction in Post-Fire Building Management with Fiber Reinforced Polymer (FRP) and Jacketing (Case Study in Semarang 'X' Market)," 2018. Accessed: Jul. 29, 2023. [Online]. Available: https://journal.unika.ac.id/index.php/gsmart/article/view/1688/1516