The Identification of Ethnic Architecture Application on the Beringharjo Market Building in Yogyakarta

Aulia Widya Chandra, Dedi Hantono*, Ari Widyati Purwantiasning, Lutfi Prayogi, Yeptadian Sari, Sepli Yandri

1 Department of Architecture, Faculty of Engineering, Universitas Muhammadiyah Jakarta, Jakarta, 10510, Indonesia

*Corresponding Author: dedihantono@umj.ac.id

ARTICLE INFO

Article history:
Received 08-11-2023
Revised 20-01-2024
Accepted 28-03-2024
Available online 31-03-2024

E-ISSN: 2622-1640
P-ISSN: 2622-0008

ABSTRACT

Indonesia is an archipelago country that consists of various ethnic groups which have different cultural traditions according to the region itself. This cultural tradition has existed for generations, and it should be maintained and preserved by the Indonesian. The development of times, it makes the local value of traditional culture slowly disappear. In prevention, the application of this ethnic architecture concept can preserve the culture of a nation. One of building that has the ethnic architecture concept is the Beringharjo Market in Yogyakarta. This research uses a qualitative descriptive method using a case study approach that aims to know how the application of the Ethnic Architecture concept in the Beringharjo Market. The construction of this market reflects the Javanese ethnic culture that prioritizes harmony. The space planning of Beringharjo Market contains Javanese philosophy and the mixture of ethnicities, one of them is European ethnicity. We can see the mixture through the shape of building, this market adopts European style and traditional Javanese style. The acculturation process of two cultures that is Javanese and European cultures shows us that the mixture culture is not limited to the locality but also across continents since the olden days. We can apply the glory of the palace to this market building that has a lower degree, especially to some elements of this building using some adjustments

Keywords: ethnic, javanese culture, philosophical, traditional

1. Introduction

The traditional market is one type of market that we can see in every region to all corners of Indonesia. This market is a place to sell the groceries such as rice, vegetables, fruits, chicken, fish, and household utensils. The main activity of traditional markets is buying and selling that still has a simple system [1]. The traditional market is identical to the conditions that are not neat and not organized so that it creates an uncomfortable feeling, especially in the inner space [2]. As we know, the inner space influences the quality of user in a building.

Indonesia is an archipelago country that consists of various ethnic groups which have different cultural traditions according to the region itself. This cultural tradition has existed for generations, and it should be maintained and preserved by the Indonesian [3]. The development of times, it makes the local value of traditional culture slowly disappear [4]. In prevention, the application of this ethnic architecture concept can preserve the culture of a nation.
Ethnicity is a part of art that has existed for a long time. It is the result of cultural traditions of a place where the culture is in the shape of space as a manifestation of character community [5]. The concept of Ethnic Architecture has applied to many kinds of buildings, such as residential buildings, religious buildings, cultural buildings, and commercial buildings [6]. Until now, the application of this concept has not been widely found, especially in traditional market buildings.

The traditional market can apply ethnic concepts through its architecture. It is caused by the Indonesian culture that have close relationships and have long history among the street vendors and the traditional markets [7]. The application of ethnic elements in architecture can preserve the culture, introduce the identity of a region, preserve it for the next generation [8]. The market has enormous potential because the market is an activity center of the public space that is an image of a city [9].

Therefore, the ethnic architecture concept should introduce to the public. One of a traditional market that still applies the ethnic architecture concept is the Beringharjo Market in Yogyakarta. The Ethnic Architecture concept of the Beringharjo Market needs further research so that the concept application can develop in other traditional market buildings. This research aims to know how to apply the Ethnic Architecture concept at the Beringharjo Market in Yogyakarta.

2. Method

This research method uses a qualitative descriptive approach. The qualitative descriptive method is the presentation method that uses a written description or narrative and photographs to support the narrative. It aims to ease the reader so that they do not make wrong assumptions when reading [10].

The data collection process takes through secondary data that is the literature. Because right now, there is a pandemic in Indonesia that prevents the people to do various outdoor activities [11]. While, this analysis uses analytical tools, i.e the ethnic architecture aspect from the literature that the researcher uses.

The object of this case study is the Beringharjo Market in Yogyakarta at St. Margo Mulyo Number 16, Ngupasan, Gondomanan District, DIY Yogyakarta. This market is quite famous of its products that are the batik, and the building. This market successfully combines the local and the European ethnic elements in one building.

3. Result and Discussion

Ethnic architecture consists of the term of architecture that means the science of building, and the ethnic that means ethnicity. Ethnic architecture is an architectural concept that relates to the culture of a nation [12]. Ethnicity is a group of people who have the same views and ways of life based on values and norms, such as similarity in religion, country of origin, ethnicity, gender, education, culture, and others [13]. Ethnic or ethnicity is an identity that forms a new group based on the same preferences between individuals. Ethnic identity is a social value that is a marker of a person’s identity that classifies in general based on the place of origin [14]. These markers can be in any form including the public open space of a city [15].

Ethnic architecture is a type of architecture that we can build according to the local natural conditions that come from traditional elements. This ethnic style is a traditional design transformation from a homogeneous culture condition to a heterogeneous culture condition. The heterogeneous culture in question is the design image of traditional elements in the design of a building.

Ethnic architecture depends on the mindset of the people so that the concept is thick with meaning and philosophy [16]. When we create an ethnic style design, we should know about the characteristics design of a place that we will build. In designing this concept, there are aspects that we need to pay attention to, such as: (1) Cultural philosophy has based on ancient traditions [17]; (2) Space planning (includes macro and micro space planning) and the shape of buildings relate to philosophy; (3) Space-filling elements include a mixture of ethnic elements (such as; the use of ornaments, textures, colors, compatibility, and atmosphere).
3.1 Java architecture

Traditional Javanese architecture assumes that the building is not only a physical object but also a manifestation of the symbols and rituals of the Javanese cultural tradition [18]. In creating a Javanese ethnic style, we should first know about the character of Javanese culture and society. As we know, traditional Javanese architecture is a reflection of people's life. Traditional Javanese architectural design is famous for soft and harmonious building colors that reflect the life of the Javanese people who prioritize a calm and peaceful atmosphere [19] [20].

In Javanese Traditional Architecture, there is a characteristic space pattern of the building that consists of pendopo (front), pringgitan (middle), and dalem (inside). This space pattern is not only applied to residential buildings but also to various types of buildings. In addition, there are motifs of traditional Javanese buildings such as flora, fauna, and nature motifs. The motifs are interrelated with the influence of the Hindu era [21].

Culture tends to develop. It is because of the acculturation process [22]. The process of cultural acculturation of some areas in Java causes a mixture of foreign cultural elements that affect the building design in Java. The mixture of foreign cultures that affect some areas of Java in question is European foreign culture. It was because Java was an area of European colonization during the Dutch colonial in the past.

3.2 Cultural philosophy based on tradition

The construction of the Beringharjo Market has been going on since 1925 [23]. This market building relates to Javanese culture. In this building, the philosophy of Javanese culture is harmony and tolerance. The Javanese have a high tolerance so that this attitude becomes the basic character of the Javanese. With the development of times, they can accept and live side by side with other nations in harmony. It reflects the shape of the Beringharjo Market that build with the concept of a mixture of two cultures such as the culture of Javanese and European elements. In addition, this market activity also reflects the five principles of Javanese culture that is narimo ing pandum (satisfied and not sorry), mutual help, ngajeni (respect elders), andap asor (polite), and respect to others [24].

3.3 Space planning and building shape of philosophy

Beringharjo Market is one of the elements of the four components of the urban planning pattern of the Yogyakarta Sultanate, namely Catur Gatra Tunggal. Catur Gatra Tunggal is based on the urban planning pattern of the kingdoms in Java. It assumes the economic, social, and religious aspects should relate to the government which we cannot separate these three aspects [25].

This urban planning pattern has four components, each component has its symbol or meaning. Kraton is the center of government that symbolizes the power of the Yogyakarta Sultanate. Alun-Alun is a public open space that symbolizes the interaction space with the king. In the modern concept, public space is provided by the government at every level of the smallest territory such as hamlet or urban village [26]. The mosque is the place of worship that symbolizes the religious aspect. The market is the place of economic transaction activity. In this urban planning pattern, the location of Beringharjo Market is at the northernmost part before the monument (Figure 1).
The orientation of the Beringharjo Market that has a relationship to the philosophical axis of Yogyakarta is the building that faces the west. It is like the buildings in general that the longest side of the building places in the north or south direction while the shortest side of the building places in the west or east direction, it aims to avoid the direct sunlight. In addition, the market building has a lower degree than other buildings like the Yogyakarta Kraton. It is based on the direction of the Beringharjo Market that faces to the west. The building that considers less sacred or has a lower degree will face in a direction other than North and South.

Based on the picture above, the pattern of urban planning has a relationship with a philosophical axis that is an imaginary line that connects the South Sea – Mount Merapi and Yogyakarta Kraton that is the center of the regional space planning. This philosophical axis symbolizes the balance between humans with their God, humans with humans, and humans with nature.

The space planning of the Beringharjo Market consists of segmented stalls and kiosks, and a courtyard on the outside. Also, the layout of stalls and kiosks has a vertical and horizontal arrangement. The space arrangement of the Beringharjo Market composes several zones. The private zone that is the office space of the market manager is on the top floor. Also, the public zone that is a salesroom is on the ground floor to the ground floor.

Among the space philosophy in Java, Beringharjo Market also applies this philosophy to its buildings. Based on the space structure of a Javanese residence, the building usually consists of a pendopo (front), pringgitan (middle), and dalem (back). It does not only exist in residence, but also it exists in this market building that applies the space structure. In the 2nd mass building of Beringharjo Market, there is a pendopo at the front before we enter the main building. Then, a pringgitan area is the transition area from the pendopo to the main building. And, there is a dalem area that is a buying and selling area. The facing direction of pendopo in Javanese space philosophy is to the south. It also has a philosophy that the Javanese people have their philosophy about the cardinal directions [27]. The south direction is guarded by Sang Hyang Brahma which means a symbol of strength and resilience to disasters. However, at Beringharjo Market there is a pendopo that faces to the east.
In general, the shape of the Beringharjo Market is a rectangle with two mass buildings. The style of this market building is a mixture of European styles that is Dutch Colonial Architecture which has the shape of traditional Javanese. We can see the shape of the European-style building in the mass building on the west side that faces Malioboro Street. Meanwhile, the Javanese-style building is on the east side, where there is a pendopo that is a characteristic of traditional Javanese buildings.

Building identification is usually easy to recognize from its facade. Visual quality is more clearly legible on the front of the building. The outdoor space also provides a visual quality on the scale of urban space through the street furniture. The application of the European style on this market is visible from the front view of the mass building on the west side (Figure 2). In this building, there are air holes (Bouvenlicht) on the exterior of the building facade, especially on the front view of the Beringharjo Market. The window looks large and has a colonial architectural style. The combination of these two styles on Beringharjo Market is because this building has built during the Dutch government era where the people in this region are Dutch (Europeans) and native Indonesians (Indonesians).

In addition, the use of roofs on the Beringharjo Market has various motifs. The roof shape is an adaptation of the traditional Javanese roof that uses a pyramid roof (Figure 3). In addition, there is also a roof shape that has an adaptation of the European style. We can see this in the use of dormers on the roof that is a characteristic of European style. A dormer is a window or other opening in the roof, and it has its roof.

Apart from using a European-style roof, at the back of the Beringharjo Market (Figure 4), which is in the Pendopo, the roof of pendopo uses traditional Javanese elements. The shape of the roof is an adaptation of the
pyramid roof of the sari symbol that is a kind of Javanese pyramid roof. It usually uses in all types of buildings in Yogyakarta. This type of Javanese roof exists in Yogyakarta because Yogyakarta follows/imitates the Javanese roof shape.

Figure 4. The Pendopo of Beringharjo Market

The space-filling elements include the mixture of ethnic elements such as the use of ornaments (motifs), textures, colors, compatibility, and the atmosphere in the building. The ornament of Beringharjo Market is in the columns, both inside and outside of the building. The ornaments of the columns (Figure 5) are the basic shape of the saton motifs on top, the geometric shape of wajik in the middle of the column surface, and the padma motifs at the bottom of the column resembles the ornaments on the columns in the Yogyakarta Kraton. The various ornaments are Javanese ornaments. It has its philosophy which the saton is a symbol of unity, the wajik is the four cardinal direction symbol that symbolizes the closeness between humans, and the padma symbolizes glory and prosperity [21].

Figure 5. The detail of column ornaments at Beringharjo Market

Apart from the building columns, there is also the use of ornaments on the exterior facade (Figure 6) around the 2nd mass building (the back) that resembles the geometry motifs that uses a repetition pattern and a reduction of rectangular pattern so that it transforms into a plus sign.
Meanwhile, the ornament application of the interior building (Figure 7) that resembles Javanese motifs is patron. It usually applies to the frame-blocks of buildings, and it has a leaf shape. The use of patron motifs in this market is around the frame-blocks of buildings.

On the roof, there is makutha on the ridge of middle roof, right and left edges. On the roof of Javanese buildings, makutha often use as a motif. Makutha has a philosophy which is a king or a leader who blesses the whole room.

On the back view, there is a Pendopo of Pasar Beringharjo (Figure 8) that uses ornaments on the columns or pillars of the roof. The use of ornaments is different from the columns (Figure 9) in the Beringharjo Market, but it is still similar to the ornaments in Yogyakarta Kraton. The use of ornaments on the columns or pillars of the Pendopo is an adaptation of the Javanese flora motif that is Saton.
The facade texture of the Beringharjo Market varies that depends on the material. Generally, this market construction is cement construction. The materials of this market are local materials such as bricks, wood, and rough ceramics. Some of the Beringharjo Market use finishing materials of ordinary wall paint, especially on the 1st mass building so that it produces a surface that has a smooth texture. Meanwhile, some other buildings use ceramic materials that have a slightly rough texture so that it produces a surface that has a rough texture. This rough ceramic texture (Figure 10) already exists in the 2nd mass building.

The overall colors of the Beringharjo Market are dark green, light green, yellow, white, cream, brown, and a little orange. This color combination is the color of Yogyakarta Kraton. It is because the Beringharjo Market has never separated from the Yogyakarta Kraton. However, the color application of Beringharjo Market is not the same as the Yogyakarta Kraton. The market building cannot be on the same level as the grand Kraton building. However, the color of this market building can not exceed the aesthetics of the Yogyakarta Kraton. In this case, the aesthetics of market building are not as luxurious as the Yogyakarta Kraton building. The gold
color that symbolizes glory removes in this market building, then it replaces with yellow color that considers close to the golden color.

The compatibility of Beringharjo Market looks harmonious between the 1st and 2nd mass buildings (Figure 11). Even, the 1st building has strong European nuance, it still has Javanese ornaments on the column building, as well as the 2nd mass building. Thus, the whole building looks harmonious. It is because the 1st and 2nd mass buildings have a transition of matching and complementary ornaments. The atmosphere in the outside building of Beringharjo Market is a blend of two different cultures into a single unit that creates a harmonious and ancient atmosphere. The atmosphere in the front building is colonial-era, and the back of the building has a Javanese (Table 1).

![Figure 11. The facade color of the Beringharjo Market](image)

<table>
<thead>
<tr>
<th><strong>ASPECT</strong></th>
<th><strong>RESULTS ANALYSIS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Philosophy</td>
<td>It contains Javanese culture that prioritizes harmony.</td>
</tr>
<tr>
<td>Space Planning City</td>
<td>It uses the urban planning pattern of Catur Gatra Tunggal that is the cultural heritage of Yogyakarta.</td>
</tr>
<tr>
<td>Space Planning Building</td>
<td>It uses the Javanese space philosophy that includes pendopo, pringgitan, and dalem.</td>
</tr>
<tr>
<td>Shape Building</td>
<td>The shape of the building uses traditional Javanese elements and foreign (European) elements. If we can see the Javanese element in the shape of the roof that is the pyramid roof. Meanwhile, we can see the European element in the dormer roof that is the European roof style.</td>
</tr>
<tr>
<td>Ornament</td>
<td>The use of ornaments is in column building, exterior facade building, and interior building. This ornament type includes Javanese flora ornaments and geometric motifs.</td>
</tr>
<tr>
<td>Texture</td>
<td>The texture uses local materials such as rough ceramics that we can see on the exterior facade of the 2nd mass building.</td>
</tr>
<tr>
<td>Color</td>
<td>The building color imitates the colors in the Yogyakarta Kraton. However, the aesthetics of color in the market building still do not exceed the Kraton building. It causes the difference degree between the market building that has a lower degree than the Kraton building.</td>
</tr>
<tr>
<td>Compatibility</td>
<td>It appears to be in harmony between the 1st and 2nd mass building.</td>
</tr>
<tr>
<td>Atmosphere</td>
<td>It creates the atmosphere of the olden days. In the 1st mass building, the atmosphere is European. While, in the 2nd mass building, the atmosphere is Javanese.</td>
</tr>
</tbody>
</table>
4. Conclusion

Ethnic architecture can be a marker or identity of a nation in a region. In designing Javanese Ethnic Architecture, we need knowledge about the characteristics of the Java region. The concept application of Ethnic Architecture at the Beringharjo Market can go through the aspects that make up Ethnic Architecture. It includes cultural philosophy based on tradition, space planning, and shape of building that has a philosophy, as well as elements that make up space that is the combination of ethnic elements such as the use of ornaments, textures, colors, compatibility, and the atmosphere in the building. We can apply the glory of palace buildings to the buildings that have a lower degree as the market with some adjustments. In addition, the mixture cultures did not only limit to the locality, but also it has reached other continents since ancient times.

5. Acknowledgements

We sincerely thank the Department of Architecture, Faculty of Engineering, Muhammadiyah University Jakarta, for the facilities and support to us researchers, lecturers, and students, as well as colleagues who acted as surveyors and their hard work in this research. All the contributions of lecturers and students in efforts to complete scientific work on the topic "The Identification of Ethnic Architecture Application on the Beringharjo Market Building in Yogyakarta" have enabled us to bring this collaborative work between lecturers and students to the completion stage, as an essential value of cooperation in the achievement of academic excellence.

References