

COMBINATION OF CULTURES TOWARD SPACE-FORMING ELEMENT ON AL-MAHSUN GRAND MOSQUE MEDAN

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Abstract

Along with the passage of time, architecture continues to develop, including Muslim places of worship known as mosques. Early mosques were built simply, using modest materials. As Islam spread to various parts of the world, cultural exchanges occurred, influencing mosque architecture. Over time, mosque designs began to evolve, adapting to local habits, characteristics, and climates. Often, space-forming elements in mosques reflect a combination of cultural influences. One example is the Al-Mashun Grand Mosque in Medan. This mosque, which was designed by Van Erp and constructed by JA Tingdeman, combines Middle Eastern, Indian, Spanish, and local Malay architectural styles, according to the North Sumatra Province Culture and Tourism Office's official website. This cultural diversity sparked the researcher's interest in exploring the truth behind these influences. The main objective of this study is to identify the combination of cultures reflected in three specific space-forming elements of the Al-Mashun Grand Mosque: the floor, walls, and windows. Direct observation and field documentation are used in this qualitative study, and the results are compared with the relevant literature. Descriptive analysis is used to examine the data. Through this study, the researcher aims to explain how each of the three elements incorporates more than one cultural influence and how those combinations take shape in the mosque's architectural form. The results are expected to show that cultural integration is not only present but plays a significant role in shaping the identity of this historic mosque—one of the oldest in North Sumatra.

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1. Introduction

The Prophet Muhammad SAW built the first mosque in the 13th year of his prophethood or the 1st year of Hijriyah (622 AD) [1]. Rasulullah SAW built a very simple mosque, but because of that simplicity, the mosque became full of functions with many roles that could be played [2]. Previously, architectural styles differed from each other. The unity of style came together with Islam; it was when Islamic architecture began to dominate by allowing variation of things that were not essential so that the style could adapt to the local climate of each country. That means it's already been more than a thousand years since the first mosque was built by the Prophet Muhammad SAW.

During that period, a combination of architectural styles between two cultures or even more began. The mosque's architecture slowly began to change following the times and culture, along with the coming of Islam to various parts of the world. Mosques evolve from one culture to another. It created a unique shape that has its characteristics in each region.

The combination of architectural cultures usually occurs in the space-forming elements. An element can be said as a space-forming element if it can form a space while being combined with another element. They can make clear boundaries and have dimensions to occupy [3]. These elements include floors, walls, roofs, windows, doors, and stairs [4]. But, in this research, I will only describe three of them. There are floors, walls, and windows.

One of the largest mosques in North Sumatra is the Al-Mashun Grand Mosque which is located in Medan. Based on the information listed on the official website of the Culture and Tourism Office of North Sumatra Province. The architectural style of the Grand Mosque consists of many architectural styles such as the Middle East, Indian and Spanish architecture while combined with their own culture, Malay. The combination of the four diverse cultures in

the Al-Mashun Grand Mosque building is interesting to study through its space-form elements. This journal aims to discover three space-form elements that experience a cultural combination and how the cultural combination is applied to each element.

2. Literature Culture

Culture is taken from the Sanskrit language, namely buddhayah. The word is the plural form of buddhi (mind or reason can be interpreted as everything related to the human mind and reason. In English, "culture" comes from the Latin word colere, which means to process or work [5]. Culture is a pattern of basic assumptions discovered and determined by a particular group because of studying and mastering the problems of external adaptation and internal integration. These have worked well enough to be appropriately considered and taught to new members as a way of being perceived and thinking. And perceived correctly concerning the problem.

Space-forming Elements

Space constantly surrounds our being. Its visual form, dimensions, scale, and lighting quality depend on our perception of the spatial boundaries defined by the elements of form. When space begins to be captured, wrapped, and arranged by mass elements. Architecture is present and becomes real.

Everything that surrounds or limits a space can be called a space-forming element. According to Francis D.K. CHING in the interior design illustration book, space-form elements include floors, walls, ceilings, roofs, windows, doors, and stairs.

The Middle East

The research of Retno Fitri Astuti [6] & Fatimatuz Zahra [7] summarizes the characteristics of middle east architecture into a table 1

Table 1 Characteristic architecture of the Middle East

Characteristic architecture of the Middle East
1. Most ornaments combine Islamic patterns that have taken shapes from the universe and are made repeatedly.
2. Domination calligraphy ornaments.
3. Tall towers and magnificent hemispherical Domes
4. The arch lines make the building look spacious
5. Large arch with dramatic impression on the entrance and the interior.
6. Mostly use carpet
7. Geometric elements with constant patterns or masculine aspects
8. The Arabesque is also related to life and growth
9. Often combine calligraphy of plant or arabesque forms with geometric patterns and plants with geometric patterns.
10. Dynamic exterior and interior
11. The use of motifs on the floor and the ceiling.
12. Used a lot of motifs on Parsi glass

Indian

Based on the research of Fajar [8] & Tiara Isfiaty [9], the characteristics of Indian architecture are in a table 2.

Table 2 Characteristic architecture of Indian

Characteristic architecture of Indian
1. Use locally available materials such as red sand, granite, brick, and terracotta marble.
2. Balanced symmetrical arrangement
3. Multilevel arch
4. The ceiling decoration the ceiling uses a lot of colored marble decorations.
5. Use of double dome and onion-shaped dome
6. It is dominated by brown, cream, pink, red, and terracotta colors.
7. The use of calligraphy in every building but the depiction of every living creature is prohibited in Islam.
8. A large gate with an arched entrance hides the main building inside.
9. Use of parks outside the area

Spanish

The research of M. Sahid Indraswara [10] & Fatimatuz Zahra summarizes the characteristics of Spanish architecture in a table 3.

Table 3 Characteristic architecture of Spanish

Characteristic architecture of Spanish
1. Adopting curved forms in Islamic architecture, which were developed from geometric shapes
2. The roofs of buildings in the Mediterranean use sloping roofs, short eaves, or no eaves at all.
3. The walls of buildings in the Mediterranean (especially in Spain) are mostly made of unburned bricks called adobe
4. Carved and decorated walls.
5. The dome is a circular roof with a hemispherical shape that is widely used in the Mediterranean region in large buildings.
6. The dome also has excellent aesthetic value.
7. Windows and doors are rectangular but have an arch on the upper side.
8. Used many profile lists, both frames, and decorations
9. Pillars have become an essential part of this style.
10. Pillars generally have decorations at the top or bottom.
11. Portico is a decorative element usually presented in front of the entrance, consisting of pillars and a peaked roof.
12. Balustrade: vertical bars or railings are often found on stairs & balconies
13. Tympanum: part of the geometric shape and decoration (decoration) in the form of a triangle (sometimes also a semicircle)
14. Balcony: prominent area on the top floor of the building, used as an outdoor area.

Malay Ornament

The research of Andrie Suparman [11] & Sunaryo [12] summarizes the characteristics of Malay ornaments in a table 4.

Table 4 Malay Ornaments

Malay Ornaments	Various		
Flowers Group	Kaluk pakis Group	Genting tak putus	
		Lilit kangkung	
	Flowers Group	Single Flower	Kundur Flower
			Jasmine Flower
			Manggis Flower
			Cengkih Flower
			Melur Flower
			Melur Flower
			Forest Flower
			Sun Flower
		Chain Flower	Tampuk pinang
		Wheel Flower	
Animal Motive	Pucuk rebung Groups		
	Pelana kuda		
	Semut beriring		
	Lebah bergantung		
	Ikan		
	Itik sekawan		
	Siku kealng		
	Burung-burung		
	Ular-ularan		
	Naga berjuang		
Nature Motive	Roda bunga & burung		
	Awan larat		
Kaligraft Motive & Belives	Ukiran bunga bunga		
Various Motive	Jala-jala		
	Sinar matahari		
	Teralis bola		
	Ricih wajid		

Colors

5.

The research of Kartini [13] summarizes the characteristics of Malay colors in a table

Table 5 Characteristics of Malay color	
Characteristics of Malay color	Color
A. Common Color	1. White
	2. Yellow
	3. Green
B. Addition Color	1. Gold
	2. Blue
	3. Black

3. Research Methods

This research uses descriptive qualitative research. In comparison, qualitative research is a descriptive research and uses detailed analysis. The goal is to gain an in-depth understanding to describe reality and describe the phenomenon or research fact as it is. In this case, it aims to examine research objectively based on the architectural elements of the mosque that has experienced a combination of cultures in the Al Mashun Grand Mosque in Medan [14].

Primary data is taken by documentation and direct observation in the field. Observation or observation is a technique or method of collecting data by direct observations of ongoing activity [15].

Secondary data collection is done by collecting literature related to research so that it can be used as comparison material. The variables in this study are the space-form elements toward each characteristic of every culture combined. If there is found a similarity between one or more characteristics of the space-form elements, then it is identified as a combined culture.

4. Results and Discussion

Floor

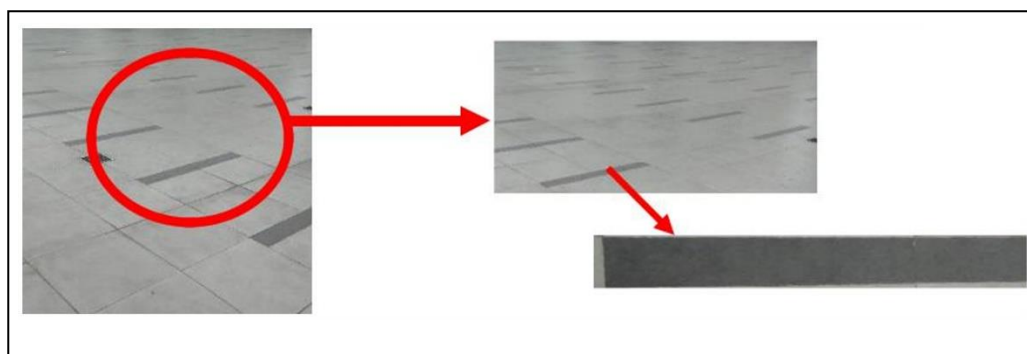
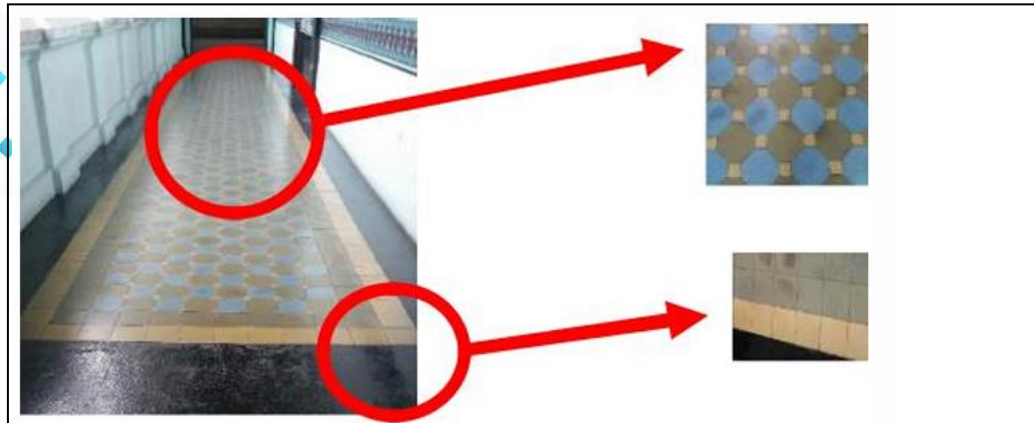


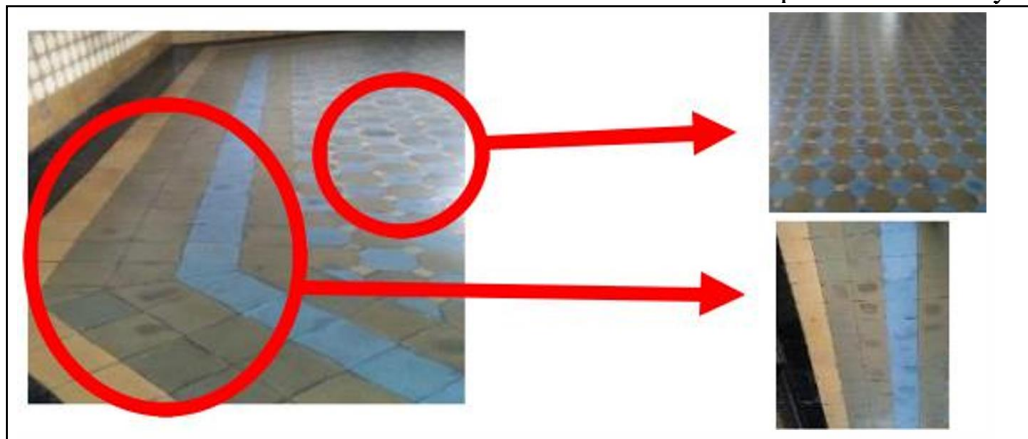
Figure 1 Floor Outside

Source: Author

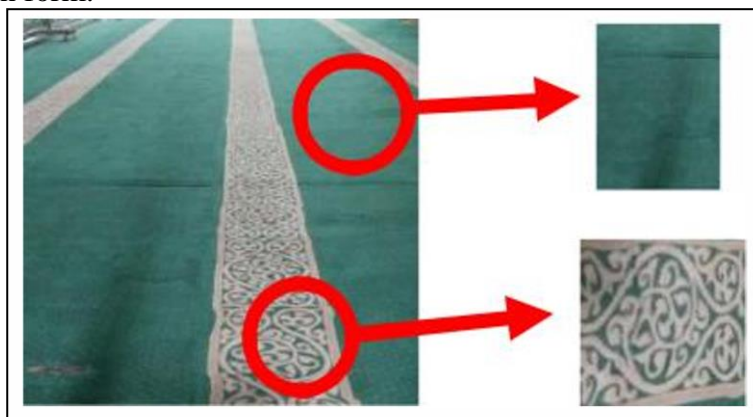
The floor on the outside has geometric elements in the form of square and rectangular tiles, which are arranged at a certain distance. This arrangement creates a masculine impression due to the combination of white ceramics with a small list of black ceramics. The constant pattern of the floor and the masculine impression are the proves of Middle Eastern culture, while the color selection comes from the Malay culture, such as white and black.

**Figure 2** Floor on the corridor side**Source:** Author

The floor pattern in the corridor uses geometric elements in the form of octagons and squares of different sizes and then arranged using a constant pattern and repeated. The choice of color used on the tiles is characteristic of Malay colors such as green, yellow, blue, and black. That means the floor combines Middle Eastern culture in pattern and Malay color.

**Figure 3** Floor on the wing side**Source:** Author

The floor pattern on the wing side resembles the corridor side, and the floor combines Middle Eastern culture in terms of pattern and Malay in terms of color. The differences in the addition green line and another blue line while the base shape of the floor takes an octagon form.

**Figure 4** Floor inside of the mosque**Source:** Author

In the prayer hall, the floor uses a green compound carpet throughout the mosque. The use of carpet itself is a characteristic of Middle Eastern culture. The color green was chosen because it is the color of Malay culture. Leaf curves with vines on the carpet reinforce Middle Eastern culture

Wall

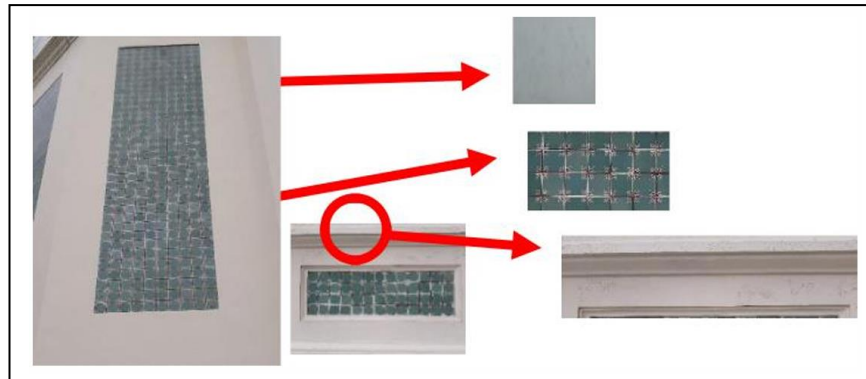


Figure 5 Outside (facade)

Source: Author

The walls are made of plastered bricks and then painted white. The use of white was chosen because it symbolizes purity and is one of the standard colors used in Malay culture. the walls are also pasted with green tiles/tiles whose color selection is also adjusted to the Malay culture. On the walls, many profile lists are made of concrete. In addition, there is texture on the bottom. The use of profile lists and textured walls are a characteristic of Spanish culture.



Figure 6 Wall outside the corridor side

Source: Author

The use of decorative profile lists and wall textures reflects a strong Spanish cultural identity. Meanwhile, the incorporation of arches and repetitive patterns along the corridor evokes a dramatic impression, which is a distinctive characteristic of Middle Eastern culture. Another notable aspect is the balanced symmetry between each aisle. The Al-Mashun Grand Mosque, built on an octagonal floor plan with four wings and connecting corridors, symbolizes elements of Indian cultural influence. In addition to these three aspects, the choice of colors also highlights the presence of Malay cultural identity.

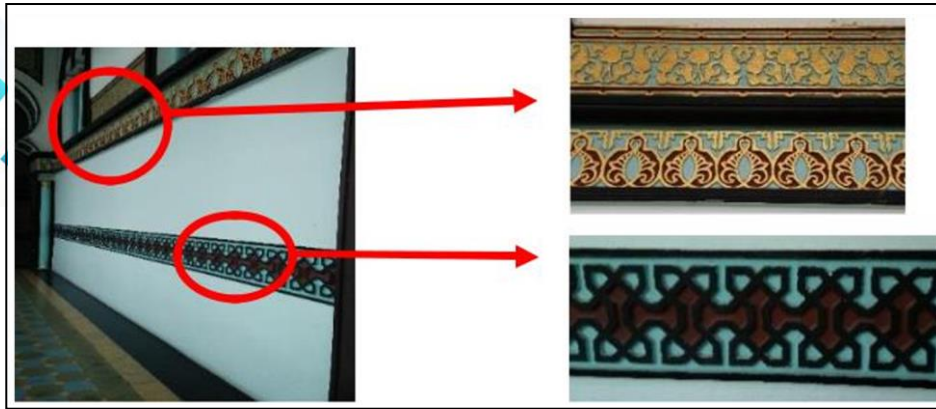


Figure 7 Wall inside the corridor

Source: Author

The walls on the outer corridor use Malay ornaments along the corridor. At the top, the Malay ornament consists of a group of flowers belonging to the type of sunflower, combined with the characteristics of Middle Eastern ornaments with Islamic patterns taken from nature, such as flowers and leaves, and made repeatedly. In contrast, the colors adopt the Malay culture: yellow, golden, black, and blue.

The lower ornament is a combination of Malay and Middle Eastern ornaments. Malay ornaments are *ricih wajid* ornaments made simpler with geometric patterns such as triangles, diamonds, and rectangles. This proves a combination between the Middle East and the Malays. In addition to the ornaments on the inner walls, there is also a black profile list. This means that in addition to the combination of the Middle East and Malay, there is also a combination of Spanish culture in the profile list and Malay in terms of color.

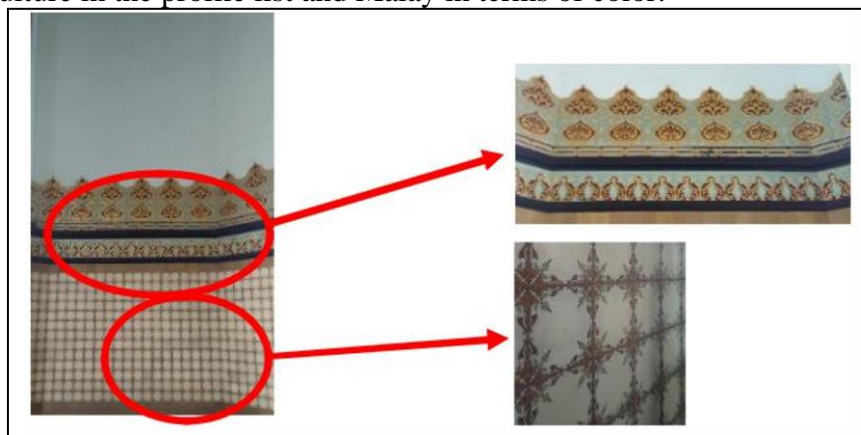
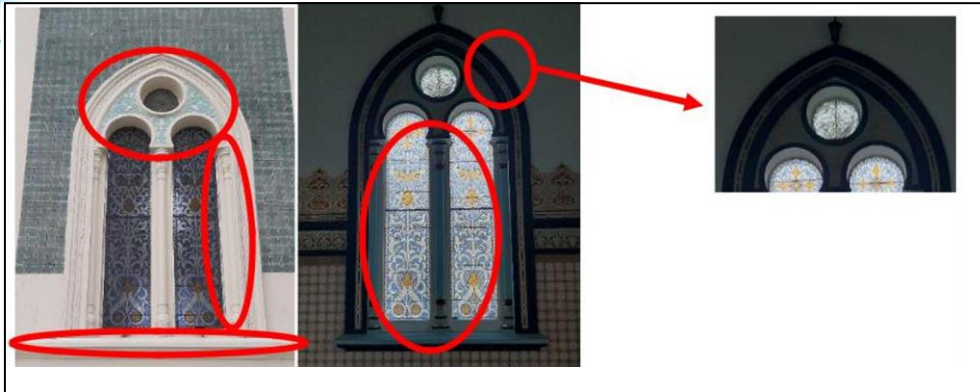


Figure 8 Wall on the wing side

Source: Author

The walls on the wings of the mosque resemble the inner walls of the prayer hall, both featuring a blend of cultural elements. The ornaments used are a combination of traditional Malay motifs such as *pucuk kacang* and sunflowers, alongside Middle Eastern-style leaf and floral patterns. In addition to the ornamental details, the use of brown and cream-colored tiles reflects the characteristic color palette of Indian culture. A black profile list framing the tiles, adorned with sunflower motifs, further represents Spanish cultural influence. Altogether, the walls of the wings and the inner walls of the prayer hall showcase a harmonious fusion of Middle Eastern ornamentation, Indian color choices, Spanish profile detailing, and Malay ornamentation and color.

Window

**Figure 9** Window on the wing side**Source:** Author

The window on the wing connects the outside and the inside of the wing. In the window, you can see an enormous arch, a characteristic of the Middle East, plus parsi glass with Middle Eastern motifs, adding to the dramatic impression. Parsi glass refracts the sun's rays inward, making the interior more colorful and dramatic.

Spanish culture also decorates the windows with a list of concrete profiles and the use of decorated pillars at the top and bottom. When viewed from the outside, the list of concrete profiles on the inside is in the form of an ornate texture.

However, without eliminating the original Malay culture, the use of typical Malay colors such as blue, black, and gold, as well as Malay ornaments in the form of kaluk pakis, add to the beauty of the corridor window.

As for the use of terraced arches to frame the window as a whole, apart from framing the window, the terraced arch is also found on the top of the glass, which also shows the existence of Indian culture in the window.

**Figure 10** Window on the corridor side**Source:** Author

The components in the windows on the corridor are the same as those on the wings, such as large arches, parsi glass, pillars, list profiles, and terraced arches. The difference between the two is in size, where the windows in the corridor are smaller than the wings, and there is no terraced arch that frames the windows as a whole. However, the light produced differs because the parsi glass used is of different motifs and colors.

5. Conclusions

After the data is compared with the study of different works of literature from each culture, it can be concluded that: **It is true that each element that forms the space in the Al-Mashun Grand Mosque Medan experiences a combination of more than one culture.**

On the floor is a combination of two cultures, Middle Eastern and Malay. Malay colors are dominant such as green, yellow, blue, and black. In addition, the floor pattern adopts Middle Eastern architectural culture with the characteristics of geometric patterns, constant and arranged repeatedly. That means there has been a combination process on the floor elements, a combination of Middle Eastern patterns and Malay colors in the first space forming elements. There are variations in combination on the walls and the four parts of the wall; two cultures on the facade, three cultures on the inner corridor, four cultures on the wing, and the outer wall of the corridor. Malay styles are dominant such as sunflower, ricih wajid, and pucuk kacang. Some of these ornaments or patterns are combined with Islamic patterns taken from nature, such as leaves characteristic of the Middle East. There is also a list of concrete profiles and textured walls characteristic of Spanish architectural culture on each wall. In terms of color, the walls of the Great Mosque use the characteristic colors of Indian architectural culture, such as brown, cream, and wither colors such as white, green, golden, and black. That means the application of combination cultures occurs in terms of ornament, color, and symmetrical shape. The window element combines the two parts into the four cultures. The use of pillars and list profiles is evidence of the existence of Spanish architecture. The symmetrical shape and the presence of a stepped arch are evidence of the application of Indian culture. While the use of large arches and parsi glass is characteristic of Middle Eastern culture. Finally, Malay ornaments such as kaluk pakis and Malay colors such as white, green, yellow, blue, black, and gold are complementary. That is, the application of the combination occurs in terms of symmetrical shape, curved shape, ornament, color, and material use.

Suggestion

With this research on the combination of cultures in space-form elements, I hope that it will open up opportunities for similar research on combinations in architecture in various ways. In addition, I also hope that this research can be a stepping stone for further research that can improve this research. This research is expected to contribute to architecture, such as enriching the repertoire of knowledge regarding the combination of cultures in space-form elements, and can be a reference for research with the same study.

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