

FRAMING NATIONAL IDENTITY AND UNITY THROUGH VISUAL DESIGN PRINCIPLES IN MALAYSIA'S POST-INDEPENDENCE ARCHITECTURE

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ABSTRACT

Malaysia's Declaration of Independence in 1957, the architecture of the era adopted an international modern style for many government buildings and mosques, heavily influenced by British architecture. This transition aligns with Edward Said's critique in *Orientalism*, which argues that colonial architecture imposed foreign identities onto built environments, reinforcing Western dominance. In response, Malaysia actively reclaimed its architectural narrative by integrating local cultural elements into national structures. However, as Homi Bhabha (2012) suggests, the formation of national identity is an ongoing process, particularly for post-colonial nations still negotiating their place between historical influences and contemporary aspirations. This study investigates how the facades of Stadium Merdeka, the Parliament Building, and the National Mosque articulate national unity and reflect Malaysia's evolving architectural identity. Employing a two-phase visual analysis methodology, the research evaluates nine Visual Design Principles (VDPs)—harmony, unity, balance, rhythm, emphasis, proportion, contrast, repetition, and movement. A Visibility Scoring System is used to assess the prominence of these principles, while comparative case studies from other post-colonial nations provide contextual grounding. The findings identify the Parliament Building as the most cohesive in terms of visual unity and harmony, whereas the other structures exhibit challenges in rhythm and emphasis. The study highlights the symbolic importance of architectural facades in shaping national identity and nation-building, providing critical insights for developing future design strategies in multicultural contexts.

Keywords: National buildings, Post-colonial architecture, Visual Design Principle, facade design, Stadium Merdeka, Parliament Building, National Mosque.

1.0 INTRODUCTION

Post-independence reconstruction in Malaya during the 1960s was aimed at promoting unity and national identity through infrastructure development. According to Hussain (2017), architecture is perceived as a means of establishing a collective national identity. This concept is widely acknowledged as a key element in nation-building in Malaysia (Koivunen, 2016). Currently, national buildings in Malaysia are often regarded as symbols of progress and economic prosperity.

During the period of post-colonialism, after Malaysia gained independence on 31st August 1957, the architecture stylistic selections reflected the effort to establish a national identity

that is distinct from its colonial past. During this time, the Modern Movement in architecture in the West was at its tail end. However, it remained influential in developing nations, including Malaysia. Due to the limited number of universities in Malaya at the time, wealthier families sent their children to Britain or India for higher education (Subramani & Kempner, 2002). The graduates who returned brought with them skills and knowledge heavily influenced by the modernist style (Hussain, 2017). This influx of modernist ideas shaped the design aspirations for government and public buildings, which came to symbolise progress and unity.

The way architecture looks and feels plays a crucial role in shaping national unity as it reflects shared cultural values and aspirations. In Malaysia, the pursuit of a national architectural identity has played a crucial role in promoting racial harmony and unity. Ismail et al. (2020) emphasise the need for a framework that defines this national architectural identity, highlighting its significance as a symbol of unity in a multi-racial society. By incorporating design elements that reflect the country's diverse cultural heritage, architecture can serve as a powerful unifying force, fostering a collective national identity.

For a building to embody the nation's aspirations, its first impression should evoke a sense of progress and unity, reinforcing national identity. Obaleye et al. (2021) assert that building image is a central element in the experience of the built environment. As the first encounter with a building, the façade plays a crucial role in shaping public perception and connection, with unique architectural features that influence its reception (Ghomeshi & Jusan, 2013). Facades, typically encompassing the front, sides, and rear of a building, serve as its outer covering (Moghtadernejad et al., 2019). Given that the façade provides the initial impression of a building's purpose, it should be considered a means of fostering national unity, particularly in the context of nation-building in Malaysia.

Designers have long utilized Visual Design Principles (VDP) to analyse public perception of media. However, in architecture, the Architectural Design Principle (ADP) usually takes precedence. ADP is a comprehensive method for developing buildings that balances social context, aesthetics, practicality, and environmental factors (Lawson, 2012). While ADP addresses a broad range of considerations, VDP focuses specifically on how two-dimensional elements are perceived (Lidwell et al., 2010). In the context of façade design and its visual impact, VDP is a more suitable tool for analyzing how design elements contribute to national identity and unity.

Therefore, this paper aims to identify the significance of the visual elements of national building facades, focusing on how they contribute to fostering national unity. It aims to identify and categorize the Visual Design Principles (VDPs) present in the façade designs of selected national buildings in Malaysia, with a focus on how these principles contribute to promoting unity within the nation.

2.0 LITERATURE REVIEW

Architecture plays a vital role in shaping national identity by reflecting cultural heritage, socio-political aspirations, and collective memories. Smith (1991) listed six foundation elements of national identity: (i) a collective proper name, (ii) a sense of solidarity for significant sectors of the population, (iii) one or more differentiating elements of a common culture, (iv) an association with a specific 'homeland', (v) a myth of common ancestry, (vi) and a shared historical memory. These aspects are translated through myths, traditions, and symbols that shape a society's identity. Architecture acts as a tangible vessel to preserve these memories and narratives (Jackson, 2006). These elements are notably relevant in multi-ethnic countries

like Malaysia, where architecture is intended to transcend ethnic divisions and represent national unity.

Visual design serves as a tangible manifestation of a product's objectives, focusing on the aesthetic, methodological, and stylistic presentation of information. Artists, designers, and architects creatively employ the language of visual design to convey messages effectively (Kress & Van Leeuwen, 1996). However, visual design is not universally understood, as it depends on various design elements and principles to convey meaning effectively. This includes disciplines within environmental design such as architecture, interior design, and landscape design (Demir et al., 2021).

Architecture shapes cities and national identity, whether by standing out as a landmark or blending into its surroundings (Quici, 2017). A building's first impression should reflect progress and unity, reinforcing the nation's aspirations. The facade, as the most visible element, plays a key role in shaping how people perceive and connect with a building (Obaleye et al. 2021). Its design influences public experience, making it more than just an exterior, as it becomes a symbol of identity and shared belonging (Ghomeshi & Jusan 2013).

2.1 Visual Design Principle (VDP)

Visual Design Principles (VDP) provide a foundation for organizing design elements in a way that is both visually appealing and functional. While often associated with graphic design, these principles are just as crucial in architecture, especially in façade design. According to Peterson (1996), VDP serves as guiding rules in visual disciplines, shaping how elements like harmony, balance, rhythm, and emphasis come together to create a cohesive design. In architecture, they influence how buildings communicate meaning and connect with their surroundings.

Facades, being the most visible part of a building, play a key role in defining architectural character. The way design elements are arranged—through structure, ornamentation, or materials—creates a sense of rhythm, unity, and identity (Demir et al., 2021). A well-designed façade can evoke a sense of belonging and reinforce cultural significance. For example, repetition in decorative patterns can establish rhythm, while emphasis on certain motifs can highlight cultural heritage. Harmony ties everything together, ensuring that proportions and materials feel balanced and intentional.

Each VDP contributes to how a building is perceived. Harmony brings cohesion, while unity ensures different elements feel connected (Yilmaz, 1999). Balance creates a sense of stability, achieved through symmetrical or asymmetrical arrangements (Watzman, 2003). Rhythm is seen in repeating patterns or structural sequences (Thapa, 2017), and emphasis draws attention to key architectural details. Proportion keeps elements in scale, preventing visual discord (Gangwar, 2017), while contrast adds visual interest by juxtaposing different textures, colours, or forms (Yilmaz, 1999). Repetition reinforces consistency across a design (Kappraff, 1999), and movement guides the viewer's eye, making the design feel dynamic and engaging (Demir et al., 2021).

When applied thoughtfully, these principles help shape a strong architectural identity. In the context of Malaysian national buildings, VDP contribute to a sense of unity, ensuring that designs reflect both modern aspirations and the country's rich cultural diversity.

2.2 Design Language Relevance in Malaysian National Buildings

In the early years of independence, the government focused on creating a master plan for the capital that was both practical and symbolic of a united Malaysia. Modernist architecture became the dominant style, not just as a design choice but as a reflection of a young, multi-ethnic nation striving for progress (Heynen, 2013). By steering clear of elements tied to any single ethnic group, these buildings fostered a shared sense of belonging (Goh & Liauw, 2009). This vision was reflected in landmark buildings like Parliament House (1963) and Stadium Merdeka (1957), where modernist architecture was subtly infused with local influences.

Post-independence, Malaysia also sought to reclaim its architectural narrative by countering the legacy of colonial-era structures. Edward Said's *Orientalism* (1978), as later interpreted by McAlister (2002), critiques how Western architecture historically imposed colonial identity on built forms. In response, Malaysia initiated efforts to move away from colonial façades, favouring indigenous and Islamic-inspired designs that better reflected its cultural heritage. However, for a nation that has been independent for less than a century, the process of defining a national architectural identity remains ongoing (Bhabha, 2012).

To showcase Malaysia's success in self-governance, landmark structures like Stadium Merdeka, the National Museum, and the Parliament Building were built by the Public Works Department to represent unity and modernization (Mohidin & Ismail, 2014; Rahman & Tunku, 1977). This approach, seen in these buildings reflected a time when leaders prioritized national identity over personal or ethnic affiliations (Rasdi, 2015). Over the years, Malaysia's architectural identity has continued to evolve, ensuring that no single ethnic or cultural group dominates its visual representation. Various policies, conferences, and urban projects have played a role in shaping a built environment that represents the nation's collective identity. Key initiatives have helped refine this architectural direction. The "Toward National Architectural Identity" conference in 1981 laid the groundwork for incorporating Malaysia's multicultural heritage into design (Ismail, 2018). This idea was later brought to life in projects like Putrajaya, a new administrative capital developed in 1995 to reflect the country's pluralistic values (King, 2008). In 2016, the National Architectural Identity Policy (DASIK) further emphasized blending cultural, religious, and traditional elements with the modernist principles introduced post-independence (Ismail, 2018). A strong architectural identity helps strengthen national unity by making buildings feel connected to the people they serve (Ismail, 2020). The façade, as the most visible part of a building, plays a key role in shaping this identity, acting as a bridge between cultural heritage, urban design, and the nation's shared aspirations (Ismail & Abd Elkader, 2023; Baper, 2024).

2.3 Malaysia and Other British-Colonized Nations

Malaysia's approach to nation-building through architecture shares common themes with other former British colonies in South and Southeast Asia, yet each country shaped its post-independence identity in its own way. Comparing Malaysia's architectural response with India and Sri Lanka reveals both shared strategies and distinct interpretations.



Fig. 1: Capitol Complex in Candigarh, India
(Source: [Florian](#), 2023)

India gained independence from British in 1947. Since then, it has moved away from colonial influences by embracing modernist principles, as seen in the Capitol Complex in Chandigarh (1950's) (See Fig. 1). These structures use raw concrete and geometric forms, relying on material consistency rather than ornamental repetition (Vikramaditya, 2002). This is seen as an effort to integrate local material with modernist style, whilst also incorporating Indian Culture influence such as brise-soleil screens, and sun-shading elements to suit the local climate.



Fig. 2: Parliament Complex in Sri Lanka
(Source: Robson & Bawa, 2002)

Sri Lanka took a slightly different approach, blending modernist design with a strong celebration of its heritage. After gaining independence from the British in 1948, Sri Lanka still ensured a strong connection with its heritage. The Parliament Complex in Sri Lanka was completed in 1982. Its tiered hipped roofs (Fig. 2) reminiscent of Kandyan-era palaces, establish a strong connection to Sri Lanka's architectural past, reinforcing a national identity tied to its historical roots (Robson & Bawa, 2002).

Malaysia, focused on practicality and efficiency in its post-independence architecture. Government buildings reflected modernist ideals, emphasizing the country's goal of becoming a global city. While cultural influences were present, they were subtly incorporated into functional designs (Hee, 2017). In Malaysia, government buildings became key symbols of national identity, balancing modernist aesthetics with cultural influences. Unlike some neighboring nations, Malaysia took a more neutral approach, ensuring inclusivity in its

architectural expression. Federal buildings, especially administrative and civic institutions, offer the clearest reflection of how Malaysia shaped its unique post-independence identity. As Ashworth, Graham, and Tunbridge (2007) argue, architecture is a tool for shaping national identity, particularly in post-colonial states. Malaysia's government buildings, like those of its regional counterparts, reflect not just progress but also the ongoing negotiation of identity, power, and historical memory in the post-colonial landscape (Frampton, 2016; Vale, 2014).

2.5 Stadium Merdeka, Parliament Building and National Mosque, Malaysia

For this study, three buildings were chosen, namely, Stadium Merdeka (Independence Stadium), Parliament Building, and the National Mosque. The three buildings completed its construction within the first 10 years of Malaysia's independence and were under the Public Work Department (now known as Ministry of Works). These structures reflect the country's early aspirations for modernity, unity, and national identity.



Fig. 3: Stadium Merdeka (Independence Stadium), Jalan Stadium, Kuala Lumpur
(Source: Bernama, 2024)

In the late 1950s, Stadium Merdeka (Fig. 3) was the biggest stadium in Southeast Asia, was built to host Malaya's Declaration of Independence on 31 August 1957 and later, the formation of Malaysia in 1963. With its reinforced concrete framework, arched grandstand, and towering floodlights, the stadium was designed to accommodate grand national celebrations (Hussain, 2017).



Fig. 4: Parliament Building, Jalan Parlimen, Kuala Lumpur
(Source: Kanagaraju, 2022)

The Parliament Building (Fig. 4) was a crucial step in establishing Malaysia's self-governance. Constructed using advanced technology at the time, it consists of two connected blocks: a podium for legislative debates and an 18-story office tower, symbolizing the country's growing administrative framework (Mohidin & Ismail, 2014).



Fig. 5: National Mosque, Lake Perdana, Kuala Lumpur
(Source: Zekrgoo, 2017)

The National Mosque (Fig. 5) reflects Malaysia's cultural and religious heritage, blending Islamic elements with traditional Malay architectural influences. Designed to represent the nation's dominant ethnic identity, it stands as both a spiritual and national landmark (Ismail & Rasdi, 2010).

Together, these buildings capture Malaysia's early efforts to shape its post-independence identity, balancing modern design with cultural significance.

3.0 METHODOLOGY

Post-independence buildings in Malaysia were designed with an absence of race-specific references, instead reflecting a modern national identity aimed at fostering unity among citizens. The façade serves as the first impression of any building, making it a crucial element in conveying national identity. This study employs a mixed-method approach, integrating quantitative visual scoring with qualitative architectural analysis to systematically evaluate the application of Visual Design Principles (VDP) in national building façades.

For this study, three buildings were selected: Stadium Merdeka (Fig. 3), the Parliament Building (Fig. 4), and the National Mosque (Fig. 5). These structures were completed within the first decade following Malaysia's independence and were developed under the Public Works Department (now the Ministry of Works). The selection of these buildings is based on their status as government-funded projects, which suggests a strong alignment with nation-building objectives. Given their historical and symbolic significance, these buildings serve as architectural representations of Malaysia's aspirations for unity and harmony in its formative years.

This study follows a two-phase Visual Analysis Methodology, integrating empirical façade evaluation and comparative case studies from post-colonized countries to strengthen the research findings. Each building's primary façade will be analysed through a combination of on-site photography and supplementary online images. On-site photographs will serve as the primary visual dataset, while online sources will be used to address any gaps, particularly in areas where access is restricted due to privacy concerns. To ensure a comprehensive

architectural analysis, observations will not be limited to a single elevation but will consider façade orientation and proportions, repetition and modularity of design elements, and symbolism and cultural motifs.

While the Parliament Building has a prominent main facade, as seen from Lebuhraya Sultan Iskandar (Fig. 7), Stadium Merdeka and National Mosque have a horizontal form that can be discerned from a few viewpoints. Stadium Merdeka has a continuous facade that goes through the whole stadium, while the National Mosque is made of a few connecting blocks. For this study, the facade perimeter of each building is limited to one side of the selected building (Fig. 6, Fig. 7, Fig. 8). However, to further examine the building, this study is not limited to only these figures. Observation will be carried out through photographs taken on-site and selected journals and articles.



Fig. 6: View of Stadium Merdeka's facade from the entrance at Jalan Stadium
(Source: Site observation on 3rd September 2024)

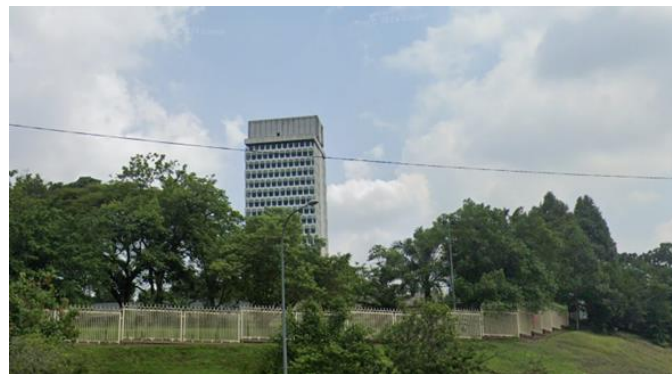


Fig. 7: View of Parliament Building's facade from Lebuhraya Sultan Iskandar
(Source: Site observation on 3rd September 2024)



Fig. 8: View of National Mosque's facade from Jalan Perdana
(Source: Site observation on 3rd September 2024)

Phase 1: Visibility Assessment through Visual Scoring System

Each selected building's façade will be systematically analyzed for the presence of nine Visual Design Principles (VDP): Harmony, Unity, Balance, Rhythm, Emphasis, Proportion, Contrast, Repetition, and Movement. To quantify their application, a scoring system (Table 1) will be employed based on photographic observations. Each VDP will be assigned points based on its visibility in the architectural façade. The scoring approach ensures objective measurement of VDP prevalence across the selected buildings.

Table 1: VDP Evaluation Framework

VDP	Phase 1 - Visibility 1 = Not visible 2 = Low visibility 3 = Moderate visibility 4 = High visibility 5 = Extreme visibility	Phase 2 - Significance 1 = No significance 2 = Low significance 3 = Moderate significance 4 = High significance 5 = Extreme significance	
Harmony		Evidently presence of elements creates a clear visual flow.	
Unity		Visible elements that complement one another, creating a unified appearance.	
Balance		Symmetry or asymmetry arrangements of elements create a sense of balance.	
Rhythm		Strength of repetitive elements that support the harmonious rhythm.	
Emphasis		Strength of the focal point is achieved by carefully arranging the elements.	
Proportion		Well-defined element sizes that create a harmonious facade.	
Contrast		Visible elements that clearly differentiated and engaged through colour, texture, and shape differences.	
Repetition		Evident repetitive patterns and motifs that create an aesthetically pleasing and well-coordinated design.	
Movement		Clear directional, overlapping, or dynamic elements that effectively lead the viewer's eye.	

Phase 2: Significance Analysis of VDP

The identified VDPs will undergo qualitative analysis to determine their architectural and symbolic significance in fostering national unity. This phase includes photographic documentation of building façades from multiple perspectives, and a comparative review of scholarly works and archival materials to contextualize VDP significance. This phase aims to decipher underlying patterns and extract meanings from the VDP application within Malaysia's early national architectural identity.

The findings of the research supposedly offer a substantial basis for modern urban planning and building design. The study should provide insightful information that can improve design methods, while preserving historical continuity in current architecture.

There are a few limitations to this study on the application of VDP to architectural facades that should be acknowledged. The study on visual elements of building facades may obscure other important design elements such as interior spaces and landscape integration. Furthermore, analysing VDPs in isolation might not fully represent a building's sensory experience, including how it interacts with its surroundings and feels to users.

4.0 RESULTS

To yield an outcome through this structured evaluation, this study compiled a database of 30 photographs for observation and analysis. 13 of the photographs were taken from site visits, while the remaining were sourced from selected journals and articles. The assessment was conducted in two phases, using a visual scoring system to quantify the presence and significance of Visual Design Principles (VDPs) in the façades of Stadium Merdeka, the Parliament Building, and the National Mosque.

Phase 1: Visibility Assessment

Table 2 presents the visibility of each VDP across the three buildings, measured on a scale from 1 (Not visible) to 5 (Extreme visibility).

Table 2: Phase 1: Visibility Assessment through Visual Scoring System

VDP	Stadium Merdeka	Parliament Building	National Mosque
Harmony	4	5	4
Unity	4	5	4
Balance	5	3	2
Rhythm	4	4	3
Emphasis	5	2	5
Proportion	3	5	4
Contrast	5	3	4
Repetition	4	5	1
Movement	4	2	4

Phase 2: Significance Analysis

Table 3 evaluates the significance of each VDP in contributing to the architectural and symbolic meaning of national unity, measured on a scale from 1 (No significance) to 5 (Extreme significance).

Table 3: Phase 2: Significance Analysis

VDP	Criteria	Stadium Merdeka	Parliament Building	National Mosque
Harmony	Evidently presence of elements creates a clear visual flow.	3	4	3
Unity	Visible elements that complement one another, creating a unified appearance.	4	3	4
Balance	Symmetry or asymmetry arrangements of elements that create a sense of balance.	5	2	3
Rhythm	Strength of repetitive elements that support the harmonious rhythm.	4	4	3
Emphasis	Strength of the focal point is achieved by carefully arranging the elements.	5	2	4

VDP	Criteria	Stadium Merdeka	Parliament Building	National Mosque
Proportion	Well-defined element sizes that create a harmonious facade.	5	5	5
Contrast	Visible elements that clearly differentiated and engaged through colour, texture, and shape differences.	5	5	5
Repetition	Evident repetitive patterns and motifs that create an aesthetically pleasing and well-coordinated design.	4	5	2
Movement	Clear directional, overlapping, or dynamic elements that effectively lead the viewer's eye.	4	3	4

Final Score: Visual Analysis with Scoring System

Table 4 summarizes the overall VDP application in each building.

Table 4: Final Score: Visual Analysis with Scoring System

VDP	Stadium Merdeka	Parliament Building	National Mosque
Harmony	7	9	7
Unity	8	8	8
Balance	10	5	5
Rhythm	8	8	6
Emphasis	10	4	9
Proportion	8	10	9
Contrast	10	8	9
Repetition	8	10	3
Movement	8	5	8

Given Stadium Merdeka's significance as the site of independence, it justified that the facade design successfully embodies all nine Visual Design Principles (VDPs). This contributes to reinforce its role in fostering national unity and pride. Its well-balanced design and strategic emphasis on key visual elements highlight its historical significance.

As a government building serving a nation with diverse races and ethnicities, the Parliament Building generally achieves moderate to high scores across all nine VDPs. However, its prominent singular block, which overshadows the series of pinnacles on its sides, prevents it from scoring highly in the 'Emphasis' category. The uniformity of its façade panels also restricts a sense of movement, resulting in a lower 'Movement' score.

The National Mosque, built to serve the predominant religion in Malaysia, must adhere to specific religious design principles, which can limit its ability to fully meet all nine VDPs. Nevertheless, the building excels in 'Emphasis,' 'Proportion,' and 'Contrast,' reflecting the key architectural principles of mosque design.

The discussion section will further explore how each VDP is applied to these buildings and their role in promoting national unity through architectural design.

5.0 DISCUSSIONS

Visual Design Principles (VDP)

Harmony

Among the three buildings, The Parliament Building scores the highest for ‘harmony’ due to its consistent repetition of the iconic ‘pineapple’ façade element. The transition of the ‘pineapple face’ to the triangular pinnacle element establishes a clear visual flow between the tower and the podium. It unifies the two masses despite their size (Fig. 9). The relationship between the tower and podium maintains a unified architectural language, contributing to the building’s overall formal and spatial harmony.

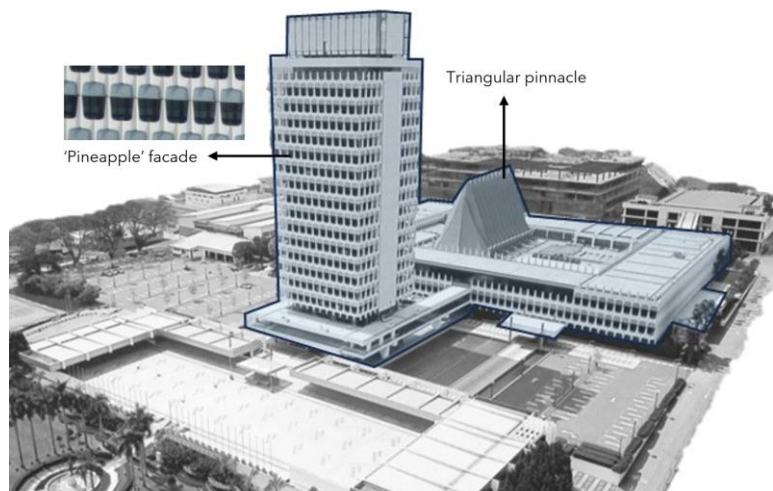


Fig. 9: ‘Pineapple’ facade elements of Parliament Building

In contrast, both Stadium Merdeka (Fig. 10) and the National Mosque (Fig. 11) rely on a consistent material palette to create visual harmony. Their uniform color palettes help create a cohesive look, though they lack the striking visual impact seen in the Parliament Building. While the Parliament Building uses harmony to balance contrasting forms, Stadium Merdeka and the National Mosque emphasize function over variation, leading to a more understated but effective sense of unity.

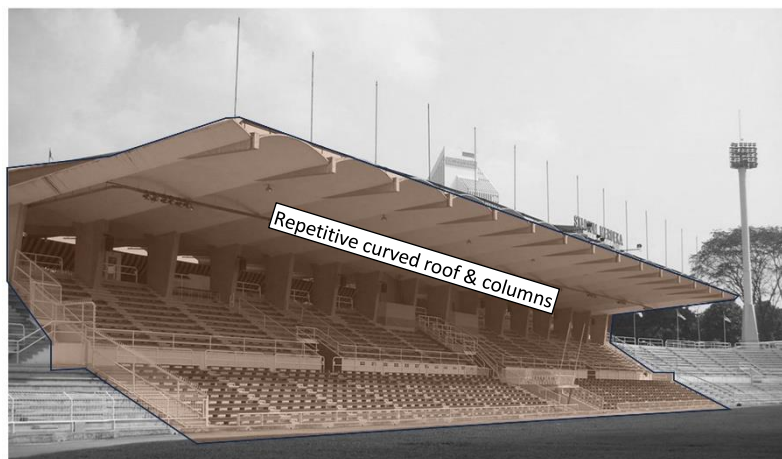


Fig. 10: Cohesive facade elements of Stadium Merdeka (Independence Stadium)

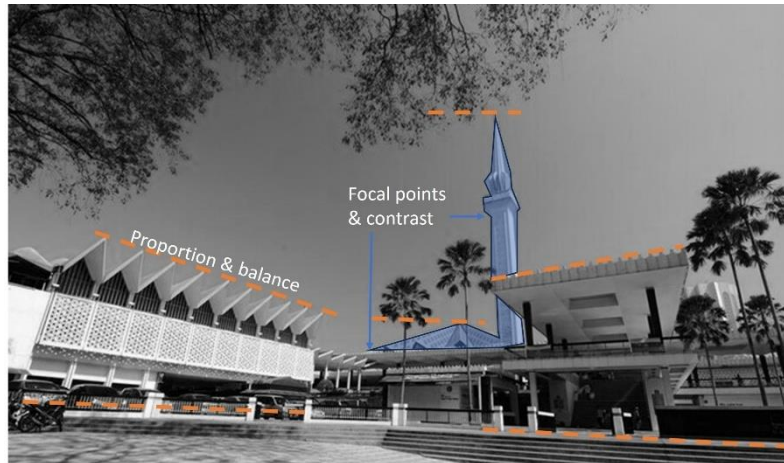


Fig. 11: Cohesive facade elements of National Mosque, Lake Perdana

Unity

All three national buildings display a strong VDP of 'unity' on their facades, despite their distinct styles and purposes. Each building maintains consistency through a simplified architectural style, characterised by the minimization of decorative elements in favour of clean, repetitive patterns.

Stadium Merdeka exemplifies unity through its use of simplified geometry at the long curved roof and its horizontal surroundings (Fig. 6). These repeated elements create a visual rhythm, ensuring that no single feature stands alone or appears disconnected from the overall façade. The Parliament Building follows a similar approach to unity through its recurring 'pineapple' facade, visually tying together its tower and podium (Fig. 9). The National Mosque, while incorporating a wider variety of shapes and forms, achieves unity through its geometric Islamic patterns (Fig. 12). These patterns provide a unifying theme, helping to integrate the various architectural elements and create a cohesive visual identity. Across all three buildings, repetition in either pattern, material, or form, enhances their visual and functional coherence.

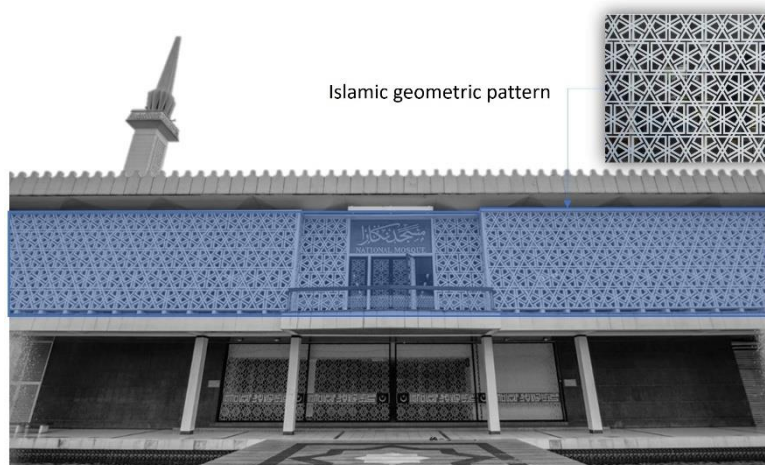


Fig. 12: Islamic geometry pattern on facade of National Mosque

Balance

Both Parliament Building and National Mosque attained a moderate score for 'balance, with emphasis placed on their dominant architectural features. However, the overall look of the façades suggests that the visual weight is concentrated on their main architectural features. Parliament Building's façade draws most of its visual weight from the iconic 'pineapple'

façade, while the lower pinnacles remain more understated (Fig. 9). Similarly, the National Mosque, pulls its visual weight from the blue pleated dome and minaret area to create focal points that define its identity (Fig. 11). In both cases, the heavier visual weight is placed on the most occupied and symbolically significant areas of the buildings. This asymmetric balance serves a functional purpose. By intentionally sacrificing perfect visual equilibrium, these designs help guide viewers toward the main focal areas, assisting in navigation.

Rhythm

Stadium Merdeka and the Parliament Building scored highly in 'Rhythm,' primarily due to the presence of strong, repetitive elements in their façades. These elements contribute to a clear and cohesive visual flow (Fig. 13). The repetition, combined with effective variations, enhances rhythm while preserving unity and visual interest.



Fig. 13: Stadium Merdeka (Independence Stadium), Jalan Stadium, Kuala Lumpur

The Parliament Building's 'pineapple' facade establishes a steady visual pattern (Fig. 9), while Stadium Merdeka's structural design reinforces its purpose with a consistent, rhythmic arrangement (Fig. 13). In contrast, the National Mosque demonstrates less consistent rhythm. Although elements such as triangular roof structures and geometric motifs are repeated, they do not create the same continuous flow observed in the other two buildings, resulting in a more varied aesthetic.

Emphasis

Each building employs emphasis differently. The Parliament Building scored lower for 'Emphasis', as compared to the other two buildings. This can be seen as an extension of the earlier discussion on 'balance' in VDP. The Parliament Building's façade, while visually striking, lacks a single dominant focal point due to its repetitive facade. Although its overall form is distinctive, its repetitive arrangement undermines the creation of a clear visual emphasis. In contrast, the National Mosque gains visual prominence through its distinct design choices, particularly by deviating from symmetry or asymmetry. The main folded roof and towering minaret serve as focal points, symbolising the building's spiritual importance and drawing attention to its religious function (Fig. 11). Stadium Merdeka similarly draws focus with its iconic shell roof, a defining element of its structure (Fig. 6). Deducing from that, for public buildings, strong emphasis aids navigation and identity, while administrative buildings like the Parliament Building may adopt a more restrained approach.

Proportion

All three buildings achieved relatively high scores for 'proportion' in VDP. This is because their designs have effectively used proportions to create balanced compositions. The Parliament Building, despite the size contrast between its tower and podium, maintains proportional harmony through the arrangement of its triangular pinnacles (Fig. 9). Similarly, Stadium Merdeka's shell roof enhances its sense of scale, reinforcing the grandeur of its design. The National Mosque, following the same footprint, balances its minaret, folded roof, and interior spaces to maintain proportional integrity (Fig.11). Across all three, careful attention to proportion ensures that their elements integrate both visually and functionally.

Contrast

The Parliament Building, Stadium Merdeka, and National Mosque all scored relatively high for 'Contrast'. The Parliament Building juxtaposes its vertical tower against the horizontal podium, emphasizing their difference in shape and function (Fig. 9). The National Mosque made use of its vivid blue roof to create a striking difference against the lush greenery of its surroundings (Fig. 11). In contrast, Stadium Merdeka focuses more on functionality, yet subtle contrast is visible in the interplay between the curved grandstand and the straight lines of its supporting columns (Fig. 14).

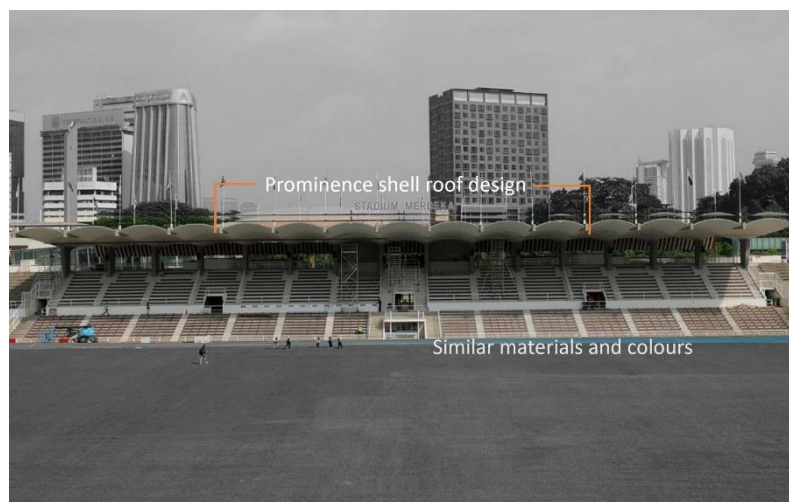


Fig. 14: Stadium Merdeka (Independence Stadium), Jalan Stadium, Kuala Lumpur

All three buildings employ contrast in different ways, through their form, material, or their interaction with the environment. This creates visually dynamic and engaging architectural compositions.

Repetition

The Parliament Building and Stadium Merdeka scored high for 'Repetition' while the National Mosque scored lower. Stadium Merdeka's combination of concrete shell roof, the grandstand, and the seating areas reinforce a rhythmic, repetitive structure. The Parliament Building's iconic 'pineapple' façade creates consistent and angular forms throughout, ensuring visual consistency (Fig. 15).

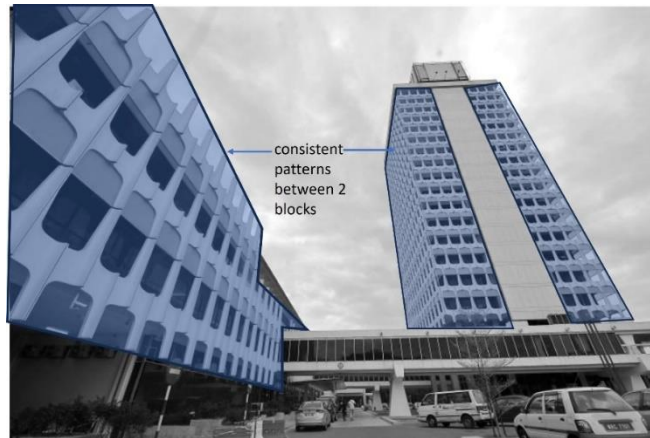


Fig. 15: 'Pineapple' facade elements of Parliament Building

On the other hand, the National Mosque exhibits subtle repetition, primarily seen in the geometric lattice panels on its façade (Fig. 11). This repetition on the National Mosque's façade suggests the sense of tranquillity and spirituality inherent in Islamic architectural traditions. In short, repetition plays a significant role in the visual appeal of all three buildings, but its prominence varies.

Movement

Stadium Merdeka and National Mosque scored the highest for 'Movement'. The curved roof of Stadium Merdeka seen as a focal point that naturally guides eyes upward, generating a dynamic flow (Fig. 6). The absence of contrasting colours on National Mosque's overall façade allows the focus to shift directly toward the vivid blue pleated dome. This creates a fluid visual journey toward the dome, which houses the main prayer hall. (Fig. 11). However, the repetitive "pineapple" façade elements on Parliament Building did not provide a clear sense of movement or direction. While the pinnacle hints at an important focal area, the overall design lacks the same dynamic progression seen in the other two buildings. This repetition could, perhaps, be seen as a more static composition, limiting the perception of movement.

Comparative perspective between national buildings in Malaysia, Sri Lanka and India

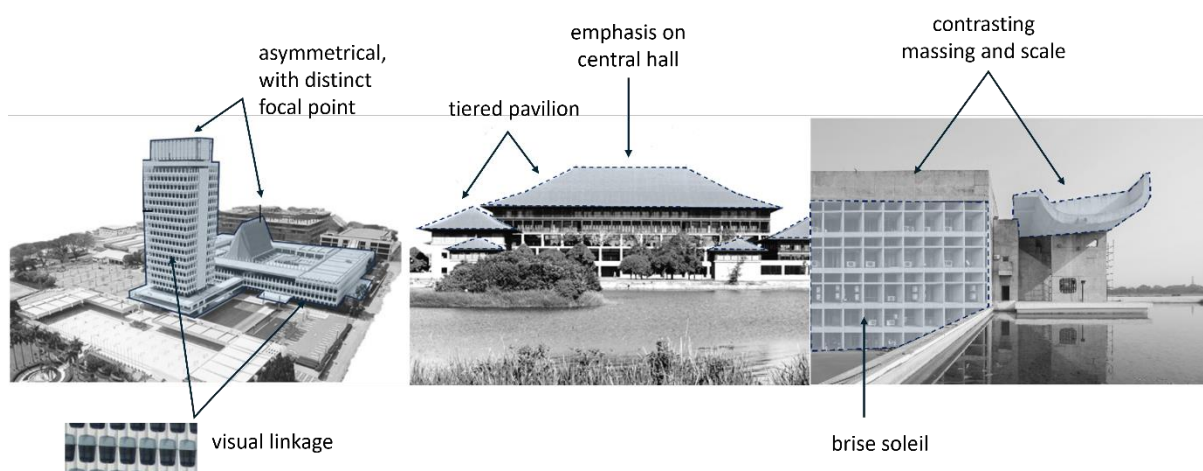


Fig. 16: (From left to right) Parliament Building in Malaysia, Parliament Complex in Sri Lanka, and Capitol Complex in India

Comparing the facades of the Malaysian Parliament Building, Sri Lanka's Parliament Complex, and India's Capitol Complex, each structure applies Visual Design Principles (VDPs) to establish a unique architectural identity.

The Malaysian Parliament Building emphasizes harmony and unity through its repetitive 'pineapple' façade, visually linking the vertical tower with the horizontal podium (Fig. 16). Sri Lanka's Parliament Complex achieves harmony through a tiered pavilion layout, blending modernist and Kandyan architectural elements with a consistent material palette. While both use repetition to create rhythm, the Capitol Complex in India achieves this through modular brise soleil elements, reinforcing its sculptural aesthetic.

Balance is approached differently. Malaysia's Parliament relies on asymmetry, with visual weight concentrated in its patterned façade, while Sri Lanka's Parliament maintains proportional balance through evenly spaced pavilions. India's Capitol Complex, in contrast, establishes equilibrium through contrasting massing and scale.

In emphasis and contrast, Malaysia's Parliament lacks a distinct focal point due to its uniform façade, whereas Sri Lanka's design highlights its central hall with an elevated roof. India's Capitol Complex stands out with its bold interplay of solid concrete volumes, open voids, and water features, creating a striking hierarchy of spaces.

Movement is most pronounced in Sri Lanka's Parliament, where cascading roofs naturally guide the eye upward, unlike the more static, repetitive façade of Malaysia's Parliament. The Capitol Complex, with sculptural elements like its hyperbolic paraboloid assembly roof, creates a dynamic visual flow across the structure.

While all three buildings reflect national identity through VDPs, they do so in distinct ways. Malaysia expresses it through geometric repetition and unity, Sri Lanka through a balance of tradition and modernity, and India through bold contrasts and dynamic sculptural forms. Together, they illustrate how design principles shape not just a building's aesthetics but also their cultural and symbolic significance.

Conceptual Model of Visual Design Principles (VDP) on national buildings in Malaysia

In the context of Malaysia's national buildings, the findings suggest that Visual Design Principles (VDP) are interconnected in the pursuit of achieving 'Harmony' and 'Unity' in façade design (Fig. 17). 'Harmony' helps to reinforce 'Unity' by incorporating complementary elements that work together to create a cohesive appearance. This is especially clear in the Malaysian Parliament Building, where a high score in 'Harmony' aligns with a high score in 'Unity' too. Both the Stadium Merdeka and the National Mosque scored lower in 'Harmony', which led to a low score in 'Unity' in VDP too.

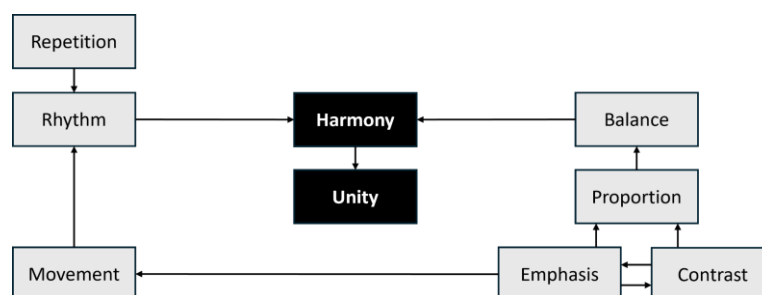


Fig. 17: Conceptual Model of Visual Design Principles (VDP) on National Buildings in Malaysia

As shown in Fig. 17, the findings conclude that two key aspects of the VDP—'Balance' and 'Rhythm'—are most prominent. These two VDPs are influential in understanding how visual elements of a façade can suggest a nation's unity, though they focus on different areas of design. 'Rhythm' is achieved through the careful use of 'Repetition,' which can also suggest a sense of 'Movement' when thoughtfully arranged. 'Balance,' on the other hand, is achieved by organising elements in symmetrical or asymmetrical arrangements. This can be achieved by establishing proportion and visual stability. 'Proportion' is often enhanced using 'Contrast,' which not only improves the visual hierarchy but also contributes to 'Emphasis' within the overall design. Through the scoring system, it also suggests that the prominence of 'Emphasis' on building facade influences 'Movement' in VDP. Scores of 'Emphasis' on all three buildings are similar to the score of 'Movement' on each respective building.

Similar principles can be observed in Sri Lanka's Parliament Complex and India's Capitol Complex facades, though each interprets 'Harmony', 'Rhythm', and 'Balance' differently. Sri Lanka's Parliament achieves 'Harmony' by blending modernist and traditional Kandyan architecture through tiered pavilions and cascading roofs, reinforcing 'Unity' through material consistency and 'Repetition'. India's Capitol Complex, on the other hand, relies on the 'Harmony' of its modular brise soleil façade to balance with its modern selection of façade overall treatment.

Despite their differences, these three national buildings demonstrate that harmony and unity are fundamental VDP principles in shaping the architectural identity of a nation through its façade.

6.0 CONCLUSION

This research explored the architectural identity of post-independence Malaysia, focusing on how national buildings balanced modernity, heritage, and multicultural influences in a period shaped by global architectural trends and local traditions. The establishment of these buildings aims not to represent any specific race, but to celebrate the concept of unity. While international modernism played a role in the formal language of these buildings, it has been assimilated to address local needs and climate. Therefore, this paper examines how the intention was achieved through the lens of Visual Design Principles (VDP), specifically harmony, unity, balance, rhythm, emphasis, proportion, contrast, repetition, and movement. Each of the three iconic Malaysian buildings selected namely, Stadium Merdeka, the National Mosque, and the Parliament Building, exemplifies unique architectural principles across the dimensions VDPs. The findings indicate that harmony and unity were among the dominant principles, reinforcing the nation's aspiration for inclusivity and modernity. However, rhythm and emphasis were inconsistently applied, suggesting differing architectural approaches in administrative versus public spaces.

A comparative perspective with Sri Lanka's Parliament Complex and India's Capitol Complex to situate Malaysia's approach within a broader post-colonial architectural discourse. Sri Lanka's Parliament integrates modernist and Kandyan elements through tiered pavilions and cascading roofs, while India's Capitol Complex achieves harmony through a modular brise-soleil façade. Though each country responded differently to its post-colonial context, all three buildings demonstrate how architecture can serve as a powerful tool in shaping national narratives.

Whilst this study highlights harmony and unity as recurring themes in Malaysian post-independence architecture, it does not claim that these should be fixed criteria for defining a national architectural identity. Nor does it suggest that these findings should be followed

uncritically as a blueprint for nation-building. Instead, the study aims to contribute to the broader conversation on how architecture, particularly in newly independent nations, navigates the balance between tradition and modernity, local identity, and global influences. It also acknowledges that architecture carries meanings beyond form and function, embodying both explicit and implicit cultural, religious, and aesthetic values that evolve over time.

By adopting both quantitative and qualitative approaches and utilising VDP to evaluate each facade design, this research sheds light on the nuanced ways in which architectural elements communicate cultural values, historical narratives, and national aspirations. Through the examination of these iconic buildings, it became evident that as an overall design aesthetic, there are no prominent styles or symbols that represent any race or ethnicity. Nonetheless, all three national buildings exhibit a prominent symbol of national unity.

However, Malaysian architectural identity is not static, nor can it be distilled into a single aesthetic or set of principles. The future of Malaysia's built environment depends on architects, policymakers, and urban planners who continue to interpret and redefine national identity in response to changing social and cultural landscapes. Rather than imposing a rigid framework, this study underscores the importance of context, inclusivity, and critical engagement in shaping Malaysia's architectural future.

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