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## A National Identity Framework Development: Adaptation of Indigenous Culture in Modern Contemporary Architecture

(Pembangunan Kerangka Identiti Kebangsaan : Adaptasi Budaya Asli dalam Seni Bina Kontemporari Moden)

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### ABSTRACT

*The failure of developing an architectural national identity has been highlighted by most scholars and architectural experts in Malaysia. Most architecture produced since Malaysia's independence are influenced by imported architectural styles. Majority of the country's architecture do not reflect the identity of its people, nor does it reflect the climate in which it is built in. Furthermore, effects of globalisation and the universalisation of architecture itself creates a plethora of issues that contribute to the lack of diversity in design, unresponsiveness to environmental concerns as well as the needs of the user. Lack of cultural heritage and national identity in architecture can be attributed to the lack of guideline or framework that allows for architects to use as a reference in designing architecture with national identity. Therefore, this study's objective is to provide a theoretical rationale for the development of an architectural national identity framework, to identify methods of adaptation of culture and cultural elements into modern contemporary architecture and lastly to identify key factors and common values that contribute to successful architecture. This study identified 5 architecture projects that reflect an adaptation of culture in modern contemporary architecture. The study revealed that there are tangible and intangible elements that contribute to design adaptation of culture in modern contemporary architecture. The role of architecture as a bridging point can both protect, preserve, and revitalise cultural heritage as well as link the tangible and intangible elements with modern contemporary architecture. The study also suggests future opportunities for research on this topic.*

*Keywords: Architecture framework; cultural adaptation; national identity; globalisation; critical regionalism*

### ABSTRAK

*Kegagalan membangunkan identiti nasional seni bina telah diketengahkan oleh kebanyakan sarjana dan pakar seni bina di Malaysia. Kebanyakan seni bina yang dihasilkan sejak Malaysia merdeka dipengaruhi oleh gaya seni bina yang diimport. Majoriti seni bina negara tidak mencerminkan identiti rakyatnya dan tidak menggambarkan iklim di mana seni bina dibina. Tambahan pula, kesan globalisasi dan kesejagatan seni bina itu sendiri mewujudkan pelbagai isu yang menyumbang kepada kekurangan kepelbagaian dalam reka bentuk, tidak bertindak balas terhadap kebimbangan alam sekitar serta keperluan pengguna. Kekurangan warisan budaya dan identiti kebangsaan dalam seni bina boleh dikaitkan dengan ketiadaan garis panduan atau rangka kerja yang membolehkan arkitek menggunakan sebagai rujukan dalam mereka bentuk seni bina yang beridentiti kebangsaan. Oleh itu, objektif kajian ini adalah untuk menyediakan rasional teori bagi pembangunan rangka kerja identiti kebangsaan seni bina, untuk mengenal pasti kaedah penyesuaian budaya dan unsur budaya ke dalam seni bina kontemporari moden dan terakhir untuk mengenal pasti faktor utama dan nilai*

*bersama yang menyumbang kepada seni bina yang berjaya. Kajian ini mengenal pasti 5 projek seni bina yang mencerminkan penyesuaian budaya dalam seni bina kontemporari moden. Kajian itu mendedahkan bahawa terdapat unsur ketara dan tidak ketara yang menyumbang kepada penyesuaian reka bentuk budaya dalam seni bina kontemporari moden. Peranan seni bina sebagai titik penghubung boleh melindungi, memelihara, dan menghidupkan semula warisan budaya serta menghubungkan unsur ketara dan tidak ketara dengan seni bina kontemporari moden. Kajian ini juga mencadangkan peluang masa depan untuk penyelidikan mengenai topik ini.*

*Kata kunci: Kerangka seni bina; penyesuaian budaya; identiti kebangsaan; globalisasi; regionalisme kritikal*

## INTRODUCTION

Developing an architectural national identity is no easy task. Discussions on national identity in architecture is a continuous worldwide debate. What is considered an architectural national identity and how does it look like? These questions have been raised by countries that have multicultural background as a direct effect of colonisation in the past. However, in recent times it is discovered that the topic of national identity, by extension national identity in architecture and the need to 'find it', is a sentiment that is shared by other countries as a collective result of globalisation.

Globalisation is a phenomenon that cannot be avoided. As Sasaki (2004) states, globalisation is endemic and is faced by everyday people in their daily lives. Sasaki's study concludes that globalisation does not necessarily involve a cultural homogenization nor is it opposed to local elements but rather it results in hybridisation of the local and global culture (Sasaki 2004).

Semenyuk et al. (2017) states that urban development and globalisation have been major topics discussed by social scientists, architects, and economists. Architecture reflects all aspects of life which includes culture, social, political, economy, fashion and style (Semenyuk et al. 2017).

Developers and architects in Malaysia employ foreign styles without considering the impact it has on the users and surroundings. This creates a confusion amongst people and an identity crisis. Lack of knowledge and of not wanting to learn the true concept of national identity are among reasons why there is a crisis in developing an architectural national identity (Seremban & Nor 2018). Alia Ahamad et al. (2019) further elaborates that the continuous misconception and confusion is due to the lack of writing, research, and documentation on Malaysian architectural national identity.

After Malaysia achieved its independence, the agenda of developing an architectural national identity was mentioned briefly during the National Cultural Congress held at the end of 1957 (Kosman 2006). As a newly independent state, the focus of developing the nation was met with great support and developed successful

architecture such as the National Mosque of Malaysia and Malaysia Houses of Parliament.

However, not all architecture built achieved the same level of success. Raymond Honey (1960) states, difficulty in forming such an identity is due to lack of information or examples of architecture from the past. Additionally, the presence of other cultures within the community is a difficulty factor in creating an architectural identity. Architecture is not only defined by the physical aesthetic representation but must reflect the regional surroundings such as culture, traditions, technology, weather, and local materials (Honey 1960; Kosman 2009).

In 2021, a symposium was held discussing 50 years after the enactment of the 1971 National Cultural Policy. Kahar (2021) reports that efforts to define Malaysian culture seem to be increasingly chaotic. Some experts argued that the change in leadership roles in the government and their own agendas are the reason there is a dispute in forming a national identity. While others argued that the policy was not relevant because of the exclusivity of other races. What can be concluded from the discussion is that there is still a lack of understanding amongst experts and the people as to what constitutes as a national identity and the evolution of the Malaysian people (Kahar 2021).

There is still hope in developing a national identity for this country. In the face of globalisation, it is important more than ever to develop one that is holistic and inclusive in nature. Architecture can be the bridging point between old and new (Kasturi 1983; Kosman 2009). It is also the perfect medium to showcase the spirit and identity of a nation. However, there should be thoughtful design generation that focus on the style and physicality of the architecture whilst emphasising the intangible elements. These intangible elements are dynamic in nature and should reflect Malaysia as it is -- a multicultural nation with plenty to offer.

## RESEARCH QUESTION

Therefore, what are the common values that contribute to a successful architecture? Secondly, what does a general architectural national identity framework look like?

## OBJECTIVES

Therefore, this paper aims

1. To provide a rationale for the development of an architectural national identity framework.
2. To identify the methods of adaptation of cultural elements into modern contemporary architecture.
3. To identify the common value that contribute to a successful architecture.

## IMPORTANCE OF RESEARCH

As a starting point to bridge the gap between vernacular architecture and modern architecture through understanding the adaptation of cultural elements and the formation of an architectural national identity framework. By using this framework allows designers to understand the many aspects of vernacular architecture.

It will function as a guide for architects, designers, and researchers on the ways to study a specific culture. This will ensure that all aspects of a specific culture are studied thoroughly. The study can then be replicated with other cultures and finally formulate an inclusive and holistic national identity framework for multicultural countries such as Malaysia.

## METHODOLOGY

This study uses Qualitative method. The study is divided into two parts data collection: through literary sources and content analysis of the literary sources.

First, consists of an analysis of literary sources on architecture styles and movements that lead to a development of an architectural framework. Five individual projects were selected for analysis based on the adaptation of cultural elements to modern architecture. This approach is in line with the concept of Critical Regionalism. The buildings chosen are selected from different years to show the comparison between the methods of design. The methods used to study the culture and adapted into contemporary architecture are analysed and synthesised.

The second part of the study is content analysis which consists of identifying common themes in each literary source analysed that form the basis of the architectural framework.

## LITERATURE REVIEW

Architecture represents everyday life of ordinary people. Their social interactions, culture, aesthetic, religious views, natural environment, and government structure (Semenyuk et al. 2017). Identity cannot be forced upon, must reflect the overall society, and should be accepted by all of society or represent the society holistically (Correa 1983). Therefore, for multicultural countries such as Malaysia, it is important to not focus on a specific ethnicity or culture when developing an architectural identity. The ability to identify common values and factors that are shared between each ethnic group need to be addressed.

History has shown past efforts in developing a national identity. The Arts and Crafts Movement was an attempt at reforming the value of design and production in Britain during the mid-19th century. The radical ideas by the group offered a way at producing relevant architecture and new way of thinking that influenced the architecture in Britain and other movements in other countries. It became a catalyst to reflect on humanistic and cultural values in architecture and product development.

### THE ARTS AND CRAFTS MOVEMENT

Arts and Crafts Movement introduced a reinterpretation of traditional architecture of Britain to modern architecture. The Arts and Crafts Movement is considered a fruitful effort in developing a national identity in Britain. It was founded to counter the negative effects of the Industrial Revolution (Kosman 2009). The movement condemn low-quality products that lack identity whilst highlighting folk and vernacular architecture as methods of enhancing quality of life. Even so, the ideas of the movement were often dismissed and ridiculed as backwards thinking in the light of a 'new era'. In recent times however, it is observed the sentiment of looking back on vernacular architecture as one of the best solutions to practice in enhancing the quality of life for the user.

Importation of neoclassical architecture was strongly opposed by the movement as it did not reflect the local identity. Writings by Augustus Pugin (1812-1852) supported the need to look back on traditional architecture, such as medieval gothic architecture of Britain, considered responsive to the needs of the people and are humanistic in nature.

As the Industrial Revolution impacted the world in an unprecedented way, other countries face similar issues within the new era of machinery. The efforts of the Arts and Crafts Movement became the inspiration behind other movements throughout the world. The widespread of the Arts and Crafts Movement can be seen in other countries such as Germany, Netherlands, and America.

### THE PRAIRIE STYLE

The Arts and Crafts Movement migrated across the North Atlantic Ocean and developed into its own distinct style in America. Historically, architecture in America was influenced by nationalities that settled in the area. For example, Dutch architecture in New Amsterdam (New York City) and French architecture in New Orleans. However, with the expansion of knowledge and the movement, American architects were inspired by the movement and developed an architecture style that reflected the American spirit. (Columbia Electronic Encyclopedia, n.d.).

British architects were able to experiment with ideas of adapting vernacular architecture, such as Victorian Gothic and folk architecture, to modern contemporary architecture. Whilst many American architects were inspired by this, they however had few vernacular architectures to refer to. Several factors that contributed to the difference in approach by both countries is its definition of vernacular, indigenous and traditional (Amundson n.d.).

The Prairie style, emerged in the early 1900s, as inspired by the Arts and Crafts Movement and is known as the first distinctly American architectural style. With emphasis on nature, craftsmanship and simplicity, it embraces the sense of place with modern elements and technology (Thomann 2022).

### CRITICAL REGIONALISM

As architecture progressed and adapted throughout the world, the advancement of technology and the emergence of WW2 became a catalyst for exploration in architecture. After the war, rebuilding cities became opportunities to put forth new ideologies in architecture and allowed for modernists to explore Avant-garde ideas. Old precedents and principles of urbanism and human dimension applied before in old cities were abandoned (Trancik 1986).

Architecture produced post WW2 focused on buildings as an image or symbol of a company. Developers and building owners compete to design magnificent large-scale buildings that do not have room to create meaningful spaces (Frampton 1983). The emergence of new technology and increase of personal vehicles created a need for highways and open parking areas which caused for fragmentation of the city, no longer allow for easy connectivity and an abandonment of culture (Trancik 1986). As a result, the population suffers from various mental and physical problems, high crime rates due to displacement and loss of Sense of Place (Trancik 1986).

The universalisation of architecture throughout the world, showcases the advancements in mankind but also a subtle destruction of traditional cultures (Frampton 1983). Traditional cultures and vernacular architecture are how great civilisations interpret life. Culture and civilisation prior to the modern era, went hand in hand in existence with civilisation being the epitome of human advancements in cultural and technological development.

Therefore, Frampton (1983) suggests the best approach is architecture that separates itself from the illusion of progress and the unrealistic impulse to return to preindustrial architecture. As Ricoeur states:

“... There is a paradox: how to become modern and to return to sources; how to revive an old, dormant civilisation and take part in universal civilisation...”  
(Paul Ricoeur, Frampton, 1983)

Originally by Alex Tzonis and Liliane Lefaivre, Critical Regionalism explores the surrounding cultures and derive elements indirectly from a particular place. It requires a higher level of critical thinking and self-consciousness from the designer to design architecture that preserves culture and develops with the era and technological advancements. Therefore, Critical Regionalism cannot be simply based on indigenous or vernacular forms.

Szacka (2019) elaborates Frampton’s text on Critical Regionalism as a method to enable an architecture of resistance. Focusing on site specific opportunities and constraints, the project takes advantage on the cultural and material histories of the site or having the awareness of the constraints and opportunities identified from the site.

Although Critical Regionalism was written during the late-20th century, it is still relevant even in recent times due to the ever-changing aspects of the world. It is ways to preserve culture through the juxtaposition of world culture and regional culture, and potentially be able to create a national identity that can withstand the effects of globalisation throughout time.

## RESULTS

When considering complex concepts such as this, we need to evaluate architecture that reflects these ideals through deep understanding of the cultures and its influence on the daily lives of people. The identity of a nation is built upon the foundations of its culture, traditions, and the language. As quoted by Uwapei elders in Peter Bang’s (2018) photography documentary of islands in Micronesia:

“A people’s culture resides in the hearts and in the soul of its people. But if you do not tell the stories – if you do not sing the songs and if you do not speak the language – the culture will cease to exist”

Uwapei elders and cultural teachers (Bang 2018)

The buildings chosen for this review are based on these ideals and embraces culture in designing modern contemporary architecture.

#### JEAN-MARIE TJIBAOU CULTURAL CENTRE, RENZO PIANO WORKSHOP



FIGURE 1. Jean-Marie Tjibaou Cultural Centre. Source : Flickr user Fournure for Archdaily

Located in New Caledonia in the South Pacific Oceania region, the Jean-Marie Tjibaou Cultural Centre by Renzo Piano was built as an effort to articulate the discussions of cultural equity and the rights of colonised indigenous populations and control over their destiny (Murphy 2002). Inspired by the Kanak people, the building is an effort at putting forth a new narration of the Kanak people in modern times.

Jean-Marie Tjibaou – son of a tribal chief, was a political leader and activist for the independence of the Kanak people (Thompson, n.d). He believed that to return to pre-colonisation Kanak traditions was unrealistic and the way for progress was to adapt for the future.

“The return to tradition is a myth... No people have ever achieved that. The search for identity, for a model: I believe it lies ahead of us... Our identity lies ahead of us.”

Jean-Marie Tjibaou (Thompson, n.d)

Renzo Piano, inspired by the words of Jean-Marie Tjibaou, created an architecture that is both forward thinking and relevant even to this day. Piano worked with ethnologist, Alban Bensa, an expert in Kanak studies along with a council of Kanak culture practitioners during the design process to better represent the culture. What was

created was a phenomenal building that highlighted the culture of the Kanak people from every aspect. The ethnologist assisted in coming up with the components that allow the Kanak people to build a modern image of themselves through the built environment but retain roots with their past (Bensa 2005; Thompson n.d).



FIGURE 2. Traditional Chief House of the Kanak people  
Source: David takes photos; Inexhibit.com

Inspired by the Kanak Chief house, the building is a reformulation and transformation effort by the architect (Murphy 2002). Using the chief’s house as a beginning point, the architects manipulated and deconstructed the

form to create a sequence of rounded, open shells on a frontal axis (Langdon 2021). The shell form is a blend of traditional construction that is tapered and follows the texture of the surrounding environment. The building appears incomplete to represent the Kanak culture as non-static but ever changing and without losing their roots.

Piano also studied the materials and patterns of construction in Kanak traditional houses thoroughly. Similarly, to vernacular architecture, Piano emphasises on site conditions and designs to the environmental factors to ensure its performance and the building's aesthetic (Langdon 2021).

The spirit of the Pacific is temporary and is represented using perishable materials. In Kanak culture, the continuity of the village is not how long the building lives on but by the preservation of the topology and pattern of construction. (Piano n.d; Murphy 2002). Piano observed the Kanak culture of weaving everyday items such as baskets and fish traps. These elements are reinterpreted and incorporated in the façade with overlapping wooden slates that reflect interwoven materials. An exploration of façade as well as creating playful spaces of light and shade. Where lashings

and structure are always visible in traditional buildings, Piano explores through easy visibility of structural timber and steel of the centre.

The materials chosen were intended to resemble traditional architecture (Langdon 2021). It is a direct reference to the vernacular techniques of traditional Kanak constructions and to invoke unity with the surroundings. However, materials were imported because of lack of suitable materials around the island for the project. Piano chose African iroko wood as the main external material as it is rot proof and fades down to a colour palette that is like the surrounding trees. (McInstry 2020; Thompson n.d).

Preservation of cultures and traditions through built form are often represented through tangible aspects. Piano incorporates intangible elements such as spiritual, historical and cosmology elements of the Kanak tradition through site planning and even procession through the site. The buildings are stretched along the hillside of the site and are clustered similarly to the traditional Kanak village which connects between one program to the other through a series of pathways (Langdon 2021).



FIGURE 3. Pathway within cultural centre.

*Source:* Saturnino for Archdaily

The buildings are arranged in what is called Le Chemin Kanak or The Kanak Path which commemorates the procession of Tea Kanake, the Kanak Culture hero (Murphy 2002). It also creates an interweaving flow of movement between indoor and outdoor elements and the surrounding island landscapes whilst incorporating environmental responses such as ventilation and lighting (Langdon 2021).

The surrounding showcase the Kanak culture through celebration of indigenous landscaping which also functions as a Melanesian food garden. The choices of plants, arrangements of earth mounds and natural elements all have significant cultural meaning and represents the stages of Tea Kanake's epic journey (Murphy 2002).

Renzo Piano was able to showcase the Kanak people's culture through a reformulation, transformation, and adaptation of its tradition to the modern contemporary architecture. Although the architect never mentioned the style of architecture, we can safely assume it is an attempt at Critical Regionalism because of its efforts in finding balance between the old and new and adapting tradition to modern.

The following discussion will look at another project that applies the same approach which is the Uluru-Kata Tjuta Cultural Centre, Australia by Gregory Burgess Architects.

#### ULURU-KATA TJUTA CULTURAL CENTRE BY GREGORY BURGEEES ARCHITECTS



FIGURE 4. Aerial view of Uluru-Kata Tjuta Cultural Centre.  
Source: Gregory Burgess Architects

Uluru-Kata Tjuta Cultural Centre by Gregory Burgess Architects is located in the Uluru-Kata Tjuta National Park, Central Australian desert. The Uluru-Kata Tjuta National Park is named after the two of Australia's spectacular sites which is the sandstone monolith of Uluru and the red domes of Kata Tjuta (Parks Australia n.d-c). Historically, the traditional owners are the Anangu people and are the keepers of the land. Anangu refers to the people of the Uluru region and is known to be one of the world's oldest living cultures that continue to preserve their traditions and heritage till present day (Parks Australia n.d-a).

For the traditional owners, their history with the white people have been an extreme cultural and physical disruption (Layton 1986 as written in Wallis 2005). The Aboriginals of Australia faced isolation from white population to a point where vast majority of them were confined to a region within the southwest corner of the Northern Territory which acts as a form of sanctuary for

the people. However, in 1936, tourism to the Aboriginal lands began with the first group of tourists visiting Uluru or Ayers Rock (Wallis 2005). Tourism in the region started expanding rapidly and eventually caused the presence of the Aboriginal people became insignificant.

Apart from that, the area surrounding Uluru became a tourist town which led to decline and underappreciation of Uluru as a spiritual significance to the Anangu. This led to a need for a restructure of tourism in the region and eventually the area became a national park with the Anangu as keepers of the land. In 1985, title of the land was granted to the Uluru-Kata Tjuta Aboriginal Land Trust and leased to the Commonwealth Australian National Parks and Wildlife Service (ANPWS). Under this arrangement, the park is managed by a Board of Management which comprises of Anangu majority. With this arrangement, the rights of Anangu are protected and promote an Aboriginal presence and management of the park.

While Anangu accept the increased in tourists that come to Uluru, they believed that tourists should learn about their culture and cultivate an appreciation towards it. With an estimate of 250,000 visitors per year, it created a need to construct a cultural centre that blended the Anangu culture and demands of tourism (Parks Australia n.d-a; Parks Australia n.d-c; Walliss 2005).

In 1990, Gregory Burgess Architects were commissioned for the project. Gregory Burgess began designing the cultural centre by first understanding the brief and needs of Anangu whom supported the idea of bringing together of cultures and tourists (Burgess 1990; Walliss 2005). It functions as a place Anangu welcome visitors where visitors can learn about Anangu and Tjukurpa without falling into tourist gimmick. Anangu wanted control over the level of access tourist had with Anangu whilst allowing for economic growth for the people. This creates a sense of ownership and strengthens sense of belonging for Anangu, indirectly shifting the perspective of Anangu in Australia and the world's view.

As Anangu life revolves around keeping Tjukurpa alive and strong, it was important for the architects to understand the essence of Anangu and Tjukurpa. To do so, the architects lived in Mutitjulu for a month to study major

Tjukurpa stories that influence Anangu's everyday life (Walliss 2005). Tjukurpa, is the foundation of Anangu culture and it is a way of life that lives in the land and its people. Tjukurpa is deep and complex, it embodies all aspects of life including religion, philosophy and how one should behave with each other and with nature. Tjukurpa is also a guide, and its stories are maps for the Anangu on where to find food and water. For Anangu, it also functions as law, spiritual guide, and a moral compass for daily life and as their justice system. Tjukurpa is passed down from one generation to the other through memory and oral tradition to selected people like an inheritance (Parks Australia n.d-b).

Designing in respect to Tjukurpa, the site selected was placed at the same side of Uluru as a fierce battle between Kuniya, a female python and Liru, the male brown snake. As Anangu history is shared by being walked and spoken, the tales of Tjukurpa is retold in dance and song throughout the continuous dunes and contours of the land (ArchitectureAU 1996). The design of the building was inspired by this epic battle with the Kuniya represented as the southern building and Liru represented as the northern building.



FIGURE 5. Uluru-Kata Tjuta Cultural Centre inspired by the epic battle of Kuniya and Liru.  
Source: Gregory Burgees Architects

The space programming of the building follows a flow of movement from the beginning of carpark to the west. Minga or tourists, walk from the carpark around the Inma danceground and pass the southern building before entering

the arrival space at the head of the serpent where it is cool and provides shade from the scorching sun. The arrival space is the beginning entrance to Tjukurpa where the space is considered sacred and quiet down upon arrival of Minga.





FIGURE 6. Interior space of Uluru-Kata Tjuta Cultural Centre  
 Source: Gregory Burgess Architects

The movement of people go through the first sequence of space through the telling of Tjukurpa by using paintings and ceramics on floors and walls which elaborates the stories well. There is also an audio and visual area where song and dance are played for the visitors to witness. These spaces tell a delicate explanation of Tjukurpa in its basic understanding. The male and female aspects of Anangu culture and lifestyle. The spaces later flow into areas with more educational aspects followed by arts and crafts gallery and lastly kiosks selling food and artwork for Minga to purchase.

The building expresses a rhythm of movement among dunes and of listening to stories of Tjukurpa as how it is told – through song, dance, and walking. The undulating building also reflects the dunes in the national park. Every part of the cultural centre plays an important and significant role in immersing the Minga to the Anangu culture and Tjukurpa. Even the landscape is not passive and is experienced actively through walking and experiences of shadow and light (ArchitectureAU 1996). The landscape surrounding reflects the dessert and is native to the region. The bush trees are familiar elements in Anangu culture and create a harmonious atmosphere with the cultural centre.

The materials used in the building on the other hand also reflects the story of Kuniya and Liru. The use of materials such as mud walls and timber soffits give a permanence towards the buildings whilst keeping the

interior cool and natural. The building breathes by allowing air to flow through shaded open spaces, perforated curved walls and undulating eaves (ArchitectureAU 1996). The roof is described to appear spine-like that reflects the backbone of the serpents in the stories. The ‘peeling’ effect of the roof exposes the timber soffits and allows for daylight to penetrate through. The ground reflects the light and gives a warm glow which transforms the ambience within the interior of the building.

Evidentially, the Uluru-Kata Tjuta Cultural Centre by Gregory Burgess Architects is another example of adaptation of culture into modern contemporary architecture. Working closely with communities is an important aspect in understanding and identifying best methods of showcasing their culture with respect to the people practicing these cultures. By adapting the Tjukurpa story of Kuniya and Liru to modern built form, it can be said that this is an example of Critical Regionalism that respects the people and the spiritual connection with the region.

Next, this paper will looks at more recent efforts in the 21st century such as in Kazakhstan and how the architect’s adapted the Kazakhs nomadic Yurts to a modern building, followed by the 2022 Pritzker Architecture Prize Award recipient, Francis Kere’s work and lastly the adaptation of Orang Asli Temiar Tribe culture and architecture to a contemporary resource and cultural centre.

## KHAN SHATYRY ENTERTAINMENT CENTRE, FOSTER + PARTNERS



FIGURE 7. External view of Khan Shatyr Entertainment Centre that resembles the traditional Yurt.  
 Source: Foster + Partners

The Khan Shatyr Entertainment Center by Foster + Partners is in Astana, Kazakhstan. The building completed in 2010, is the largest tensile structure and has become a major new civic, cultural, and social venue for the people of Astana (Archello n.d). Essentially, it is a giant transparent tent that is built at 150m high and has a 200m elliptical base designed by Norman Foster. The architect is well known for its use in technological advancements in its buildings and the majority of literature available on the project are about the technology and science put into it.

However, a writing by Semenyuk et al., (2017), studies the design from a different perspective which rarely gets traction for projects at this scale. Although the project does reflect a futuristic modern style and structural innovation, one can argue that the design has roots in the nomadic houses called Yurts of traditional nomadic Kazakh culture. The Yurt have always been a distinct feature of lifestyle, culture and tradition of the people of Central Asia (WEproject 2017). There are different types of Yurts that suit the nomads of the region such as the Mongolian Ger/ Yurt, Kazakh Yurt and Kyrgyz Yurt. Each of these Yurts are used by different ethnic groups, thus represents each of their culture, lifestyle and tradition. However, for the sake of this paper, we will only be referring to the Kazakh Yurt for better understanding of Norman Foster's building.

In modern times, most Kazakhs no longer live in Yurts.

However, it still plays an important role in their life and often used in different celebrations and holidays. While some even use it for keeping stock or as a cookhouse for gatherings (Uatkhanov 2015). The Kazakh Yurt or also called *kiyiz* is translated to felted house in which the materials used is out of soft felt from wool of a special breed of sheep shorn in autumn. As the Yurt is a mobile dwelling, the overall materials used is lightweight and portable. The Kazakh Yurt embodies the principles of life and traditions which is the desire to live in harmony within nature, universe and oneself (Semenyuk et al. 2017).

Every part of the Yurt represents this desire. From the nomadic life of its people, to the colour of the exterior tent, each element within the simple but sturdy structure has meaning. The nomadic life focuses on the need for the Yurt to be lightweight and portable. The exterior felt which is white in colour symbolises harmony with the backdrop of snow top mountains. The circular shape of the Yurt and the circular central opening called *Shanyrak*, which is known to be the oldest symbols in world culture and the Kazakh tradition, is symbolic of universal harmony and the link between generations (Semenyuk et al. 2017). The interior of the Yurt is often colourful, which is in contrast with the white exterior tent. The vivid colour of the interior along with the sacred circular forms are often related to spiritual worship of the nature and heavenly bodies.



FIGURE 8. Kazakh Yurts with the background of mountains.

*Source: onikonova on Flickr*



FIGURE 9. Khan Shatyry Entertainment Centre's transparent tent reflects the sky giving a similar colour to the traditional Yurt.

*Source: Foster + Partners*

The Khan Shatyry Entertainment Centre by Norman Foster has similar elements to the Kazakh Yurt. Although it is a more direct approach compared to the previous two buildings discussed in this paper, Foster's approach is theoretically in line with the theory of Critical Regionalism whereby he includes the use of modern technology and science in its construction. The Khan Shatyry Entertainment Centre features a transparent tent that covers the entire complex similarly to the felts of the Yurt. The transparent tent during daytime is often seen as white in colour which is similar to the Yurt which pays homage to the surrounding nature of the mountains. The interior of the Yurt still maintains the circular form which is an important element in Kazakh tradition and the interior also features a more colour and vibrant atmosphere compared to the exterior.

The interior also includes vegetation which also exists in the traditional Yurt in the form of ornaments.

The concept behind the Khan Shatyry Entertainment Centre's design or inspiration was never explicitly discussed by the architect, one cannot help but wonder if the similarities between the building and the traditional dwelling were purposeful or accidental. Regardless of its true ideation, the Khan Shatyry Entertainment Centre successfully embodied and merged the blend between tradition and modern with an interesting rendition of a traditional dwelling for a meaningful culture. The next project this paper will study on the Benin National Assembly by 2022 Pritzker Architecture Prize winner, Diébédo Francis Kéré.

## BENIN NATIONAL ASSEMBLY BY DIEBEDO FRANCIS KERE



FIGURE 10. Rendering of Benin National Assembly by Francis Kere.

*Source:* Kere Architecture

Winner of 2022 Pritzker Architecture Prize Award, Diébédo Francis Kéré or better known as Francis Kere, explores architecture with a sense of rooted cultural sensitivity that not only delivers social and environmental justice but focuses on the needs of the community. His designs stem from a need to provide comfortable conditions for the user by solving issues surrounding the site such as environmental impact as well as lack of resources and materials.

Francis Kere combines his European architectural education with the traditions, needs and customs of his home which responds and respectful towards the site (Pritzker Architecture Prize n.d) The sensitivity towards his culture becomes a guide to designing for the community by making the program, materials, and characteristic of his buildings unique to each individual project and site requirement. Like the other architects and the buildings studied in this paper, Francis Kere does not specifically mention a particular style or theory of design being applied.

However, Kere Architecture's principle is informed by tradition yet explores new modes of construction. Innovative use of local materials and resources, along with the community participatory in the beginning stages of design creates a more holistic architecture that allow them to work beyond the boundaries and set a dominant presence in the architecture industry, challenging normal methods of design and construction as well as the established design practices out there in the world (Kere Architecture n.d).

The architect also includes working with local craftsmen and utilising their skills in construction. In doing so, it involves direct work with community and elevates the lifestyle of the people. These principles of design and ideologies are in line with Critical Regionalism that implore the architects to develop architecture by truly understanding the roots and elements of a culture whilst incorporating new methods of construction, materials and technology.

The Benin National Assembly is one of many projects under Kere Architecture that is inspired by a cultural activity of a community. The national assembly functions as representing the people and the new building design embodies the values of democracy and cultural identity of its citizens (Joyner 2021). A more thematic and cultural approach, the building design was inspired by the tradition of discussing under the palaver tree. Kere designed the Benin National Assembly to mimic this tradition with revolutionary design strategies to promote a holistic public building for both locals and government officers to utilise. In West African tradition, meetings to make important decisions in the interest of the community are held under the Palaver Tree (Shanghai Academy of Fine Arts, Shanghai University n.d). It is considered a timeless and sacred symbol that respects the majestic force of nature which bears witness to human lives and evolution of society.



FIGURE 11. Meetings conducted under Palaver tree. *Source:* Robynfsalter

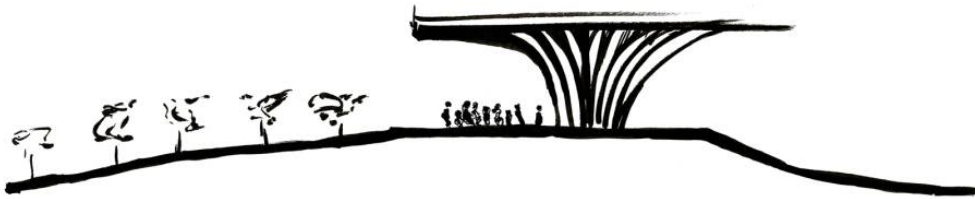


FIGURE 12. Sketches of Benin National Assembly. *Source:* Kere Architects

As the function of The Benin National Assembly is a place where law and decision making are conducted, it acts as a similarly to the Palaver Tree. Thus, Kere's spark of cultural inspiration and design with response to environmental needs. The Benin National Assembly features an assembly hall on ground level with the offices located on the upper 'canopy' for government officers. The offices are set back deep from the facade to filter out the harsh African sunlight whilst providing natural daylight. The 'trunk' acts as a central courtyard that allows for natural ventilation, daylight, and the main circulation area. Including in the courtyard is a central spiral staircase that allows for vertical movement from each floor. The building also features a public park that displays Benin's native vegetation whilst catering to the needs of the people for a new recreational space.

The Benin National Assembly is an example of using a cultural activity and adapting it to a contemporary building for the use of the public. It blends a sense of

tradition keeping alive in a subtle but forward way but physically inserting itself into modern society through building. One of Francis Kere's bigger scale projects that show this blending of culture and tradition with modern architecture is achievable. Next, this paper will look at adaptation of indigenous culture into modern contemporary architecture for the Orang Asli of Malaysia.

#### TEMIAR RESOURCE AND CULTURAL CENTRE

The Orang Asli of Malaysia is categorised as a group of native inhabitants that can be found in Peninsula Malaysia. They are indigenous minority group of people that have African roots and have Negrito ancestry roughly around 40,000 years ago (Shah et. al. 2018). According to Bellwood (2007), the Orang asli are direct descendants from the Hoabinhian era which refers to the late period of hunter-gatherers and the beginning of agriculture.



FIGURE 13. Temiar Resource and Cultural Centre.  
 Source: SM Hilmee, Final Year Thesis Project Report (2021)

The Orang Asli is divided into three major ethnic groups which are the Semang Negrito, Senoi and Proto-Malaya (JAKOA 2022; Hilmee 2021). In each major group there are 18 ethnic sub-groups or 'tribes'. The tribes are categorised by difference physical features, economic lifestyle, social organisation, religion and even language (Nicholas et al., 2003). The Orang Asli of the Temiar Tribe (hereafter will be referred to as Temiar), are categorised as sharing Austroasiatic or also known as Mon-Khmer language (Benjamin, 2012). They make up second largest tribe in Senoi category and live mostly in the high mountains of the Titiwangsa mountain range (Hilmee 2021). As a rule of life, they mostly live at upstream of rivers and open spaces of the forest. The main activity conducted by the Temiar are agriculture, hunting and foraging.

Common knowledge and census on economic growth of these minority group, suggest that the Orang Asli population are mostly left behind in terms of modern progress when compared to other ethnic groups. Due to their remote rural location, majority of the Temiar receive less assistance from the state or even federal government. This is further exacerbated with the forest being destroyed for development or agriculture thus reducing their foraging and hunting grounds.

The Temiar tribe in Pos Gob, Gua Musang, Kelantan

were identified as one of the last human settlements in the Titiwangsa Range that are highly impacted by these issues. In a study conducted by Doris Padmini Selvaratnam et al. (2016), the community voiced out their desire to have a better quality of life and to be able to afford daily necessities as well as protecting their culture, tradition and identity. Therefore in 2021, as part of a long-term development program by the University Community Transformation Centre (UCTC) in Universiti Kebangsaan Malaysia (UKM), a masters architectural design thesis was developed to propose a resource and cultural centre that can allow for economic growth for the community as well as preservation of culture and tradition.

Thus, the Temiar Resource and Cultural Centre (TRCC) was designed as a place for the residents of Pos Gob to use for learning and cultural sharing within their community. TRCC was also designed to cater to visitors who enjoyed eco-tourism and providing them a place to rest and relax away from the hustle and bustle of city life. To design TRCC, the architect had to study the Temiar culture, lifestyle and adapted into a contemporary modern architecture. From the study, the architect identified the cultural element of *sewang* which is an important traditional spiritual dance conducted by the Temiar. The *sewang* became a starting point on exploring the flow of movement of people within the centre.



FIGURE 14. Site plan of the Temiar Resource and Cultural Centre, Pos Gob, Gua Musang Kelantan.  
 Source: SM Hilmee, Final Year Thesis Report (2021)



FIGURE 15. Cultural Centre overlooking river and forest.  
 Source: SM Hilmee, Final Year Thesis Report (2021)

The site planning of the building was also inspired by the traditional villages of the Temiar which are predominantly designed around an open communal space with the river or forest behind it. The river, being a major wayfinding point, was taken into consideration when designing and became a major element within the overall design and spatial planning. The cultural component of the

centre was designed with the river and forest as the background which creates an attraction and spectacular view that showcases the spirit of the people and the forest.

Each building block was used for specific program of the building. Therefore, a clear distinction and separation between the culture centre and resource centre was created to cater for the shy nature of the Orang Asli community.

Each building block designed was inspired by the vernacular Temiar house or *Rumah Inap*, in which major components were considered such as physical, environmental, cultural, social, and material used. The Temiar are a community that rely on bamboo for most of their daily needs. As the building designed did not follow the traditional *Rumah Inap* form, the materials used tied it back to the people in which bamboo was explored to its fullest potential including hybrid experimentation of concrete and bamboo to make up for the long span and curvature element of the building footprint.

This adaptation of Temiar culture and architecture is an example of how Critical Regionalism can be implemented by using a simple culture in a remote rural area that can potentially improve the lives of the people for the better. Next, the following section will discuss on the trends identified in each building studied and the elements that contribute to a framework development for national identity.

## DISCUSSION

Evidentially, there are many ways to approach the discussion of national identity. Architecture can be considered a small slice of the bigger cake but has the most impact in terms of visual perception to the public of what can be defined as national identity. The buildings discussed in this paper are some examples of how identity can be showcased through an adaptation of culture into the modern contemporary architecture. Various elements within each building had been identified through content analysis. The results of the analysis can be divided into two main categories which are tangible elements and intangible elements. The categories are tabled out as below:

TABLE 1. Results of tangible cultural elements identified having significance in adaptation of culture in modern contemporary architecture

COMMON THEMES IN CRITICAL REGIONALISM BUILDINGS								
BUILDING	ARCHITECT	CULTURAL IDENTITY	CULTURAL FACTORS INFLUENCING DESIGN					
			TANGIBLE FACTORS					
			PHYSICAL INSPIRATION	SITE PLANNING	ENVIRONMENT	TOPOGRAPHY	INDIGENOUS LANDSCAPING	USE OF LOCAL MATERIALS
Jean-Marie Tjibou Cultural Centre, New Caledonia	Renzo Piano Building Workshop	Kanak People	/	/	/	/	/	/
Uluru-Kata Tjuta Cultural Centre, Australia	George Burgees Architects	Anangu		/	/	/	/	/
Khan Shaytr Entertainment Centre, Kazakhstan	Foster + Partners, Semenyuk et al.,	Kazakhs People	/		/			
Benin National Assembly, Republic Of Benin	Kere Architects	Republic Of Benin	/		/		/	
Temiar Resource And Cultural Centre, Malaysia	SM Hilmee, Final Year Thesis Report	Temiar Tribe, Orang Asli	/	/	/	/	/	/

The results in Table 1 show the tangible common themes identified that influence the design of each building. Tangible is defined as capable of being perceived especially by the sense of touch or substantially real. It also can be defined as capable of being precisely identified of realised

by the mind (Merriam-Webster Dictionary n.d). In this instance, tangible elements in terms of architecture should be considered as elements that are capable of being perceived through the senses, such as through sight, smell, hearing, taste and touch. The common tangible themes



identified in all 5 buildings is the influence of environmental factors, followed by having a physical inspiration, the use of indigenous landscaping, site planning, topography and lastly the use of local materials in construction. Environment is identified as the most common theme or element present in each project having a significant contribution in the overall design. This is because it is the very basic essence in every architectural project. As architects, the basic principles that reflect good architecture is a building that responds to the local climate and site requirements. Fundamental in every architecture project, regardless of the concept or type of building designed every architect should first and foremost solve environmental requirements for each architectural project.

Next, 4 out of 5 buildings studied had a physical element that influenced or was used in adapting to modern contemporary architecture. These physical elements include the use of Chief house in Jean-Marie Tjibou Cultural Centre, Kazakh Yurt in the Khan Shatyry Entertainment Centre, Palaver Tree in the Benin National Assembly and lastly the Temiar vernacular house and village in the Temiar Resource and Cultural Centre (TRCC) design. Each project studied the physical element of the culture studied and adapted it into the buildings design. The TRCC adapted the stilts of the *rumah inap* which gave its character and responded to environmental needs.

In addition to that, 4 out of 5 buildings used indigenous landscaping as part of their overall masterplan design. Each project focused on preserving and showcasing the culture and lifestyle of the people through its surrounding landscape. For example, the Jean-Marie Tjibou Cultural Centre featured a working Melanesian food garden that could be cultivated for the use of Kanak traditional cooking. The Uluru-Kata Tjuta Cultural Centre also features

indigenous landscape and elements that is suitable in the deserts of Australia at the same time blends well with the scenic background. The landscaping used also plays an important role in Anangu culture and it is showcased through the design of its landscape.

Site planning and Topography are almost similar in meaning however site planning refers to the active decision on using cultural elements in its design such as implementing the Kanak Path in Jean-Marie Tjibou Cultural Centre, the creation story of Kuna and Liru in the Uluru-Kata Tjuta Cultural Centre and lastly the traditional village site planning of the Temiar village in the TRCC. Topography on the other hand refers to the overall physical land feature of the site and how the building 'sits' on the natural land contours with minimal disturbance towards the land. This is similar to the *rumah inap* in Temiar culture where the houses are 'gently' placed on the land with minimal change to the land.

Lastly, on the use of natural materials, only 2 out of the 5 used vernacular local materials. This number is low because of various reasons such as the scale of the project, the use of modern technology and the type of building built. Local materials would not have been suitable to be used in the construction of the projects due to its nature of deterioration and size of the building project. Therefore, the architects decided that materials used for construction should have a better lifespan or explore the concept of hybrid construction through a merging of vernacular materials with modern technology or modern materials with vernacular theories of construction.

Next, the following section will discuss on intangible cultural elements that influence and are adapted into modern contemporary architecture of each building studied.

TABLE 2. Results of intangible cultural elements identified having significance in adaptation of culture in modern contemporary architecture

COMMON THEMES IN CRITICAL REGIONALISM BUILDINGS							
BUILDING	ARCHITECT	CULTURAL IDENTITY	CULTURAL FACTORS INFLUENCING DESIGN				LIFESTYLE
			INTANGIBLE FACTORS				
			HISTORY	POLITICS	SPIRITUAL/ RELIGION/ BELIEF	CULTURE & TRADITION	
Jean-Marie Tjibou Cultural Centre, New Caledonia	Renzo Piano Building Workshop	Kanak People	/	/	/	/	
Uluru-Kata Tjuta Cultural Centre, Australia	George Burgees Architects	Anangu	/	/	/	/	

*continue ...*

... cont.

Astana : Khan Shaytr, Kazakhstan	Foster + Partners, Semenyuk et al.,	Kazakhs People	/	/	/
Benin National Assembly, Republic Of Benin	Kere Architects	Republic Of Benin	/	/	/
Temiar Resource And Cultural Centre, Malaysia	SM Hilmee, Final Year Thesis Report	Temiar Tribe, Orang Asli	/	/	/

Table 2 shows the intangible cultural elements identified in each project. Intangible can be defined as something that exists that is impossible to touch, to describe exactly or give an exact value (Cambridge Dictionary, n.d.) . Intangible cultural elements include folklore, traditions, language and knowledge, atmospheric conditions and so on (Lao & Zhao 2019). The intangible cultural elements identified having influence within each project are culture and tradition, spiritual belief, political influence, history and lastly lifestyle of the people.

The most comment element identified in the adaptation of culture into modern architecture is the presence of culture and tradition. This includes folklore, traditional rituals, and traditional activities such as weaving. For example, the Jean-Marie Tjibou Cultural Centre uses the traditional activity of weaving in its facade design whilst using the story of Tea Kanake's journey in the pathway through the building. The Temiar Resource and Cultural Centre on the other hand was designed based on the tradition of the *sewang* or ritual dance, whereby the buildings are arranged in an organic circular motion with the users walking along the pathway, symbolising the movement of the *sewang*.

Next, spiritual or religion belief played an important role in the design of 4 out of 5 buildings. Spiritual and religion elements depend on the individual culture studied, however, the elements identified explore a sense of universal element beyond the human realm. The Astana: Khan Shatyry Entertainment Centre was designed with the Kazakh Yurt as its main inspiration. Circles and circular shapes have important meaning in Kazakh belief. It represents a spiritual belief of oneness with the universe. Therefore, the Khan Shatyry Entertainment Centre is designed with a similar circular form that pays homage to this belief. Apart from that, the Uluru-Kata Tjuta Cultural Centre is also designed based of one of the cultural and spiritual stories of creation for the Anangu. The building was inspired by the story of the epic battle between Kuniya and Liru. Apart from that, when visiting the Uluru-Kata Tjuta Cultural Centre, visitors are advice to not take photos of the building or the artifacts within the building as it is believed to have spiritual presence within the objects and buildings.

History and Politics both influence 3 out of 5 buildings studied. History and politics are elements that often intersect with each other. Both elements contribute to the

need for cultural buildings and representation of these ethnic groups. History shows the need for such buildings as a way of preserving one's culture and the politics involved is what drove the need for representation and preservation. The world we live in now appears 'smaller' due to the rapid progression in technology and the advancements in social media easily allow for exchange of knowledge between different cultures. However, this can lead to a homogenous universalisation, as coined by Paul Ricouer in Frampton's writing (1989) or globalisation as defined by Sasaki et al. (2004). Globalisation does not necessarily have a negative impact, nor does it solely have a positive impact. The fact of the matter is globalisation has always been a part of human history. In the classical oriental globalisation era, the oceans and seas were used equally without dispute regarding borders (Ramli 2018). Trade routes, like The Silk Road, have always been ways people of different cultures migrated and interacted with one another. Therefore, history and politics do play important roles in the development of a culture and thus, directly impact the architecture produced.

Lastly, lifestyle of the community was identified to influence 2 out of 5 buildings studied, which are the Benin National Assembly and Temiar Resource and Cultural Centre. The Benin National Assembly is designed as the country's administrative centre. However, in line with the concept and the nature of the building, the design incorporated lifestyle elements such as the discussion under the Palaver tree. The Temiar Resource and Cultural Centre on the other hand was designed with the lifestyle and daily life of the Temiar people in mind. The cultural centre is placed further away from the community housing area to protect their privacy, whereas the resource centre is placed closer to the housing area and the community have direct access to the building. The surrounding areas are designed for the community in mind with an open field for football games, a favourite pass time of the youth there and farming areas for daily activities and visitor interaction.

## CONCLUSION

Globalisation and universalisation are endemic and unavoidable (Sasaki 2004). National identity in a globalising world will continuously reconstitutes itself, re-embeds and reform cultural norms and practices (Edensor 2002; Sasaki 2004). Identity itself is ever

changing and continues from time to time and constantly adapts (Guibernau 2007). Globalisation and universalisation in architecture has created cities that are equally similar from country to country. This creates an importance and rationale in the development of an architectural national identity that can be differentiated within each country. This can be achieved by highlighting the cultural heritage of a nation. According to Lao and Zhao (2019), they define cultural heritage as the legacy of physical antiquity and intangible essence of a group or society handed down from past generations, guarded in the present and entrusted to the future generations. Cultural heritage can be divided into tangible and intangible elements. The combination of these elements in auditing to applying critical regionalism as an architectural approach, creates an opportunity for developing architecture that not only responds to the needs of the user, but builds an architecture that is resilient through the understanding of culture and adapting it to the modern context.

Tangible elements identified such as physical inspirations, site planning, environment, topography, indigenous landscaping, and use of local materials play a role in providing direct design inspiration in the modern contemporary architecture. Whereas intangible elements such as history, politics, spiritual religious beliefs, culture, and tradition as well as lifestyle play a more indirect approach to architectural design. All these elements can be seen through the adaptation of indigenous cultures in the selected modern contemporary architecture. The methods of approach by the architects discussed in the results and discussion section show the creative ways tangible and intangible elements within a cultural heritage can be manipulated and designed to represent a culture through contemporary lenses. Ultimately, the common values identified through this study is beyond just constructing a building but the need to preserve cultures and provide an opportunity for indigenous cultures to evolve and progress alongside other races and nations within their country. It is about understanding the physical site, environmental, climate influences and the lifestyle, culture, beliefs of the user and the genius loci of the location that determines a successful architecture that is reflecting the current and future society in which it is built in.

Developing an architectural national identity is not an easy task and there are many ways of approaching the subject matter. It is reasonable to assume that this study has raised more questions to the topic of architectural national identity. But in doing so, it has also provided a starting point in the development of architectural national identity framework that should be used for future research. We are reminded, as in earlier quote by Hijjas Kasturi (1983), that architecture has the potential to be the bridging point between old and new (Hijjas Kasturi 1983; Kosman

2009). It is in fact crucial that this matter be looked upon urgently by others in hopes of developing an architectural national identity, not only in Malaysia but potentially other countries that face similar issues as us.

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