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Framework of National Architectural Identity of Public Administration Buildings: A Case Study of Majlis Bandaraya Johor Bahru (MBJB) Tower

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Abstract: In the context of a multi-racial country consisting of Malays, Chinese, and Indians as the main majority, the search for the value of national architectural identity is important in highlighting racial harmony. Therefore, establishing the national architectural identity framework is necessary to ensure this can be realized. This paper focuses on the construction of an architectural framework of national identity based on the results of previous scholarly studies. This study uses a hermeneutic methodology in which data were collected from scholarly views through literature reviews and then interpreted into its disciplinary subject matter in compiling the indicators for the national architectural identity to propose a framework for public administration building in Malaysia. A case study of green building certified –MBJB Tower is used to further broaden the understanding of the national identity of architecture in Malaysia. An interview session with related personnel and site observation was carried away at MJB Tower to test the proposed framework. An interpretive paradigm was used to explore each architectural element of national identity and a narrative method was used to discuss the findings in this paper. As an outcome, the architectural framework of the national architectural identity of public administration buildings consists of an understanding of the role, typology, and themes of architectural national identity. The architectural design pattern of national identity for public buildings is seen at three levels, namely *macro*, *meso* and *micro* levels. The architectural measurement of the national identity of a building can be defined by the design features produced based on the context of *venustas*, *firmitas*, and *utilitas*. In general, the MJB Tower building is a good example of national identity architecture and can be used as a benchmark to produce more national architectural identity buildings in the future.

Keywords: National architectural identity framework, public administration architecture

1. Introduction

One of the aspects to evoke the aspirations of patriotism among Malaysians of all ages and communities is based on national architectural identity. In the context of a multi-racial country consisting of Malays, Chinese, and Indians as the

main majority, the search for national architectural identity is an important effort in highlighting racial harmony and efforts to achieve three main aspects in the social life of a country i.e. racial unification (Abel & Foster, 2012; Ismail, 2018), increase national productivity and achievement, especially at the global level (Avcioglu, 2007; Ismail, 2018) and produce sovereign citizens, have dignity and self-esteem that high (Abel, 2000; Ismail, 2018). Racial unity is the key to a nation's success and one of the ways towards fostering a spirit of tolerance and cooperation between races is through the national architectural identity. Identity cannot be framed or falsified but describes characteristics that are appropriate to the context of human life and society as well as acceptable by logical thinking (Ismail, 2018; King, 2004). It is a process created because of the evolution of human civilization that is constantly striving to get better. In this context, identity is the personality, mannerisms, habits, and dignity that are fought for. The formation of all these elements goes through a continuous process and eventually becomes an identity that represents the personality of a particular individual or race. National architectural identity is the direction of architectural style that leads to the identity of a country. Thus, Malaysia's style of appearance and identity is the main symbol that is translated into every element of new architectural development in Malaysia. Considering the sociocultural situation in Malaysia which consists of three main majority races, namely Malays, Chinese and Indians, it is necessary to ensure that the three roles of these races can be highlighted to uphold the country's national architectural identity.

2. Literature Review

2.1 Elements

There are three main elements that make up the national architectural identity, namely Roles, Typologies and Themes.

2.1.1 Role

The roles of the national architectural identity can be broken down into two parts, namely the appearance to meet the needs of the community which is Project Identity and appearance to meet the needs of the government i.e. sub-national identity, supra-national identity and private identity (Zharani, 2019). Project identity forms an identity that creates a sense of acceptance and unity of all walks of life. Architecture is used as a symbol of the values of community cohesion, democracy, and racial integration. Sub-national identity makes architecture as a medium of conveying the nation's wishes, philosophy and symbolism. In this context, architecture is intended to benefit the people. Its design and functions are translated from the context of the local community. It is also used as a symbol of the country's success in economic, political, and social achievements. Supra-national identity has a role similar to sub-national identity. Architecture is used as a symbol of power at the national and international levels. International recognition helps to raise the status and dignity of the country to a higher level. Finally, private identity is an architectural identity created on the needs of the individual or patron of a community who determines the architectural design according to their own tastes and agendas.

2.1.2 Typology

The typologies of national architectural identity are divided into three different identities, namely natural identity, artificial identity (manufactured), and forced identity (Surat, 2020). Natural identity is the identity that appreciates the concepts of the 'spirit of the time' and the 'spirit of the place'. The 'spirit of the time' is an architecture that follows the current technological updates and is not something obsolete or backward. The 'spirit of the place' is an architecture that can interact well with the local context and environment. Artificial identity (manufactured) is created when the world is squeezed by the challenges of political upheaval and economic instability. This artificial identity architecture is produced to promote architecture to a level acceptable to all, easy to understand, and carries the right expression. Examples are *functionalism machine*, *primitive regionalism*, and *revivalism*. Forced identity, on the other hand, is an identity formed on the insistence of fulfilling a purpose. This identity can be classified as biased and profitable for one side but does not mean that it comes with negative consequences and bad intentions. The formation of this identity often does not consider one hundred percent of the views and wishes of the user and is guided only by every instruction from the authorities. Elements in the formation of forced identity are economic factors, political structures, and even the policies of the ruling government. An example is the construction of low-cost houses which are said to reduce the people's housing problems but have to put aside the factors of building a comfortable architecture to ensure profitability for the developers.

2.1.3 Theme

The themes of national architectural identity are represented by three main points, namely typology, remembrance (memorial), and geopolitics (Pandya, 2020). Typology gives a dialectical emphasis on the local culture and the political environment. Remembrance focuses on who and what should be used as a subject to serve as a 'reminder'. Often associated with the construction of the palace, national theatres, museums, parliaments, and government buildings

where the invention process is often based on previous historical values or socio-political elements related to the identity requirements of a country. Remembrance (memorial) also gives the value of patriotism that is conveyed implicitly or expressed through the architectural design produced. Geopolitics on the other hand shows the relationship between political power and geographical space. It often involves the relationship between regions and states at the national level and international relations between countries. This requires efforts in the search for deterministic principles that govern the development of the country. A good understanding of geopolitics can help deepen the development and defense strategy of a country.

2.2 Factors in Shaping Architectural Identity

The search for the national architectural identity of public administration buildings focuses on the architectural elements referred from a study by Torabi & Berahman (2013). The study listed the main factors that shape and give identity to an architecture. Such factors are the organization of space, the organization of time, the organization of semantics, the principles of architectural design, architectural design, and building materials (Torabi & Berahman, 2013).

(a) Space organizations - In shaping the architecture of identity, the resulting space must make a difference in the perception of the use of space according to culture and architectural functions (Torabi & Berahman, 2013). In his book entitled *Aesthetics in Architecture*, Jorg Kurt Grutter stated about the concept of space being broken down into three different types, namely that geographical spaces - subjective spaces that cannot be directly understood, living spaces - are semi-subjective and some of their properties are understood directly while most of them are known based on information, and architectural spaces - can be seen objectively, felt directly and recognized through the defining elements (Grütter, 2014). In this context, the organization of space in architecture plays a role in achieving robust and objective building functions in nature and can be evaluated directly through determining elements based on architectural functions (Torabi & Berahman, 2013).

(b) Time Organization - Architectural construction has been through a lot of development and evolution from time to time. Architecture is often used as an identity reference for a particular era. This is because, the features and elements of architecture often symbolize cultural characteristics and geographical conditions according to the time the architecture was built (Torabi & Berahman, 2013). Good architecture can maintain its identity (physical structure, social and cultural structure) although it is still necessary to keep up with the social and physical changes of society.

(c) Semantic Organization - Each society has a culture that symbolizes the ideals, goals, and ideology of the society itself. The semantic organization is provided taking into account the 'meaning' that can be shared by architectural users (Torabi & Berahman, 2013). This 'meaning' can be made through the observation of experiences, feelings, and perceptions that carry understandable symbols, as well as are often associated with the history, war stories, and the success of society. This semantic symbol can be displayed through landmarks, colours, shapes, sizes, and other physical characters. For example, gold and marble are symbols of originality, wealth, and something that shines and is ready to be polished. This understanding is very important for maintaining architectural identity.

(d) Architectural Design Principles - Architectural design ideas and concepts based on original identity and architecture that were successfully translated into physical form (Torabi & Berahman, 2013). Such ideas and concepts can create an architecture that has its meaning of identity as a result of the creativity of an architect.

(e) Architectural design – The design produced for architecture is a translation of the context and culture around the architecture (Torabi & Berahman, 2013). Therefore, using architectural designs that have a certain meaning cultivated as a result of environmental conditions is the best way to achieve identity-oriented architecture in contemporary architecture.

(f) Building Materials - In addition to acting as a material that adorns the surface of the building, the building material also has its character and values that differ in terms of roughness, smoothness, transparent value, stability, and purity (Torabi & Berahman, 2013). Building materials are also able to convey different meanings according to different ways of use. An understanding of the personal values of this building material is important for creating an architecture capable of achieving the semantic goals it wants to create.

(g) Relationship with context – In shaping a good identity-oriented architecture, harmony between architectural design and surrounding conditions must be achieved (Torabi & Berahman, 2013). Minimal intervention as well as focusing on establishing a natural connection between architecture and surrounding conditions can help create a good architectural identity. Here, the surrounding situation is a context that needs to be the main basis in the architectural design process and in-depth and detailed study to deepen the necessary context before producing an architecture that has its own identity.

2.3 Design Patterns Principles of Government Public Administration Buildings

The discussion of contemporary architectural typology has been broken down into several scales that have been enlarged from the understanding of the building itself, to the scale of the municipality on which the building was built. There are three stages which are macro level, meso level and micro level (Tao, 2014).

2.3.1 Macro Level

A district or area is formed through its system of civilization and social organization (Tao, 2014). These systems are connected in playing the role of shaping and providing specific characteristics for districts or areas, especially in urban planning. Topography, history, landscape, and typology of local development are among the characteristics that give their values that carry an element of uniqueness and difference for each area. Each built element is a reflection of areas and districts designed according to its subjectivity and creativity.

2.3.2 Meso Level

The continuation of some buildings in the neighborhood along with infrastructure systems such as roads, drainage, recreation areas, and so on is called 'block' (Tao, 2014). This name was given because the scale of the neighborhood is seen in terms of the layout involving the 'empty' area and the 'mass' area which is the 'block' character. In other words, the relationship between the local space and the development of local architecture.

2.3.3 Mikro Level

a) Buildings: Buildings are the most basic elements of urban formation (Tao, 2014). The variety of building designs found in a city will form a view of the city that is the identity of the city. For the scope of this scalable study, it involves the morphological study of buildings and the relationship between the outer spaces of buildings.

b) Building details: Various building details are created over time based on the culture and history of civilization (Tao, 2014). In this context, the study is based on a close relationship between users and buildings that can be seen visually and felt directly. For example, the difference in the details of buildings that can be seen during the *Renaissance*, *Boroque*, *Rococo* and *Neoclassical* periods that managed to give the identity of the building itself.

2.4 Taxonomy Measurement of National Architectural Identity

In an effort towards upholding the national architectural identity, the taxonomy measurement of the architectural status of national identity was developed by Surat (2020). Through taxonomy, Surat (2020) has divided the architectural core of national identity into four different focuses, namely 1) consumer and cultural, 2) environmental and local context, 3) environmentally friendly and 4) native wisdom. The table below shows the fractions on each part that are the taxonomic focus:

Table 1 - Proposed taxonomy of national architectural identity's cores principles as a summary of the opinion of related figures from literature reviews (adopted from Surat, 2020)

Cores of National Architectural Identity	Related figures statements
Consumer and cultural	Community Culture Belief / Religion / Community Customs National Heritage & History Requirements from the patron / Requirements / Role of Space Economic Community Progress
Environmental and local context	Local environment Local building materials National Constitution / The will of society Patriotism & nationalism
Environmentally friendly	Local climate
Native wisdom	Style of appearance / symbolic value of national civilization Local mind & work Reviving the local architectural language

The result of this taxonomic formation is a good start towards establishing guidelines for shaping the national architectural identity. Although if viewed in detail, this taxonomy is formed based on the discourse of personal ideas and scientific studies that have been produced by certain figures, however, the background of diverse figures without taking into account the expertise at the time of the study was conducted makes this taxonomy classified as a preliminary discovery. In this study, opinions from 41 figures were taken into account in the compilation of ideas for this taxonomy. Detailed studies should be carried out at the next stage to test the determining factors in ensuring sincerity and accuracy as an indication of determining the national architectural identity. However, the list of determining factors obtained through this taxonomy can still be used in unraveling the architectural ideology of national identity in Malaysia.

2.5 Draft National Architectural Identity Policy

The Draft National Identity Architecture Policy (DASIK) was developed using three main principles and five main thrusts (DASIK, 2017). DASIK's three main principles are National Cultural Skills, Renewal & Invention and Identity & Architecture Excellence. DASIK's five main thrusts are Society and Culture - Consumer suitability and cultural background of Malaysian society, Environment and Local Conditions - Core Culture and local ecosystem, Eco-Friendly Design - Appreciation of architectural and architectural design to the climate and tropical nature, Native Wisdom Architecture - Creative translation of cultural elements into architectural design and consultation, rules and enforcement of the National Identity Architecture Policy - Evaluate and formulate rules and guidelines towards creating the conditions and atmosphere of practice that lead to the formation of the architectural design of the national architectural identity.

The content of the formation of the DASIK Draft also outlines elements of local fixed factors and local dynamic factors. These factors became the main driving force in determining the formation of the architectural direction of national identity. However, efforts to improve the draft into an act that can be adopted by every player in the architecture industry in Malaysia were still unsuccessful.

2.6 Local Fixed and Local Dynamic Factors

Results from the study (Ismail et al., 2020; Zharani, 2019), throughout the review of scientific works that discussed the factors of the formation of national architectural identity, it can be concluded that there are two main factors which are local fixed factors and local dynamic factors. These factors have a great influence on architectural design in the 'spirit of the place' and the 'spirit of the time'. The table below is a summary of what these two factors contain.

Table 2 - Elements of local fixed factors and local dynamic factors

Local Fixed Factors	Local Dynamic Factors
1. Climate, weather	1. Culture & local society
2. Geographical (the surface of the earth)	2. Islamic and local design approach
3. Landscape	3. Heritage design network
4. Historical building preservation	4. Suitable socio-economical construction materials

2.6.1 Local Fixed Factors

Local fixed factors can be expressed as factors that cannot be changed according to the geographical position of an area. These factors are related to climatic and weather factors, geographical factors (the surface of the earth), the landscape of the earth's surface, and historical and heritage factors that include culture, traditions and architecture (Ismail et al., 2020; Zharani, 2019). These four factors are fixed and cannot be changed. It is also closely related to the nature and character of a country. Therefore, in order to ensure that the architecture can be assimilated with local conditions, the architectural design must be cleverly designed taking into account these factors. In this context, the resulting architecture has a close relationship with the nature and character of a country and is suitable for being called the national architectural identity. Here are the features of local fixed factors for Malaysia:

Table 3 - Local fixed factor characters in Malaysia

Local fixed factors	Characters in Malaysia
Climate and Weather (<i>Iklm Malaysia</i> , 2021)	<ul style="list-style-type: none"> • Malaysia is in the Hot Zone • uniform temperature (27 degrees Celsius) • high humidity and abundant rain. • the wind is generally weak. • Malaysia is located in the Equatorial doldrum area - rarely has cloudless sky conditions even during severe droughts. • Malaysia also rarely has a few days without direct sunlight except during the Northeast Monsoon season.
Geography (Earth Surface) (Musa & Abdullah, 2007)	<ul style="list-style-type: none"> • Position in the middle of the sea road between East and West • Located outside the Pacific Ring of Fire and the path of the windstorm • Over 60% consists of highland - Range, folding mountain, plateau • Seaside – wave erosion (high cliffs, capes, caves, bays, sea arches, stump stones, waste stones) and wave deposits (beaches, capes, sand cliffs, knobs, lagoons) • Lowlands - plains, valleys, basins, delta, swamps • River
Earth's Surface Landscape (Musa & Abdullah, 2007)	<ul style="list-style-type: none"> • Tropical rainforests, freshwater swamp forests, mountain forests, coastal forests, saltwater swamp forests.

- History and heritage (encompassing culture, traditions and architecture) (Zainuddin et al., 2010)
- History of Malaysia
 - architecture, location - preservation and conservation of sites, historical monuments, historical sites, heritage architecture and architecture formed through historical depictions of historical events intended to be commemorated
 - Race
 - Religion and beliefs
 - Languages and dialects
 - Dance and music

2.6.2 Local Dynamic Factors

Local dynamic factors are more flexible and are influenced by the creativity of architects to find out other factors in the architectural design process involved. In addition, the role of the patron also affects the direction of local dynamic factors involved in the architectural design process. There are four factors in this category, namely the local culture and community, the approach of Islamic and local arts, the interweaving of heritage architecture and the appropriate local building materials factor (Ismail et al., 2020; Zharani, 2019). Here are the features of local dynamic factors for Malaysia:

Table 4 - Local dynamic factor characters in Malaysia (Zharani, 2019)

Local dynamic factors	Characters in Malaysia
Culture and local community	<ul style="list-style-type: none"> • The factor of influence of local culture and society refers to the culture of the society born for generations and is the origin of the society of this country
Islamic and local arts approach	<ul style="list-style-type: none"> • Based on the values and principles enshrined in the National Cultural Policy (1971) and the Malay Cultural Congress II (2009) which introduces the architecture of national identity shall support three main elements; • Islam (as the official religion) as an important element in the formation of the National Culture, • based on the culture of origin of the region (indigenous in the region of the Malay World), • other cultural elements that are appropriate and desirable to accept.
Heritage architecture	<ul style="list-style-type: none"> • The design of the building to be achieved is encouraged to be ‘<i>syumul</i>’ (universal) with a safe and suitable environment in terms of meeting the needs of the disabled, the elderly and children. • Architecture of buildings formed from interweaving or continuity of heritage architecture, • renovation of buildings is set according to the contemporary context, • the use of various approaches and concepts of architectural design using interpretive, translative, abstract, metaphorical, analogy or any method that is compatible and corresponding to the project in combining aspects of culture and heritage of society
Appropriate local building materials	<ul style="list-style-type: none"> • the use of local art and artisan as a resource for carving, interior decoration and finishing of buildings according to local socio-economic suitability

2.7 Theoretical Framework of Architectural Design Process

In a study conducted by Dahabreh (2019) entitled 'Understanding architectural forms: a conceptual framework', the description of the relationship between 'form' and 'function' and the process approved in architectural design is described in more detail. The diagram below shows the explanatory process that has been carried out so that it becomes a framework that can formulate an architectural design process.

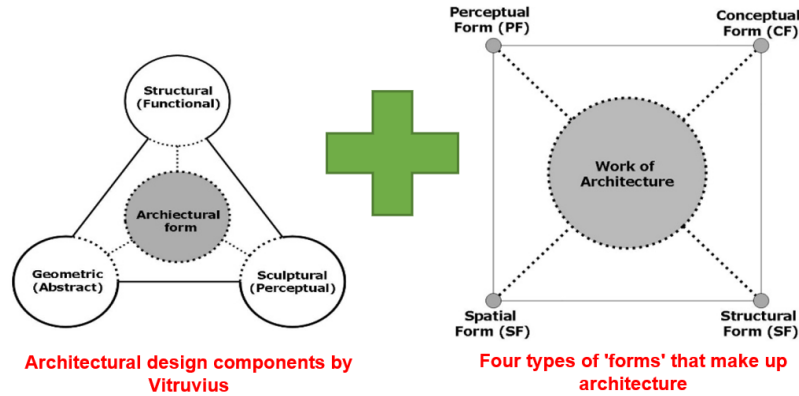


Fig. 1 - The architectural components proposed by Vitruvius and four different types of 'Forms' of the architectural work (M. Dahabreh, 2019)

The study began based on the form components in the architecture proposed by Vitruvius as well as the four types of forms that make up the architecture according to the scope of the architectural work (M. Dahabreh, 2019). Vitruvius noted that this form consisted of three main components, namely the *structural form (functional)* - in relation to the structure that supports the building and the space inside the building, the *sculptural form (perceptual)* - in relation to the texture of the building's surface as well as the interaction of the user experience as well as the sense of taste and *geometric form (abstract)* - in relation to the elements that control the shape of the building. According to the scope of the architectural work, the four types of forms are The *Perceptual Form* - an idea or concept born from the perception of the designer or architect, *Conceptual Form* - a plan created taking into account the synthesis of the input obtained as the process of the first work in architectural design, *Structural Form* - gives an idea of the architectural structure, and the *Spatial Form* - the space resulting from the architectural design process.

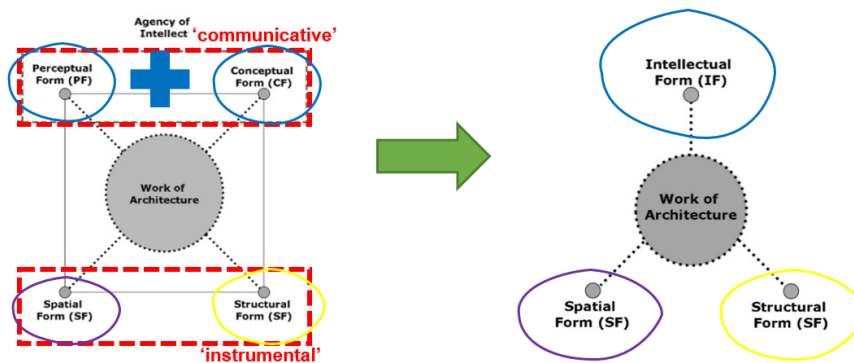


Fig. 2 - Combination of *Perceptual Form* and *Conceptual Form* becomes *Intellectual Form* (M. Dahabreh, 2019)

In a study conducted by Hendrix (2012), the scope of architectural work was broken down in two, namely the '*communicative*' part - focusing on how communication, expression and symbolism through architecture and '*instrumental*' - focused on the use of space and technology used in architecture. This '*communicative*' section is represented by the *Perceptual Form* and *Conceptual Form*, both of which have been incorporated into the *Intellectual Form* (Hendrix, 2012). In this context, both involve the use of intellectual power in shaping the best architectural forms. The '*instrumental*' section is represented by *Spatial Forms* and *Structural Forms*, both of which are intermediate in the use of space and technology in forming a strong and structured architecture that provides the right satisfaction to the user. From this study, Hendrix (2012) had summarized the scope of architectural work into only three forms, namely the *Intellectual Form*, *Spatial Form* and *Structural Form*.

However, the process of understanding the *form* does not stop here alone. These findings still need to be synthesized along with the architectural design process to ensure their effectiveness. The result of synthesis is in the form of a new distinctive element and requires further investigation for a deeper understanding of the relationship between the *form* and scope of the architectural work. The next process involves exploring the aesthetic values that can be achieved through the experimentation and manipulation of the *form* itself, and evaluating and revising the main requirements that will be achieved through the design proposals that were initially desired (J., Peponis, J., 2002). This

discovery and understanding is named as the concept of architectural design (design concept). In other words, it is also named after *Formative Ideas* (R.H., Clark, M., 1996). *Formative ideas* include everything that is taken into account in the design process such as relevant additional information, creativity styles and innovations from designers in translating every existing relevance as well as finding a starting point for the architectural design process. The careful implementation of the design process and taking into account each aspect and meeting each of the requirements outlined in such a design proposal is what distinguishes between architecture and ordinary buildings (Schumacher, 2011). Such a process can transform and give life to form an unusual architecture. The formative role of this idea is seen as the driving force for each architectural design process as well as creating logical value on each translation of the design idea that is trying to be conveyed. The architecture does not seem empty, but the concept of the highlighted idea can be seen in the resulting final design and can ensure proper integration with the space and the targeted user. Thus, the *formative idea* in this context is considered the main axis that holds each design process within the scope of architectural work.

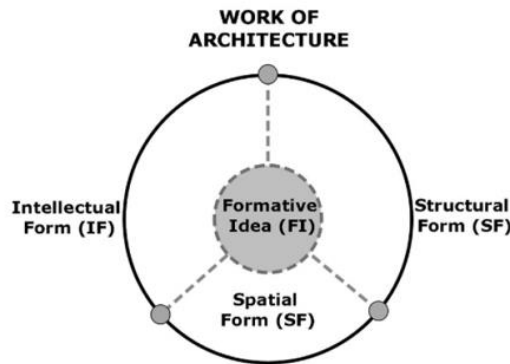


Fig. 3 - Formative integration of ideas with *Intellectual Forms*, *Spatial Forms* and *Structural Forms* within the scope of architectural work (M. Dahabreh, 2019)

Human plays an important and major role in shaping architecture. In this context, human interests and needs are the main platforms adopted in the search for logic for each decision taken in architectural production (Simon, 1998). Therefore, the contextual context of the environment in which the architecture will be erected should be given attention and assimilated with the proposed architecture. Here, the values of civilization, history, story, terrain, climate, current situation and everything related to the local context will be perceived and given due attention within the scope of architectural work. All this is done in order to create comfort and satisfaction especially to the consumer (Kolodner, 1993). Therefore, a deep understanding of the needs of the local context and taking into account the context as one of the important aspects of the scope of architectural work, can help in revealing the best architecture. The figure below shows the relevance between all the important elements within the scope of the architectural work.

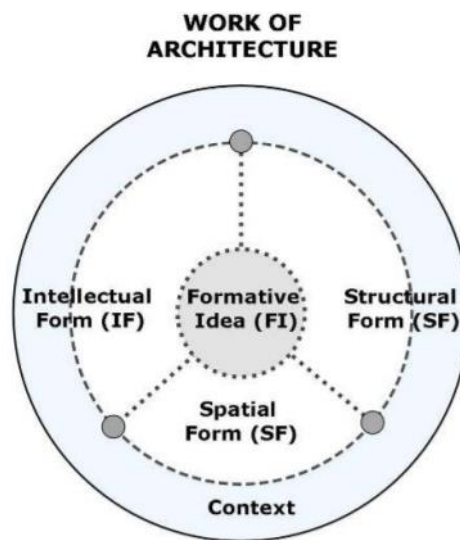


Fig. 4 - Context as a complementary element to the scope of architectural work (M. Dahabreh, 2019)

2.8 Proposed Framework

After examining all the aspects discussed through the studies that had been conducted, a framework can be formulated that can classify the elements of shaping the national architectural identity in Malaysia. The findings are according to the following diagram:

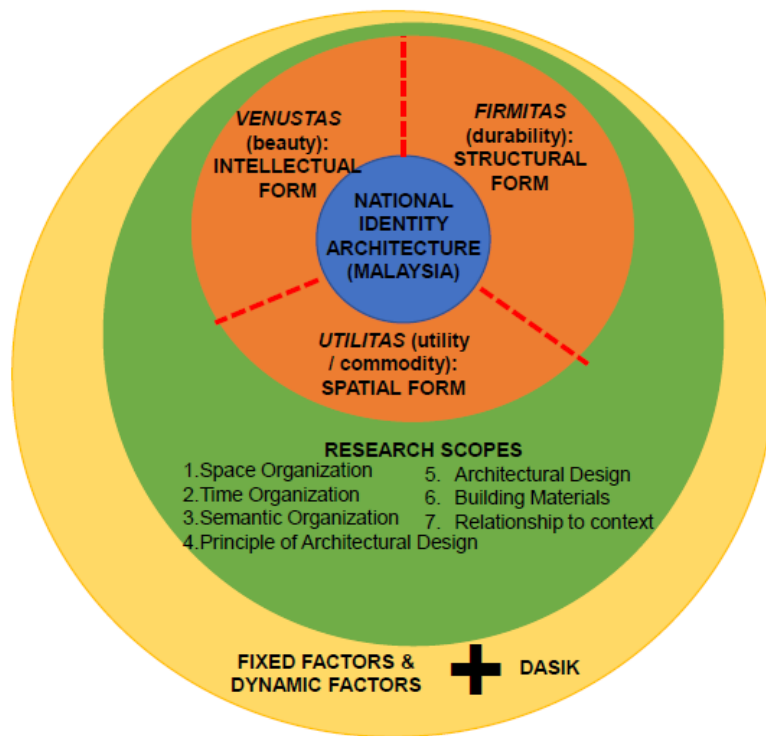


Fig. 5 - Features and elements that shape the architecture of the national identity administration in Malaysia

The main formation of this framework is based on the *form* formation component in architecture by Vitruvius which was later developed by M. Dahabreh (2019) in his study to form the theory of *Work of Architecture*. These two theories form the basis that can be used in the formation of architecture and can be represented by three main elements, namely *Venustas (Intellectual form)*, *Firmitas (Structural form)* and *Utilitas (Spatial form)*. This framework then takes into account the aspects outlined in the Torabi & Berahman study (2013) which focuses on the scope that needs to be taken into account in shaping the architecture of identity. The study outlines 7 main factors, namely the organization of space, the organization of time, the organization of semantics, the principles of architectural design, architectural design, building materials and the relationship with context. In ensuring that this framework is focused towards the formation of national architectural identity in Malaysia, local fixed factors and local dynamic factors are the main basis in ensuring that each architecture produced is in line with the local context as stated from the Ismail et al (2020) and Zharani (2019) studies. In addition, draft DASIK (2017) which had formulated all the elements of shaping the national architectural identity was also a key pillar in outlining each important factor to ensure that the framework produced is more comprehensive and capable of delivering appropriate results.

2.8.1 Summary of the Proposed Framework

In general, the interpretation of the national architectural identity is represented by three main elements, namely the roles, the typologies, and the themes. These three elements define to discuss the classification of national architectural identity. In focusing on the study of the architecture of public administration buildings, the design patterns of government public administration buildings should be considered in the interpretation of the architecture of national identity. In this context, the study is broken down into three main scopes, namely macro, meso and micro levels. The macro and meso levels generally discuss the influence of context and location on the national architectural identity while the micro-level is more detailed to the formation and construction of the architecture itself. Through this study, the indicators have been successfully outlined through the framework of the national architectural identity of the public administration building in Malaysia discussed earlier.

3. Methodology

This study uses a hermeneutic methodology in which data were collected from scholarly views through literature reviews and then interpreted into its disciplinary subject matter in compiling the indicators for the national architectural

identity to propose a framework for public administration building in Malaysia. Hermeneutics, in general terms, is the art of interpretation (Debesay et al., 2008). As such, hermeneutics has a rich history and can now be identified with four major strands: conservative, critical, radical, and moderate. Out of these strands, the moderate hermeneutics of Hans-Georg Gadamer has proven to be the most relevant to educational thought. An interpretive paradigm was used to explore each architectural element of national identity and a narrative method was used to discuss the findings in this paper.

To test the proposed framework, a case study of the Majlis Bandaraya Johor Bahru (MBJB) Tower building was chosen, and an interview with the architect of the building was conducted. The architect was chosen due to her involvement in the making of the building from the early stage of design until it was completed.

From all the data gathered through the interview based on the proposed framework, an analysis was conducted in compiling all the information needed in justifying the building and whether it promoted a good sense of national architectural identity besides being crowned as a certified green building. A coding method was used to rearrange and regroup all the information gathered before compiling it into facts to be presented in response to the proposed national architectural identity framework and interview conducted.

This testing of the proposed framework conducted on the MBBJ building is important because the MBBJ building is one of the new landmarks in Johor Bahru which is currently promoting the idea of a sustainable city and green building. Having its ability to portray a good national architectural identity can make it one of the precedent projects for other new architectural projects in Malaysia.

4.0 Case Study: MBBJ Tower

Table 5 - Summary of the observations conducted on the MBBJ Tower

Indicators	Observations
Roles	Supra-national identity
Typologies	Natural identity
Themes	Typology
Macro & Meso	Prominent location based on the geographical location & city centre
Mikro - Venustas	Meet the criteria
Mikro - Firmitas	Meet the criteria
Mikro - Utilitas	Meet the criteria

4.1 Role – Supra-National Identity

The architecture of the MBBJ Tower is used as a symbol of power at the national and international levels. International recognition helps to raise the status and dignity of the country to a higher level. Through the Johor Bahru City Council Strategic Plan 2016-2020 (MBJB, 2015), it can be concluded that the main objective of this plan is to create a plan that can make Johor Bahru a city capable of matching the world's major cities, especially in the Southeast Asian region such as Singapore which is a neighbouring country located next to Johor Bahru. The construction of the MBBJ Tower is one of the steps taken in upgrading the MBBJ city to make it a world-class city. In the signing ceremony of the Menara MBBJ building project with project developer Astaka Holdings Limited in 2016, the Mayor of Johor Bahru - A Rahim Nin stated that Johor Bahru is in the process of new-faced development and is committed to attracting more domestic and international investment to come to the city (Begum, 2022; Chan, 2016). One Bukit Senyum is a strategic location and is the urban transformation centre of Johor Bahru (Astaka Holdings Limited, 2016a; Begum, 2022). In this context, it is symbolic of the planned development that will further enhance Johor Bahru's name internationally. Thus, it can be concluded that the construction of the MBBJ Tower is based on the architecture of supra-national national identity. The architecture of the MBBJ Tower is used as a symbol of power at the national and international levels. International recognition through achievements as GBI Certified as well as modern abstract architectural design in interpreting traditional Malay architecture helps to elevate the country's standards and dignity to a higher level (Green Building Index, 2021; *MBJB TERIMA ANUGERAH DI LEADERSHIP IN SUSTAINABILITY AWARDS 2020*, 2020). This proves that the architecture of the MBBJ Tower can be used as a symbol of power at the national and international levels.

4.2 Typology – Natural Identity

MBJB Tower typology has been identified taking into account the understanding of the concept of the 'spirit of the place' and the 'spirit of the time' in its design and construction process. The 'spirit of the time' gives the interpretation that the resulting architecture is not obsolete or backward but according to the current latest technology and the 'spirit of the time' is that every architectural design should be able to interact well with the local environment. The green building concept of Menara MBBJ became the main attraction in One Bukit Senyum as a catalyst towards the development of green township in Johor Bahru (Green Building Index, 2021) and became one of Iskandar Malaysia's

proud landmarks (MBJB, 2015). This enabled Menara MBBJ to place its architecture among the main pioneers of green buildings in Johor and also to be a pride at the Malaysian level. This is evident when the victory of Menara MBBJ as the '*Best New Green Institutional Building*' in the Sustainability Awards 2020 organised by the Malaysian Green Building Council on 15 August 2020 enabled it to represent Malaysia in the World Green Building Council Asia Pacific Network Awards 2020 (World GBC APN) for Leadership in Sustainable Design and Performance category (*MBJB TERIMA ANUGERAH DI LEADERSHIP IN SUSTAINABILITY AWARDS 2020*, 2020). As a green building that has gained international recognition, MBBJ Tower is an architecture that focuses on adapting to the local context in detail. This is the main focus in the architectural design of the MBBJ Tower and is emphasized starting from the initial phase of the design process. The architectural concept of traditional Malay houses was preceded and adapted to the local context in terms of the use of natural sunlight, natural ventilation, framing the natural scenery as well as ensuring the comfort of the occupants of the building at the proper level is a testament to the appreciation of the concept of 'spirit of the place' at Menara MBBJ (*MBJB to Receive a New Home*, 2017). In addition, the use of the latest technologies such *OTTV-Glazing (10.38mm laminated low E green glass)*, *OTTV – Shading (sun screen)* as well as *daylighting technology* in controlling the outdoor level lux at 31000 lux and the *daylight factor* at 1% - 3.5% of *daylight factor* (310 lux - 1085 lux). The architectural design of the MBBJ Tower which is friendly to the local context as well as the use of the latest technology allows a lot of light to enter most of the space inside the building. The construction of the MBBJ Tower which is conceptualised as a green building takes into account the relationship related to the 'spirit of the place' and the 'spirit of the time'. As a result, the MBBJ Tower was not only built as a local city council building, but also took into account all aspects of architecture as well as the goal of becoming a local architectural icon that is a pride not only for the locals, but also for the state and the country. The creativity of architectural concepts inspired by the architectural concept of traditional Malay houses and green building technology makes MBBJ Tower a modern building that not only has its own appeal, but also manages to bring the image of national architectural identity to the public eye.

4.3 Theme - Typology

The 'typology' theme which emphasizes dialectics towards local culture and political environment in Johor Bahru is seen as the national identity theme displayed through the architecture of MBBJ Tower. This is evident when the architectural design concept of MBBJ Tower focuses on framing the attractive scenery in Johor Bahru through the concept of an open green garden that focuses on the view of the city and the Straits of Johor, the architectural design of traditional Malay houses as well as Islamic architectural motifs (*MBJB to Receive a New Home*, 2017). The construction of this building can also solve the problem of lack of parking in the old MBBJ building through the construction of the deepest basement parking in Johor Bahru which is 28 meters deep. The MBBJ Tower also provides a 300-capacity auditorium, a 1000-capacity hall, counters, a nursery for staff use and a cafeteria (Suhaini, 2019). This construction takes into account the characteristics and elements of the local climate and environment to be manipulated as an element inside the building that can save energy through the implementation of green technology (Mohd Idham Daniel, 2019). Thus, it can be formulated that the architectural theme of the national identity of the MBBJ Tower focuses on the elements of local typology. Starting from the design concept inspired by traditional Malay house architecture, beautiful panoramic frames around Johor Bahru as well as green building concepts that take into account the use of the latest technology. MBBJ Tower has successfully provided the value of its own national architectural identity by combining traditional and modern architectural concepts into elegant and iconic city council architecture that is able to compete internationally.

4.4 Makro & Meso Context

Architectural location plays a role in providing value and influence on the local community. MBBJ Tower is an architecture that is not only built as an office building for the Johor Bahru City Council, but it is symbolic of the change towards a new era of development. Therefore, the construction site of the MBBJ Tower is very important. In the macro context, the two factors of the MBBJ Tower location selection were 'Geographic Prominent Location' and its location at the 'City Center'. In the context of meso, the focus of the location is around One Bukit Senyum. Menara MBBJ is the meeting centre of two main roads in Johor Bahru, namely the Jalan Lingkaran Dalam and the Tebrau Highway. This route makes it easier for the community to get to the MBBJ Tower for any business they wish to do.

The location of MBBJ Tower at One Bukit Senyum is located in the main area of Johor Bahru which is the main trading activity centre (Tay, 2016). The location is very strategic and is located 700m away from Johor Customs and Immigration Complex, 30 minutes from Senai International Airport, Johor and also just 40 minutes away from Changi International Airport, Singapore (Hoong, 2016). This location is very strategic and is the transformation centre of the city of Johor Bahru. In this context, it is symbolic towards a planned development that will further enhance Johor Bahru's name (Astaka Holdings Limited, 2016b; Begum, 2022). The MBBJ Tower project is part of Sultan Ibrahim Ibni Almarhum Sultan Iskandar's vision to make Johor Bahru the second largest city in Malaysia after Kuala Lumpur. This will attract domestic and foreign investments to continue to gain a foothold in Johor Bahru (Astaka Holdings Limited, 2016a; Green Building Index, 2021).

Thus, it can be concluded that the location of the MBBJ Tower is very strategic and suits its status as the main administrative office of the Johor Bahru Local Council. The selection of this location plays a major role especially in boosting local development activities as well as being an attraction and making it easier for the public. As a government building whose role is to bring the image of national architectural identity to the international level, the MBBJ Tower design team has managed to ensure that the selection factor of this location is something that should also contribute significantly to the iconic value brought by the MBBJ Tower architecture.

4.5 Mikro Context – *Venustas, Firmitas & Utilitas*

In the micro-context that focuses on the influence of building design, it can be seen that the architectural design of the MBBJ Tower building is influenced by regional culture and local traditions. As mentioned earlier, the architectural design of MBBJ Tower is more focused on the use of traditional Malay house architectural design, using Islamic architectural symbols as well as responding well to the weather, climate and local context through green building technology developed. In deepening the architectural context of MBBJ Tower in more detail, the architectural design analysis of MBBJ Tower was made using the architectural indicators of the national identity that has been developed. The focus of this analysis is on the value of the architectural design produced and its relevance to the architecture of national identity. This analysis is described into three main indicators, namely *Venustas - 'Intellectual form'*: intellectual design, *Firmitas - 'Structural form'*: structural design and *Utilitas - 'Spatial form'*: space design. The next discussion is a formulation made from the results of the analysis that has been carried out.

Located at One Bukit Senyum, MBBJ Tower is the area's main attraction. Adjacent to the Astaka Residential Tower, which is the tallest residential tower in Southeast Asia delivers exclusive and elegant value between the two buildings. Looking at future planning, the One Bukit Senyum area will be a major commercial and commercial hub that provides the aura of the neighborhood with elegant and superior features. One Bukit Senyum is a strategic location in Johor Bahru. Located in the heart of the Johor Bahru metropolitan city centre and just a 15-minute drive to Woodlands Checkpoint which is 5km away, providing extra value and extra charm for the area. Its position, located at the rendezvous point between the *Jalan Lingkaran Dalam* and the Tebrau Highway, facilitates every movement to reach the MBBJ Tower. This route is also a public transportation route and this should not make it difficult for all residents around the area to come here to settle any business involved.

The MBBJ Tower concept focuses on green building architecture incorporated with the traditional Malay architecture as well as Islamic architectural motifs (*MBJB to Receive a New Home*, 2017). The architectural concept of traditional Malay houses became the main inspiration in the design process carried out (Samuri, M., personal interview, 2022, March 14). The understanding of the concept of natural ventilation that is the core of Malay architecture is used as the main driving force of the architectural design of MBBJ Tower. Through adherence to this concept that has been developed into an abstract and modern architecture, MBBJ Tower has been awarded as the winner of the 'Best New Green Institutional Building' category in the Leadership in Sustainability Awards 2020 organised by the Malaysian Green Building Council (*MBJB TERIMA ANUGERAH DI LEADERSHIP IN SUSTAINABILITY AWARDS 2020*, 2020). Besides that, the design of the MBBJ Tower also frames the cityscape of Johor Bahru and the Straits of Johor which should give a beautiful picture of the city (*MBJB to Receive a New Home*, 2017). The green park concept that fills this space provides an image of a floating garden within the city with a beautiful panoramic backdrop around the city of Johor Bahru, bringing a connotation of values of luxury, elegance and promoting sustainable architecture to a high level. In addition, the issue of lack of parking, which is often highlighted in old buildings, was successfully resolved through the construction of a 28-meter deep basement parking that became the main parking lot and at the same time, made it the building with the deepest basement in Johor Bahru. Here, Menara MBBJ successfully incorporates the diversity of values of community life in Johor Bahru into an architecture that can be used as an icon to the local community.

Re-measuring the architectural design concept of MBBJ Tower, the concept of cross-ventilation, Malay house landscaping and beautiful panoramic frames are among the art ideas and creativity of the art heritage applied in the architecture of the MBBJ Tower (*MBJB to Receive a New Home*, 2017). In addition, Islamic motifs designed to be shading tools, providing privacy in office space as well as being a pattern of decorating the space in MBBJ Tower are seen as creativity in the application of Islamic patterns and motifs into the architecture of the building. These ideas were successful and repeated in the architecture of the MBBJ Tower through abstract and modern styles making the architecture more elegant and different from others. Moreover, each element is placed together with the architectural function and not only exhibits the value of beauty. Thus, in this context it can be seen that the MBBJ Tower has successfully injected local art and craft elements into the resulting modern architectural design. This design not only craves international beauty and grandeur, but still upholds the values of Malaysia's national identity to be proud of by all walks of life.

This building is not heritage architecture. It is a new building that uses traditional Malay heritage architecture as the architectural construction concept of this building. The MBBJ Tower building concept focuses on modern architecture based on green technology. Here, architectural construction elements using the latest technology are used to provide comfort to the occupants of the building as well as ensure efficient energy consumption such as *OTTV-*

Glazing, OTTV - Shading and Daylighting System. The central space of the atrium of the building also allows lighting to the central part of the building which is also decorated with green plants.

The native wisdom is one of the factors evaluated for the national architectural identity. As for the MBBJ Tower, although the original ideas and concepts were inspired by an overseas firm of architects who also designed the Burj Khalifa in Dubai, this process was on the initial planning stage only (Mohd Idham Daniel, 2019; Samuri, M., personal interview, 2022, March 14). Skidmore, Owings & Merrill from Chicago, Illinois, U.S. was involved with the formation of the Iskandar City master plan and this MBBJ Tower project was one of the key components in the formation of the master plan (*Nusajaya West Urban Design Master Plan*, 2022). The implementation of the final idea and final project of the MBBJ Tower was realized by the local design team namely as follows (Samuri, M., personal interview, 2022, March 14):

Architect	: Saadon Architect
C&S	: Jurutera Perunding RiZ Sdn Bhd
M&E	: JP Ace Sdn. Bhd.
Quantity Surveyor	: Perunding Kos T&K Sdn Bhd
Landscape Architect	: Rainforest Concept
Town Planner	: RA Planning & Management Services
RSA Consultant	: Hiway Matra Consult
Land Surveyor	: Jurukur Jasa Jaya
GBI Consultant	: JBBK Sdn Bhd
ID Consultant	: Team BJ Design & Contracts

The design team appointed in the MBBJ Tower construction process comprising local firms enables all design processes to relate to construction techniques and structures that are compatible with local fixed factors as well as in line with current technological developments. The same applies in terms of the needs of the building materials used. Their wisdom in ensuring compatibility between the proposed design concepts, together with the construction techniques and concepts used is very helpful in ensuring that the MBBJ Tower can perform its functions well and at the same time, become an icon of national architectural identity.

The construction of the MBBJ Tower takes into account the main scope of architectural design, namely the architecture of the A-grade government office tower (Samuri, M., personal interview, 2022, March 14). Therefore, in terms of comfort to the users and visitors of this building, the specifications used are based on the specifications set by the government for each government facility (*Garis Panduan Dan Peraturan Bagi Perancang Bangunan*, 2015). Therefore, comfort for the users of the building and visitors is absolutely guaranteed. The size of the office space and hierarchy, furniture, final details, office position, order and everything related to the organization of space are determined in accordance with the guidelines set out in the guidelines as well as discussions between MBBJ and the developer (Samuri, M., personal interview, 2022, March 14). This discussion session involves several corrections and amendments according to the specifications that have been set. Level 1-3 is a public area where it is accessible to the public such as the main lobby, payment counter, cafeteria, *surau*, multipurpose hall and herbal garden area. Level four and above is a space reserved only for employees at MBBJ Tower and those who get a special pass. This security access is carried out through a special pass given when visitors register at the security counter in the lobby section of the building.

Taking into account the status of MBBJ Tower as Green Building Certified, this architectural design has taken into consideration the comfort and safety of building users starting from the initial design process (Samuri, M., personal interview, 2022, March 14). The emphasized concept of green buildings allows the implementation of environmentally friendly and user-friendly architecture. Among the architectural green elements found in the MBBJ Tower are OTTV glass, OTTV shading, structured integrated energy management system, use of lighting zoning system, daylight glare control system, green plants and green roof, efficient water flow system, pneumatic waste collection. In addition, the MBBJ Tower is also equipped with a security system that is tested and periodically-checked according to the schedule set. The safety and fire control room becomes the main space that monitors the security system in the building. Panic buttons are also placed in underground parking lots to help visitors who feel threatened, followed or through a state of panic when they are alone in the area. Each visitor will also be given a key card to enter the space inside the building. Each given key card can only enter the specified space. This key card will be provided after the visitor registers at the lobby counter by handing over an identity card or driver's license and it will be handed back once the key card is returned.

In meeting the requirements as a universal architecture, the design of the MBBJ Tower also takes into account the needs of people with disabilities (OKU) who are also visitors to the building (Samuri, M., personal interview, 2022, March 14). Among the infrastructure provided are blind route guides (tactile), ramps, OKU toilets, OKU parking and OKU lifts. Besides that, to facilitate the affairs of staff who need to send young children to day care centres, there is also a special daycare centre for staff here that operates according to working hours. A beautiful *surau* with lighting control and a cafeteria is also provided inside the building.

Menara MBBJ has appointed a local landscape architect firm, 'Rainforest Concept' as the party responsible for landscaping matters in this building (Samuri, M., personal interview, 2022, March 14). As a Green Building certified building, landscape elements are among those given attention starting from the initial design process. Just as the architectural concept of this building comes from the architectural beauty of traditional Malay houses, taking into account the factors of an efficient ventilation system, beautiful panoramic framing and green landscape in the surrounding courtyard, the same ideology can also be seen in the MBBJ Tower (*MBJB to Receive a New Home*, 2017). As for the creativity of the building design team, the result is even more beautiful when the idea of a green park in the air against the backdrop of the panorama of the Johor Bahru metropolitan city and a little bit of Singapore's view makes the value of the landscape brought to the MBBJ Tower not just one that only meets the mandatory criteria for obtaining Green Building Certified recognition. Among the main attractions is the 'Edible Garden' landscape built next to the main payment counter for visitors. Here, visitors can see herbal plants such as *lemongrass*, *pandan*, *turmeric*, and *caddie*. All this is symbolic of the herbaceous plants that can be found in the traditional Malay house area and brought to be part of the MBBJ Tower building. In addition, other landscape plants are also climate-appropriate plants and suitable for the weather in Malaysia such as *croton*, *Chinese fan palm*, *red circle flag*, *cornstalk dracaena*, *variegated snake plant*, *land dracaena*, and *wild betel*. For visitors to MBBJ Tower, the beauty of the landscape can be appreciated along the roads around the building (level 1), edible garden (level 3), staff lounge (level 7), sky garden (level 9), and rooftop garden (level 15). The interaction between staff, visitors, and the green areas provides an element of tranquility that can relax the mind after a hard day's work.

The award of the MBBJ Tower as the winner of the 'Best New Green Institutional Building' category in the Leadership in Sustainability Awards 2020 organised by the Malaysian Green Building Council is not just a mediocre award (*MBJB TERIMA ANUGERAH DI LEADERSHIP IN SUSTAINABILITY AWARDS 2020*, 2020). It is a testament to the dedication of architectural design towards green and sustainable buildings. The main factor leading towards this sustainable architectural design is the success of the design team in producing architecture that can interact well with local climate factors as well as take advantage of the constraints and opportunities from the climate and weather (*Green Building Index*, 2021). In this context, all these elements are used as a resource for buildings to continue to function better and efficiently. For example, excessive sun rays, heavy rain, flash flood, natural ventilation and daytime lighting. These elements are seen to get good attention at MBBJ Tower (Samuri, M., personal interview, 2022, March 14). The built atrium space allows sunlight to enter the central rooms of buildings that often have trouble getting daylight and also improves the performance of thermal comfort inside the building. In addition, the space allows the conduction of natural air into the building. The MBBJ Tower, which is decorated with various local green plants, is also used as an element that helps provide clean and quality air for building users. The green roof space is equipped with a rainwater harvesting system that is then used for the plant irrigation system in the building. The façade of the building is also equipped with *horizontal shading* Islamic pattern-motifs to protect the occupants of the building from excessive sunlight. High-quality building walls (high-performance double skin walls) further improve the performance of the building by providing protection to the occupants of the building from direct sunlight. The idea of sustainability applied in MBBJ Tower is based on the understanding of the architectural sustainability concept of Traditional Malay House which is then pursued towards abstract and modern architecture (*MBJB to Receive a New Home*, 2017).

It can be concluded that the architecture of Menara MBBJ is not only a symbol of international development for the city of Johor Bahru, but also a catalyst and pride of the local community to jointly respond to MBBJ's call towards making Johor Bahru an international, cultured and sustainable city.

5. Conclusion

As a result of the analysis and observation carried out on Menara MBBJ using the proposed national architectural identity framework, it can be concluded that Menara MBBJ is a modern and new architecture that successfully meets the criteria as a building designed as a symbol of national architectural identity. Through the analysis and observation that had been carried out, the MBBJ Tower reflects the roles of national identity as a supra-national identity. Here, the construction of the MBBJ Tower is not only to meet the needs of the local community but also to meet Johor Bahru's development plan. MBBJ Tower is an architecture with a natural identity. The construction of the MBBJ Tower as a 'green building' considers the architectural appreciation of the 'spirit of the time' and the 'spirit of the place'. The application of 'green architecture' is similar to the architecture of traditional Malay houses which is the main concept of MBBJ Tower. A good understanding of these concepts has helped to enable the MBBJ Tower to interact with its surrounding context successfully. From the context of *Venustas*, *Firmitas*, and *Utilitas*, the observations and analyses carried out show that every element of the national architectural identity was successfully met. The elements are developed using a modern and elegant abstract architectural language that the community in Johor Bahru and the rest of Malaysia can be proud of. Overall, based on the proposed national architectural identity framework, it can be concluded that the MBBJ Tower is one of the architectures that can be used as an example of good green architecture with an outstanding national identity. It is a modern building capable of promoting national identity in addition to being a major landmark in Johor Bahru.

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