## PLANNING MALAYSIA: Journal of the Malaysian Institute of Planners VOLUME 21 ISSUE 6 (2023), Page 456 – 476

# A COMPARATIVE STUDY ON THE ROLE OF URBAN SQUARES' PATH IN SHAPING THE CITY IMAGE OF PAST AND PRESENT ADMINISTRATIVE CAPITALS IN MALAYSIA

## Hazrina Haja Bava Mohidin<sup>1</sup>, Ng Yi Ming<sup>2</sup>

<sup>1,2</sup>Department of Architecture, Faculty of Built Environment, UNIVERSITI MALAYA

## Abstract

The 'Dataran' or urban square has been suffering an identity loss as a result from rapid urbanization despite its significance in shaping the city image. The concept of "city image," often referred to as a city's reputation or perception. Even though numerous studies had address different contribution of an urban square, there is only limited information that addresses its role in shaping city image, especially in relation to administrative capital in Malaysia. This paper is vital as it intends to provide emphasis to the actual role of the urban square once again. This study aims to examine the role of urban squares' path in shaping the city image through observable analysis on past and present administrative capitals in Malaysia; Dataran Merdeka, Kuala Lumpur and Dataran Putra, Putrajaya. The observable analysis will draw attention to two subject matters of paths; Clarity of Access Linkages and Directional Quality. Comparison will be made and the urban square that shows a stronger role in shaping the city image will be determined. Conclusively, it is found out that the urban square with higher clarity in the access linkages and strong directional quality are prone to show stronger role in shaping the city image. Based on the observable analysis, Dataran Putra shows a stronger role in shaping a city image as almost 100% of its' paths shows clarity in its' access linkages and form a strong directional quality due to its radial alignment.

Keywords: City Image, Urban Square, Path, Legibility, Administrative Capital

<sup>&</sup>lt;sup>1</sup> Corresponding author Email: hazrinahaja@um.edu.my

## INTRODUCTION

The 'Dataran' or urban square is a term used to describe an open space found inside Malaysia since the early 18th century during the British Colonial (Lai and Ang, 2018). During their colonial period, the administrative building becomes one of the focus of Malaysia's town planning development (Mohidin, 2015). This is the time when urban squares started to form a close relationship with the administrative buildings as these urban features are often present in the urban planning of such cities. This inseparable bond between urban square and the administrative building shows a strong sense of place which one way or another contributes to shaping the city image of such city (Razali et al., 2019). Besides administrative buildings, urban squares are often surrounded by circulation pathways (Wessel et al., 2018). Lynch (1960) disclosed that paths are one of the major urban elements as it is one of the first elements to be designed during city development. Paio et al. (2016) also stated that the surrounding paths often dictate the formation of an urban square. All these further strengthen the role of the path as a physical urban element that is closely related to urban square.

As one of the characterizing traits which dictate the formation of the urban square, it is undeniable that paths share a similar role as the urban square which is to shape the city image. But yet, few studies highlighted that the present urban square suffers from identity loss as a result of district division (Sennett, 2017). The physical transformation of the urban square as a result of rapid urbanization also affects this public realm negatively (Zakariya and Harun, 2018). On the other hand, past researches such as Gehl, J (2013) and Vadiati et al. (2011) had to address the different contribution of the urban square to the surrounding community in term of social cohesion and environmental sustainability but there is only limited research that addresses the role of the urban square in shaping the city image, especially concerning the urban paths inside the context of Malaysia. Hence, this research intends to overcome this gap by examining the legibility of paths for the selected urban square in shaping the image of past and present administrative capitals in Malaysia. Furthermore, this study intends to emphasize the role of urban square paths in shaping city image once again.

## LITERATURE REVIEW

## Administrative Capital

An administrative capital, also known as an administrative center or government capital, is a specific city or location within a country that serves as the primary center for governmental and administrative functions (Rossman, 2018; Turner and Turner, 2011; Mosser, 2010). This is distinct from the term "capital city," which may also encompass other functions like culture, economics, and historical significance. An administrative capital is primarily focused on housing government institutions and facilitating the operation of the government

(Rossman, 2018). It is therefore acting as the heart of a country and plays a significant role in shaping city image. Administrative capitals are essential for the effective functioning of a country's government and the execution of public policies. They facilitate communication and coordination among government agencies, lawmakers, and other stakeholders involved in governance. Administrative capitals are often chosen strategically for reasons such as political stability, geographical location, and historical significance (Rossman, 2018). Some examples of administrative capitals are Canbera in Australia, Washington D.C in USA, Jakarta in Indonesia and so many more rapidly growing old and new administrative capitals.

## **Roles of Urban Square**

Based on Alves (2017), an urban square is defined as any space located within an urban area, in which its defining elements are seen from within and where the feeling of being is more acutely emphasized than in any other urban area. Public space such as urban square plays an essential role in the city to catalyze the humanization of its inhabitants (Bibri et al., 2017). Throughout history, different events such as festival celebrations or entertainment-related activities had seen taking place in the urban square (Zakariya et al., 2014). Kim (2017) also mentioned that cities are formed through the composition of voids and masses and the ratio of voids and masses will determine the structure of the city. Hence, the urban square also plays a significant role concerning the context of void and mass composition of a city due to its quality of openness.

Besides the physical role, the urban square also benefits the ecological quality of the urban environment by improving the surrounding air quality and lessen the water surface runoff (Massaro et al., 2021). Jin et al. (2020) also mentioned that the presence of urban squares helps to reduce the noise level of the surrounding. In addition, this urban feature is also a place where groups or individuals learn to respect and tolerate others (Vis, 2018). All these contexts of social cohesion and interaction display the local identity which will then reflect and shape the image of the city (Yavuz et al., 2020). Furthermore, the urban square also manifests a symbolic meaning of coexistence that further emphasizes the placemaking identity of the surrounding (Moro et al., 2020).

Throughout every country, urban square plays an essential role in catalyzing the humanization of inhabitants inside a city (Gehl, J, 2011). The role of urban square ranges from physical, ecological, contribute to social cohesion, placemaking, and the local identity. Thus, there is a strong relationship between the presence of an urban square and the surrounding urban contexts where the urban square also shows a role in shaping the city image.

## Urban Square in Malaysia

Although the urban square was introduced and implemented by the British in the early 18th century, the creation of the urban square was originated in Calcutta, India (Lai and Ang, 2018). The creation of 'maidan' or an urban square in Calcutta, India resulted from a town planning experiment initiated by the British Empire while they were adapting to the pre-existing spaces in India (Nayan et al., 2019). After the creation of 'maidan', this urban feature was subsequently adopted by the British Empire as a hybrid planning device that formalized as an instrument for cities' planning (Razali et al., 2019).

Coming back to the context of the Malay Peninsula, the first urban square that was introduced was named Fort Cornwallis which was located in Penang Island (Shamsuddin et al., 2018). After the implementation of this urban feature in Malaya, the term 'maidan' was then changed to 'Dataran' to adapt to the context of Malaya (Lai and Ang, 2018). Following the introduction of Fort Cornwallis in Malaysia, few other urban squares such as the Padang Kota Lama in Penang, Dataran Merdeka in Kuala Lumpur, Dataran Putra in Putrajaya, and a few others were subsequently being introduced into the context of Malaysia. As a result of its openness, the urban square in Malaya plays an essential role in providing visual emphasis to the surrounding administrative building (Zakariya and Harun, 2018).

## City Image and Legibility

Like a piece of architecture, the city is a construction in space, but one of vast scale, a thing perceived only in the course of long periods (Lynch, 1984). A city is not only an object that is perceived by people of diverse character, but it is an outcome of many designers and planners who are continuously modifying the structural framework based on their reason. Thus, the strong link between the city's memory, image, experience by its inhabitants and those physical characteristics of such a city results in the formation of city image (Lynch, 1960). In many ways, the visual quality or the image of a city is often defined by the mental image held by each citizen (Lak et al., 2019). The term "Legibility" of city image is the apparent clarity of the cityscape (Moulay et al., 2017). Legibility refers to the quality or state of being clear, readable, or easily understood (Moulay et al., 2017). If a physical object or element is legible, it could be easily seen as a recognizable symbol or a pattern. Thus, a legible city would be one whose physical elements are easily noticeable. Colding et al. (2020) also emphasized that there is a change in the pattern of urban public spaces where prominent architects and urban planners have been arguing that the quality of public spaces has much to do with the image that they convey. This statement further emphasized the importance of 'legibility'.

In short, Lynch (1960) emphasized that people should first attain a clear mental mapping of their surrounding urban environment where they will then be able to navigate, operate and act upon the environment. In conjunction with the idea of mental maps, Lynch (1960) proposed 5 elements that are contained inside these mental maps, namely: 1) Paths, 2) Edges, 3) Districts, 4) Nodes and 5) Landmarks. As the formation of the urban square is strongly dependent on the surrounding paths, this research study on urban square's legibility will only be focusing on the elements of paths.



Figure 1: The Element of a City Source: Lynch (1960)

## Paths of Urban Square

Based on Javadi (2016), the form of the urban square could be categorized into 4 types, namely: 1) The Closed Square, 2) The Dominate Square, 3) The Amorphous Squares and 4) The Street Plaza. Even though urban square could be defined into a few types, Paio et al. (2016) mentioned that all types of urban square share a similar characterizing trait that depends on 'The Global Properties' The global properties of an urban square refer to the overarching characteristics and qualities that define a square within an urban context (Paio et al., 2106). These properties encompass the square's role, significance, and impact on the surrounding city and its inhabitants. Global properties help distinguish one square from another and contribute to its unique identity within the urban fabric. It is also used to create reference between the urban square and the surrounding access or circulation pathways whether it is vehicular routes or pedestrian pathways (Wessel et al., 2018)

As one of the first urban elements to be designed during the initial city planning development, the path is considered the most significant element in urban design (Carmona, 2021; Jacobs and Appleyard, 2015; Lynch, 1960). Whether in international or local urban settings, urban squares are often surrounded by circulation pathways; either pedestrian pathways or vehicular routes where all these access linkages further emphasize the continuity and clarity of paths (Wessel et al., 2018). Access linkages in the context of an urban square refer to the connections and pathways that facilitate accessibility and movement within the square and its surrounding areas (Camona, 2021; R.Siti, 2019). These

linkages are designed to provide pedestrians with convenient and safe routes to access the square, move around it, and connect to adjacent streets, buildings, public transportation, and other key destinations. Access linkages play a crucial role in enhancing the functionality and usability of urban squares (R. Siti, 2019).

Besides continuously identifiable, the elements of paths may have directional quality (Lynch, 1960). The directional quality of a certain urban feature could also be a result of the alignment of access linkages where a certain feature could be the focal or termination point of the access linkages (Perovic and Folic, 2012; Wessel et al., 2018). This directional value will then lead to the perception of destination and origin points (Lynch, 1960). Thus, lacking identity in a major path will result in confusion between one path with another, leading to difficulty in reading the entire city image. The directional quality of paths at an urban square refers to how well the paths and walkways within the square guide pedestrians and provide a clear sense of direction or orientation (Carmona, 2021; Jacobs and Appleyard, 2015). This aspect of urban design focuses on ensuring that people can easily navigate the square, understand where they are, and find their way to desired destinations within or beyond the square. The directional quality of paths is an important consideration in urban planning and design to enhance pedestrian safety, convenience, and overall user experience (Carmona, 2021; Jacobs and Appleyard, 2015).

In short, both clarity of access linkages and directional quality of paths will contribute to a clearer mental map of the observer which will then contribute to a stronger visual clarity of city image.

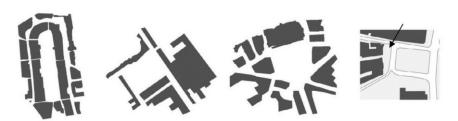


Figure 2: Different Forms of Urban Squares Source: Javadi (2016)

## RESEARCH METHODOLOGY

This qualitative research will be utilizing the case studies method as the method of data collection; in which two (2) urban squares, namely Dataran Merdeka and Dataran Putra from both past and present administrative cities in Malaysia were selected as case studies. The two dataran are chosen as they are located in a capital city have or currently serving as the administrative capital in Malaysia.

The data will be obtained from observing the main vehicular passage, pedestrian linkages and public vehicular access from site plans of the two administrative cities through the method of object mapping where this technique helps to remove non-related elements inside a particular image and provide the viewer with a quick overview of the subject of research analysis (Downes et al., 2015). To provide clarity and emphasize the different objects inside the site planning images, different elements inside the site planning will be shown through different images; Emphasizing only one object inside each image (Marosi, 2016). Even though each object mapping will only be indicating one element at a time, the site boundary of the selected case studies will always be shown in red inside every image to provide clarity between the relationship of the selected case studies and each surrounding element. The approach of the observation will be based on the subject matter of 'paths' as outlined by Lynch (1960).

As this research takes on an interpretive approach to research, the researcher will play the role of a complete observer as no interaction will be carried out with any insider to examine the legibility of the city image. Wibowo et al. (2015) stated that the maximum distance of travel for pedestrians inside a tropical climate such as Singapore is a total of 600m. However, a different point of view was reviewed by Azmi et al. (2012), where they mentioned that the maximum walkable distance inside another tropical city like Malaysia is only 400m. This statement was further supported by Leh et al. (2017) where they also mentioned that 400m is a safe travel distance inside Malaysia. With all these, the scope of observation and qualitative analysis for urban legibility will only be examined within a distance of 500m radius from both case studies as this distance represent the average comfortable travel distance inside a city of tropical climate.

The research analysis will then compare these two case studies in a table format with regards to the two subject matters of paths: Access Linkages and Directional Quality (as shown in Table 1). Lastly, the urban square that shows a stronger role in shaping the city image will then be determined.

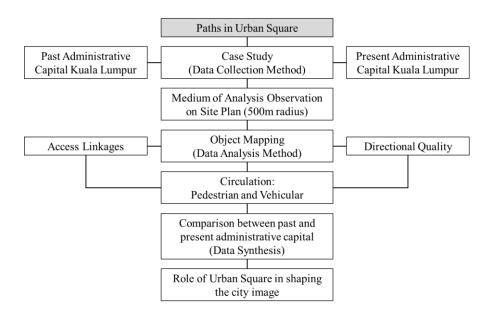
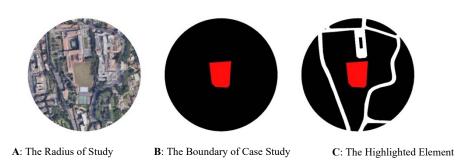


Figure 3: The research methodology framework

Table 1: Component of Object Mapping

PHYSICAL ELEMENT OF URBAN SQUARE	SUBJECT MATTERS	OBSERVABLE ELEMENTS
Paths	Access Linkages	Access Linkages around Urban Square
Tutilo	Directional Quality	<ul><li>Main Vehicular Passage</li><li>Pedestrian Linkages</li></ul>



**Figure 4:** Example of Object Mapping as Method of Analysis *Source: Authors (2021)* 

## ANALYSIS AND DISCUSSION

#### Dataran Merdeka

Having witnessed the rise of the Malaysian flag during Independence Day, Dataran Merdeka is among the earliest public square introduced during the British Empire. Formally known as the Padang Club, this urban feature is situated inside the heart of an old government administrative district known as Kuala Lumpur alongside the National Police Department headquarters and the Gombak River (Zakariya & Harun, 2018).

For almost 140 years, Dataran Merdeka has witnessed many transformations and events (Lai and Ang, 2018). Besides diminishing in area of the open field, one of the major changes of Dataran Merdeka took place in the mid-1980s where this huge open space was completely dug up to further accommodate an underground parking area and a commercial plaza known as Plaza Dataran Merdeka (Zulkefle et al., 2012).

Despite all those physical transformations, Dataran Merdeka is still consistently the strongest element found inside this cityscape, a vast open space inside the heart of the busy district - Kuala Lumpur, the formal administrative capital of Malaysia (Nayan et al., 2019). It is undeniable that the stories of Dataran Merdeka contribute significantly to both the historical formation and social-cultural development of the formal administrative capitalof Kuala Lumpur. Figure 5A shows the area of study for this selected case study within a radius of 500m as specified in the previous section.

## **Dataran Putra**

Initiated by the 4th Prime Minister Tun Dr. Mahathir Mohamad, Malaysia embarked on an aspiring 'refashioning' of the nation known as Wawasan 2020 (Vision 2020) to achieve the goal of becoming a 'developed country' by then (Rossman, 2018). In conjunction with that, Putrajaya, the new federal administrative capital was formed and replaced the congested Kuala Lumpur as the administrative capital. One of the major urban features found in this administrative capita is an urban square known as Dataran Putra.

Dataran Putra contributes significantly to the overall master planning proposal for the new administrative capital of Putrajaya, as it is positioned in the termination point of this major boulevard of this city, the Putrajaya Boulevard (Ngesan et al., 2015, Moser, 2020). Hence, providing emphasis on the surrounding administrative building and architecture as a result of the openness of this urban feature (Kim, 2017). In addition, Dataran Putra also contributes greatly towards the social and communal values of the surrounding local community where recreational activities such as picnics, jogging, cycling, and skating were often carried out here (Ujang et al., 2015).

As a whole, Dataran Putra plays a significant role not just as the termination point of the major axis of Putrajaya, the Putrajaya Boulevard, but also as an urban feature that shows placemaking identity to the local. It is certain that the existence of this urban square also contributes greatly to forming the city image of this new administrative capital of Malaysia. Similar to that of the previous case study, Figure 5B shows the area of study for this selected case study within a radius of 500m.





A: Dataran Merdeka

B: Dataran Putra

Figure 5: 500m Radius around both case Studies Source: Authors (2021)

In general, the comparison between Dataran Merdeka and Dataran Putra is shown in the table below, where physical elements such as geographical location, urban form, and surrounding paths are specified.

 Table 2: General Comparison between Dataran Merdeka & Dataran Putra

ELEMENTS OF	CASE STUDIES			
URBAN SQUARE	DATARAN MERDEKA	DATARAN PUTRA		
Photography				
Location	Kuala Lumpur			
User / Observer	(Past Administrative Capital of Malaysia)	Putrajaya		
Form	(Present Administrative Capital of Malaysia)			
Surrounding Paths	Tourist / Foreign Traveller	Local Residence		

## **Access Linkages**

Based on what was observed from the site planning of Dataran Merdeka (as shown in Figure 6A), we can deduce that the site planning of this area is not referring to any major axis on-site, hence resulting in a diverse network of paths scattered all over the urban area. The reason behind the formation of this scattered capital might have resulted from the unplanned morphological transformation from a previous local village into an administrative capital after the arrival of the British Colony. On the other hand, based on Figure 6B, even though a few major roads with wider width could easily be observed from the site planning, those access linkages do not show any emphasis or focus towards any other urban feature inside the surrounding context, hence resulting in a weaker visual clarity inside the mental image of the traveling observers. In short, all the access linkages inside this area were not dictated by any major planning axis on-site, hence resulting in an unplanned capital with a diverse network of access linkages scattered all over the urban context.

## Access Linkages in Dataran Merdeka

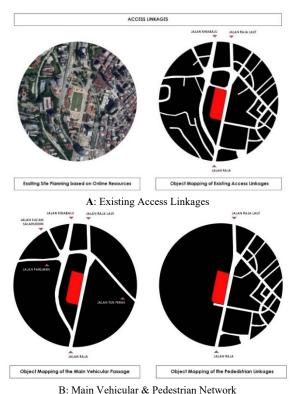


Figure 6: 500m Radius around both case Studies

Source: Authors (2021)

## **Access Linkages in Dataran Putra**

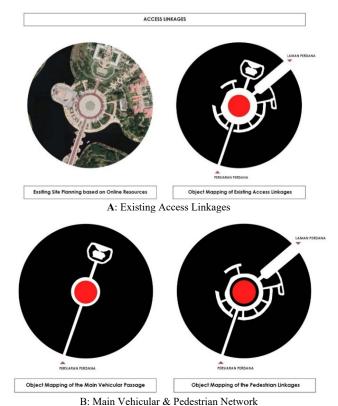


Figure 7: Overview of Access Linkages of Dataran Putra through Object Mapping

Source: Authors (2021)

Dataran Putra is an open space located in Precinct 1 of Putrajaya Malaysia (Rossman, 2018). Based on what was observed from the site planning of Dataran Putra in Figure 7A, it is apparent that the site planning of this area follows a major axis and the Dataran Putra plays a prominent role as the catalyst or binder for the surrounding site planning.

As a whole, the master plan for this 'Utopian City' divides the city into 2 main zone or areas, namely: 1) the Core Zone and 2) the Periphery Zone. Dataran Putra plays a prominent role inside the core zone where this urban feature acts as an open space that provides emphasis towards the surrounding feature, a catalyst for the city planning of Putrajaya's Core Zone (as shown in Figure 7B)

In summary, as a significant binder for the master planning of Putrajaya's Core Zone, Dataran Putra explicit a strong role as an important element of the city that shaped the city image of Putrajaya. All the access linkages

around this urban feature follows a focal point (the Dataran Putra) as the main planning axis which dictate the other paths' placement and position.

## **Discussion on Access Linkages**

Based on what was observed, Dataran Merdeka shows a lack of clarity for its access linkages as all the access linkages inside this area was not dictated by any major planning axis on-site, hence resulting in an unplanned capital with a diverse network of access linkages scattered all over the urban context. As mentioned previously, the reason behind the formation of this scattered capital might have resulted from the unplanned morphological transformation from a previous local village into an administrative capital after the arrival of the British Colony (Zakariya & Harun, 2018).

In many ways, the visual quality or the image of a city is often defined by the mental image held by each citizen (Lynch, 1960). If a physical object or element is legible, it could be easily seen as a recognizable symbol or a related pattern (Lak et al., 2019). A similar theory applies to the physical elements of paths, where these unorganized access linkages found around Dataran Merdeka are portrayed as a non-legible urban element which one way or another weaken the travelers' apparent clarity to this specific urban area. Hence, visual clarity could not be seen inside the mental mapping of the observers as they pass through the surrounding access linkages because of those unorganized access linkages.

On the contrary, as the newly built and structured administrative capital of Malaysia, Dataran Putra shows a better clarity in its access linkages compared to that of the Dataran Merdeka. The contrast between the site planning of both urban features can be seen clearly as Dataran Putra follows a circular focal point as the main planning axis which further defines and dictate the other paths' positioning and planning. All these alignments and well-planned access linkages will then provide a stronger 'imageability' inside the mental mapping of the observers, thus allowing them to travel through the surrounding with ease and clarity. Moreover, a clear environmental image will also provide the inhabitant with a significant sense of emotional security (Colding et al., 2020). This statement further proves that the paths along Dataran Putra play a stronger role in shaping the city image compared to that of Dataran Merdeka.

TO 11 2 4	a	. 1 .	C 4	T ' 1
I ahle 4. A	Comparative	Analyete	tor Access	Linkages
I abic 5. A	Comparative	Tillarysis	IOI ACCUSS	Lillikages

	Table 5: A Comparative An	alysis for Access Linkages		
SUBJECT		OBSERVABLE		
MATTERS	PHYSICAL	DATARAN	DATARAN	
		MERDEKA	PUTRA	
Clarity of Access Linkage	A: Dataran Merdeka	As the previous administrative capital which underwent major morphological transformation from way before the country's independence      Shows a lack of clarity of paths as there are a diverse network of paths scattered throughout the area as a resulted from the unplanned	As the current administrative capital that was newly built and structured without any influence from the previous morphological transformation     Shows a stronger clarity of paths as all paths follow a radial site planning axis where Dataran Putra act as the	
	B: Dataran Putra	morphological transformation  • A strong visual clarity or 'imageability' could not be formed inside the mental mapping of the observers due to such unplanned access linkages	binder for the overall site planning  • A stronger 'imageability' could be formed by the observer as they pass through the radial site planning axis	

## **Directional Quality**

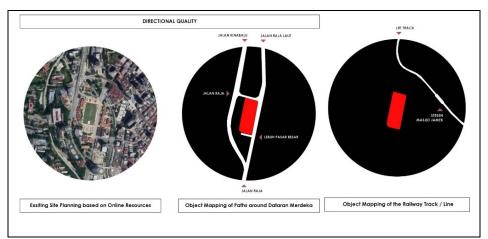
Based on what was observed from Figure 8, we can deduce that the perimeter access linkages of Dataran Merdeka are all aligning with the perimeter boundary of the urban square with an exception of one main road on site – Jalan Kinabalu. The reason behind the morphological transformation of the surrounding urban context that resulted in the current disconnection between Jalan Kinabalu (previously Jalan Raja at 2007) might be caused by the development of the Royal Selangor Club located on the west of Dataran Merdeka (Rossman, 2018).

Even though all those paths were positioned at the perimeter of Dataran Merdeka, there is no strong physical connection or directional quality between both the urban square and surrounding street as the urban square is not conceived

as either a focal or termination point. Hence, the mental mapping of observers will no longer perceive the Dataran Merdeka as a place of significance but rather a place in the city where the community passes by every day.

Conclusively, although there is a presence of path's alignment surrounding the perimeter of Dataran Merdeka, this urban square does not play a significant role in providing a clear mental mapping inside the mind of observers as clarity cannot be seen in term of directional quality of paths, hence confusing 'imageability' of paths in term of directional quality.

## **Directional Quality in Dataran Merdeka**



**Figure 8:** Overview of Perimeter Access Linkages of Dataran Merdeka through Object Mapping

Source: Authors (2021)

## **Directional Quality in Dataran Putra**



Figure 9: Overview of Perimeter Access Linkages of Dataran Putra through Object
Mapping
Source: Authors (2021)

As the main termination point of Putrajaya Boulevard, the site planning, and the alignment of paths inside the Dataran Putra were also planned carefully per a specific focal point or site axis. This resulted in a strong radial site planning strategy where Dataran Putra acts as the focal point of this termination zone. All these further define and give clarity towards the paths' alignment and directional quality inside this area. All this will then contribute to a clearer mental image inside the observers' minds as they travel through this urban feature.

In summary, the surrounding access linkages around Dataran Putra show a strong directional quality as this urban feature was positioned in the termination point of the major axis of Putrajaya, the Putrajaya Boulevard. The alignment of all the access linkages here follows a central radial axis where the Dataran Putra acts as the binder for the overall site planning. All these alignments of paths inside Dataran Putra help strengthen the role of this urban square in shaping the city image of Putrajaya as clarity could be from inside the mental mapping of the observers, hence resulting in the clarity of 'imageability' of paths in term of directional quality.

## **Discussion on Directional Quality**

Glancing through the surrounding context of Dataran Merdeka, even though most of the surrounding perimeter access linkages are aligned with the perimeter of Dataran Merdeka (except Jalan Kinabalu), no strong directional quality could be

seen between those access linkages with the Dataran Merdeka as the urban square was positioned at the perimeter of those paths and was only perceived as a place where the community pass by every day.

Lynch (1960) mentioned that travelers tend to imagine a paths' origin and termination point which allow them to know where they are heading and coming from. Colding et al. (2020) also disclosed that having a strong visual clarity in the paths' origin and a destination point will tend to lead to a stronger identity of that paths, giving a sense of bearing towards the observers' whenever they crossed them. All these further prove the lack of strong directional quality in the perimeter access linkages of paths along Dataran Merdeka as all of those paths do not show an origin or termination point.

On the contrary, the surrounding access linkages around Dataran Putra show a stronger visual clarity in all the paths' alignment as this urban feature was positioned in the termination point of the major axis of Putrajaya, the Putrajaya Boulevard. In addition, all the surrounding access linkages were also dictated by the presence of that urban feature and hence strengthening further the role of Dataran Putra in shaping its city image. This statement was supported by Lak et al. (2019) where he mentioned that and end-from-end differentiation could be formed by elements that may be visible near the end of a path, which further defined the termination point. On the other hand, Moulay et al. (2017) also added that having a strong directional quality as a result of origin and termination point will then give a sense of scale towards the travelers, which one way or another allow the observer to have a stronger mental mapping of the urban surrounding as a result of the visual clarity.

As a conclusive remark, Dataran Putra shows a stronger role in shaping the city image through its alignment of the path which resulted in a stronger directional quality as this urban square plays a significant role as it is positioned in the termination point of the major axis of Putrajaya – The Putrajaya Boulevard. In addition to that, the alignment of paths for Dataran Putra was not only an alignment following the perimeter of the urban square but contribute to a major planning axis of the whole city of Putrajaya.

	~	1 · C	D	1 0 1"
Table 4. A	Comparative .	Analysis to	· I hrections	al ( )iialify

	I able 4: A Comparative Ana	lysis for Directional Quality		
SUBJECT		OBSERVABLE ANALYSIS		
MATTERS	PHYSICAL	DATARAN	DATARAN	
MATTERS		MERDEKA	PUTRA	
Directional Quality	A: Dataran Merdeka	Most access linkages except Jalan Kinabalu area aligned to the perimeter of Dataran Merdeka     No strong physical relationship could be form between the alignment of paths and the positioning of the urban square	All the access linkages follow the radial site planning axis of Dataran Putra      This urban square plays a significant role as the main termination point for the major axis of Putrajaya — the Putrajaya Boulevard	
	B: Dataran Putra	Dataran Merdeka was not perceived as a place of significant but rather as a place in the city where the community pass by as a result from such paths' alignment	Hence, strengthening further the significant of Dataran Putra in shaping the city image of Putrajaya	

## **CONCLUSION**

Conclusively, it is found out that the urban square with higher clarity in the access linkages and strong directional quality are prone to show stronger role in shaping the city image. As compared to Dataran Merdeka, we can deduce that Dataran Putra shows a stronger role in shaping the city image of the present administrative capital of Malaysia, Putrajaya. Looking through the site planning of Dataran Putra, a stronger 'imageability' could be form inside the mental mapping of the observer through its radial alignment and the strategic location of this urban feature as the termination point of the major axis of Putrajaya, the Putrajaya Boulevard resulted in a stronger clarity of access linkages and directional quality. Furthermore, this research study intends to reinstate the importance of urban square as a place of significant inside a city by allowing more residence to acknowledge the role of urban square in shaping city image.

## REFERENCES

- Alves, F. B. (2017). The traditional urban square—a vital organ in the city or a "thing" of the past? In the Pre-Fabrication of Building Facades (pp. 37-46). Springer, Cham.
- Azmi, D. I., and Karim, H. A. (2012). Implications of walkability towards promoting sustainable urban neighbourhood. *Procedia-Social and Behavioural Sciences*, 50, 204-213.
- Bibri, S. E., and Krogstie, J. (2017). Smart sustainable cities of the future: An extensive interdisciplinary literature review. *Sustainable cities and society*, 31, 183-212.
- Carmona, M. (2021). Public places urban spaces: The dimensions of urban design. Routledge.
- Colding, J., Gren, Å., and Barthel, S. (2020). The incremental demise of urban green spaces. *Land*, 9(5), 162.
- Downes, M., and Lange, E. (2015). What you see is not always what you get: A qualitative, comparative analysis of ex ante visualizations with ex post photography of landscape and architectural projects. *Landscape and Urban Planning*, 142, 136-146.
- Easton, G. (2010). Critical realism in case study research. *Industrial marketing management*, 39(1), 118-128.
- Gagnon, Y. C. (2010). The case study as research method: A practical handbook. PUQ. Gehl, J. (2011). Life between buildings: using public space. Island press.
- Gehl, J. (2013). Cities for people. Island press.
- Ismail, A. S., Mohidin, H. H. B., & Daud, M. M. (2017). A Review On Occupants'satisfaction And Wellness Level In Low-Cost Housing In Malaysia. *Planning Malaysia*, 15.
- Jacobs, A., & Appleyard, D. (2015). Toward an urban design manifesto. In *The city reader* (pp. 640-651). Routledge.
- Javadi, H. (2016). Sustainable Urban Public Squares. *European Journal of Sustainable Development*, *5*(3), 361-361.
- Jin, Y., Jin, H., and Kang, J. (2020). Combined effects of the thermal-acoustic environment on subjective evaluations in urban squares. *Building and Environment*, 168, 106517.
- Kim, J. (2017). Comparing the Influences of the D/H Ratio, Size, and Facade Design of an Enclosed Square on Its Perceptual Qualities as a Sustainable Urban Space in South Korea. *Sustainability*, 9(4), 675.
- Lai, C. K., and Ang, C. C. (2018). The merdeka interviews: architects, engineers and artists of Malaysia's independence. Pertubuhan Arkitek Malaysia.
- Lak, A., and Hakimian, P. (2019). Collective memory and urban regeneration in urban spaces: Reproducing memories in Baharestan Square, city of Tehran, Iran. City, *Culture and Society*, 18, 100290.
- Leh, O. L. H., Hasri, N. I. Z., and Musthafa, S. N. A. M. (2017). Residents' transportation mode preferences in Transit Oriented Area: A case study of Mentari Court, Petaling Jaya, Malaysia. *Geografia-Malaysian Journal of Society and Space,* 12(1).
- Lynch, K. (1960). The image of the city (Vol. 11).

- Marosi, Z. (2016). Redrawing Historical Illustrations in Research of Genuine Urban Features. *Territorial Identity and Development*, 1(1), 45-58.
- Massaro, A., Birardi, G., Manca, F., Marin, C., Birardi, V., Giannone, D., and Galiano, A. M. (2021). Innovative DSS for intelligent monitoring and urban square design approaches: A case of study. *Sustainable Cities and Society*, 65, 102653.
- Mohidin, H. H. B. (2015). Pengaruh Pemikiran Pemimpin Politik Terhadap Rekabentuk Senibina Pentadbiran di Malaysia (Doctoral dissertation, Universiti Teknologi Malaysia).
- Mohidin, H. B. H. B., & Ismail, A. S. (2015, January). Regional design approach in designing climatic responsive administrative building in the 21st century. In *IOP conference series: Earth and environmental science* (Vol. 23, No. 1, p. 012016). IOP Publishing.
- Moro, J., Krüger, E. L., and Camboim, S. (2020). Shading analysis of urban squares using open-source software and free satellite imagery. Applied Geomatics, 12, 441-454.
- Moser, S. (2015). New cities: Old wine in new bottles? *Dialogues in Human Geography*, 5(1), 31-35.
- Moser, S. (2010). Putrajaya: Malaysia's new federal administrative capital. *Cities*, 27(4), 285-297.
- Moulay, A., Ujang, N., and Said, I. (2017). Legibility of neighborhood parks as a predicator for enhanced social interaction towards social sustainability. *Cities*, 61, 58-64.
- Nayan, N. M., Jones, D. S., and Ahmad, S. (2019). Historic Open Space: The Identity of [Padang] Merdeka Square, Kuala Lumpur, Malaysia. *Asian Journal of Behavioural Studies*, 4(17), 29-39.
- Ngesan, M. R., & Zubir, S. S. (2015). Place identity of nighttime urban public park in Shah Alam and Putrajaya. *Procedia-Social and Behavioral Sciences*, 170, 452-462.
- Paio, A., Cutini, V., Pezzica, C., Ventura, J. L., and Bevilacqua, M. G. (2016). Urban squares morphologies, contributes of a multidimensional analysis. In Nexus Congress 2016 (pp. 113-117). Kim Williams Books.
- Perovic, S., and Folic, N. K. (2012). Visual perception of public open spaces in Niksic. *Procedia-Social and Behavioral Sciences*, 68, 921-933.
- R Siti, R. (2019). Peer Review Post Office and Traditional City Square As City Linkage in Java
- Razali, M. K., Ahmad, H., and Er, A. C. (2019). The Analysis of Place-Making Research towards Community Sustainability in Malaysia. *International Journal of Business and Society*, 20(1), 329-347.
- Rossman, V. (2018). Capital cities: Varieties and patterns of development and relocation. Taylor & Francis.
- Oliver, S. D. (2012). Putrajaya: A capital for the future. The Unfamiliar, 2(2).
- Sennett, R. (2017). The fall of public man. WW Norton and Company.
- Shamsuddin, S., Sulaiman, A. B., and Amat, R. C. (2018). Historic urban landscape and the character of George Town, Penang UNESCO world heritage site. *Asian Journal of Environment-Behaviour Studies*, 3(9), 27-35.
- Turner, S. C., & Turner, R. N. (2011). Capital cities: a special case in urban development. *The Annals of Regional Science*, 46, 19-35.

- Ujang, N., Moulay, A., & Zakariya, K. (2015). Sense of well-being indicators: Attachment to public parks in Putrajaya, Malaysia. *Procedia-Social and Behavioral Sciences*, 202, 487-494.
- Vadiati, N., and Kashkooli, A. M. (2011). Environmental sustainability of newly developed city squares in historic cities: Case study of Isfahan-Iran. *Procedia Engineering*, 21, 829-837.
- Vis, B. N. (2018). Cities made of boundaries: mapping social life in urban form. UCL Press
- Wessel, G., Karduni, A., and Sauda, E. (2018). The image of the digital city: revisiting Lynch's principles of urban legibility. *Journal of the American Planning Association*, 84(3-4), 280-283.
- Wibowo, S. S., Tanan, N., and Tinumbia, N. (2015). Walkability measures for city area in Indonesia (case study of Bandung). *Journal of the Eastern Asia Society for Transportation Studies*, 11, 1507-1521.
- Yavuz, A., Ataoğlu, N. C., and Acar, H. (2020). The Identification of The City on The Legibility and Wayfinding Concepts: A Case of Trabzon. *Journal of Contemporary Urban Affairs*, 4(2), 1-12.
- Zakariya, K., Harun, N. Z., and Mansor, M. (2014). Spatial characteristics of urban square and sociability: A review of the City Square, Melbourne. *Procedia-Social and Behavioral Sciences*, 153, 678-688.
- Zakariya, K., and Harun, N. Z. (2018). The Square as an Outdoor Market Space: Exploring the potentials of Dataran Merdeka. *Asian Journal of Behavioural Studies*, 3(10), 183-192.
- Zulkefle, H.A. and Siti Norlizaiha, H. (2012). The Legibility of Urban Square in Shaping City Image of Historical Cities in Peninsular Malaysia. In 1st International Conference on Innovation and Technology for Sustainable Built Environment.

Received: 7th June 2023. Accepted: 5th September 2023