

Identifying Barriers for Sustainable Townscape Development: Challenges in Malaysia

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Abstract: Sustainability has become a key concept in urban development, with increasing attention being paid to creating a townscape that is both environmentally friendly and socially inclusive. However, the townscape quality in Malaysia has been criticised as having poor quality in general. Many cities in Malaysia suffered from a lack of attention or awareness of the importance of a good quality of townscape, resulting in a lack of character and identity of the place. This research presents the findings of a focus group discussion research method on the factors contributing to the barriers for sustainable townscape development in Malaysia. This involved five urban design experts from both academia and industry. The data were analysed by adopting the thematic analysis matrix and analysed using Atlas.Ti software and five themes were established. The framework of "Barriers for Sustainable Townscape Development in Malaysia" is beneficial to policymakers, local authorities and practitioners in ensuring the enforcement of good development and meeting the need for a sustainable townscape in Malaysia.

Keywords: Sustainable townscape development, Urban planning and design, Malaysian townscape, Historical preservation, Thematic analysis

INTRODUCTION

Sustainable urban design has become a crucial focus in recent years, as cities worldwide grapple with the pressing challenges of population growth, resource depletion and environmental degradation. A growing body of research has explored various strategies and approaches to create more sustainable and resilient urban environments. Existing models of sustainable urban form still pose several conundrums and raise numerous issues, when it comes to their development and implementation as to their contribution to the fundamental goals of sustainable development (Bibri and Krogstie, 2017). This pertains to limitations, uncertainties, paradoxes and fallacies. Multidimensional representation of urban form is essential to address these issues (Wentz et al., 2018).

In light of these conditions, urban design has emerged as a crucial endeavour to showcase the practical implementation of sustainable development principles.

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This is achieved by creating a new and prosperous urban environment for cities through an endorsed vision, targeted proposal, leading edge, comprehensive strategies and implementation framework (Shao et al., 2019). Hence, including sustainability, encompassing social, environmental and economic aspects, into the development plan is a universal need for all suburban communities. However, it poses a more arduous task for urban designers and architects.

Therefore, this study aims to explore the challenges faced in achieving sustainable development in the context of Malaysian townscapes. By identifying and analysing the barriers that hinder progress towards sustainability, this study seeks to shed light on the complexities involved in addressing these issues. Understanding these challenges is crucial for formulating effective strategies and policies.

LITERATURE REVIEW

Townscape

The term "townscape" refers to the visual and spatial characteristics of a town or urban area, encompassing its physical elements such as buildings, streets, open spaces. Townscape encompasses the comprehensive visual manifestation and distinctive qualities of a town or urban locality, encompassing its architectural structures, thoroughfares, public areas, notable features and components of the natural environment (Indratno et al., 2021; Koren and Rus, 2019; Pinho and Oliveira, 2009; Wang, Liu and Huang, 2022; Whitehand et al., 2011; Xiong et al., 2017). In the context of Malaysia, similar to numerous other nations, the townscape characteristic assumes a pivotal role in facilitating the sustainable development of cities and metropolitan regions. The presence of townscape problems in Malaysia presents significant obstacles in the pursuit of attaining sustainable development goals.

One of the challenges impeding the achievement of sustainable development in the urban landscape of Malaysia pertains to inadequate design practices that compromise the visual appeal and aesthetics of the built environment (Ismailoglu and Sipahi, 2021). This phenomenon not only impacts the outward perception of a municipality, but also impedes the cultivation of a collective identity within its inhabitants. Moreover, the clash of interests concerning the conservation of townscapes and the promotion of urban densification is a significant obstacle to achieving sustainable development in Malaysia.

Sustainable Townscape

The conflict emerges as a result of alterations in zoning regulations pertaining to townscape history, wherein there is often a preference for urban densification over the preservation of historical elements (Schmid, Kienast and Hersperger, 2021). There is prevalent inclusion of cultural heritage in planning documents, although emphasise the inadequate discourse around its integration within the framework of sustainable development. Insufficient consideration of cultural heritage engenders a disrespect for the preservation of old urban districts, hence fostering the proliferation of new projects that pose a threat to the integrity of these places.

The disparity between urban development and historical preservation is particularly evident in emerging nations such as Malaysia, where the rapid process of urbanisation and development presents a significant challenge to the preservation of historic urban regions (Najd et al., 2015). In order to effectively tackle these difficulties and attain sustainable development in the urban landscape of Malaysia, it is imperative to give due consideration to the incorporation of socio-cultural components within the framework of green space planning (Mohamed et al., 2022). This means that, in addition to providing green spaces in urban areas, such as parks and gardens, the planning and design of these spaces should consider the socio-cultural characteristics of the community. This implies that the provision of green spaces, such as parks and gardens, in urban areas should incorporate considerations of the socio-cultural dimensions of the community within the planning and design process.

An Overview of Townscape Challenges in Malaysia

Malaysia, a country characterised by dynamic urban centres and a variety of natural environments, encounters a multitude of obstacles in its pursuit of sustainable urban development (Abdullah and Usman, 2022; Goh, 2013). One of the primary challenges impeding the achievement of sustainable development in the urban design of Malaysia is the prevalence of inadequate design practices that undermine the visual appeal and aesthetics of urban areas. These practises not only exert a detrimental influence on the outside perception of urban areas but also impede the cultivation of a sense of community among inhabitants. One further impediment to achieving sustainable development in the urban design of Malaysia is the inherent conflict of interest that arises between the preservation of townscapes and the pursuit of urban densification.

The aforementioned issue manifests itself in the expeditious and extensive urban revitalisation initiatives occurring in numerous urban heritage locations, leading to the removal of architectural structures with historical significance and the consequent erosion of cultural assets (Agapiou, 2021; Boussaa, 2017; Swai, 2016). Moreover, the inadequate consideration of cultural heritage within planning documents further intensifies this problem. The discourse around urban development frequently acknowledges the importance of cultural heritage yet fails to adequately address its implications within the framework of sustainable development.

The complexities of the coexistence of urban expansion and cultural protection pose significant concerns, particularly in developing nations such as Malaysia (Najd et al., 2015). In the aforementioned nations, the initiation of novel construction endeavours frequently poses a significant risk to historic urban regions, hence resulting in irrevocable harm to the cultural heritage of these cities. In order to effectively tackle these difficulties and attain sustainable development in the urban landscape of Malaysia, it is imperative to give due consideration to the incorporation of socio-cultural components within the framework of green space planning (Mohamed et al., 2022).

This implies that urban areas should not only incorporate green spaces, such as parks and gardens, but also consider the socio-cultural dimensions of the population when planning and designing these spaces. The consideration of socio-cultural factors holds significant importance in the planning of green spaces for the purpose of achieving sustainable development. The establishment of a

distinct feeling of place and the promotion of cultural heritage conservation are of paramount importance in urban environments.

In Malaysia, the issue of poor urban townscape is a significant problem that needs to be addressed. The rapid urbanisation and uncontrolled expansion of urban areas in Malaysia have led to the deterioration of the townscape in many cities. This is evident in the lack of proper urban planning and design, resulting in overcrowded and poorly designed buildings, inadequate infrastructure and a general lack of aesthetically pleasing and functional public spaces (Aelbrecht, 2016). Furthermore, the legacy of the Modern Movement in architecture and planning, which heavily influenced urban renewal projects in the 1950s and 1960s, has also contributed to the poor urban townscape in Malaysia.

Cities affected by poor townscape in Malaysia including Kuala Lumpur, Pulau Pinang, Johor Bahru and Ipoh (Ju, Zaki and Choi, 2011; Mohamed et al., 2022; Samsudin et al., 2020; Shamsuddin, Sulaiman and Amat, 2012; Shukuri and Awang, 2014; Aelbrecht, 2016; Wahi et al., 2018; Yasin et al., 2021; Zheng, Shen and Wang, 2014). In these cities, structures of great height and mass have been introduced in recent decades that are grossly out of scale amidst traditional one- and two-storey dwellings (Samsudin et al., 2020). Consequently, the streets and thoroughfares are often narrow and congested, with little consideration for the needs of pedestrians or cyclists (Wahi et al., 2018). This has resulted in a lack of walkability and accessibility, leading to further urban sprawl and increased reliance on private vehicles. The introduction of multi-storey buildings in these narrow streets has not only destroyed the human scale and character of the traditional urban landscape but has also impaired natural lighting at street level.

Identifying Key Barriers to Achieving Sustainable Development Sustainable

To ascertain the fundamental obstacles to sustainable growth in the urban design of Malaysia, it is imperative to confront a number of significant issues. One of the primary obstacles pertains to the tension that arises from the need to balance the preservation of townscapes with the imperative of urban densification. The debate at hand stems from the alterations in zoning regulations pertaining to townscape heritage, wherein there is a tendency to prioritise urban densification at the expense of preservation (Schmid, Kienast and Hersperger, 2021). One additional obstacle is to the conservation-redevelopment predicament, wherein the apparent contradiction between the protection of heritage and the pursuit of urban redevelopment arises (Zhong and Chen, 2017).

The phenomenon of historic structures being displaced and the subsequent loss of cultural assets is readily apparent in urban heritage sites that are undergoing fast renovation. One further obstacle to achieving sustainable development is the limited public awareness and engagement in the preservation of old urban districts. The successful protection of historic urban places is heavily influenced by the vital role played by public perception and support.

In addition, the dearth of specialised knowledge and available resources in the field of heritage conservation poses an additional obstacle to the advancement of sustainable development endeavours. One significant obstacle to achieving sustainable development in the urban design of Malaysia is the quick pace of development and urbanisation, which frequently disregards the importance of preserving historic surroundings. Furthermore, the absence of integration and

coordination among various stakeholders and government agencies engaged in urban development serves to intensify these obstacles. The inclusion of socio-cultural factors in the planning of green spaces is essential for addressing these challenges and attaining sustainable development in urban areas in Malaysia (Mohamed et al., 2022).

The incorporation of socio-cultural elements into the planning of green spaces is crucial for addressing the challenges associated with sustainable development in urban areas of Malaysia. The process of integration would necessitate the examination and incorporation of socio-cultural elements pertaining to the community, encompassing the preservation of cultural history and the establishment of a distinct sense of place within metropolitan environments. In addition, the achievement of sustainable development within the urban design of Malaysia necessitates the adoption of a comprehensive and integrated approach that duly considers the environmental, social and economic dimensions of urban development.

RESEARCH METHODOLOGY

The focus group discussion (FGD) was conducted at Taylor's University in October 2023. Five experts participated in the FGD, which lasted approximately 120 minutes. The decision to include five experts was carefully considered and deemed sufficient for the aims of the study. This sample size was chosen based on multiple factors aimed at ensuring the depth of understanding rather than the breadth of expertise. Firstly, the selection of five experts was guided by the principle of diversity and expertise (Krueger et al., 2000; Liamputtong, 2011; Nyumba et al., 2018). These experts were chosen to represent a wide range of perspectives, experiences and knowledge relevant to urban design and sustainability in Malaysia. They were drawn from various academic backgrounds, including architecture, urban planning, environmental science and sociology.

Additionally, the experts brought diverse professional experiences, ranging from government agencies and non-governmental organisations to academia and architectural consultancy design firms. This diversity ensured a comprehensive exploration of the obstacles in implementing sustainable townscape practices in Malaysia from different angles. Secondly, the smaller size of the expert panel facilitated more intimate and focused interactions among participants (Onwuegbuzie et al., 2009). This setting fostered an environment where individuals felt comfortable sharing their experiences and perspectives in greater detail about the challenges faced in sustainable townscape development.

The FGD followed a semi-structured format, incorporating predetermined themes that were relevant to the phenomenon under study. These themes were flexible and were modified, renamed and expanded to reflect the actual perceptions and experiences of the experts. Prior to the session, appointments were scheduled with each respondent two weeks in advance. The first author, acting as the moderator, briefed the participants on the ground rules of the session. These rules included respecting contrasting insights, speaking one at a time, muting microphones when not speaking, ensuring balanced participation and maintaining anonymity of names and organisational identities to uphold confidentiality.

During the sessions, the first author moderated discussions while a postgraduate student served as a note-taker to record important group dynamics. The discussions followed the asking, recording and confirming (ARC) procedural steps (Zairul, 2019). Initially, participants were asked about their thoughts on the developed model using open-ended questions. Subsequently, the moderator and note-taker recorded and encouraged participants to jot down comments and reflections on digital post-it notes for documentation. Real-time validation of codes, categories and emerging themes occurred before organising them systematically in Atlas.ti 23 (Scientific Software Development GmbH, Berlin, Germany) software for the final framework formulation. The final validated themes were tabulated in a thematic analysis matrix (TAM) format for further analysis and interpretation (Zairul, 2019). Table 1 shows the background of five expert panellists involved during the FGD session.

Table 1. Expert panellist for FGD

Expert	Education Background	Expertise	Institution
E1	Doctor of Philosophy (PhD) in Urban Design	Environmental planning and urban design	Malaysian Urban Design Association
E2	PhD in Urban Design	Architecture and urban design	Universiti Sains Islam Malaysia
E3	PhD in Urban Design	Architecture, landscape architecture and urban design	Universiti Putra Malaysia
E4	PhD in Urban Design	Town planning and urban design	Malaysian Urban Design Association
E5	Bachelor of Architecture, The Royal Institute of British Architects (RIBA) Part II	Urban design	Malaysian Urban Design Association

RESULTS AND DISCUSSION

Table 2 shows the TAM of the data collected from the FGD session conducted. There are mainly five themes that were constructed – Theme 1: Misconception and Limited Recognition of Urban Design and Townscape, Theme 2: Lack of Design Control Framework, Theme 3: Communication and Collaboration Barriers across the Stakeholders, Theme 4: Education, Training and Knowledge Transfer Gaps in Urban Design and Theme 5: Lack of Political Will.

Table 2. TAM of five themes

Problem Statement: Issue of the Development Towards Sustainable Townscape in Malaysia		
Main Research Question: What is the obstacle in implementing a sustainable townscape practice in Malaysia?		
Construct	Codes	Categories
Construct	Codes	Final themes
Sustainable townscape	The absence of comprehensive guidelines or resources for urban design in the national planning framework, indicating a lack of structured support and recognition; Lack of awareness and understanding of townscape as a crucial component in urban planning and design; Perceived low importance of urban design in the overall planning process; Townscape is not considered an essential aspect of sustainability in urban development; Perception of urban design as a three-dimensional (3D) translation of zoning and land use, possibly limiting its holistic consideration.	1. Absence of comprehensive guidelines 2. Perception of urban design as 3D translation 3. Lack of recognition in urban planning guidelines
	The absence of a similar design control framework, such as townscape assessment, in Malaysia's development process, which may lead to a lack of consideration for the contextual integration of new developments with existing surroundings; Lack of effective design control in local authorities, with a focus on technical and quantitative aspects rather than design quality; Lack of a similar design control framework, including townscape assessment, in Malaysia's development process; Urban design proposals are not followed or implemented by local authorities, leading to frustration and a lack of impact.	Theme 1: Misconception and Limited Recognition of Urban Design and Townscape Description: This challenge encompasses several related issues that hinder the development of townscape as an essential component of urban design and city planning. Theme 2: Lack of Design Control Framework Description: It encompasses various issues related to the lack of structured mechanisms for assessing and regulating urban design and townscape integration.

(Continued on next page)

Table 2. Continued

Problem Statement: Issue of the Development Towards Sustainable Townscape in Malaysia		
Main Research Question: What is the obstacle in implementing a sustainable townscape practice in Malaysia?		
Construct	Categories	Final Themes
Lack of effective communication and collaboration between architects and planners in Malaysia, resulting in siloed approaches to urban design; The siloed approach between planners and architects extends to areas like heritage and local identity.	<ol style="list-style-type: none"> Siloed approach between architects and planners Ineffective design control in local authorities that leads to the misalignment 	Theme 3: Communication and Collaboration Barriers across the stakeholders Description: It encompasses issues related to the siloed approach between professionals and organisations, hindering effective cooperation.
The education system for architects may not adequately emphasise urban design; The siloed approach between planners and architects extends to areas like heritage and local identity; Lack of prioritisation and investment in urban design education and training for government officers, leading to a focus on two-dimensional (2D) zoning and land use planning without considering the 3D aspect of urban design; Limited recognition and acceptance of organisations and individuals advocating for townscape and urban design.	<ol style="list-style-type: none"> Education system and urban design Interdisciplinary collaboration Knowledge transfer and urban design advocacy 	Theme 4: Education, Training and Knowledge Transfer Gaps in Urban Design Description: It focuses on the challenges related to education and training in the field of urban design in Malaysia. It includes issues concerning the education system, knowledge transfer and the need for interdisciplinary collaboration.
The absence of comprehensive guidelines or resources for urban design in the national planning framework, indicating a lack of structured support and recognition; A misconception among decision-makers that urban design is synonymous with physical planning, leading to a lack of recognition of its broader scope and significance; Lack of political influence and power to drive change, with the need for ministers or key figures with a background in urban design to champion it.	<ol style="list-style-type: none"> Policy development and implementation Decision-making and prioritisation Advocacy and leadership 	Theme 5: Lack of Political Will Description: It addresses the challenges related to political support and commitment to urban design initiatives in Malaysia. It includes issues concerning policy development, decision-making and the role of key figures.

Theme 1: Misconception and Limited Recognition of Urban Design and Townscape

The first theme, highlighting the lack of recognition and integration of townscape, sheds light on a significant challenge in the Malaysian urban planning and design sphere. This challenge stems from the failure to fully acknowledge the profound impact of townscape on the character and identity of urban areas. Interviews with experts consistently reveal that townscape often takes a back seat in planning guidelines and discussions, leading to its neglect during the development process.

A fundamental challenge within this theme is the absence of townscape considerations in urban planning and design guidelines. Respondents consistently emphasised that this omission lies at the core of the problem. Without explicit recognition and guidance, townscape-related factors are frequently overlooked, resulting in urban environments that lack a cohesive and distinctive identity:

E1: In Malaysia, is townscape really being recognised? That's the problem, we hardly see it in any LDP (local development plan) or any design guideline. There is no compendium on urban design in Malaysia Plan, even though it's an important aspect.

Another critical aspect brought to light in this theme is the limited awareness and understanding of the role of townscape in urban planning and design. Experts stress that achieving sustainable townscape development necessitates recognition from the outset. However, the failure to comprehend the importance of townscape often relegates it to a secondary concern. This lack of awareness presents a significant barrier to holistic urban development:

E1: Once they do not realise the townscape existed, why do they want it if they do not recognise the townscape.

Furthermore, the perception of urban design as less important in the overall planning process compounds the challenge. Experts point out that urban design is not consistently regarded as a pivotal component of sustainable urban development in Malaysia. This perception can lead to urban planning that neglects townscape principles and aesthetics, ultimately resulting in environments that lack character and cultural significance.

The failure to recognise urban design and townscape as integral to sustainable city development emerged as a significant obstacle. Malaysia appears to lag behind countries like the UK, where townscape and urban design have been prioritised for decades:

E1: During the development process in the UK, they have a design control section that includes townscape assessment.

This gap becomes even more apparent when considering the absence of a similar design control framework, such as townscape assessment, in Malaysia's development process. The lack of such a framework limits the capacity to assess and ensure the contextual integration of new developments with the existing urban fabric. In summary, the first theme underscores the pressing need for recognising and

incorporating townscape principles into urban planning and design. The exclusion of townscape from planning guidelines, limited awareness and the perceived lack of importance attributed to urban design all contribute to a scenario where the potential of townscape to enrich urban environments remains untapped. Addressing these challenges is paramount for fostering a deeper appreciation of townscape's significance in shaping the urban environment and advancing sustainable urban development.

Theme 2: Lack of Design Control Framework

The second theme revolves around the absence of a robust design control framework in Malaysian urban development. This theme encompasses various challenges that stem from the lack of comprehensive guidelines and regulations aimed at shaping the physical form and quality of urban environments. Interviews with experts consistently highlighted the need for effective design controls to ensure the contextual integration of new developments and to maintain the overall quality of townscape.

One central challenge within this theme is the absence of a design control framework, such as townscape assessment, in Malaysia's development process. Experts assert that the absence of such a framework can result in haphazard and disjointed urban development, where new constructions fail to harmonise with existing surroundings. Without a standardised system for assessing and guiding development, townscape quality may suffer.

The lack of design control is further exacerbated by the focus on 2D zoning and land use planning at the expense of 3D urban design considerations. Respondents expressed concern that government officers often receive inadequate training and education in urban design, leading to an overemphasis on land use and zoning regulations. This narrow focus can undermine the holistic consideration of townscape, as urban design is perceived merely as the translation of these regulations into physical space.

E1: Urban design we see as 3D, translation of those zoning and land use in physical form. For them it's always land use, but there is no connotation. It's about zoning, if not on urban design, then it's only this is for commercial, residential and housing. It's all 2D, plan.

Furthermore, the absence of effective design control is reflected in local authorities' practices. Many local authorities prioritise technical and quantitative aspects over design quality when evaluating development proposals. This technical orientation can result in approvals that overlook crucial townscape elements, leading to urban environments that lack character and visual coherence.

E1: In OSC one-stop centre to check all planning submission, *Keberanian Merancang* [Development Order]. You know what they do, very technical, quantitative, plot ratio... *mana ada design* [nothing about urban design]. [Author's translation]

In contrast, other countries, like the UK, have established comprehensive design control frameworks and townscape assessment processes, which have been in place since the 1980s. This comparison highlights the gap in Malaysia's

approach to urban design and townscape development. The UK's emphasis on townscape has allowed for the creation of distinctive and visually appealing urban environments over the years.

In summary, the second theme underscores the critical need for a robust design control framework in Malaysian urban development. The absence of such a framework, coupled with an overemphasis on 2D zoning and land use planning, can hinder the integration of new developments with existing contexts and compromise townscape quality. Drawing lessons from countries like the UK, Malaysia has an opportunity to establish effective design controls and townscape assessment processes, thereby ensuring the creation of more harmonious and visually appealing urban environments.

Theme 3: Communication and Collaboration Barriers across the Stakeholders

The third theme centres on the complex challenges associated with communication and collaboration among key stakeholders in Malaysian urban planning and design. These challenges revolve around the fragmented relationships between architects, planners and local authorities and how they influence the practice of urban design. Experts highlighted that effective communication and collaboration are vital to creating integrated and cohesive urban environments.

One of the prominent challenges within this theme is the limited communication and collaboration between architects and planners in Malaysia. Experts pointed out that these two groups often work in silos, with minimal interaction or exchange of ideas. This siloed approach can lead to disjointed urban design outcomes, where the architectural aspects of new developments may not align with the broader urban context:

E1: The architect and planner do not talk to each other. They were in silo.

This lack of collaboration extends to areas like heritage preservation and the preservation of local identity. Experts noted that the separation between architects and planners can result in heritage conservation efforts that prioritise architectural significance over townscape value. Similarly, the preservation of local identity may be overshadowed by individual building designs, neglecting the broader townscape composition:

E1: It is not just about element; it is about relationship. So, the problem currently in Malaysia is when they talk about urban design, they talk about elements independently, rather than relationship.

In summary, the third theme underscores the critical need for improved communication and collaboration among key stakeholders in Malaysian urban planning and design. The siloed approach between architects, planners and local authorities can lead to disjointed and less cohesive urban environments. By fostering effective interdisciplinary collaboration and emphasising townscape values, Malaysia can enhance the quality and coherence of its urban developments, ultimately creating more liveable and visually appealing cities and towns.

Theme 4: Education, Training and Knowledge Transfer Gaps in Urban Design

The fourth theme brings to light the challenges associated with the education and training of professionals involved in urban planning and design in Malaysia. Respondents emphasised that the limited prioritisation and investment in urban design education and training for government officers hinder the development of a holistic understanding of urban design principles.

One of the significant challenges within this theme is the lack of prioritisation and investment in urban design education and training for government officers. Respondents noted that government officers responsible for urban planning often receive training primarily focused on 2D zoning and land use planning, neglecting the critical 3D aspect of urban design. This limited perspective can result in urban planning decisions that prioritise zoning regulations over the broader aesthetic and functional aspects of townscape:

E1: They do not send their officers to do master's in urban design because they do not see it as important. They rather send them to other areas like housing and land use.

Furthermore, a significant hurdle arises from the misconception held by decision-makers that urban design is equivalent to physical planning, leading to its underestimation and lack of recognition in terms of its comprehensive impact on urban environments. These misconceptions and limited recognition pose substantial obstacles to fostering effective urban design practices in Malaysia:

E1: They are not well educated to see importance of urban design. *Diorang ingat* [They thought] urban design is physical planning. That's the misconception on urban. *Diorang ingat diorg ajar urban design tapi sebenarnya* planning [They thought they were teaching urban design but it was actually about urban planning]. [Author's translation]

The absence of comprehensive guidelines or resources for urban design in Plan Malaysia, the national planning framework, further exacerbates these challenges. Respondents emphasised that the lack of structured support and recognition for urban design within the national planning framework impedes the integration of urban design principles into the planning process. The absence of clear guidelines leaves room for ambiguity and inconsistency in urban design decisions.

Experts also raised concerns about the education system for architects, suggesting that it may not adequately emphasise urban design. This limitation in architectural education can result in a workforce that lacks a strong foundation in urban design principles, further hampering the quality of urban developments:

E1: We are discussing now from the educational perspective, where it appears that the way they educate the architects seems not concern about urban design.

In summary, the fourth theme underscores the importance of enhancing education and training in urban design for professionals involved in Malaysian urban planning and design. The lack of investment in 3D urban design education, coupled with the perception of urban design as a mere translation of zoning

regulations, poses significant challenges. To address these issues, Malaysia must prioritise urban design education and provide comprehensive guidelines and resources to support the development of well-rounded professionals capable of creating cohesive and visually appealing urban environments.

Theme 5: Lack of Political Will

The fifth theme highlights the challenges stemming from the absence of strong political will and support for urban design and townscape initiatives in Malaysia. Respondents pointed out that the lack of political influence and power dedicated to driving change in this area has hindered progress. One of the key challenges within this theme is the lack of political influence and power to drive change. Experts emphasised that urban design and townscape initiatives require strong advocacy and leadership at the political level. Without ministers or key figures with a background in urban design championing these causes, they often remain on the periphery of urban development discussions:

E1: No political power. If they want new changes, there needs to be a minister knowledgeable in urban design. Architects and urban designers should oversee the Ministry of Housing and Local Government (KPKT).

Respondents also noted the need for political leaders to prioritise urban design as an essential aspect of sustainable and liveable cities. While urban design is recognised globally as a crucial element in creating attractive and functional urban environments, its inclusion as a key indicator for liveable cities is lacking in Malaysia's assessment criteria. This gap suggests a need for political commitment to incorporating urban design principles into the criteria used to evaluate city liveability. Furthermore, possible concerns were raised about the selection process for awarding liveable city status. If considerations beyond urban design are prioritised, this could contribute to the lack of emphasis on urban design principles in city planning:

E1: Globally, urban design is considered a crucial indicator for liveable cities. However, in Malaysia, urban design is not included in their criteria. Yet, the minister still wants to award the liveable city designation, which, in my opinion, is very corrupt.

In instances where urban design proposals are not followed or implemented by local authorities, respondents highlighted frustration and a lack of impact. This underscores the importance of political will not only at the national level but also at the local level to ensure that urban design principles are effectively integrated into urban development projects:

E1: At that time, we were developing the KL Heritage Trail Master Plan. When we completed it and proposed using an urban design approach, the authority did not follow through. They pursued different things.

In conclusion, the fifth theme underscores the critical role of political will in advancing urban design and townscape initiatives in Malaysia. The lack of political influence, commitment and recognition of urban design as a key element of liveable cities presents significant challenges. To overcome these challenges, it is imperative that political leaders recognise the importance of urban design and actively champion its integration into urban planning and development processes at both the national and local levels.

Barriers for Sustainable Townscape Development in Malaysia

Figure 1 shows that the five factors contributing to the barriers for sustainable townscape development in Malaysia, including (1) misconception and limited recognition of urban design and townscape, (2) lack of design control framework, (3) communication and collaboration barriers across the stakeholders, (4) education, training and knowledge transfer gaps in urban design and (5) lack of political will.

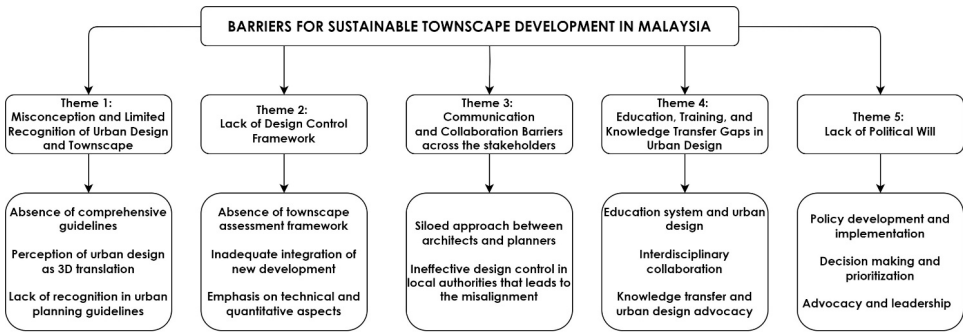


Figure 1. Barriers for sustainable townscape development in Malaysia

CONCLUSION

In conclusion, Malaysia, like many countries, faces numerous challenges in achieving sustainable townscape development. These barriers have contributed to inadequate urban planning systems and hindered the effective implementation of sustainable development strategies. Furthermore, a better understanding of the nature of urban socio-ecological systems is needed to address the challenges related to urban morphology in developing countries like Malaysia. The adoption of the coupled human and natural systems framework can provide a comprehensive and interdisciplinary approach to examining the dynamics of human-nature interactions in the urban context. This framework allows for the integration of diverse theories and techniques to better understand the relationships between human and natural dimensions of environmental change.

These barriers hinder the achievement of sustainable townscape development and pose threats to the preservation of cultural heritage and the development of liveable urban environments. In order to address these barriers, it is crucial for Malaysia to improve the integration between urban planning and cultural conservation efforts. This can be achieved through the implementation

of comprehensive urban planning strategies that prioritise the preservation of historic urban areas and the incorporation of cultural identity in design principles. Furthermore, it is essential to consider the public's perception and visual preferences in the development process. This can be done by actively involving stakeholders, such as international tourists, in decision-making processes and conducting surveys to understand their preferences. By addressing these barriers, Malaysia can work towards achieving sustainable townscape development and create urban environments that are not only visually appealing but also respect local traditions and culture. In conclusion, the barriers for sustainable townscape development in Malaysia stem from a lack of integration between urban planning and cultural conservation, the loss of local identity due to a focus on modern and innovative designs, inadequate urban growth control measures and the need for considering public perception and visual preferences in the development process. These barriers hinder the achievement of sustainable townscape development and pose threats to the preservation of cultural heritage and the development of liveable urban environments.

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