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RE-INTERPRETING TRADITION: INTEGRATING INTERIOR SPATIAL PLANNING PRINCIPLES OF TRADITIONAL MALAY HOUSE AS VERTICAL MODERN DWELLING DESIGN STRATEGY

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Abstract

This study investigates the application of TMH's interior space planning principles into contemporary housing design to produce culturally attuned, climate responsive and spatially adaptable housing strategies for the 21st century Malaysian environment. The research is motivated by the extended gap of contemporary house types to socio-cultural, environmental and spatial value that rooted in local heritage of Malay Vernacular architecture. Through a qualitative case study approach, the research investigates spatial configuration, zoning patterns, environmental attributes and socio-cultural relationships in identified TMH instances within Peninsular Malaysia. These understandings are subsequently compared against contemporary urban housing units namely PRIMA Apartments in Ipoh, Perak, to determine spatial disconnection and or synergies. Based on architectural drawings, field survey and interviews to architects and residents the research outlines adaptive design methods. The main findings that emerged about the principles of TMH planning, such as hierarchical spatial sequence, multifunctional open spaces, passive ventilation strategies and community-orientated layout become valid concepts for versatile thermal comfort, social interaction and flexibility in the morphology of urban dwelling. A design suggestion to incorporate TMH principles in today's interior layouts without interfering with building codes or visual aesthetics is suggested at the end of the study. This work adds to the discourse on culturally grounded sustainable design, emphasizing the need for tradition based spatial wisdom being revived as an approach towards a more liveable and contextually aware housing typology in Malaysia.

Keywords: Traditional Malay House, Spatial Planning, Green Design, Principles, Wellbeing

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INTRODUCTION

Malaysia's residential architecture has evolved dramatically in the past few decades, from traditional vernacular models to current housing standards. This shift-driven largely by urbanization, globalisation, and increasing housing demand-has seen housing such as mass-produced high-rise apartments and terrace houses proliferate architecture. The result is that far too many developments not only ignore cultural identity but also flexibility of space and environmental responsiveness. By comparison, the Traditional Malay House is a beacon of Malaysia's architectural heritage. It embodies generations worth of architectural wisdom, a convergence of humanity with space and nature under diverse social, cultural and climatic conditions.

The TMH goes far beyond a mere shelter. It represents the spatial embodiment of Malay societal values, way of life, and environmental thinking. Its interior spatial layout features raised flooring, a layered spatial hierarchy, multi-functional rooms, passive ventilation and open verandas. All these elements foster community, modulate privacy, let in the right amount of light, reflect Islamic design and have their roots in *adat* (customary law). In today's urban housing projects, however, these values are often ignored for a house that is both efficient and uniform in design; market demand constraints lead people to put up with what's not really suited to their needs. As a result, modern housing often fails locally speaking to satisfy social, cultural demands. Consequently, living environments are culturally remote and fuel inefficient.

Problem Statement

Current design approaches tend to rely heavily on international standards and Western planning paradigms, with little attention paid to traditional design intelligence. This has led to a pressing concern: how can the spatial principles of the TMH-rooted in heritage yet inherently functional be reinterpreted and applied meaningfully in modern dwelling contexts, especially within the spatial constraints of urban living. The lack of study on the integration of TMH interior planning into modern housing contributes to this gap. While some research highlights the environmental performance of traditional houses, there is limited focus on how these spatial arrangements can be transformed and adapted as viable design strategies in present-day interior and architecture.

Research Objectives

The objective of this research is to fill this gap by studying modern urban housing design from the viewpoint of traditional Malay house architecture. The study is undertaken in the belief that traditional architectural models can provide beneficial perspectives for sustainable living that does not negate its environment,

that is sensitive to different cultures and flexible on a spatial level. In many ways, the issues raised are linked to current urban problems.

Through this research, I hope to:

- i. Analyse the interior spatial planning of the Traditional Malay House, specifically looking at spatial hierarchical order, functional zoning, environmental adaptability, and socio-cultural usage.
- ii. Assess modern urban housing types such as PR1MA apartments for their spatial dimensionality in terms of flexibility that is user friendly and provides comfort in varying climatic conditions.
- iii. Offer a design guide or series of strategies for making traditional Malay House-derived interior spatial principles assimilation into modern housing design a reality— while drawing attention to current architectural regulations, material systems, and lifestyles that are evolving.

By tying history to present practice, this study intends to provide a culturally embedded and environmentally adaptable way of housing design. Ultimately, it sees a future where Malaysian homes are revived by drawing on tradition's authentic essence rather than obliteration within the modern world. This effort contributes to a broader conversation within architectural circles on how to bring vernacular architecture back from the brink of extinction, design that is sustainable, and cultural continuity within built environments.

LITERATURE REVIEW

A residential home serves as a sanctuary from peril, inclement weather, and environmental factors (Talib, 2010). Homeownership is the aspiration of every individual. The home serves not only as a refuge but also as the cornerstone of both structure and life development. The quality of a home's interior space significantly impacts the success of an individual's life. This attribute pertains to the interaction of architecture, interior space, and the environment. Residential spaces should be created to harmonize physical, human, and environmental elements to promote the well-being of inhabitants in accordance with the rhythms of daily life, (Hossein, 2018). The internal physical characteristics of the houses should be in line with the basic needs of the users, (Pauzi et al., 2022).

Traditional Malay House (TMH)

TMH are characterized by their distinctive architectural style, rooted in centuries-old cultural and environmental influences. These iconic dwellings reflect the harmonious integration of function, aesthetics, and the natural landscape (Hossein, 2018). Featuring intricately carved wooden structures, elevated platforms, and sweeping, tiered roofs (Choo et al, 2024), Malay houses embody

a rich heritage that has inspired contemporary interpretations in modern living spaces. The traditional Malay house is an architectural marvel, featuring a distinct design that reflects the cultural heritage and environmental adaptations of the region. As urban populations grow, the need for efficient and sustainable vertical dwelling solutions has become increasingly important. This paper will explore how the principles of traditional Malay house spatial planning can be adapted and reinterpreted for modern vertical living designs. According to Shamsudin (2016), Malay communities are rich with their customs, culture and values guided by the Islamic principle. He suggested that to promote an ideal living environment for the Malay-Muslim community, lessons can be learned from the traditional settlements such as the Malay kampong house.

Spatial Planning Quality

Malay house design follows several rules. Traditional Malay dwellings need climatic and environmental design to generate a suitable climate. Traditional Malay houses are passive and energy-efficient due to site and construction orientation relative to dawn (Hanafi, 2014). Traditional Malay houses feature modular construction with a unique joint method for adding and removing modules (Surat, 2015). Post-and-lintel structure with prefabricated system. Building a stilt-supported timber house for storm and flood protection (Gibbs, 1987). Less building effect than modern approaches. Wide roof eaves and low walls control direct solar radiation and rain in TMH architecture. High roofs with big windows and ventilated walls circulate air for cooling (Lim, 1987). Traditional Malay homes are tailored to local needs. Traditional Malay dwellings are fractured and open plan, allowing wind and natural air to cool them. Multifunctional spaces like *anjung*, *serambi*, *rumah ibu*, and *dapur* are socially defined, comfortable, and reduce central home heat gain and energy usage. Building lumber quality depends on homeowners' reputation (Hanafi, 2012). Sustainability requirements, including carbon reduction, have been applied and documented (Kassim, et al., 2017). Artistic expressions in design, culture, and architecture that apply sustainable design principles to conserve electricity and money. Figure 1 illustrates TMH hose form and space planning concerns.

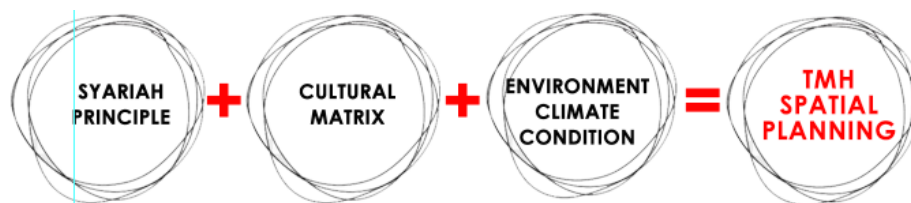


Figure 1: Factors Influencing House Form and space planning of TMH

Source: Authors infographics

Space Classification

The set space and form in the Malay architecture is developed on utilitarian principle. Spaces were usually public, private and semi-public. Family privacy was reflected in its layout. The earlier writer on traditional Malay houses had noted that space was identified by its qualities. Abdullah (1981) suggests that traditional Malay homes contain three categories of space: cooking area (*Dapur*), veranda (*Anjung*) and formal chambers for guests or administrative use. Secondly, there's a functional space for family day chores like cooking and washing or *pelantar*. Third place is passive space, it means the core house (*rumah ibu*) and bedroom for family members main activities. Lim (1987) explains that the traditional Malay house is divided into two parts, namely, the front and back section based on the core house (*rumah ibu*) and kitchen. In the Malay house, compartments are organised by function and adjacency. This house consists of three areas: Verandah (*Serambi*), Main House (*Rumah Ibu*) and also Kitchen. Ibrahim (2020) also discovered that complex is preferred by Malays for feasts. Socio-cultural values must be taken into consideration while designing Malay traditional house grounds. So too should the design of urban housing. Private yard and landscaping planning must be included in plans. And that, the shape and form of the house depend on the family requirements and surrounding, culture, religion. This study enables the new generation to appreciate precious Malay culture. Therefore, this paper is to analyse the spatial organization design and architecture of the functional diversity of a TMH and explore how space influences traffic ability. In this way, space will be utilized most effectively for the intended function. In the traditional Malay house literature various writers have classified space as tabulated in Table 1.

Table 1: Space Classification by previous researchers of Traditional Malay House

Space Classification	Spatial Organization	Space Classification by	Character/Key Principles
Gender Types	Male Areas; Female Areas; Common Areas	Phillip Gibbs	Open Plan, Linear Plan, Multifunction Space, Flexible, Clear Hierarchy, Minimalist Plan, environmentally friendly
Genders Type and position of space	Male areas (in front of the house); Female areas (Main House/centre of house); Space for common areas	Abdul Halim Nasir	
Genders type and privacy space	Dual compartmentalization concept; Front Area Zone; Back area zone; Central Zone; Public-private Zone	Mokhtar Haji Ismail	
Construction technique	Standard/ basic areas; added space	Abdul Rahim Abdullah	
Frame/structure	Main structure; Secondary structure	Phillips Gibbs	

Space Classification	Spatial Organization	Space Classification by	Character/Key Principles
Functions	Public areas; Special area	Zulkifli	
Religion; social-culture; custom	Ruang Serambi/veranda & Kitchen areas; centre areas-main house/ room	Hanafi Mokhtar Haji Ismail	

Source: Tahir (2016), Hossein (2018)

Spatial Organization

The traditional Malay house has an *Anjung* (porch space), Veranda (*Serambi*), Core House (*rumah ibu*), Bedroom, Loft (*loteng*), Kitchen, and Platform (*Pelantar*). Nasir (1994) claims that the Malay traditional house's layout depends on its residents' needs and habits. According to Hanafi (2012), a successful life begins at home, and the traditional Malay house meets several needs, including functionality, comfort, safety, and spiritual ambitions. The Malay community's architecture must meet Islamic socio-cultural standards. Arbi (1997) claims that building or habitation depicts civilization because it includes spirituality, physiology, emotion, gastronomy, philosophy, and religion. Malay architecture seamlessly blends people, nature, and spirituality. Table 2 below shows a traditional Malay home's layout.

PR1MA Apartment Housing in Malaysia

In 2011, the Perumahan Rakyat 1Malaysia (PR1MA) program was launched under the PR1MA Act (Act 739) to solve home affordability issues for Malaysia's M40 demographic. The program has built medium-to-high-rise apartment units in important growth areas nationwide to provide quality, affordable urban housing. Despite its policy importance, the PR1MA housing typology-particularly vertical apartments-has been criticized in scholarly debate for spatial quality, user pleasure, and cultural adaptability.

Mohamed and Baqutayan (2014) found that PR1MA flats are affordable but often neglect spatial planning and socio-cultural needs, mismatching policy goal and lived experience. Standard modular designs maximize unit amount per block, limiting ventilation, natural lighting, spatial seclusion, and functional adaptability. Vertical housing complicates socio-behavioural issues in densely populated urban regions (Salleh & Yusuf, 2006).

Samsudin and Idid (2016) found that PR1MA layouts rarely include Malay cultural standards including public-private separation, multi-generational interaction spaces, and gender-sensitive zones. In traditional Malay homes, these omissions can damage family intimacy and cultural practise. The absence of semi-outdoor spaces like verandas or transitional thresholds reduces social

involvement and passive environmental regulation in traditional Malay design (Kamal et al., 2004).

Environmental and climatic responsiveness is another issue. Traditional Malay houses use passive cooling and site-responsive layouts, but PR1MA designs generally ignore these. Using generic, imported models increases mechanical system use and reduces thermal comfort, creating unsustainable living conditions, according to Hanafi (2012).

Raja Ariffin et al. (2010) argue that design innovation can improve policy. They advise employing vernacular spatial techniques to improve livability, identity, and sustainability in future PR1MA housing. Traditional Malay dwelling forms are modular and expandable, yet many PR1MA units have fixed interior designs that hinder household evolution (Utaberta, et al., 2009).

The research on PR1MA residences in Malaysia shows a large gap between functional delivery and cultural or spatial resonance. Although the program meets quantitative housing targets, it sometimes sacrifices user experience. Design study that reassesses PR1MA's spatial framework for cultural relevance, environmental responsiveness, and adaptive use is needed, especially for vertical urban life.

METHODOLOGY

This was a qualitative type of study using spatial analysis to investigate Traditional Malay House typologies and the PR1MA apartment unit in Ipoh. The focus was to study the design concept in TMH regarding spatial planning with emphasis on space utilisation and recommend principles of it as a guideline for designing vertical living environment such as PR1MA Apartments. We measured the likely incorporation by considering parameters such as spatial variability species rank and environmental satisfaction.

The study analysed the design of TMH in terms of its ideals and aspirations through plans that were obtained from drawing storage department in Pusat Penyelidikan Kajian Alam Melayu University Technology, Malaysia, and Centre for Knowledge Understanding of Interior Architecture. Four TMHs were purposively selected from the major zones (North, South, East Coast and West/Central) of Peninsular Malaysia. Data were collected through a combination of site observation, literature review and drawing analysis with an emphasis on a 750 sqft mobile vertical modern PR1MA apartment using architectural drawings from the Majlis Bandaraya Ipoh Office.

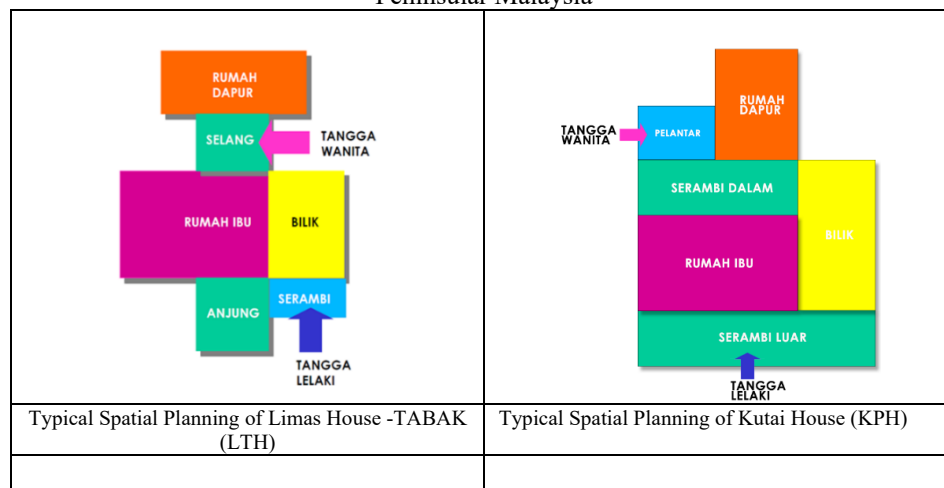
Ethical Issues- The study was conducted on the analysis of architectural design (plans), drawing and review of literature, without direct human participation. As such, formal ethical approval was not necessary, and all sources were publicly accessible or institutionally provided.

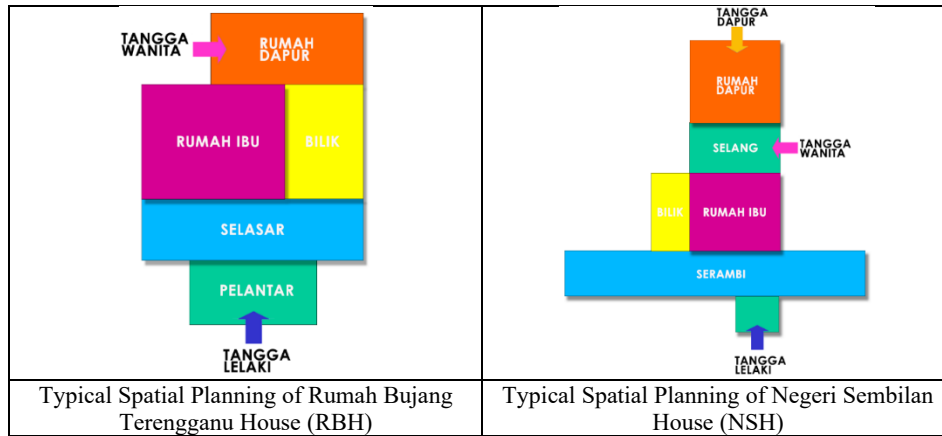
Conclusion-A major methodological constraint was the limited scope of case studies used, restricted to specific PRIMA housing units that limit the applicability of findings. Also, the non-interviewed occupants did not provide information on resident satisfaction and perceptions. Subsequent work would benefit from a more diverse array of cases and some user interviews grounded in people's actual lived experience and preferences.

FINDING AND DISCUSSION

From the observation of spatial analysis on TMH typology, it is evident that the separation of space based-on characteristic requirement culture and Islamic residential for privacy have been achieved. The finding showed that the layout plan of TMH is well meet segregation male and female, segregation public and private space, public, semi-public and private provides specific room for bathing house orientation, moderation in expenses and cleanliness need.

Figure 2: Typical of TMH space planning according to traditional house types in Peninsular Malaysia





Source: Authors drawing (2025)

Figure 2 above illustrates typical TMH spatial organization categorized by zones, including Rumah Limas - TABAK (LTH), Rumah Kutai Perak (KPH), Rumah Bujang Terengganu (RBH), and Rumah Negeri Sembilan (NSH). Colour coding is employed to examine the similarities and distinctions among various housing styles. Initial findings indicate that the characteristics and components of TMH space planning are aligned with past research. However, discrepancies may arise from specific causes. Table 2 below presents a summary of the conducted space planning study:

Table 2: Summary of the Spatial Planning Analysis of Traditional Malay Houses (TMH). Note: The symbol ✓ indicates "Complete", while @ indicates "Partly".

Space	Space Classification	LTH	KPH	RBH	NSH	Analysis
Anjung/Porch	Public Space	✓	@	✓	✓	Only the RBH house has a small porch to cover the main entrance stairs due to environmental and wartime pressure factors
Serambi	Semi Public	✓	@	✓	✓	The RBH and NSH houses have a long <i>Serambi</i> room, lower space and adjacent to the main room/ mother's house for welcoming and entertaining guests, children's sleep areas as well as guests and recite al-Quran. The KPH house has a porch internally house due to the constraints and pressure of the surrounding atmosphere

Space	Space Classification	LTH	KPH	RBH	NSH	Analysis
<i>Rumah Ibu/Core Area</i>	Private	✓	✓	✓	✓	Almost all categories have this space with minimal furniture use, partitions and interior walls are good to allow proper ventilation and natural lighting into space. Make it a flexible and open space to carry out activities.
<i>Bilik tidur/bedroom</i>	Private	✓	✓	✓	✓	All house types have a room for parents' use as well as a dressing room for young women for privacy. There is also a loft space for some Malay houses that serve as space for young women and store items.
<i>Selang/</i>	Public	✓	@	@	✓	Space is used for welcoming, chatting and entertaining activities for women. Apart from that, it is also used as a place to weave mats, sewing, for generate economic.
<i>Dapur/Kitchen</i>	Semi Public	✓	✓	✓	✓	All house types have <i>rumah dapur</i> that are used for food preparation, cooking and family meal processing.
<i>Pelantar</i>	Public	✓	✓	@	@	Not all types of the house have this space that is adjacent to the kitchen to wash groceries and equipment in the process of food preparation. Under certain circumstances, it is also used to bathe the infants and mothers who are in abstinence.

Source: Authors (2025)

The analysis of Traditional Malay House (TMH) typologies- specifically Limas House (LTH), Rumah Bujang Terengganu House (RBH), Kutai Perak House (KPH), Rumah Bumbung Panjang (RBH), and Negeri Sembilan House (NSH)-reveals distinct spatial compositions and classifications that emphasize cultural, environmental, and functional considerations. These spatial characteristics offer valuable insights for reinterpreting traditional planning principles in modern vertical housing design.

Space Classification and Functional Hierarchy - Spaces in TMHs are classified into three main categories: public, semi-public, and private. This hierarchical zoning is consistently observed across all house types and plays a critical role in managing social interactions and privacy levels.

- Public spaces like *anjung*, *selang*, and *pelantar* function as transitional or community areas. The *anjung* is usually a reception area, but wartime or environmental limits may reduce it, as in the RBH. The *selang* and *pelantar* are flexible social and utilitarian areas.
- Semi-public spaces include *serambi* and *dapur*. These regions balance domestic and social life. *Serambi* accommodates guest receptions, Quranic recitations, and children's sleep spaces, demonstrating its versatility. Besides food production, the *dapur* (kitchen) enables communal meal sharing and nurturing.
- Private spaces like *rumah ibu* and *bilik tidur* use little partitioning, cross-ventilation, and flexible layouts. The central room of a household, the *rumah ibu*, offers flexible usage and unimpeded ventilation, making it appropriate for modern compact apartments.

Spatial Adaptability and Cultural Integration - The analysis reveals that spatial flexibility, natural ventilation, and cultural appropriateness are consistent traits across TMH types. For instance, the absence of fixed walls in *rumah ibu* allows spaces to be repurposed easily. Bedrooms (*bilik tidur*) are modest yet strategically placed to ensure privacy, often featuring lofts for additional storage or privacy for unmarried daughters.

Moreover, the presence of multi-use zones like the *serambi* and *selang* underlines the significance of adaptive reuse of space based on time, activity, and user demographics-a concept especially relevant in the context of small urban dwellings.

Design Implication for PRIMA Apartments - The study suggests that these spatial attributes can be translated into PRIMA apartments by introducing flexible partitioning, reconfigurable core spaces, and tiered zoning that respects cultural norms. The incorporation of transitional semi-outdoor areas or multi-use corridors, akin to the *serambi* or *selang*, can enhance social interaction, comfort, and privacy within compact vertical layouts.

In conclusion, the findings support the hypothesis that integrating traditional Malay spatial principles into modern vertical housing can significantly improve spatial quality, cultural identity, and environmental responsiveness in PRIMA apartments and similar public housing projects in Malaysia.

Finding from the spatial planning of the Falim PRIMA Apartment in Ipoh, Perak, reflects a typical vertical housing typology developed to accommodate Malaysia's middle-income group within limited urban land areas. Designed for efficiency and affordability, the layout presents a compact, modular organization of space within a constrained floorplate of approximately 785 square feet. Despite achieving density targets, the spatial composition reveals several

limitations when evaluated through the lens of traditional Malay spatial planning principles.

Zoning and Spatial Hierarchy - The internal configuration of the Falim PR1MA unit adopts a linear and compartmentalized layout, divided into fixed zones: living area, dining space, kitchen, bedrooms, and bathrooms. This model emphasizes privacy through enclosed rooms but lacks the nuanced gradation of public, semi-public, and private spaces. The entrance typically opens directly into the living area, merging visitor and family spaces without transitional buffers such as *anjung* (porch) or *serambi* (veranda), which in TMH architecture mediate between public and private spaces.

Limited Flexibility and Adaptability – the spatial planning is rigid, with minimal opportunity for reconfiguration or adaptive use. The use of permanent walls to demarcate bedrooms and living areas restricts spatial flexibility. This contrasts with the TMH, where spatial fluidity enables rooms to transform for sleeping, hosting, or family rituals based on time and need.

Environmental and Climatic Response - Ventilation and daylighting in the PR1MA unit are achieved primarily through standard window placements in bedrooms and living areas. However, the absence of cross-ventilation strategies, overhangs, or shaded verandas-hallmarks of the TMH environmental response-results in increased reliance on mechanical cooling. Moreover, the kitchen is often enclosed and located at the rear, separating it from any external semi-outdoor working space such as the traditional *pelantar* used for washing or post-cooking tasks.

Privacy and Social Interaction - While the unit provides three bedrooms and two bathrooms, the overall layout does not accommodate multi-generational living or gender-sensitive zoning effectively, both of which are critical in traditional Malay households. The compact nature of the unit forces overlapping between private and communal functions, often leading to compromises in personal privacy and domestic rituals.

RECOMMENDATION

It is proposed for industry players, particularly in design and planning of vertical housing such as upcoming PR1MA Apartment projects to consider infusing culturally responsive spatial concepts that harmonize the environment in their product. In this context, the results could be used in guiding the design and planning issues, where spatial interventions are expected to improve user experience and use considerably as Table 3 (as follows):

Table 3: Recommendation for future design and planning of vertical dwelling apartment

Recommendations	TMH	Modern House
Reinterpretation of <i>Kolong</i> and Outside Compound	The <i>kolong</i> (under-house space) and outside compound, traditionally crucial for daily activities, storage, social gatherings, and festive celebrations.	Adapting and should be re-envisioned for modern vertical dwellings. These concepts can provide valuable multi-functional areas.
<i>Serambi</i> Integration	The <i>serambi</i> , which historically served as a semi-public transitional space for welcoming guests while preserving privacy between genders, warrants reinterpretation in contemporary layouts.	Modern homes have often replaced the <i>serambi</i> with direct entry into living rooms, which can compromise privacy for both guests and the host family.
Rethinking Linear Planning Layouts:	Specifically, welcoming areas that promote privacy, where kitchens are typically located at the rear, can lead to discomfort during guest interactions.	The layout of the reception area that places less emphasis on privacy, with the kitchen positioned at the front, can cause discomfort during interactions with guests.
Incorporation of <i>Selang</i> Functionality	The <i>selang as</i> transitional space that connects the core house to the kitchen and often functions as a secondary entrance and a designated area for women activities.	Reintroducing its functional and social roles could cater to daily life practices and enhance spatial flow.
Embracing Open-Plan and Minimalist Design	The design principles of the Traditional Malay House (TMH), with an open-plan and minimalist approach characterized by simple geometry, straightforward layouts, unobtrusive detailing, and honesty in material usage, can facilitate spatial flexibility and adaptability, in line with the multifunctional nature of the spaces.	Adopting principles of open-plan and minimalist design, characterized by uncomplicated geometry, simple layouts, inconspicuous detailing, and honesty of materials, can facilitate spatial flexibility and adaptability.
Utilizing Flexible Furniture	The use of minimal furniture that suits daily activities is a concept inherent in the	The integration of flexible furniture for supporting open-plan spatial organization,

Recommendations	TMH	Modern House
	adaptable nature of Traditional Malay House (TMH) spaces.	enabling dynamic adaptation to diverse activities and occupant needs

Source: Authors (2025)

CONCLUSION

This study examined the application of TMH interior spatial organization principles in modern vertical house design to tackle Malaysian high-rise housing issues. The theory of vernacular architecture, space syntax and cultural sustainability were employed to analyse features as practicable principles for adaptation TMH spaces alongside open-plan flexibility, zonation hierarchy, climate responsive design and levels of communal connectivity. The research results reveal that the spatial logic can resolve contemporary apartment privacy, environmental comfort, social interaction and cultural identity problems. We can only attract our clients in PR1MA projects to have a sense of ownership while staying true to such inspiration which has been proven transformative over the years, unnecessarily at a cost, by adopting and applying this concept for more human friendly, liveable and culture enriched designed vertical houses. It is a proof of the fact that tradition and innovation can go hand in hand when well interpreted matching heritage with urban requirements. By linking historical spatial understanding with present design limitations, the research contributes to sustainable and culturally (Islamic) compatible housing. It raises the importance of local cultural stories for spatial identity and condemns homogenizing models of high-rise living independent of social and environmental milieu. To propose a culture inspired urban housing project, this research resets vertical housing in the tradition. It recommends to the designers, urban planners and housing authorities that vernacular spatial intelligence should be considered as an innovative design approach for addressing Malaysia housing provision as well as preserving its architecture heritage.

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