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Spatial Perception and Existential Senses of Being in a Place

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Abstract

With digital technology becoming a dominant lifestyle nowadays, people tend to indulge too much in the virtual experience of a place without actually being there. This excessive digital consumption gives an unreal sense of spatial experience to today's generation. Therefore, this research aims to explore the pattern of spatial perception and existential senses of being in a place from the interior architecture students' perspective. The study employed a qualitative method of 'non-verbal interview' which was retrieved from the students' spatial experience portfolios. This study highlights the importance of seeing and experiencing a place in-situ to truly understand the architecture.

Keywords: Spatial perception; existential senses; in-situ; spatial experience.

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1.0 Introduction

1.1 Problem Statement

This research is driven by the urge to strengthen the importance of architectural experience in today's society. The decrease in architectural experience and appreciation seems to contribute to the poor design of the recent built environment (Alan, 2022). The relevance of well-designed architecture and interior space seems at risk these days due to the growth of the metaverse. With digital technology becoming a dominant tool of communication and lifestyle, many people tend to overly immerse in the virtual experience of a place without actually being there. This excessive digital consumption imposes an unreal sense of spatial experience to today's generation, threatening the relevance and value of architectural design.

1.2 Aim and Objective

Considering the current issue discussed above, this research emphasises the importance of experiencing architecture in a physical place. Based on the environmental psychology perspective, an individual's spatial perception can only be acquired by actually being in the place. Therefore, this research aims to explore the pattern of spatial perception and existential senses of being in a place from the interior architecture students' point of view. The research objective is to investigate the most frequent aspects being indicated in a spatial experience narrative of being in a physical space.

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2.0 Literature Review

2.1 The Importance of People-Place Connection

The people-place relationship is no less important in the psychological and physiological health of human life. Human behaviour and activities in a building are influenced considerably by the physical design of the space (Jones and Evans, 2012). St-Jean et al. (2022) indicate that the form, lighting, acoustic, colour, texture, and other elements of architectural space influence human psychological and physiological conditions in many ways. Architecture, through its materiality and experiential ways, can determine human physical, mental and economic well-being (Caplan & ProQuest, 2016). The interplay of the physical elements and other conditions in an architectural space creates a spatial experience which further influence how people perceive, feel and sense a space (Alan, 2022). It is, therefore, apparent that designers have the power to influence people's behaviour and psychological well-being through a meaningful identity within the built environment of their creation (Gehl, 2011).

Pallasmaa (2005) urges that there is a necessity for an emphatic approach where architecture considers a thorough understanding of the human condition and its relationship with the built environment. He mentions, "In memorable experiences of architecture, space, matter and time fuse into one singular dimension, into the basic substance of being, that penetrates our consciousness. We identify ourselves with this space, this place, this moment, and these dimensions become ingredients of our very existence. Architecture is the art of reconciliation between ourselves and the world, and this mediation takes place through the senses" (Pallasmaa, 2005, p. 72). He concludes that architecture provides substances for permanence versus change debates and allows the occupants to gain a sense of belonging to the place, community and the present moment (Pallasmaa, 2005). The urgencies discussed here exhibit the need for people-centric architecture where a more emphatic approach is carried along in the spatial design process.

2.2 The Notion of Being in A Place

The first condition in understanding a place is by being in situ, which can be referred to as physically being in the place. Peter Zumthor's works advocate that truly meaningful architecture refers to the idea of being in the place to understand it through existential senses. A place's identity can be seized from the physical features, historical values, cultural characteristics, experiential ties, and other collective aspects within the environment. From the environmental psychology approach, an individual's spatial perception can only be acquired by experiencing it in situ. The keyword here is being physical and tangible for the occupants to see, touch and sense.

The embodiment is the fundamental aspect of the spatial identity within an architectural space (Childs, 2021; Abdul Kadir, Aris and Ginting, 2022). In addition, the physical quality of a building or interior setting manifests its architectural success, shown through institutional values and aspirations felt by the building occupants (Childs, 2021). While within a place, there are people interacting with people, there are also people interacting with the space through their existential senses. The interplay of physical and intangible environmental elements such as lighting, air ventilation, thermal comfort, and acoustics accomplishes this. Considering the other attributes of spatial identity, a place as a whole can be identified by its physical form, activity and meaning (Ujang & Zakariya, 2015). These indications enhance the idea of embodiment as the underlying aspect of people-place interaction through its interplay with the intangible environmental elements within the space.

2.3 Spatial Perception and Existential Senses

Human spatial experience is a thinking process where sensing space allows exploration, resistance and criticism through the materiality of the architecture (Ren, 2022). The physical materiality of space reflects the occupant's spatial experience and emotion towards the place (Atmodiwirjo and Yatmo, 2018). The spatial experience within a place is accomplished through the space's physical and social features. Through the practicality of physical settings, there exists an opportunity for involvement in meaningful activities, which moulds the individuals' social identity and their attachment to the place (Ujang, Kozlowski and Maulan, 2018). The connection between the physical and social context of space with the occupants' spatial experience suggests that being in a place also contributes to the individual's identity. In response to the growth of digital lifestyle in today's society, some recent studies on third places found that using digital technology may support and enhance the places' physical and social context (Kutlay, 2019; Hadi & Ellisa, 2019; Magkou & Pélissier, 2021).

Merriam-Webster (2023) defines 'existential' as "a: grounded in existence or the experience of existence (empirical); b: having being in time and space". It is, therefore, attentive that the term 'existential senses' refers to the actual time and place of the sensory process. In a research on the stimulus of senses in spatial perception focusing on children, Turgay and Sariberberöglü (2022) found that the senses partake in the process of spatial perception depending on the existing stimuli within the space. They also establish that the various human senses are the most essential factor in a spatial experience, resulting in the people-place relationship (Turgay and Sariberberöglü, 2022). This finding supports existential senses as the vital component in experiencing a space.

3.0 Methodology

The study employed a qualitative method of 'non-verbal interview' which was retrieved from the spatial experience portfolios - composed of second-year interior architecture students (n=67) of a higher learning institution in Malaysia. The spatial experience portfolios consist of narratives and images from public places visited by the students. At the beginning of the data collection, the students were constructed to choose a public place of their interest located within the Klang Valley areas and visit it. During the visit, the students were encouraged to take some time to observe, sense the space, and then narrate their spatial experiences in the portfolio. The students then submitted their spatial experience portfolio, which consisted of pictures of the place and its explanation. These portfolio images and non-verbal

interview analysis are part of the methodologies discussed in Ray Lucas's Research Methods for Architecture (Lucas, 2016). The non-verbal interview data were analysed through thematic analysis. Significant statements from the respondents were tabulated into different aspects of spatial experience accompanied by the related keywords mentioned by the respondents.

4.0 Findings and Discussion

The thematic analysis from the spatial experience portfolios are presented as in Table 1.

Table 1. Spatial experience aspects of being in a place

ASPECT	KEYWORDS	EXAMPLE FROM THE RESPONDENTS
Physical Attributes	Design; accessible	The building is carefully designed and develop as the parking space is plenty, easier for old folks, for kids and as much as very accessible for wheelchair user since its provided ram for every stairs or stage. (F.S.)
	Concept; style	The concept of the design are probably more grandeur and modern of Islamic art and styles, as it does not looks like a traditional Islamic design at all. The design making the visitors more focused on what their exhibit instead of the building itself although there's a few eye-catching features here and there, I supposed to not make the building dull and the visitors bored. (A.N.)
	Natural light	From my observation, the building are build with glass to gain more natural lighting while give a bright and spacious impact to the interior. The building are using the transparent roof which brings the exterior mood to the interior of the building. (A.A.)
	Open space; double volume	The space look more open with no border or partitions that create a connection between indoor and outdoor spaces, manifesting feelings of independence, less isolation, and more imagination. The double volume ceiling gives the entire area to be more spacious and create a sense of openness at every side of the spaces. (A.A.F.)
	Materiality	The use of solid wood seating in the building adds a touch of elegance, with high-gloss elements providing an aura of ultimate luxurious indulgence while elevating the overall perspective. (S.A.)
	Indoor plants	They also add a variety of indoor plants. Not only do indoor plants enhance the overall appearance of a space, but studies show they boost moods, increase creativity, reduce stress, and eliminate air pollutants, making for a healthier body. (N.A.I)
	Color; design scheme	As I was stepping into the restaurant, the first thing I was able to take note of was the consistent application of the colour Carmine Red which is presumably part of the restaurant's corporate identity. The choice of furniture as well as its materials was spot-on and goes hand in hand with the overall design scheme of the space. (M.F.N.)
Social Attributes	Visual connection	The staff freely can serve customers without any obstruction. Without partition, the layout allows visual connection between one to another customers. They can engage and can look around the cafe without any hesitation. The customers can see on the staff workflow and at the same time can inform them on the nature of food and beverages business. (A.A.F.)
	Diverse occupants	The Bricks & Bread cafe is designed for the use of people from many walks of life. From students and workers to get their work done to social meetings between friends. (N.J.)
	Friendly; welcoming	Greeted by the friendly employees at the main door of the building, customer will automatically feel welcomed...The environment was warm and welcoming while yet being quite active, brimming with joy and uplifting energy. (S.A.)
	Gathering; socialize	People that came to this place were quite autonomous and interested in learning and research. However, not only do people visit BookXcess in RexKL to buy books and read them, but it is also a place where people are simply hanging out. It appears to be a gathering spot for friends or strangers to enjoy their shared passion for literature, discussion, chill, and socialize. Despite having a connotation of being a place associated with books and quietness, it defies that perception and becomes one of the most popular places for the current generation to socialize. (A.H.)
	Vibrant community	I was fortunate enough to have been at the restaurant during lunch as I was able to observe the bustling neighbourhood at its busiest hours. The surrounding communities was undoubtedly vibrant in terms demographics which includes the cultures, nationalities as well as the age range of the nearby residents and visitors. (M.F.N.)
	Seating configuration; interaction	The majority of the cafe's customers are young people, couples, cat lovers, children, and young parents who bring their children. There are two types of seating available. One has table and chair seating, while the other has cushioned floor seating with a table. Due to the cats that come between them, the visitors could occasionally be seen mingling with others as they are trying to get the cats attention. (N.E.A.)
Sensory Attributes	Acoustic; noise	The waterfall is insta-worthy spots and most of people walk around it to feel near to the water. But somehow, from my observation, the waterfall happen to be a bit noisy as the falling water sounds is so loud that make it harder for people to communicate and talk. (F.S.)
	Scent; smell	The sense are memorable which it has the scented of timber and bamboo leaves. (A.A.)

Sense of calmness	The use of neutral colours throughout the entire cafe gives a sense of calmness to the user. (N.J.)
Thermal comfort; breathable	The store's thermal comfort was balanced with the temperature outside. In terms of the interior aspect of this store, it is designed minimal and modern exposed to open, breathable space and materials like steel. (A.H.)
Calming ambience	When I visited the National Mosque the ambience is very calming and at peace. The prayer hall inside feels very calm and tranquil as the interior are designed to give the people the calmness and alone time with The Almighty as they pray. (A.)
Comfort; peaceful	The sound of water and the natural wind entering the prayer hall gives so much comfort and serene environment. The coolness of the air-conditioning in the prayer hall combines with the natural ventilation adds the peaceful ambience in the space that gives the people the perfect surrounding to perform their prayers. (A.)
Warm light; cozy	Furthermore, the cafe uses subtle and soft lighting to create a cozy, and comfortable mood. Warm light creates a warm, cozy atmosphere and it is very soothing and ideal for areas where to spend time with my friends and family. (N.A.I.)
Music; nostalgic	During my stroll along the walkway leading up to the restaurant itself, I felt a profound sense of halcyon as I was breathing in fresh air with the occasional breeze flowing through the surrounding greeneries on a pleasant sunny Saturday afternoon. Interestingly, a song by the name of 'It's Very Sunny' by Casino Versus Japan kept playing in my head repeatedly. Perhaps, it subconsciously encapsulated how I felt the entire time well enough through its melodies and rhythms. (M.F.N.)

From the thematic analysis, the main aspects of spatial experience based on the respondents' narratives are the physical, social and sensory attributes. There are other keywords referring to these three aspects, but the following keywords are some significant ones. Physical attributes include keywords such as accessible design, concept and style, natural light, open space, materiality, indoor plants, colour and design scheme. The social attributes, which are no less important, include keywords like visual connection, diverse occupants, friendly and welcoming, social gathering, vibrant community, seating configuration and interaction. Meanwhile the third aspect, sensory attributes, listed acoustic, scent and smell, sense of calmness, thermal comfort, breathable, calming ambience, comfort, peaceful, cozy and warm light, and nostalgic music as some of the keywords indicated by research respondents.

The finding of physical attributes aspect resonates with recent literature (Atmodiwirjo and Yatmo, 2018; Ujang et al., 2018; Childs, 2021; Abdul Kadir et al., 2022; Ren, 2022) highlighting embodiment values in an architectural identity and spatial perception. In a similar study, Padmaperuma, Buddhine and Senadeera (2020) also found that the physical aspects of a building such as materials, signage, symbols, and facade design enhance the spatial perception of their respondents. The social attributes indicate human needs for a sense of belonging and community through the occupants' engagement in social activities within the space. Equally significant, the sensory attributes signify that a huge part of spatial experience relies on existential senses for the respondents to feel the space. There is also a pattern of how the respondents narrate their spatial experience by using phrases suggesting first-hand perception such as 'from my observation', 'the space gives a sense of' and 'I feel'. This highlight suggests that it is human nature to express their feeling through what they perceive and sense existentially.

5.0 Conclusion and Recommendation

This study proposes the physical, social and sensory attributes as the thematic components in the in situ spatial experience process. The study also demonstrates that human touch is much needed in today's society as it nurtures mental and emotional health through spatial perception and existential senses. A well-designed architectural space should reflect an emphatic approach in the built environment, thus creating a more people-centric design.

However, the data collected through this study might have lacked emotional aspects. This limitation could be recovered by further investigating spatial experience focusing on emotion, where different qualitative research variables need to be predetermined in the methodological phase. This may fill the gap of qualitative analysis of this particular topic, contrary to precedent technical studies such as empirical research on spatial experience emotion by Franz (2005) that was examined quantitatively. The chosen demographic of the respondents also limits this study. Therefore, for future research, a similar study with different backgrounds of respondents other than interior architecture university students could be conducted.

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Paper Contribution to Related Field of Study

This study highlights the significance of a good architectural design and the importance of seeing and experiencing a place in-situ to truly understand the architecture.

References

- Abdul Kadir, S., Aris, N.N. and Ginting, N. (2022). Exploring the Concept of Spatial Identity within a Building Environment. *Environment-Behaviour Proceedings Journal*, 7(19), 55-59.
- Alan, A. (2022). *Architectural Experience and "Existential Sense": Analysis of some architectural patterns in Eminonu with their sociocultural context*. Thesis submitted to Graduate School of Natural and Applied Sciences, Middle East Technical University. Degree of Master in Architecture. July 2022.
- Atmodiwirjo, P. & Yatmo, Y.A. (2018). Interiority in Everyday Space: A Dialogue between Materiality and Occupation. *Interiority*, 2(1), 1-4. DOI: 10.7454/in.v2i1.56
- Caplan, B. & ProQuest (2016). *Buildings are for People: human ecological design*. Green Frigate Books, Libri Publishing.
- Franz, G. (2005). *An empirical approach to the experience of architectural space*. Dissertation at the Max Planck Institute for Biological Cybernetics, Tübingen and the Bauhaus University, Weimar.
- Gehl, J. (2011), *Life between Buildings: Using Public Space*, 5th ed. Washington DC: Island Press.
- Hadi, R.F.P. & Ellisa, E. (2019). Rethinking third place in the digital era. Conference Paper - *International Conference on Informatics, Technology and Engineering 2019*, Bali, 22-23 August 2019.
- Jones, P. & Evans, J. (2012). Rescue Geography: Place Making, Affect and Regeneration. *Urban Studies*, 49(11), 2315–30. DOI:10.1177/0042098011428177.
- Kutlay, E. (2019). *Different waves of coffee houses as third places and the use of information and communication technology devices in these settings: a cross-case study in Ankara* [Master thesis, Middle East Technical University].
- Lucas, R. (2016). *Research Methods for Architecture*. London: Laurence King Publishing Ltd; 2016.
- Magkou, M. & Pélissier, M. (2021). Being together, doing together and going forward together – echoes from France's cultural third places in times of Covid-19. *Extraprensa, São Paulo*, 14(2), 327-343.
- Merriam-Webster (2023). Existential. Retrieved from <https://www.merriam-webster.com/dictionary/existential>
- Padmaperuma, D.I., Buddhinie, U. & Senadeera, J. (2020). Architectural Responsiveness of Entry Threshold Spaces of Public Buildings: Physical Attributes and People's Perceptions. *Cities People Places*, 4(2), 78-99.
- Pallasmaa J. (2005). *The eyes of the skin – Architecture and the senses*. Wiley Academy: Great Britain.
- Ren, J. (2022). Instability in the Experience of Space and the Perception of Materials. *International Journal of Frontiers in Sociology*, 4(5), 7-9. DOI: 10.25236/IJFS.2022.040502
- St-Jean, P., Clark O.G. & Jemtrud, M. (2022). A review of the effects of architectural stimuli on human psychology and physiology. *Building and Environment*, 219.
- Ujang, N., & Zakariya, K. (2015). Place Attachment and the Value of Place in the Life of the Users. *Procedia - Social and Behavioral Sciences*, 168, 373–380.
- Ujang, N., Kozłowski, M. & Maulan, S. (2018). Linking place attachment and social interaction: towards meaningful public places. *Journal of Place Management and Development*, 11(1), 115-129.
- Turgay, Z.T. & Sarıberberoğlu, M.T. (2022). The Role of the Senses in Children's Perception of Space. *ICONARP International Journal of Architecture and Planning*, 10(1), 70-96. DOI: 10.15320/ICONARP.2022.194