Social Science and Humanities Journal
Everant Journal
https:https://sshjournal.com/
Impact Factor: 2024: 6.576
2023: 5.731
ISSN: 2456-2653
Volume 08 Issue 07 July 2024
DOI: https://doi.org/10.18535/sshj.v8i07.1204

Sensory and Psychological Study of Users at Airport Bali

Alya Syarifa Ramadhani[1] | Susy Budi Astuti[2] | Firman Hawari[3]

[1,2,3] Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia
Email: alyasyarifar@gmail.com

Received 19-06-2024
Revised 21-06-2024
Accepted 10-07-2024
Published 13-07-2024

Abstract:

The sensory modality, which plays a dominant role in spatial perception in humans, is essential for recognizing the geometric structure of the surrounding environment. The interaction between the body, imagination, and environment in the interior experience contributes to the formation of memories from visited places. This paper is conducted to explore the impact of human senses on spatial perception and the psychological effects of different environments and experiences on visitors. Focusing on the interior environment of Bali's airport and incorporating elements of Balinese culture, this study examines how sensory experiences can significantly influence the psychology of tourists. Through comprehensive literature reviews, the research aims to provide insights into the integration of multisensory elements and cultural aspects in airport design to enhance the overall experience and emotional well-being of travellers.

Keywords: Human Senses, Sense of Place, Psychological Effects, Balinese Culture, Airport

Introduction:

In addition to being aesthetically pleasing, interior design is also effective when it can elicit certain feelings, which are quite important.

The interactive relationship between the body and the environment creates profound experiences that affect emotions and enrich the quality of architecture (Reddy, 2012). In line with the evolution of architecture throughout history, vision and visual perception have played a primary role in the development of spatial design. However, the design paradigm has undergone significant changes in recent decades. Architects and designs are increasingly recognizing the potential of other senses, namely auditory, tactile (including proprioception, kinesthesis, and the vestibular sense), olfactory, and even gustatory stimuli (Spence, C. 2020).

Attention to these diverse senses not only transforms the approach to architectural and interior design but also significantly influences the experience of the surrounding space. Multi-sensory experiences in architectural and interior design can also create richer existential experiences. The interaction between human, senses, imagination and the environment generate unique memories in every place visited (Zacca, D. 2023). The design of spaces that stimulate the human senses can create diverse experiential fields, foster connections between visitors and the environment (Najafi, M. 2011), and enhance awareness of the local culture and identity of the space.

Bali attracts a high number of visitors due to its natural wealth, culture, and aesthetic values that give the region its uniqueness (Picard, 1995). As

the initial gateway before entering the island, the airport serves as a reflection and general representation of Bali's character, cultural wealth, and identity. Bali Airport has the potential for design development to enrich visitors' experiences by introducing the destination's identity. This stimulates tourists' psychology to connect their feelings and psychology with the local area, which can be perceived through the five senses, especially through sight, hearing, and smell. This connection develops from elements of the physical environment, human behaviour, and intertwined social and/or psychological processes to create meaning and a sense of place (Stedman, 2003). This study aims to understand the role of visitors' senses in building spatial experiences. The senses are identified as key instruments in sensing and understanding the arrival area's environment, with the hope of providing further insights into how interior elements influence visitors' perceptions and experiences in the airport space. This research employs a literature study method for the review of final results.

Five Senses and Experience:

Human senses are inherently connected to perception, memory, and place. The human body collects and interprets data when interacting with the material conditions of life. This unconscious and interactive flow of sensory engagement informs the understanding of local experiences within the broader relationship between the environment and humans (Hadjiphilippou, 2013). Beyond human perception, the senses play an integral role in processing, learning, and emotional interpretation. During various emotional elements, the sensory cortex can be activated at different levels. What is perceived—heard, seen, smelled, and touched—can inform one about something and how it is felt. On the other hand, what is seen by the human senses can have a significant impact on what is felt.

Humans are constantly interacting with various interior elements of a space. The interior environment provides a material world; the physical aspects (wood, bricks, and concrete) and substances (proportion, shape, texture, light, form, colour, temperature, smell, sound) (Lee, 2022).

This idea is known as environmental stimuli, and it may be divided into two categories: morphological factors, which pertain to the visual structure of architectural space, and sensual factors, which involve stimulating sensory perceptions in individuals. Beyond just the visual quality of a space, sensual factors engage the human body; for example, people can detect different scents, feel surface textures, and hear sounds as they move through the space. Therefore, interior spaces can be defined not only by their use but also by their material characteristics. (Atmodiwirjo et al., 2019).

Multi-sensory design contributes to creating spaces that are not only aesthetically pleasing but also offer rich and immersive experiences for users by considering multiple sensory elements simultaneously with depth and intentionality. By integrating a multi-sensory approach, the interaction of interior elements can create cohesive and harmonious experiences that engage sight, sound, smell, and touch. Such engagement can result in spaces that are visually appealing while also evoking emotional and sensory responses from users.

Multi-sensory activities can be seen as more intense and interconnected neural activities, which may provide significant evidence of their impact on cognitive stimulation (Oviatt, 2017). To put it another way, multisensory devices have the power to enhance perception and produce more powerful experiences than single-modal ones. The way the body interacts with its surroundings is multimodal by nature. Because it occurs through various types of sensory information. By contrast, passive behaviour is frequently unisensory, using only one sense modality. (James et al., 2017).

A key feature of the sensory system is its ability to receive information about the surrounding environment, which can then be used to take appropriate actions (James et al., 2017). According to Yi-Fu Tuan (1977), the experience of space results from the combination of sensations, perceptions, and conceptions of users through

emotions and thoughts. Spatial experience is not limited to vision but also encompasses dimensions of depth such as spatial perception and sensation. Humans observe geometric patterns in nature and create abstract spaces in their minds, while also striving to materialize their feelings, images, and thoughts into tangible forms. The sensory engagement in interior design thus moves beyond visual aesthetics to incorporate elements that stimulate all senses, leading to a more profound and memorable user experience (Spence, 2020). This approach not only enhances the functionality and enjoyment of the space but also strengthens the connection between the user and the environment, fostering a deeper appreciation of the space's cultural and sensory context.

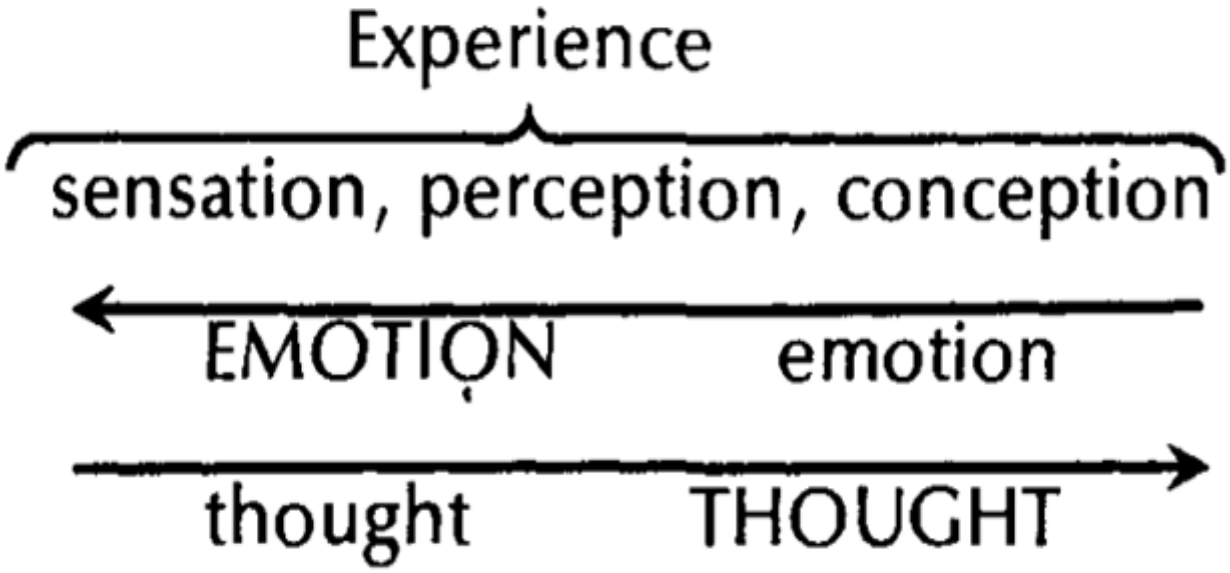

Figure 1 The Extent of Experience (Source: Tuan,Yifu.1977)

According to Yi-Fu Tuan (1977), the experience of space is the result of a combination of sensations, perceptions, and conceptions by users through emotions and thoughts. Spatial experience is not limited to vision but also encompasses dimensions of depth such as spatial perception and sensation. Humans observe geometric patterns in nature and create abstract spaces in their minds, while also striving to materialize their feelings, images, and thoughts into tangible forms.

People view the world through the lens shaped by the emotions they experience (McCarter, 2016). Human emotions are manifested through feelings, which are triggered by specific events and experiences. These feelings are connected to individual encounters with interior environments and social interactions, which affect how one perceives and defines space. This can shape one's spatial identity by becoming ingrained in the body as memories. For example, because people experience locations differently, they all have unique spatial memories (Kim, 2004). This implies that an individual's emotions can be influenced by interior spaces as they elicit spatial experiences that are socially recalled. Stated differently, an individual's perception of space can vary even inside the same physical location, and their view of interior spaces can also be influenced by overlapping experiences and memories established by previous cultural encounters. In order to create an emotional connection, experiencing space thus entails comprehending it phenomenologically and utilizing the body, surroundings, and culture.

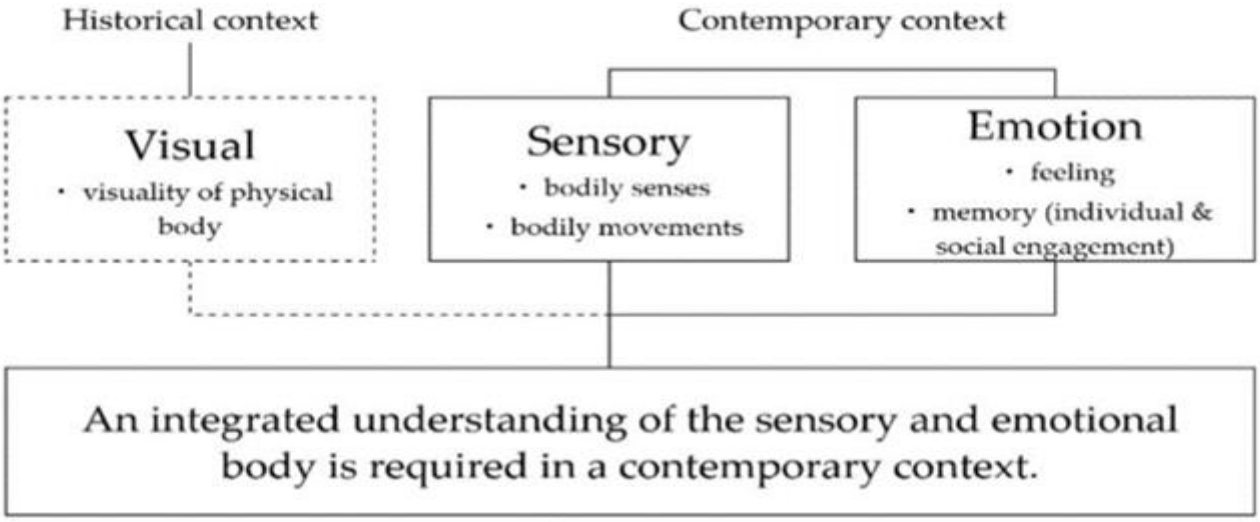

Figure 2 Phenomenological Understanding of The Body (Source: Lee, K. 2022)

Concept of Sense of Place, Place Identity, and Memory

Human senses are intrinsically tied to perception, memory, and place. The human body collects and interprets data when interacting with the material conditions of life. This unconscious and interactive flow of sensory engagement informs the understanding of local experiences within the broader relationship between the environment and humans (Hadjiphilippou, 2013).

"Sense of place" is a relational process between humans and places, resulting from comprehensive sensory engagement with environmental conditions, including both physical and social settings, which provide experiences that generate an intentionality towards the place. Sense of place requires behavioural elements. This can manifest as dependency or reliance on a specific place to fulfil particular behavioural needs (Stokols et al., 1981). It can be evidenced as proximity-seeking behaviour or when someone avoids or seeks close relationships with a place in proportion to their attachment's valence (Scannell et al., 2010).

According to Hashemnezhad et al. (2013), sense of place is closely related to cognitive and perceptual (objective) aspects and physical forms (subjective). An individual's experiences influence the emergence of subjective perceptions of the place, while objective influences come from external aspects, such as images or forms that can be assessed through human senses.

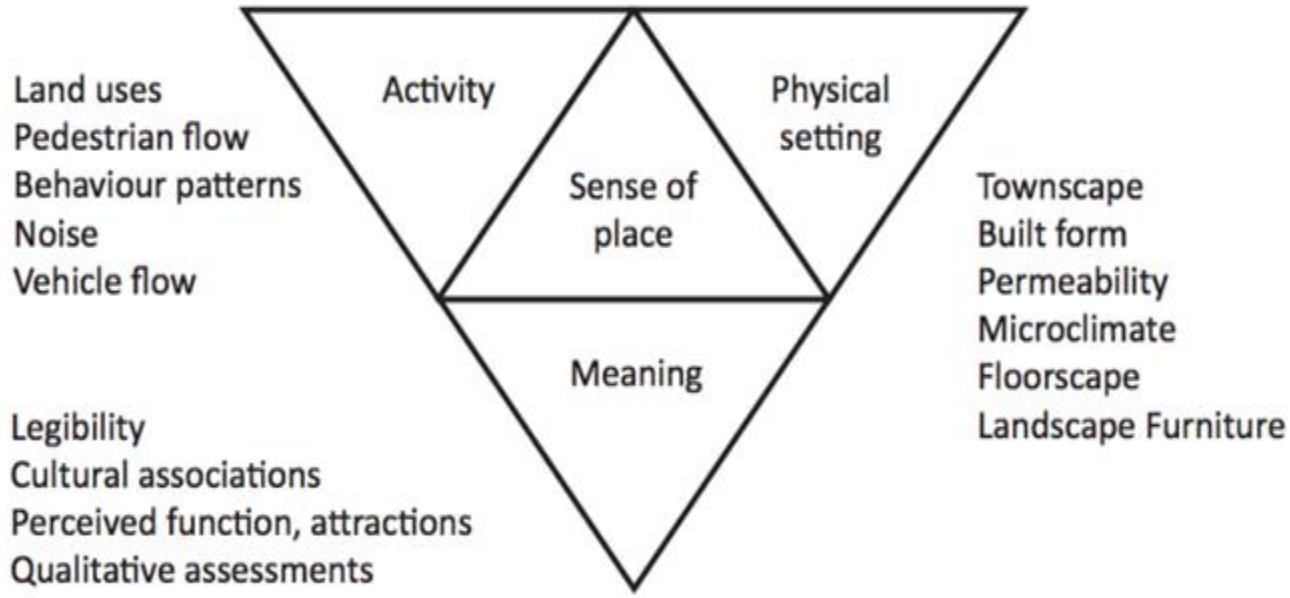

Figure 3 Factors Forming Sense of Place (Source: Steele, 1981)

Sense of place, as a theory, reveals the relationship between humans and their environment or a particular place. Several factors influence its formation. The sense of place is derived from the relationship between physical setting (form), activities, and image/meaning that emerge. These three elements are then broken down into the components of the sense of place, where the form element represents the physical attributes present in a location.

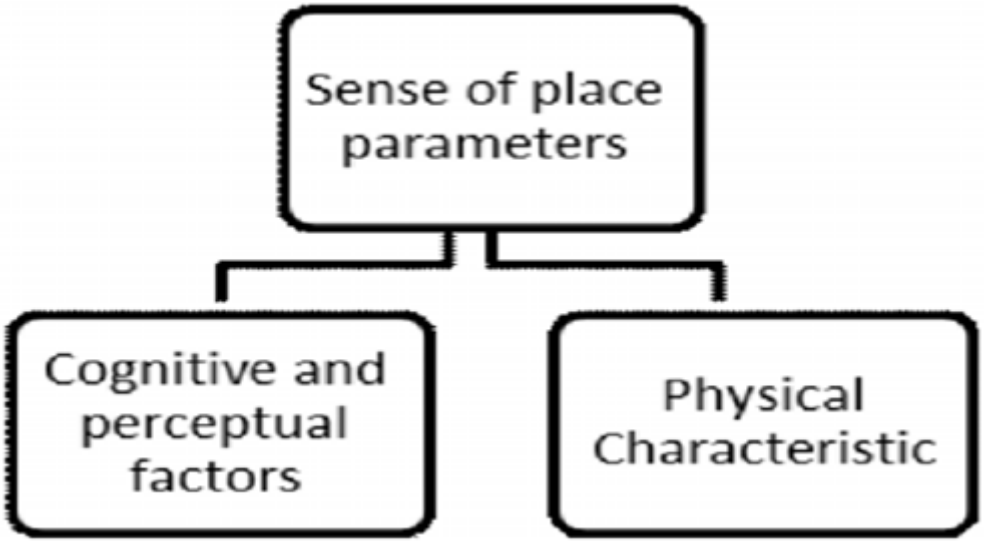

Figure 4 Diagram of Sense of Place (Source: Punter, 1991; Montgomery, J. 1998)

Montgomery (1998) later revised Punter's diagram, adding more elements to Punter's model, as shown in Figure 5. Steele, on the other hand, identifies several elements that contribute to the sense of place. These elements include: "background size, scale, proportion, diversity, distance, texture, ornamentation, colour, smell, sound, temperature, and visual variation" (Steele, 1981).

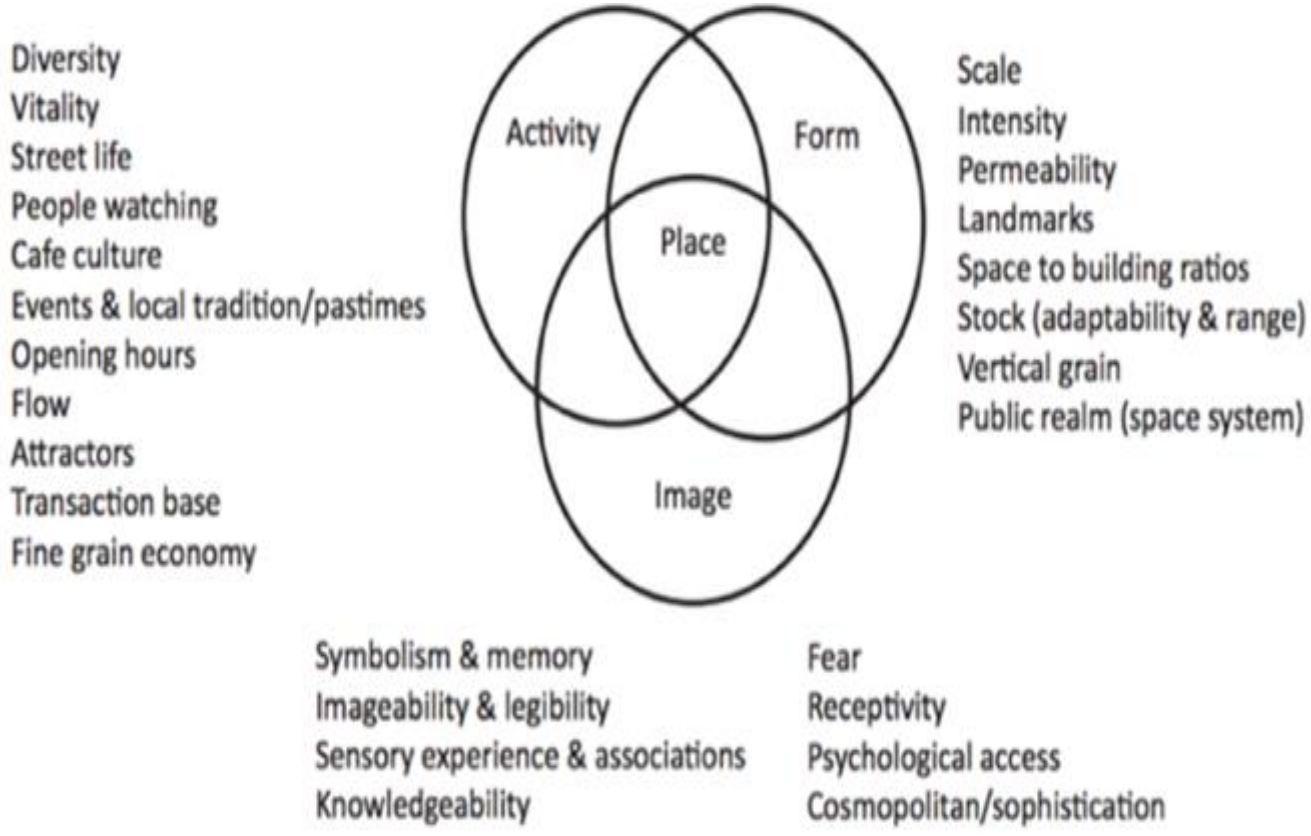

Figure 5 Policy Directions to Encourage Placemaking (Montgomery, J. 1998)

According to Steele (1981), Punter (1991), and Montgomery (1998), the components of a place can be structured as follows: (1) cognitive: representing the emotional relationship with a place through the understanding of symbols and meanings. This connection is formed from long-term relationships between the place and people across generations, reinforcing cognitive elements like meaning, concept, identity, tradition, myth, symbol, and ritual. Moreover, the physical characteristics of a place, perceived through the five senses (sight, hearing, smell, taste, touch), contribute to forming sensory experiences tied to that specific place. Physical attributes play a very important role in enhancing the mental and physical well-being of its users; and (3) activity: A place is associated with a person's work, actions, or recreational activities. Therefore, activities connect people with places (Najafi & Shariff, 2011; Ahmed, K. & Zeile, P. 2020).

A place can be referred to as a location that has significance for an individual or a group of people. A place at any given time encompasses the actual site that signifies a location with its historical importance (Low, 1992). An individual's identity is influenced through their interaction with their surrounding environment. Individual traits are not only formed internally, but are influenced by the dynamics of their relationships and connections with people and places around them. Relationship occurs because of strong imagery or events at a place. To obtain a theory of individual identity, one must distinguish themselves and their built environment (Lalli, 1992). The dimensions of the self that define an individual's identity in relation to the physical environment of their activities. This relationship can be influenced by factors such as awareness, unconsciousness, ideas, preferences, beliefs, feelings, values, goals, behavioural tendencies, and relevant abilities in the environment (Zarkhah, S., et. al., 2020). The most dominant memories come from life experiences rooted in places where someone lived during a certain period in specific locations (Marcus, 1992). Several complex elements enable this communication to occur, which can include experiences, purposes, programs, or authentic features. These different components are very important for individuals in shaping their identity, which are symbols. These symbols can have significant meanings for a wider society or appeal to individuals within a specific local community. Additional components of this fluency help individuals place themselves in a specific built environment. Lastly, in the context of place memory, there is a term called "collective memory" or "social memory" widely used by sociologists and analysts (Halbwachs, 1925). Social memories can be related to events that occurred throughout life, even before birth.

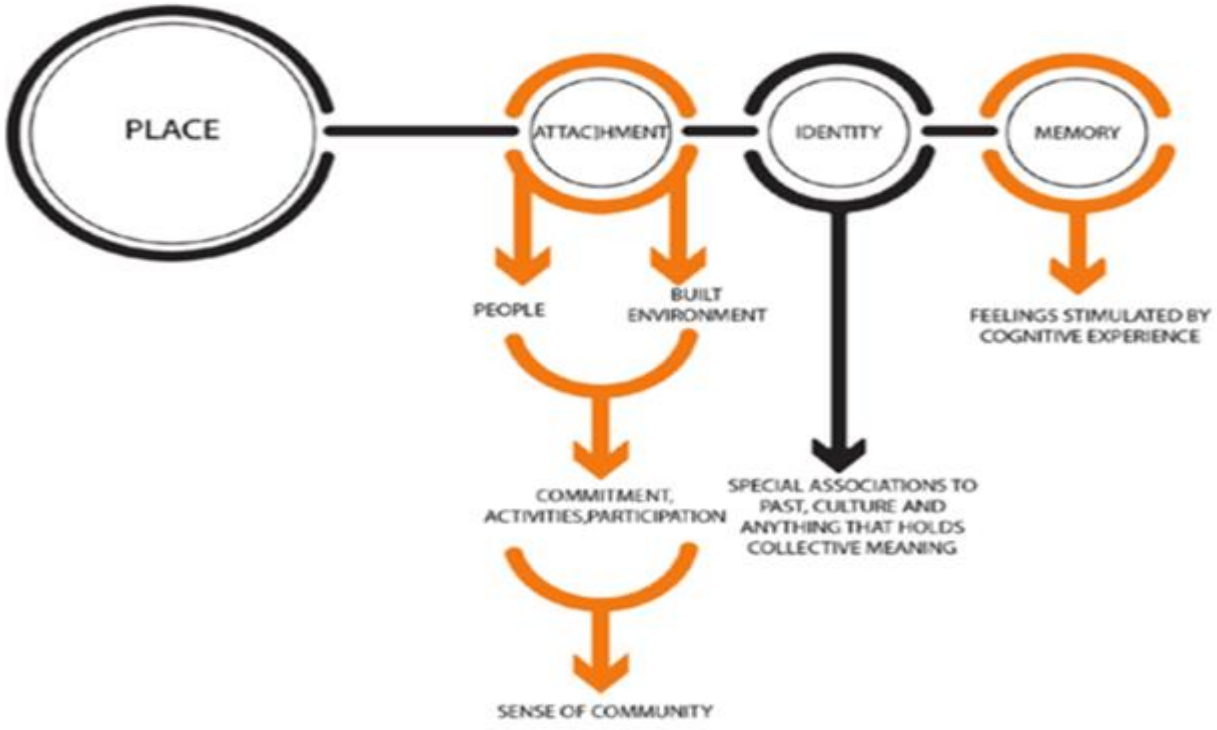

Figure 6 Place Determinants/Values (Zahid, 2021*)*

Memory does not depend on an individual's experience, but on past experiences and past social behaviour. Strong responses occur during identity development (Bellelli et al., 2010).

Balinese culture encompasses the thoughts, works, and creations passed down from generation to generation. The presence of Balinese culture is inseparable from Hinduism, which serves as its main foundation. Supported by traditional villages, customs, and practices, the continuity of culture is likened to a tree: the roots are Hinduism, the trunk and branches are customs and practices, the twigs and leaves are culture, and the flowers are art and culture.

Rumphius (1705), Kempers, Stutterheim (1929; 1935), and Goris (1951) were drawn to Bali because of its rich arts and culture, history, and knowledge. The island's natural wealth, culture, customs, and religious ceremonies are spread throughout, with certain villages selected as exemplary centers in the fields of art and culture, customs, and religious ceremonies. These elements shape the collective memory of the Balinese people and leave a lasting impression on visitors, embedding the island's identity in their memories.

Bali's diversity is reflected not only in its arts, culture, customs, and religious ceremonies but also in its beautiful natural panoramas. This diversity makes Bali unique compared to other islands in the archipelago, enriching the life experiences of its people.

In the context of Bali, this approach is particularly significant. The rich interplay of Balinese cultural elements, such as traditional art, rituals, and natural landscapes, within interior spaces can create profound multisensory experiences that resonate deeply with both residents and visitors. By integrating the sensory and cultural aspects of Bali into architectural and interior designs, spaces can evoke powerful memories and emotional connections, enhancing the overall sense of place and reinforcing the unique identity of Bali. This not only enriches the daily lives of the Balinese people but also ensures that visitors carry with them lasting impressions of Bali's cultural and natural beauty.

Given that the meaning of space is formed via experience, interior spaces can therefore be defined and interpreted not only in terms of architectural forms but also in terms of their relationship to the body, surrounding stimuli, and culture. This concept offers a framework for investigating how interior spaces might create a multisensory milieu and how this encourages emotional and spatial experience.

Method:

The research method applied is a literature study, which involves a series of activities related to collecting data from various library sources. This process includes reading, noting relevant information, then processing, analysing, and concluding the obtained material to derive conclusions from the available literature (Zed, 2008; Kartiningrum, 2015).

The data used in this research comes from studies that have been conducted and published in national and international online journals. In conducting this research, the researcher searched for research journals published on the internet using search engines with keywords: five senses, multi-sensory design, sense of place, place identity, and airport.

Result and Discussion:

The following is a literature review that directs to similar journals and previous research on the five senses, multi-sensory design, sense of place, airports, and airport.

Table 1 Previous Studies (Source: Author's Document)

No.	Reference	Summary Findings
1.	*Pengalaman Ruang Melalui Lima Indera* Hartati, A., & Sutanto, A. (2019).	In this study, a five sense experience space was created to make people caught in the hustle and bustle of Jakarta aware of the importance of human senses in daily life. The human living environment will affect physical and psychological well-being; for example, if the environment feels comfortable, people will feel comfortable, and vice versa. The design and optimization of environments that engage all five senses can significantly enhance the overall well-being of individuals.
2.	*Peran Panca Indra Dalam Pengalaman Ruang.* Riska, A. S. (2016).	In this research, the sense of sight plays a crucial role for humans in experiencing space. However, not all spatial experiences are determined by visual dominance alone. The characteristics of spaces, such as indoor and outdoor spaces, also influence the use of senses. Although both indoor and outdoor spaces are still dominated by the sense of sight, the second most significant sense in outdoor spaces is hearing, while in indoor spaces, the sense of smell is more active than the sense of hearing.
3.	The Anthropology of Vision, Memory & The Sense. Irvin, A. (2019).	The importance of perception, memory, and imagination in shaping human experience challenges the traditional view of imagination as inferior. The interaction between vision, imagination, and memory creates the visual world and influences other senses such as feeling, hearing, smell, and touch. This exploration provides deeper insights into how individuals perceive and interact with their environment, both currently and through remembered experiences.
4.	Senses Of Place: Architectural Design For The Multisensory Mind. Spence, C. (2020).	This article emphasizes the potential of a multisensory perspective to enhance quality of life and create memorable experiences in architecture and daily life. While understanding of human multisensory nature is evolving, its application in architectural design needs improvement. As awareness spreads beyond academia, architectural professionals are increasingly adopting this

		perspective, promoting buildings and urban spaces that better support social, cognitive, and emotional well-being.
5.	Multi-Sensory Working Memoryc - In Vision, Audition and Touch. Joseph, S. (2014).	This study introduces the concept of precision as an index of working memory, providing new insights into how visual and auditory information is directly stored. The proposed framework in this study suggests that representational noise in internal auditory memory representation is primarily influenced by the amount of information being processed, contributing to a better understanding of the dynamic nature of working memory processes in both the visual and auditory domains.
6.	Explaining Multisensory Experience. Fulkerson, Matthew. (2014).	This research concludes that recognizing the importance of interactions between senses is crucial, rather than focusing on them in isolation. Philosophers and psychologists are increasingly acknowledging that our perceptual experience is inherently multisensory. Although it might seem that multisensory interaction is clearly defined and distinct from unisensory experience, our perceptual experiences are actually supported by a variety of sensory interactions. Depending on the context, we may focus on conjunctions, functional interactions between sensory systems, or the content of our experiences. Embracing a multisensory perspective enhances our understanding of sensory experiences, requiring us to examine specific interactions between senses while also appreciating the unique aspects of each individual sense.
6.	Multi-sensory Experience Design in Museums Mäkelä, A. (2020)	This thesis explores how incorporating senses in museum design enhances visitor experiences. Using case studies and theoretical frameworks, it highlights the benefits of a multisensory approach in creating deeper connections between visitors and exhibits. The research shows that including all five senses adds more value for customers, with sight as the primary sense. It advocates for using multi-sensorial marketing and branding in future

		museum designs to improve educational and emotional impacts.
7.	An Airport Experience Framework From A Tourism Perspective. Transport Reviews. Wattanacharoensil, W., et al. (2015).	This article proposes a theoretical framework for enhancing the airport experience from a tourism perspective. It integrates sociological, psychological, and service marketing and management research, supported by empirical evidence from case studies. The framework highlights how various components of the tourist experience can enhance the role of airports in connecting passengers with their destinations. This benefits the airport industry by providing clear components and linkages that need to be effectively delivered to passengers for a positive airport experience. Additionally, airports can contribute to the tourist experience by serving as both experience providers and facilitators. This can be achieved by creating terminal environments that reflect the concept of a sense of place through physical settings, cultural artifacts, and activities that connect passengers with the destination's cultural elements. Airports must also ensure that their performance aligns with the destination's image and slogan, as passengers often associate the two, thus ensuring a satisfactory experience that enhances the overall perception of the destination.

Losing the ability to use the five senses can result in a loss of the ability to fully experience the environment, making it essential to understand the role of the senses. Spatial experience involves the senses of sight, hearing, smell, and touch, all of which contribute to a better understanding of the role of the senses in creating human experiences. The importance of perception, memory, and imagination in shaping human experience and understanding challenges traditional views, making the exploration of memory and imagination key to understanding (Irvin, A. 2019) how individuals interact with their environment and providing deeper insight into the "sense of place" and local identity (Spence, C. 2020).

The use of a multisensory perspective in architecture and everyday life has the potential to enhance quality of life and create deep, engaging, and memorable experiences (Mäkelä, A. 2020). This study also introduces the concept of precision as an index of working memory, providing new insights into the storage of visual and auditory information (Riska., A. S. 2016). Airport experiences, for example, play an important role in enhancing passenger service, focusing on experiential approaches (Wattanacharoensil, W., et al. 2015). Awareness of the multisensory nature of human perception is crucial in designing spaces and environments that are responsive to the needs of individuals.

Conclusion:

Based on the studies and literature review, it is evident that adapting airport architectural design to multisensory concepts can significantly enhance the overall experience for visitors and travellers. Integrating the "sense of place" within airport design is crucial, as it helps to create an environment that resonates with the cultural and emotional aspects of the destination. This involves utilizing the potential of the five senses—sight, hearing, smell, and touch—to craft a holistic sensory experience.

For instance, visual elements such as local Balinese art and architecture can immediately connect travellers to Bali's rich cultural identity. Auditory cues, such as traditional Balinese gamelan music or nature sounds from the island's lush environments, can further enhance this connection, creating an auditory landscape that complements the visual aesthetics. The sense of smell, often overlooked, can be powerful in evoking memories and emotions; incorporating local scents, such as the fragrance of frangipani flowers or Balinese cuisine, can enrich the sensory tapestry of the space. Tactile elements, including the use of locally sourced materials and textures like bamboo and stone, can provide a tangible link to Bali, offering a unique touch experience that differentiates the space.

The goal is to create spaces that not only meet functional needs, such as efficiency and comfort, but also provide deep and meaningful sensory experiences. This approach can transform Bali's airport from a mere transit point into a memorable, engaging environment that enhances the travel experience. By focusing on the multisensory aspects, Bali's airport can foster a stronger emotional connection with travellers, leaving a lasting impression that resonates well beyond their journey.

In summary, incorporating a multisensory perspective in the design of Bali's airport involves a comprehensive approach that embraces the cultural and sensory dimensions of the space. This not only supports the functional requirements of an airport but also creates a rich, immersive environment that celebrates Bali and provides travellers with a profound sense of place.

Acknowledgement:

The author expresses sincere appreciation to Dr. Ir. Susy Budi Astuti, M.T., and Dr. Firman Hawari, S.Sn., M.Ds., of the Master's Program in Interior Design at Institut Teknologi Sepuluh Nopember, for their insightful guidance and support during discussions on the research topics and theoretical frameworks that have greatly contributed to the composition of this article.

References:

1. Atmodiwirjo, P., & Yatmo, Y. A. (2019). Interiority In Everyday Space: A Dialogue Between Materiality And Occupation. Interiority, 2(1), 1–4. Doi: 10.7454/In.V2i1.56.
2. Fulkerson, Matthew. (2014). Explaining Multisensory Experience. 10.1007/978-94-007-6001-1_25.
3. Hadjiphilippou, P. (2013). The Contribution Of The Five Human Senses Towards The Perception of Space.
4. Hartati, A., & Sutanto, A. (2019). Pengalaman Ruang Melalui Lima Indera. Jurnal Sains, Teknologi, Urban, Perancangan, Arsitektur (Stupa), 1, 497. Doi: 10.24912/Stupa.V1i1.3807.
5. Hashemnezhad, H., Heidari, A. A., & Mohammad Hoseini, P. (2013). "Sense of Place" And "Place Attachment. International Journal of Architecture And Urban Development.
6. Holland, J. (2017). "Sense of Place Now A Key Part of The Airport Experience, Says Latest M1nd-Set Report." The Moodie Davitt Report. Accessed on 25 December 2023, Https://Www.Moodiedavittreport.Com/Sense-of-Place-Now-A-Key-Part-of-The-Airportexperience-Says-Latest-M1nd-Set-Report/.
7. IAI Bali. (2015). "*Konservasi Bangunan Bersejarah" Perlunya Tim Ahli Bangunan*

Cagar Budaya (TACB) Di Daerah (Vol. 2). IAI Daerah Bali.
8. Irvin, A. (2019). The Anthropology of Vision, Memory & The Senses.
9. James, K., & Vinci-Booher, S., & Munoz-Rubke, F. (2017). The Impact of Multimodal-Multisensory Learning On Human Performance And Brain Activation Patterns. Doi: 10.1145/3015783.3015787.
10. Joseph, S. (2014). Multi-Sensory Working Memoryc - In Vision, Audition and Touch. UCL (University College London).
11. Kartiningrum, E. D. (2015). Panduan Penyusunan Studi Literatur.
12. Kim, S-W. (2004). Vision And Responsiveness: The Problem of Experience In The Architectures of The East And The West. Journal of Architectural History.
13. Li, W. (2016). The Inheritance And Development of Traditional Culture In Interior Design And Three Dimensional Structure. Advances In Social Science, Education And Humanities Research, 286(8), 967-971.
14. Mäkelä, A. (2020). Multi-Sensory Experience Design In Museums.
15. Mccarter, R. (2020). The Space Within: Interior Experience As The Origin of Architecture. Retrieved From Https://Scholarsjunction.Msstate.Edu/Caad-Harrison/4.
16. Montgomery, J. (1998). Making a City: Urbanity, Vitality and Urban Design. Journal of Urban Design, 3, 93-116. http://dx.doi.org/10.1080/13574809808724418
17. Oviatt, S. (2017). Theoretical Foundations of Multimodal Interfaces And Systems. The Handbook oMultimodal-Multisensor Interfaces, Volume 1: Foundations, User Modeling, And Common Modality Combinations. Doi: 10.1145/3015783.3015786.
18. Picard, Michel. (1995). Cultural Heritage and Tourist Capital: Cultural Tourism in Bali.
19. Raka, A. A. G., Parwata, I. W., Gunawarman, A. A. G. R. (2017). *Pustaka Larasan. Universitas Warmadewa Denpasar.*
20. Reddy, S. M., et al. (2012). Emotion and interior space design: An ergonomic perspective. Department of Design, Indian Institute of Technology Guwahati.
21. Relph, E. (1976). Place And Placelessness. London: Pion.
22. Riska, A. S. (2016). Peran Panca Indra Dalam Pengalaman Ruang.
23. Scannell, L., & Gifford, R. (2010). Defining Place Attachment: A Tripartite Organizing Framework. Journal of Environmental Psychology, 30(1). Doi: 10.1016/J.Jenvp.2009.09.006.
24. Seamon, D., & Sowers, J. (2008). Place And Placelessness, Edward Relph. Chapter In Hubbard P, R. Kitchen, & G. Vallentine, Eds. Key Texts In Human Geography.
25. Spence, C. (2020). Senses of Place: Architectural Design For The Multisensory Mind. Cogn. Research, 5, 46. Doi: 10.1186/S41235-020-00243-4.
26. Stedman, R.C. (2003). Is It Really Just A Social Construction?: The Contribution of The Physical Environment To Sense of Place. Society & Natural Resources, 16, 671-685.
27. Steele Fritz. (1981). The Sense of Place. Boston Mass: CBI Pub.
28. Stokols, D., & Shumaker, S. A. (1981). People In Places: A Transactional View of Settings. In J. Harvey (Ed.), Cognition, Social Behavior, and The Environment (Pp. 441–488). Hillsdale, Nj: Erlbaum.
29. Trisno, R., Lianto, F., & Choandi, M. (2020). An Interior-Architecture Concept For Fashion-Accessory-Interior: Transforming Space From Body To Transformable Fashion Interior. International Journal of Engineering Research And Technology, 13(11), 3262. Doi: 10.37624/Ijert/13.11.2020.3262-3265.

30. Tuan, Y-F. (2001). Space And Place: The Perspective of Experience. Minneapolis: University of Minnesota Press.
31. Wattanacharoensil, W., Schuckert, M., & Graham, A. (2015). An Airport Experience Framework From A Tourism Perspective. Transport Reviews. Doi: 10.1080/01441647.2015.1077287.
32. Yasin, G. S., Christina Shirleen., Widjaja, D. C. (2019). *Analisa Perbedaan Persepsi Konsumen Generasi X Dan Generasi Y Terhadap Kualitas Lingkungan Fisik Di Kafe Petrichor Surabaya. Jurnal Hospitality Dan Manajemen Jasa. Universitas Kristen Petra.*