



Experiencing Space

Elyna Amir Sharji¹

¹ Multimedia University, Cyberjaya, Malaysia

Abstract. The complexity of understanding and experiencing space, being intrigued and fascinated at the same time is a mind boggling situation. Have you ever been awed and puzzled, captivated and teased, over and over again by the sublimating non-existence substance that one calls space? In architecture, space is one of the fundamental concepts often discussed. It is used in numerous scholarly discourses and implemented in varied design processes and creations. Multiple comprehensions, perceptions and critical abstractions of the meaning of space bring us to a complicated territory. This article highlights the progression of space concept from a theoretical perspective of sense of place and space making to the current concept of experiential design and virtual space, and a first-hand narrative section on space exploration, as interpreted from an eleven year old female student engaging in an online game platform.

Keywords: sense of place, experiential design, virtual space

1 Introduction

1.1 Sense of Place and Space Making in Architecture

According to Parsaee, Parva & Karimi (2015), the view and comprehension of space is intricate and demanding to put in perspective (Mahmoodinejhad et al, 2009; Parsaee, Parva & Karimi, 2015) while Heidegger (2000) did not consider space as something which stands in front of the humans, rather than in his view, space is neither an external nor an inner experience (Heidegger, 2000; Parsaee, Parva & Karimi, 2015). Arnheim (2007) informed that the discernment of space is deemed realizable when recognizable items are available consequently; space is the connection between them. Space is also regarded as the foundation of architecture (Arnheim, 2007; Parsaee, Parva & Karimi, 2015).

Architecture has the ability to influence the effect on users' perception where geometric forms, decorative elements and spatial relations, regardless of their complexity, gradually unfold to become evident to the thinking eye (Liapi and Oungrinis, 2006). Users of the built environment with their involvement and undertakings elevate space and areas into places where the energy of a place is an immediate consequence of users' interaction (Lawson, 1999; Liapi and Oungrinis, 2006).

Robertson (2017) denotes that architecture and the built environment influences and affects our day to day undertakings and that it significantly constitutes to as how we act and react. Sensitive and constructive spaces usually tend to accentuate human scale and proportion (Robertson, 2017). Gehl (2015) stated that his TEDx talk “In Search of Human Scale,” emphasized that towns should be design in accordance to human scale and their participation. He continued to implore that modern designs that are huge in scale often discard the people using it and living in that area (Robertson, 2017).

The theory of Sense of Place denotes connection between a person, his meaning / concept and his surroundings. All of the surrounding elements contribute to the sense of place theory where the environment influences one’s actions, societal attributes and perspective. Human beings engage in communal engagements based on their sense of place (Canter, 1977). Jackson (1994) further added that sense of place talks about place environment, surroundings and this includes components of desirability that denotes sense of well-being. These elements allure people to revisit the place again and again. Norberg-Schulz (1979) in his book, *Genius Loci: Towards a Phenomenology of Architecture* illustrates the meaning of a place as holistic approaches that are symbolic incorporation of all senses. In Figure 1, spaces transforms into places when three important components are inter-related where participants of the social environment behave accordingly to their understanding.

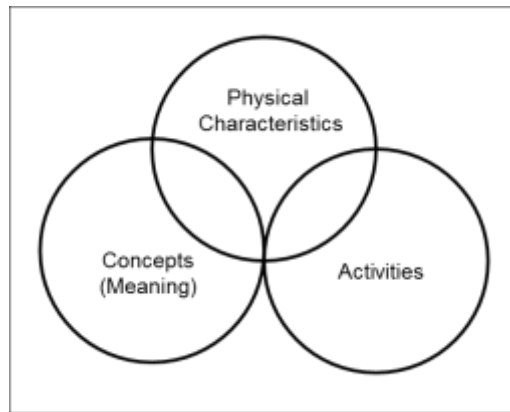


Fig. 1. Sense of Place Theory (Canter, 1977)

Sense of place is the integration of various elements that elevates the research and design of the surrounding area and what it signifies when these multiple associations are integrated together. Being able to achieve this signifies and heightened the feelings of sense of place. Researchers often think that the enhancement is signified when users discern positively their surrounding social and built environment. This creates a

better opportunity and beneficial outcome from their engagement (Nelson, Ahn & Corley, 2020, Hausmann et al. 2016; Williams et al. 2008).

Sense of place, an authentic concept, recognized after the ancient Roman ‘genius loci’, Latin for ‘spirit of place’ (Beidler & Morrison, 2016, Jackson 1994; Lewis 1979). Sense of place is an experience generated by the environment combined with what a human being carries to it (Beidler & Morrison, 2016; Steele 1981). Jackson speaks of the concept of ritual repetition, amicable surroundings, and a companionship existence in a familiar environment leads to time being a substantial component (Beidler & Morrison, 2016; Jackson 1994). In tune with illuminating outlooks, these connotations denote that the theory applies individually and communally.

1.2 Experiential Design Space

Deleon (2018) states that physical connections and interactivity enhance the elevation of spaces. This is where place meaning is born. He further stresses that while areas are defined by boundaries, places are defined by the happenings that take place subtly or significantly. This notion allows opportunities in creating meaningful and purposeful encounters. Places that transmit emotions generate feelings in establishing unforgettable relationships with the users. In the current escalation of electronic clamour, the physical environment shouts scarcity and the need to treat physicality correctly with the necessary treatment of connecting emotionally with users.

Experiential design fundamentally seeks in enhancing users of space in their interaction and engagement of surroundings. It stresses significantly with people and their experience with the space. Creations of memorable emotions and feelings are priority elements in designing experiences; when an area do not present its users connectivity and understanding, it is not deemed experiential (Demaria, 2018). This act of integrating interaction and engagement in places with traditional ways becomes more demanding especially in this era of technology thus the multiple-play of disciplines intertwined together creates memorable engagements (StudioVN, 2019).

1.3 Virtual Space

Just when you think you might be able to grasp and gauge the fundamentals of space, and implement understanding of perception and appreciation towards the multi facet conception, another dimension of space entralls our mind vividly.

The computerized electronic which includes machine-learning, AI and algorithms configure and develop our current digital lifestyle through its evolutionary process. New ways, intelligent usages of media and technology and a significant increase of involvement in our day to day chores are evident (Giannini & Bowen, 2018).

During the coronavirus pandemic, architects turn to virtual worlds for both working and socializing (Fairs, 2020). Virtual reality (VR) present alternatives of adventure and immersion as recalled by Mamou-Mani. An example of this is his escapade of virtual ‘Burning Man’ on a virtual platform, the Altspace VR where he gets to experience space in a multitude of feelings (Fairs, 2020). Izod (Fairs, 2020) mention that her acquaintances now require her to congregate virtual happenings in replacement of cancelled events in the actual world; many products also gear towards alternative paths to launch virtually. However, Space Popular’s Lesmes (Fairs, 2020) forewarned that VR complements in areas that physical activities are not permissible at times in a balancing act; to correspond and not to replace tangibility.

Webster’s New Universal Unabridged Dictionary [1989] emphasized virtual as “being in essence or effect, but not in fact.” Webster also defines reality as “the state or quality of being real”. The essential component in engaging with virtuality and reality are virtual environment, engagement, interactivity as well as the users and inventors that create these worlds. Users or participants in VR world are deemed to be a crucial element due to the happenings of VR takes place in the participants’ minds. Each user takes in different understandings, potentials, aptitudes and absorb differently at their own pace (Sherman & Craig, 2018).

A collective domain allows users to engage with each other within the simulated environment. Users interact and decipher other users within the virtual vicinity producing complementary engagement. Participants’ epitome engage and interact within themselves in VR environment and when engaging with others it is crucial that their presence is distinguishable and felt, their navigation and movement, as well as dialogues and communication (Sherman & Craig, 2018).

2 Venturing into Space: a Narrative Project

This project started during the Movement Control Order (MCO) with the stay, work and play at home constraint. Alani, female, aged eleven years old then was introduced to Roblox which is an online game platform and game creation system developed by Roblox Corporation. This game platform allows users to program games and play games created by other users (Roblox, 2021). This exploration is with the intention of finding out more on perception and meaning of space from a child’s point of view.

She took up to the online game instantly, spending hours designing and creating spaces in the virtual built environment. Referring to online content, design magazines and books, as well as perhaps, from conversations she has heard throughout the years, she has created several designs; aquarium house, cat café, modern luxury house, mansion, beach house, bedroom interior design, farm tree house, DIY room and many others. At a tender age she is seen already designing with ease and constructing with such a critical mind. Is it the normal norm of Generation Z to instantly

be comfortable around online platforms? How is she able to perceive space? What is the basic underlying knowledge that she used to be able to create? Does the concept of sense of place, space making, experiential design and virtual space mean / add anything to her exploration?

I decided to probe her mind to catch a glimpse of her thinking.



Fig. 2. Capturing Alani aged eleven during her space exploration in Roblox, an online game platform

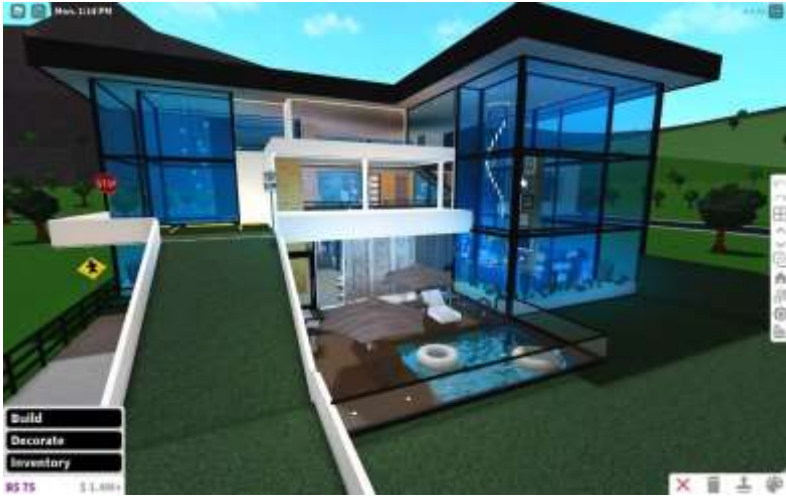


Fig. 3. An exterior view of the Aquarium House, created by Alani



Fig. 4. An interior that shows accessibility of external view through glass windows around the house



Fig. 5. Sense of place and space making in a virtual aquarium house

2.1 Conversation

Question 1

Author: *Hello Alani, how and where did you get the idea to design this aquarium house?*

Alani: From my dream. Before I sleep I always watch TikTok and Instagram. I get all of the ideas from there and it pops up in my dream. So I decide to build this house because I think about building all the time like my mom and dad.

Question 2

Author: *Why are the walls made of glass and water like an aquarium? Usually houses are made from concrete, wood and bricks. But yours is made from glass. I have never seen these types of houses.*

Alani: My idea came from fish tank ideas. And from my dream; the glass house. It comes from another world. Not from this world. Because my house now is boring. I wonder if I can add big windows so that I can see outside. About what is going on, on the outside.

Question 3

Author: *How did you get your concept?*

Alani: It is so powerful, thick and the quality is so fire (slang talk). Most of my friends get phobia from my house because it looks like an ocean but that is alright I can always change to another house. (At this point I suddenly startled because it started to rain in her aquarium house; real time).

Question 4

Author: *Do you want to live here?*

Alani: Of course. Because I've been waiting for my dream to come true. And because this house is so perfect. I feel comfortable, happy and peaceful. I can spend hours in my house.

Question 5

Author: *Would you invite your friends and family to come over and enjoy your house?*

Alani: Of course. I would love for them to come to my house because I want them to get ideas from my house so that their mind is not empty and lonely. Because we can role play at my house even though it is for kids, but everyone can always play and design anything that they want. You can be anything in my world.

Question 6

Author: *What do you wish to share with others, with your creation?*

Alani: I wish to share what this house can be to all. But this is my dream, it is mine though. You can enjoy the fish here. They sleep, eat and play. You can have activities with them, clean them. And play with the rest of the house too. But sadly this game do not have pets, I need to build them using bricks. I wish there are live animals. I love animals.

Question 7

Author: *Would you like to inspire others with this invention?*

Alani: If you want to colour it you can colour with cool colours unlike the boring colours. If it is too bright change colour to darker colour. You will be peaceful and happy.

Question 8

Author: *I see that you have virtual friends online. What do you do, what do you talk about and what activities do you usually do?*

Alani: We usually play murder, mystery games. We can't have private chats so we end up having personal chat on IG. We play, eat, sleep, jogging, camping, swimming, watch TV and others at my house. I will also do sleep overs at my house. Because we can't in real life now, due to MCO.

Question 9

Author: *Lastly, what do you wish in the future; perhaps to build more, or meet your family (whom we have not seen for a long time) online, here?*

Alani: I wish that my dream will come true as a real house. Of course I wish they will come and meet here. I would love to meet them. Can they come?

3 Discussion

Questions asked are based on the perspective of theories and concepts on space as discussed earlier on. Taking into consideration certain limitations such as the understanding gauged is from an eleven year old and limited to the output of the online platform game in this project.

Question 1 discussed about the respondent getting ideas from her dreams and thinking about it all the time which is in line with Fairs (2020) that stated 'feeling space in a different way when dealing with space in virtual world'. It is derived that her creations are formed in a virtual space and the ability to perceive a 3-dimensional space can be further explored.

Question 2 and 3 probed into the idea of us living in an aquarium-like house, which is a totally unthinkable in reality. Her answer that her creation comes from another world and her intention to be able to see outside from the inside of her house is supported with the notion that 'the perception of space is only possible in the presence of the perceptible objects therefore space is the relation among objects' (Arnheim, 2007; Parsaee, Parva & Karimi, 2015). To visualize her ideas, she has a relative concept of objects in a space. Therefore, a glass and water building is equivalent to a creation from another world, according to the respondent.

Question 4 seeks to enquire on 'the notion 'liveliness' of a building is a direct effect of people's actions in it (Lawson, 1999; Liapi and Oungrinis, 2006) with the question of whether the respondent would like to live here. Her answer yes because she feels comfortable, happy and peaceful relates to the actions that she is able to do influences her to spend long hours in her virtual house.

Question 5 refers to the concept of 'sense of place; People usually participate in social activities according to their sense of places (Canter, 1977). Respondent is confident that visitors to her house will be inspired and get more ideas from interac-

tions that will take place as she mentioned that they are able to role play and be anything in her world.

Question 6 and 7 explores the idea of elevating space into place; ‘Spaces are defined by their edges (think walls or boundaries). Places are defined by the activities and engagements happening within them (Deleon, 2018). Respondent replies that she would like sharing her house with the others and translates this into creating places by defining activities within them; enjoy the fish, sleep, play, clean and other activities. Her space is shaped by activities thus the creation of place (her virtual house). Her only disheartened concern is that the absence of live animals. This hinders the absolute reality feeling she intends to create. She relates higher level engagements with the level of her love of animals.

Question 8 investigates ‘A subconscious interpretation of time is a consistent element in the qualities of place identified by Jackson (Beidler & Morrison, 2016; Jackson 1994). Here, a sense of place requires a lively awareness of a familiar environment, ritual repetition, and a sense of fellowship based on a shared experience. Sharing her virtual world with her friends and repeatedly ‘we play, eat, sleep, jogging, camping, swimming, watch TV and others at my house. I will also do sleep overs at my house’ indicates that the repeated actions results in a high level of sense of place. Comfort, familiarity and satisfaction that is achieved and the fact that her virtual friends like to visit her house indicates a great sense of place.

Question 9 refers to experiential design concept in space, ‘if a space doesn’t allow its occupants to feel connected, it’s not experiential (Demaria, 2018). Her confidence that her virtual house has allowed occupants to feel connected leads her to wish that she could build more and meet her family and friends there. This is the basis of an experiential design concept. And to wish that her dream will come true as a real house indicates the resemblance to the connectivity feeling achieved in her virtual world.

4 Future Projects

This explorative project was initiated based on the concept of understanding space and the comparative space concept of the real and virtual world. As a fundamental study, similar concepts of grasping the understanding of space are seen to be achieved in both worlds. Both seeks for a higher level of sense of place, interactivity, engagement, sense of connectivity and perception in space by defining activities that take place within the space. This enables spaces to be elevated into places. Factors that appear and used in creating this design can be explored further by comparing with factors that appear in the respondent’s other virtual creations, just waiting to be explored. Future projects also include experiments and explorations by a larger group

of respondents to find out similarities and significant differences among them in gauging and experiencing spaces, either physically or virtually.

Thus, the mind is a powerful space, don't you think so?

References

1. Arnheim, R. (2007). *The Dynamics of Architectural Form*, SAMT Publications, Tehran.
2. Beidler, K. J., & Morrison, J. M. (2016). Sense of place: Inquiry and application. *Journal of Urbanism*.
3. Canter, D. (1977). *The Psychology of Place*. London: The Architectural Press Ltd.
4. Deleon, R. (2018). 10 Principles of Physical Experience Design. Retrieved from <https://medium.com/capitalonedesign/10-principles-of-physical-experience-design-711bef279bf2>
5. Demaria, K. (2018). *Experiential Design and Interior Spaces: The New Movement That Is Shaping The Way We Connect*. Retrieved from <https://www.terramai.com/blog/experiential-design-interior-spaces/>
6. Fairs, M. (2020). "Incredible things are happening" in virtual reality say architects in lockdown. Retrieved from <https://www.dezeen.com/2020/05/13/incredible-virtual-reality-coronavirus/>
7. Giannini, T., & Bowen, J. (2018). Of Museums and Digital Culture: A landscape view. *Proceedings of Electronic Visualisation and the Arts Conference*.
8. Heidegger, M. (2000). *Building, dwelling, thinking, Modern Hermeneutics*, Markaz Publications. pp. 55–83.
9. Jackson, J. B. (1994). *A Sense of Place, a Sense of Time*. New Haven, CT: Yale University Press). pp. 157–158.
10. Liapi, M. and Oungrinis, K. (2006). Spatial Diagnosis as a Means to Design Mediated Spaces. *Proceedings of Communicating Space(s) 24th eCAADe Conference Proceedings / ISBN 0-9541183-5-9] Volos (Greece) 6-9 September 2006*, pp. 420-427.
11. Mahmoodinejad, H. et al. (2009). The urban environment phenomenology: contemplation on promoting the space to urban place, *Environ. Sci. Technol.* 39 282–297.
12. Nelson, J., Ahn, J. J., & Corley, E. A. (2020). Sense of place: trends from the literature. *Journal of Urbanism*.
13. Norberg-Schulz, C. (1979). *Genius Loci: Towards a Phenomenology of Architecture*. New York: Rizzoli.
14. Parsaee, M., Parva, M., & Karimi, B. (2015). Space and place concepts analysis based on semiology approach in residential architecture: The case study of traditional city of Bushehr, Iran. *HBRC Journal*.
15. Robertson, C. (2017). What Makes a Space a Place?: Place-making in Urban Design. Retrieved from <http://www.hasta-standrews.com/features/2017/11/14/what-makes-a-space-a-place-place-making-in-urban-design>
16. Roblox. (2021). Retrieved from <https://www.roblox.com>

17. Sherman, W. R., & Craig, A. B. (2018). *Understanding virtual reality: Interface, application, and design*. Elsevier Science & Technology.
18. StudioVN. (2019). What is experiential design? Retrieved from <https://www.estudiovn.com/post/experiential-design-interiors>
19. Zevi, B. (2009). *Saper vedere l'architettura*, Shahidi, Tehran.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

