The Sheraton Park and Users' Human Behaviour: Strategies for Implementation of the Public Realm in Qatar

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Abstract The Sheraton Park was opened to the public in the late 2015; it features five main water components, which portrays different themes pertaining to five senses. It also features green belts at the street frontage and planting, outdoor fitness and playground area, a miniature fan zone with a massive led screen, pyramids (first aid points) and 4 parking levels. This research study investigates (A) the relationship between the physical settings of the Sheraton Park in Doha and users' social behavior; (B) how social interactions vary by age, gender or place depending on physical spatial features; and (C) the extent to which the spatial form can be implemented to improve social interactions in urban parks in Doha. Qualitative methods, such as site visits and observation, maps, photographs and on-site surveys are adopted as the main assessments tool to investigate the users' activities and/or human behavior at the Sheraton Park. The study allows understanding of the extent to which the settings of the Sheraton Park can be implemented in order to encourage social activities.

Keywords Public Open Spaces, Spatial-Human Behavior, Social Interactions, Spatial Form, Sheraton Park

1. Introduction

Commonly, public spaces are arenas for recreational and/or social activities (Bunschoten, 2002; Carmona, 2010; Furlan, Muneerudeen, & Khani, 2016; Furlan & Petruccioli, Researchers have formulated multi-faceted definitions about 'urban places and spaces'. While some scholars describe the public space in relation to users' spatial perception, namely where users' human behavior is influenced by spatial form and design-features (Brown, D. Dixon, & O. Gillham, 2014; Carmona, 2010; Farr, 2008; Stevenson, 2013), others categorize open facility areas and urban public amenities into three types: (A) municipal, (B) public and community and (C) neighborhood district facilities (Chang & Liao, 2011).

Sheraton Park in Doha, the capital city of the State of Qatar (figure 1-2-3). Doha's Sheraton Park, an iconic public landscaped park located in a prime location on Doha's Corniche between the Sheraton Hotel and the Doha Convention Center was opened to the public in the late 2015. It features five different water themes (figure 4-5), which encourage various social-recreational activities involving children and families.

The research paper draws on the case study of the

The project site is 80,666m² with 161,657m² allocated for car parking, 76,629m² of landscaping, 3500m² underground substation area, 1480m2 restaurants and 600m² for tunnel area ... it consists of five water-themed features, uniquely folded hard and soft landscaping with flowering trees and shrubs, children's play area, two sunken gardens with adjacent restaurants, an underground four-level car park for 2,664 cars, an underground connecting tunnel link (under the Corniche) for overflow traffic from Doha Convention Centre and Tower, and a 66KV primary power substation (QPM, 2015).

Each water feature, located in front of the Sheraton Hotel, accessible to the public at the end of Doha's Corniche, represents and stimulates each of the five senses of human beings (Furlan, 2016b; Furlan, Almohannadi, Zaina, & Zaina, 2015; Gunay, 2003; QPM, 2015). The area where the Sheraton Hotel is located is originally shaped following wide-range dredging work, which was carried out through the late 1970s and early 1980s and re-shaped Doha's coastline. The five water features, which are the most unique attractions of the park where different aesthetic experiences are provided to the public, are the main objective of the research, aiming at exploring the impact on the behaviors of the visitors (J. Ong, 2016; Jodidio & Halbe, 2015).

This research study focuses on the public and community facilities in the urban park. According to scholars, the place making is a methodology that concentrates on people's behavior within the place (Relph, 1976), where a place is characterized by a combination of materials, practice and meanings. The urban space's usage is determined by the extent to which users perform their activities, which in turn is influenced by the physical settings of the place. Social interactions within urban public spaces are also influenced by the way attributes or signs are perceived by users (Clark, Holland, Katz, & Peace, 2009).

The research study aims at investigating how public and social interactions are perceived and conceived by the users within the urban park. Namely, the study explores the nature of various activities performed by the users within the selected case study. The findings will allow understanding of the extent to which the physical settings of Doha's Sheraton urban park can be implemented in order to encourage social activities.



Figure 1. Sheraton Park's map



Figure 2. Sheraton Park's aerial view



Figure 3. Sheraton Park's public realm





Figure 4-5. Sheraton Park's Water Themes

2. Background

Urban Public Spaces

Historically, urban public open spaces are characterized by natural elements in their structure and composition. Naturalness of design features in public spaces has been related to the human senses and social meanings (Ghavampour, Vale, & Del Aguila, 2015). In ancient Greece, gardens were assembly places contributing to improve social life. For Romans, gardens were spaces utilized to create entertainment for communal happiness (Jones & Wills, 2005). Chinese, Persians and Japanese people used representative landscapes for spiritual holiness (McIntosh, 2005). Also, Italian veranda gardens and large French gardens symbolize authority (McHarg & Mumford, 1969).

Public open spaces, in general, are open to both city's residents and visitors, while private open spaces are solely planned for private purposes. Public urban spaces include both green and non-green areas, designed and planned to satisfy numerous needs of the users. While Kaplan and Motloch (1987; 2000) define perception as a psychological symbol that mostly forms after the initial impression, other scholars (Ittelson, 1973; Ulrich, 1983; Zajonc, 1980) argue that the affective perception is a pre-cognitive assessment, occurring faster and more frequently. The connection between public urban spaces and the user can be created and ensured by establishing different meanings and spatial functions. Certainly, individuals get attached to their physical and communal environments. Users are more likely to get involved in open urban spaces, namely when the

physical setting significantly influence users' life style and/or quality of life. Responsive public spaces satisfy different users' supplies, such as well-being, relaxation, dynamic and passive engagement and socializing (Faggion & Furlan, 2016; Furlan, 2016a, 2016b; Furlan & Almohannadi, 2016; Furlan & Faggion, 2015a, 2015b; Furlan & Zaina, 2016). Cohesive open spaces enable different social-recreational practices and are available to people belonging to different cultures. Space is meaningful when a durable and solid connection is established between the environment and the individuals who use the space.

In his first book "The Social Life of Small Urban Spaces", Whyte describes how small urban places influence 'the life' of the plaza (1980). He observed the street life and the plazas by putting time-lapse cameras overlooking the plazas and recording users' daily activities. He realized that quality space stimulates users' new habits. Also, during peak hours, the number of people on a plaza varies depending on the seasons and weather. Also, it was revealed that users are attracted by watching other users performing activities.

According to Crush (2014), it is the perception of the individuals of the space that adds the final dynamic to the place. 'Users' are individuals influenced by public spaces' configuration and/or surrounding buildings, which in turn affect passive and active involvement with the space. Also, the quantified length and frequency of the engagement affect the behavior of people within the urban space (Gehl & Lars; Jan Gehl; J. Gehl & Svarre).

In his second book "City: Rediscovering the Center", Whyte describes outdoor city spaces (plazas, parks and streets) and discusses the extent to which the design of urban spaces contributes to inviting users to perform different activities. Also, he argues that natural elements such light, wind, trees, and water play a crucial role in attracting users to the urban space. Whyte also discusses the relevance of connecting the space and the main pedestrian traffic flow: if people do not perceive the space, they will not cross the threshold. Meyrowitz (1986) also reveals that individuals are involved more in fixed events: if the public place does not have a specific purpose, users will not get involved in it. Furthermore, natural features such as plants or water increase the open space's values (Tagtow, 1990) (Luttik, 2000) (Forsyth, Musacchio, & Fitzgerald, 2005) (Goličnik & Thompson, 2010).

Public Urban Parks in Doha

Doha is home to numerous open green spaces and parks that offer opportunities for relaxation and recreation for families, walkers and joggers. From the perfectly trimmed cornice to aspire park, visitors will find a spot to relax in the shade underneath trees or by the water. In the past, the urban design of parks in Doha was not given sufficient attention by the municipality. However, recently this vision has changed: nowadays parks are playing a crucial role and representing a landmark for Qatar (Rizzo, 2014; Salama, 2013; Salama & Wiedman, 2013). Rumeileh Park (Previously called Al-bida'a) is located on the Doha Cornice between the

national theatre and the ministry of Interior of Qatar. It was planned in 1996 on an area of 105,000 sqm. Rumeileh garden is considered to be one of the most attractive parks in Qatar, looking over Doha Bay. Parks and green areas attract citizens and tourists, cause of their distinctive large areas and the diversity of physical components.

Also, Doha's dominant 8 km-long waterside cornice offers a unique panoramic view of the capital. Lined with palm trees, the walkway is magnificent at night, when the shining lights of Doha's iconic horizon shine crossways Doha Bay, from the museum of Islamic Art to the contemporary new business district of West Bay, besides the majestic Sheraton Park.

The five water features are the most unique attractions of the park where different aesthetic experiences are provided to the public. The five water features, accessible by the public, are a unique feature of the urban park (Sherrod & Downs, 1974). Miles (1997) declared that the ability to touch water as one element of the public art is one factor that makes the public place successful.

The first water feature in the Sheraton park is called the tidal pool and is located at the northern part of the park along the Corniche. The designer's intent was to create three different levels of water creating a natural effect off the shore. A pool with four sculptures at the center and water tides represents Qatar's marine life. Whale sharks and dugongs (sea cow) are the two most endangered mammals in the Arabian Gulf. The sculpture represents a horizontal outline of those marine animals.

The second water feature is the *Wadi* gardens. This water feature contains different cascades and water walls. A pedestrian path is located in the middle of the water feature, allowing people to experience the water feature more intimately. The visual connection with the first water feature is created when the water reaches the lowest point of the Wadi gardens. The jets of the tidal pool creates a visual illusion, where the water is creating distributary channels from the first water feature. The Wadi gardens are composed of four types of features such as the dry deck cascade and water walls. The designers used different patterns and tile layouts to achieve different effects. The water jets control the amount of water flow by operating at three different heights, progressively. The water movement for all the water features are controlled and monitored through a sensor system and controller to avoid the spreading of water due to excess heat, humidity and wind circulation.

The third water feature is the sensory garden. It is located at the heart of park; an intimate space, rich in plant-variety, lighting effects, sound and texture through interactive features stimulate the senses. Children find it amusing while adults can seek tranquility in this space. At the edges of the sensory garden three grand water walls fall onto the rough granite surface. The designer used several elements such as colored lights, the bubbling effect of the water, musical cymbals, in addition to linear sculptures of lights standing two meters tall within a reflective pool.

The fourth water feature is the northern sunken garden. This water feature was designed to reduce the harshness of the five meters solid wall at the sunken garden. A different combination of elements such as water, light and climbers create a relaxing scene of flowing water, creating a babble sound reducing the noise from the street. This water feature is adjacent to the grand stairs leading to the sunken garden. The water flows through weirs at the top of the staircase, past the planter pots of the flowering shrubs, into a basin, which subsequently flows down gently to the pool at the lower end. The total estimated water volume of this water feature is 36 square meters. Along the Sheraton Park project specific colors indicating each zone were used as a way-finding. The used signage types are in Arabic and English. They point towards facilities, water features, services and some instructional signs. The instructional signs are friendly to people with special needs.

3. Methodology

The research study investigates how and the extent to which the urban spatial-form of the Sheraton park in Doha contributes to enhance social activities. The study aims at exploring (1) the spatial form and (2) the use of the park. The analysis of the spatial form and use of the Sheraton Park is undertaken using four methods for collecting data: (a) photographs; (b) site observation of user's activities, (c) on-site survey and (d) interviews conducted with 50 users (Creswell, 2003; Denzin & Lincoln, 2005; Dunn, 2005; Marshall & Rossman, 2010; Mason, 2001; Maxwell, 1996).

In relation to the concept of activities (Rapoport, 1970), it is vital to undo the concept of activities into its variables. Rapport identifies six components: the variability of the activity which involves (a) the nature of the activity itself (what), (b) the individuals involved or omitted (who), (c) the place where it is implemented (where), (d) the order or sequence it happens (when), (e) the connotation to other activities (how - including or rejecting whom), and lastly (f) the sense of the activity (why) (Rapoport, 1970). Therefore, this research study aims at exploring six features related to social activities.

Summing the responses on all six items for each respondent a table score is produced, reflecting (1) the degree to which the Sheraton Park is the arena for the performance of social activities and (2) how the built environment can be enhanced to facilitate social activities.

4. Findings

Activities

The findings of the study reveal that sixty percent of the users visited the park at night on a weekly basis, as it has different lighting effects and the climatic conditions are more pleasant. Thirty percent of the monthly visitors to the Sheraton Park and ten percent of visitors visit the park along

the day. Less than ten percent prefer to visit the Sheraton Park in the mornings while thirty percent prefer to visit the park in the afternoons or evenings.

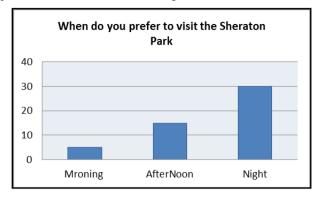


Figure 6. The frequency of visiting the Sheraton Park



Figure 7. The time people are likely to visit the Sheraton Park

Water Features

The water labyrinth area is the most active area in the park as it gives people a more compelling reason to use the space compared to other spots in the park. The first reason mentioned by the users is that it allows children to play with the water and to have different experience as the jets of water have different colors by time. The different levels of water excite children waiting for the different colors. Adults were sitting on the grass watching their children from a distance playing with the jets of water; twenty percent of the adults mentioned that the area needed seats and benches to sit near the jets in order to watch their children playing instead of sitting on the grass and being distant. Some children were playing with their bicycles near the sunken garden water features; the users mentioned that there should be a special area for cycling as bicycles disturb children who are jumping and dancing in the water area (figure 9-10-11). So, providing special lanes or plaza, specific for the cycling, would be advisable.

The second active area in the park is the tidal pool as it has the view to the towers of Doha. This allows people enjoying night-lights of the city and looking at the towers while sitting at the edge of the pool. The pool has shallow water and it makes families feels safe, namely when they have children. Twenty percent of the people highlighted that this area needs more benches: namely, elderly people are not comfortable

with sitting on the pavement and they need a higher place to reside.

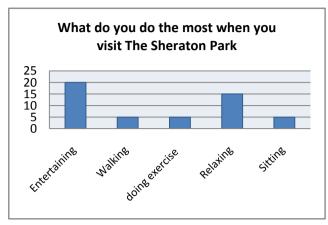


Figure 8. Activities people doing in the Sheraton Park



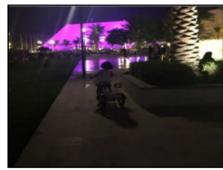




Figure 9-10-11. Social Activities in the Sheraton Park

It was also stressed by fifty percent of the users that this area needs shading devices namely in the mornings and afternoons. Small kiosks could be introduced every few meters along the Corniche for social and recreational purposes. Food attracts people who, in turn, attract more people (Whyte, 1980). Also, the frontage of the street facing

this water feature has different types of hedges and bushes, which are distributed continuously along the street (figure 12-13-14). Benches and seats that may invite people and encourage them to visit the park to see the different activities are needed.







Figure 12-13-14. Walking in the Sheraton Park at night

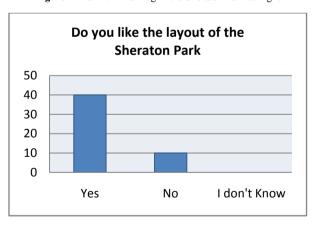


Figure 15. The layout of the Sheraton Park

The sunken garden area, as highlighted by seventy percent of the interviewees, is a dynamic area that provides relaxation for people as the sound of falling water allows them to relax and creates a pleasant environment (figure 16-17-18). Most of the users of this area were couples and women sitting on the pavement and on the benches provided on the steps of the water feature. The area lacks sun-shading devices. It has trees on the top of the waterfall, which allows shades to the people who are sitting in the morning. The lighting on the bottom of each leveled pool gives an interesting effect as mentioned by people in the park. Also,

the lighting on the steps allows people to draw their path easily towards the next destination within the park.







Figure 16-17-18. Lightings in the Sheraton Park at night

The last water feature is the sensory wall that attracts many visitors as it provides a different experience for children, who can touch the wall and feel the texture. It also has a canal of water that looks like a puzzle, so some of the children sitting there can discover the movement of the water through the canal. Children also were touching and playing with stones inside the pool in that area. This helps children to learn about textures and to use their sense through touch. This water feature is a little bit dark at night and it is not visible to everybody as it is a few stairs-level down. The colored bubbling effect in the swimming pool attracts children and adults walking on the top level of the park. There are many people taking photos in this water feature as it reflects some of the towers in front of the park and it creates a pleasant effect. People are not using this water feature in the morning as no sun-shading devices are provided. Also, the lighting effect on the water feature at night makes it more attractive than in the day time.





Figure 19-20. The Pergola and Pyramids of the Sheraton Park

The sound deck water feature makes children use their hearing sense and get them involved with the sound effect produced by the flying drops of water on the drum. This sound makes children thinks creatively as some of them mentioned about thinking how the system works and from which direction the water comes and/or how it flies to the drums. Such design features encourage children to explore what experienced around them. The pergola in front of the sound deck works as a gateway which makes people follow the sound to reach the destination without seeing it from a long distance. This allows people to walk under the framed pergola that has climbers. The pyramids on the park are used as the first aid point. The top roof of the pyramids is planted with grass: while adults were sitting on it, children were rolling over it (figure 19-20).

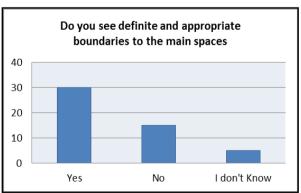


Figure 21. Boundaries of the Sheraton Park

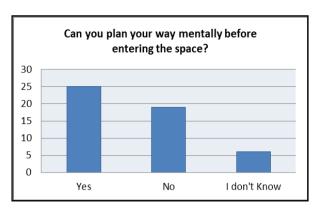


Figure 22. Entering the Place

Landscape

The users of the park acknowledged that the variety of landscape trees and bushes contribute to enhance livability; there are several palm trees. Some of the trees are with flowers: the color of the flowers differs according to the type of the tree. The decorative trees and the shaped climbers with pergolas allow people to walk through them and enjoy the landscape (figure 23-24-25).





Figure 23-24-25. Landscape features in Sheraton Park

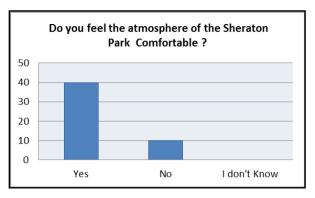


Figure 26. The Atmosphere

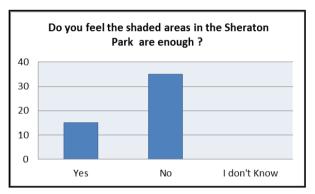


Figure 27. Shaded Areas

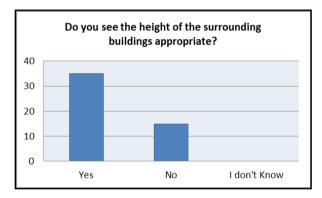


Figure 28. Surrounding Buildings Heights

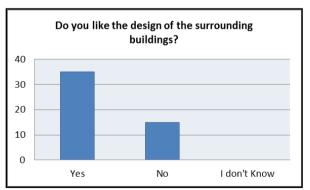


Figure 29. Surrounding Buildings Design

Parking area and facilities

The parking area has different levels characterized by different colors, which can be easily seen from the top of the park and allow people to locate their exit. Signage system is used with the same colors of the parking columns. The signage is found on the top of each door. Parking spaces are considered sufficient for the users. On each parking area there are staircases and lifts, which take users to the top of the park. Each staircase is numbered.







Figure 30-31-32. Car-parking facilities in Sheraton Park

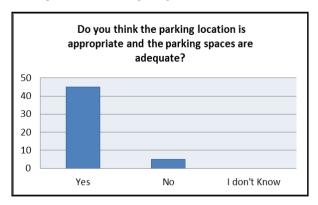


Figure 33. Parking Spaces

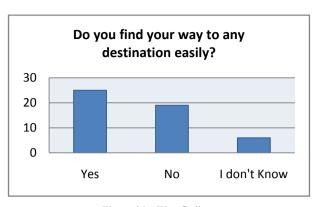


Figure 34. Way-findings

5. Conclusions

Within the Sheraton Park, urban design and architecture merge. The creativity of architecture and urban design move from the macro into the micro-level: places as spatial fragments, carved and detailed with sensorial beauty and identity, make the urban park distinctive. This spatial behavioral study contributes to understand the social, economic and environmental factors, which should be addressed for implementation of the physical urban settings. As stressed, the spatial behavior of users varies during the day and night: several identified factors, design-related, affect the behavioral patterns of users, namely circulation, routes sun-shaded areas and sitting, lighting and the location of peculiar facilities.

Implications for Practice and Advancement of Research

The impact of the five water features of the Sheraton Park on users' human behavior can be investigated further as this research study is limited to single limited sectors/areas of the park. Larger sample of visitors could also be interviewed.

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REFERENCES

- Brown, L. J., D. Dixon, & O. Gillham. (2014). Urban Design for an Urban Century-Shaping More Liveable, Equitable, and resilient Cities. New Jersy, USA: John Wiley & Sons.
- [2] Bunschoten, R. (2002). Public Spaces. London: Black Dog Publishing.
- [3] Carmona, M. (2010). Public places, urban spaces: the dimensions of urban design: Routledge.
- [4] Chang, H.-S., & Liao, C.-H. (2011). Exploring an integrated method for measuring the relative spatial equity in public facilities in the context of urban parks. Cities, 28(5), 361-371.
- [5] Creswell, J. (2003). Research Design: Qualitative, Quantitative and Mixed Methods Approaches (2 ed.). Thousand Oaks, California: Sage Publications.
- [6] Crush, T. (2014). Public Art in Urban Parks. University of Louisville.
- [7] Denzin, N. K., & Lincoln, Y. S. (2005). Handbook of Qualitative Research. London: Sage Publications.
- [8] Dunn, K. (2005). Interviewing. In I. Hay (Ed.), Qualitative Research Methods in Human Geography (pp. 79-105). Oxford: Oxford University Press.
- [9] Faggion, L., & Furlan, R. (2016). Post-WWII Italian Migration from Veneto (Italy) to Australia and Transnational Houses in Queensland. International Journal of Arts, 6(1), 1-10.
- [10] Farr, D. (2008). Sustainable Urbanism Urban Design with Nature. United States: Wiley.
- [11] Forsyth, A., Musacchio, L., & Fitzgerald, F. (2005). Designing small parks: a manual for addressing social and ecological concerns: John Wiley & Sons.
- [12] Furlan, R. (2016a). Modern and Vernacular Settlements in Doha: An Urban Planning Strategy to Pursue Modernity and Consolidate Cultural identity. Arts and Social Sciences Journal, 7(2), 171-176.

- [13] Furlan, R. (2016b). Urban Design and Livability: The Regeneration of the Corniche in Doha. American Journal of Environmental Engineering', 6(3), 73-87.
- [14] Furlan, R., & Almohannadi, M. (2016). Light Rail Transit and Land Use: An Integrated Planning Strategy for Al-Qassar's TOD in Qatar. International Journal of Architectural Research-ArchNet-IJAR', 10(3), 170-192.
- [15] Furlan, R., Almohannadi, M., Zaina, S., & Zaina, S. (2015). Integrated Approach for the Improvement of Human Comfort in the Public Realm: The Case of the Corniche, the Linear Urban Link of Doha. American Journal of Sociological Research, 5(3), 89-100.
- [16] Furlan, R., & Faggion, L. (2015a). The Development of Vital Precincts in Doha: Urban Regeneration and Socio-Cultural Factors. American Journal of Environmental Engineering, 5(4), 120-129.
- [17] Furlan, R., & Faggion, L. (2015b). The Souq Waqif Heritage Site in Doha: Spatial Form and Livability. American Journal of Environmental Engineering, 5(5), 146-160.
- [18] Furlan, R., Muneerudeen, A., & Khani, F. A. (2016). Urban Revitalization of Public Spaces in the Pearl in Qatar. American Journal of Sociological Research, 6(1), 1-9.
- [19] Furlan, R., & Petruccioli, A. (2016). Affordable Housing for Middle Income Expats in Qatar: Strategies for Implementing Livability and Urban Form. International Journal of Architectural Research-ArchNet-IJAR', 10(3), 138-151.
- [20] Furlan, R., & Zaina, S. (2016). Urban Planning in Qatar: Strategies and Vision for the Development of Transit Villages in Doha. Australian Planner, Dec 2016, 1-16.
- [21] Gehl, & Lars, G. (1996). Public spaces Public life. Copenhagen: Danish Architectural Press and the Royal Danish Academy of Fine Arts, School of Architecture.
- [22] Gehl, J. (2011). Life Between Buildings: Using Public Space. New York: Island Press.
- [23] Gehl, J., & Svarre, B. (2013). How to Study Public Life Washington: Island Press.
- [24] Ghavampour, E., Vale, B., & Del Aguila, M. (2015). Nature as a Design Element in Small Urban Public Spaces. Future of Places, Stockholm.
- [25] Goličnik, B., & Thompson, C. W. (2010). Emerging relationships between design and use of urban park spaces. Landscape and Urban Planning, 94(1), 38-53.
- [26] Gunay, B. (2003). Design Brief for Doha Corniche. Qatar's Centre for Arts & Culture. Ankara: Aga Khan Trust for Culture National Council for Arts and Culture. The State of Qatar.
- [27] Ittelson, W. H. (1973). Environment perception and contemporary perceptual theory. Environment and cognition, 1-19.
- [28] J. Ong. (2016). Sheraton Park In S. Park-Doha (Ed.), https://www.flickr.com/photos/jun_ong/sets/7215766123773 9484.
- [29] Jodidio, P., & Halbe, R. (2015). The New Architecture of Qatar. New York: Skira Rizzoli.

- [30] Jones, K. R., & Wills, J. (2005). The invention of the park: from the Garden of Eden to Disney's Magic Kingdom: Polity.
- [31] Kaplan, S. (1987). Aesthetics, affect, and cognition environmental preference from an evolutionary perspective. Environment and behavior, 19(1), 3-32.
- [32] Luttik, J. (2000). The value of trees, water and open space as reflected by house prices in the Netherlands. Landscape and Urban Planning, 48(3), 161-167.
- [33] Marshall, C., & Rossman, G. B. (2010). Designing Qualitative Research (3 ed.). California: Sage Publication.
- [34] Mason, J. (2001). Qualitative Researching. London: Sage Publications.
- [35] Maxwell, J. (1996). Qualitative design research: An interaction approach. Newbury Conari Press.
- [36] McHarg, I. L., & Mumford, L. (1969). Design with nature: American Museum of Natural History New York.
- [37] McIntosh, C. (2005). Gardens of the Gods. Myth, Magic and Meaning in Horticulture. London: Tauris.
- [38] Meyrowitz, J. (1986). No sense of place: The impact of electronic media on social behavior: Oxford University Press.
- [39] Miles, M. (1997). Art, space and the city: public art and urban futures: Psychology Press.
- [40] Motloch, J. L. (2000). Introduction to landscape design: John Wiley & Sons.
- [41] QPM. (2015). Sheraton Park Qatar

- [42] Rapoport, A. (1970). The study of spatial quality. Journal of Aesthetic Education, 4(4), 81-95.
- [43] Relph, E. (1976). Place and placelessness (Vol. 1): Pion.
- [44] Rizzo, A. (2014). Rapid Urban Development and National Master Planning in Arab Gulf Countries. Qatar as a Case Study. Cities, 39, 50-57.
- [45] Salama, A. (2013). The Impact of Economic Diversification on Urban Morphologies in Doha: An Interdisciplinary Assessment. Paper presented at the Qatar Foundation Annual Research Forum Proceedings, Doha.
- [46] Salama, A., & Wiedman, F. (2013). Demystifying Doha. Uk: Ashgate Publishing Limited.
- [47] Sherrod, D. R., & Downs, R. (1974). Environmental determinants of altruism: The effects of stimulus overload and perceived control on helping. Journal of Experimental Social Psychology, 10(5), 468-479.
- [48] Stevenson, D. (2013). The City. UK: Polity.
- [49] Tagtow, R. (1990). The need for urban forests. Am. City County, 105, 74-75.
- [50] Ulrich, W. (1983). Critical heuristics of social planning: A new approach to practical philosophy.
- [51] Whyte, W. H. (1980). The social life of small urban spaces.
- [52] Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. American psychologist, 35(2), 151.