

Assessing The Urban Public Spaces In Heart Of Sharjah: A Mixed-Methods Analysis

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Abstract

The paper presents a mixed-methods approach to investigate and assess the design of the public realm in Sharjah's old town or "the Heart of Sharjah", a regenerated and restored urban center, and to understand the features that contribute to a well-designed public realm in this specific context. A literature review is conducted to gather insights and identify key qualitative and physical features associated with user satisfaction and social engagement in public spaces. The physical features include diverse seating, shade greenery, water surfaces, landmarks, play zones, and economic activities. Similarly, various qualitative features were recognized including accessibility, adaptability, public participation, environmental sustainability, safety, and the creation of a sense of place. The current status of the public realm in the study area is later assessed using mapping and land-use analysis, utilizing Google Earth maps and on-site photographs for visual documentation. The identified features are used as evaluation criteria, and a systematic assessment of the design is conducted, highlighting areas where improvements are needed. Based on the evaluation results, recommendations are formulated to enhance the urban space and address the identified shortcomings, aiming to improve user satisfaction and promote social engagement. The evaluation findings indicate that the area lacks pedestrian accessibility, shading, various amenities, green areas water surfaces, and public engagement in design and management. This research contributes to the understanding of designing inclusive and vibrant public realms in historic urban contexts, providing valuable insights for urban planners and policymakers.

Keywords: Public Space, Public Realm, Sense of Place, Heart of Sharjah, Urban design, Urban Management, Social engagement, user satisfaction.

I. INTRODUCTION – PUBLIC SPACES DESIGN AND THEIR FEATURES

Urban design as a sector aims mainly to create urban spaces containing buildings and the spaces among them. It operates from the macro-scale of planning, zoning, and infrastructure networks to the micro-scale of street furniture and lighting (UN-Habitat, 2020). Once implemented, its impact extends beyond the physical aspect as it has the power to affect the socio-economic relations in its context and shape the lives of its users (Dias et al., 2014). For this paper, we will be dealing with the planning of the public spaces within the urban form, that is, all publicly accessible areas, including streets, sidewalks, parks, plazas, and other open spaces that are available for use by the general public (UN-Habitat, 2018). The reason for choosing public spaces is their role in enhancing social cohesion, life quality, and social sustainability in general (Harun et al., 2014). These Public spaces may be green spaces or paved hardscapes. They can also feature elements like plants, vegetated structures, water surfaces, pathways, squares, and markets (Aljabri, 2014). A well-designed urban space mainly provides a variety of amenities and services that meet the needs of residents. It also can impact, through the design of its streets, the safety and comfort of its users whether they are pedestrians, drivers, or cyclists.

In social aspects, it can foster a sense of place and identity, making people feel connected to their communities (Cresswell & Holloway, 2009). For instance, by sitting in an urban square that is imbued with history, identity, and symbolic meaning, people can stop and think about these meanings, their city's identity, and future, which can help them build a connection to it and shape their sense of community (Levy, 2012). They may also provide an open-air social gathering outlet with seating areas where people can sit and talk with each other or participate in group activities such as sports or cultural events (UN-Habitat, 2018). On the contrary, poorly designed urban forms can lead to negative user experiences, social isolation, lack of access to services and amenities, and unsafe living conditions (Banerjee, 2001; Bigdeli Rad & Bin Ngah, 2013). According to (Levy, 2012), public areas should encourage co-existence rather than division and discrimination.

In economic aspects, (Ezzeddine et al., 2018) suggest that well-designed high quality attractive public spaces, increase the value of residential properties in the area which can significantly influence homebuyers. Consequently, an effectively planned public space should not only be aesthetically pleasing but also contribute positively to the adjacent neighborhood. Furthermore, public spaces should also

foster local economies by promoting local businesses, attracting new investments, boosting tourism, and creating new job opportunities. For a public space to be considered well-designed and achieve its full potential, especially in optimizing social cohesion and increasing users' satisfaction, literature has reported a set of features that can be categorized based on their nature, in two groups, physical or tangible, and qualitative or intangible.

1.1 The Physical Features of a Well-designed Public Space

Physical features refer to those aspects of the urban space that can be observed in a physical sense, this includes:

1. Comfortable seating: such as benches, chairs, and tables. Diversifying seating arrangements will meet the preferences of different groups. For instance, younger individuals often prefer using stairs for seating and socializing, while older individuals lean towards traditional seating like tables, and children enjoy sitting near statues. To optimize the functionality of seating areas, they should be strategically placed in well-visible locations near attractive landmarks, and incorporated with shading elements (Monfared et al., 2015; UN-Habitat, 2020).
2. Shade: Various weather conditions like sunlight, temperature, humidity, and wind influence how people perceive and use urban spaces. However, these conditions can be alleviated through design strategies that provide shelter and shade such as placing walls, trees, canopies, and awnings, in order to create a more inviting and protected area while maintaining a clear view of the surroundings (Carmona et al., 2010; Gehl, 2011; UN-Habitat, 2020).
3. Greenery: Incorporating green elements such as trees and planters in public spaces can optimize air quality, improve microclimates, and reduce urban heat. It also contributes to the character of urban spaces and promotes biodiversity. Studies on urban design and human health emphasize the importance of exposure to natural light and green views to improve well-being and health, and grass areas can serve as locations for recreational activities and social interactions. (Carmona et al., 2010; UN-Habitat, 2020).
4. Water surfaces: Natural bodies of water like coastlines or rivers, create distinct edges for surrounding public areas and enhance their character. Artificial water installments within these areas like ponds and fountains can create a pleasant relaxing environment by masking negative noises like traffic, cooling through water vapor evaporation, and adding visual interest (Carmona et al., 2010; UN-Habitat, 2020).
5. Lighting: Adequate lighting can make outdoor spaces feel safer and more inviting and shape their aesthetics, and functionality (UN-Habitat, 2020). Daylight and the visibility of the sky are essential for space quality, and artificial lighting ensures users' safety, wayfinding, and amenity purposes, thus, enhancing the scenery and creating ambiance (Carmona et al., 2010).

6. Landmarks: they act as contrast points with their surroundings. They come in two types: distant or surrounding landmarks like buildings or natural landscapes visible from many angles within the urban space, and inner landmarks like sculptures, artworks, or exhibitions placed within the urban space. The architecture of buildings acts as landmarks both distant and inner. Identifiable landmarks contribute to the identity of public spaces and can hold special cultural or symbolic meanings, thus exceeding their physical importance (Carmona et al., 2010; UN-Habitat, 2020).
7. Play areas: Playability is a crucial aspect of active engagement in urban spaces and a sign of place quality and richness (Carmona et al., 2010). Providing play areas and equipment for children of different ages such as playgrounds or splash pads can attract families with young children to spend time in outdoor spaces.
8. Food options and economic activities: Urban public spaces should incorporate both structured and casual economic activities, such as food vendors and small shops. Integrating food stalls or cafes into these areas can further encourage people to visit them (UN-Habitat, 2020).

The Physical Features of a Well-designed Public Realm

Table 1: The physical features of a well-designed public space that increase social satisfaction, with application examples.

Possible practices	World Example
Comfortable seating - Provide a range of seating options such as benches, chairs, and loungers to accommodate different preferences and needs and space them properly. - Select comfortable materials that are durable in different weather conditions and don't absorb heat or cold.	
Shade - Through trees, shading structures, shade sails, and shaded walkways.	
Greenery - Through lawns or grass areas. - Trees, flower gardens, Shrubs. - Green roofs or green walls.	
Water Surfaces - Fountains, lakes, ponds, reflecting pools, waterfalls, and streams. - Interactive Water Play Areas.	
Adequate Lighting - Pathway or stairs Lighting. - Decorative lighting e.g., lanterns or string lights.	

Landmarks	- Smart lighting systems, or solar power lighting. - Ambient and accent lighting.	
Play Areas	- Seasonal temporary exhibitions. - Sculptures and artworks - Water or tree sculptures	
Food Options & Economic Activities	- Playground equipment provided with adult seatings, and shaded areas. - Different themed and multi-generational playgrounds. - Active (climbing, running) and passive (drawing, building, reading) play zones.	
	- Food trucks, boats, or stalls. - Dining areas, picnic areas, cafes, and restaurants. - Food and cuisine festivals. - Distributed vending machines.	

1.2 The Qualitative Features of a Well-designed Public Space

Qualitative features of a public space refer to the intangible attributes and characteristics that contribute to its overall atmosphere, appeal, and functionality. These features are not easily quantified but are essential for creating a vibrant and inviting environment. This includes:

1. Accessibility and Connectivity

A public space is accessible when all individuals, of all backgrounds and age groups, particularly the elderly and those with specific needs, can access it easily using all four mediums, that is, private vehicles, bikes, public transportation, or walking. (UN-Habitat, 2020). While most literature prioritizes pedestrian accessibility and walkability and

emphasizes that car-free and pedestrian-focused spaces enhance public space quality, it is also important to consider proximate accessibility for cars and public transportation (Ezzeddine et al., 2018).

Accessibility can also be optimized through multiple urban design and management strategies such as making the use of public spaces more obvious to people and encouraging activities that are cost-free and appeal to different ages (Barnett & Beasley, 2015). In addition, considering families with baby carriages and wheelchair users by adding ramps, placing clear visible signages for wayfinding, creating clearly oriented attractive pathways that encourage walkability, and making them pedestrian-friendly by using safe non-slippery pavements are recommended (Gehl, 2011). (Carmona et al., 2010) suggest that keeping public spaces safe and well-monitored yet, tolerant towards free use can increase accessibility and reduce exclusion. They also emphasize the role of connectivity and visual permeability in users' convenience in public spaces.

2. Adaptability

Adaptability in public urban spaces is its repurposing ability to meet changing needs, demands, and circumstances over time. It involves both the design and management of urban spaces in a way that allows for easy adjustments and modifications for various activities and functions in an affordable way. In social aspects, public spaces with adaptable and changing uses are seen as attractive and crucial for creating a more vibrant and livable urban environment as they attract a wider range of people to an area, fostering a sense of community, and encouraging social engagement (Bratina Jurkovič, 2014). Adaptable uses also have cultural social significance as they encourage innovation and cultural production in society when transforming spaces into culturally- meaningful spaces (Nasr & Khalil, 2021).

Previously, temporary uses and diverse activities in urban areas were often ignored in urban development discussions, but they have been gaining more recognition in contemporary urban development, for being a valuable urban design tool that promotes sustainability, livability, and resilience in the face of various challenges, such as shifts in population, technological advancements, or unexpected events like pandemics.

Adaptable uses also have an economic dimension that involves changing its functions depending on local market conditions, and encompassing small local businesses which can further foster sustainable urban development (Susilo, 2015).

3. Public Participation and Inclusivity

Public participation in urban planning and design is a critical aspect of creating healthy and vibrant spaces. It involves giving the public

through their local community organizations, a voice in decisions that affect their lives and environments. This approach aims to empower citizens and build a sense of community by involving them in the vision-making and design processes. This applies specifically to the public realm as it serves as a stage for socio-political activities essential to citizenship and civil society unlike experiences focused solely on consumption (Carmona et al., 2010). Shifting towards community-based approaches in design and management allows individuals to be more than spectators; they can become part of the urban scene and organize events and programs to interest them and attract more people to their areas thus, Bridging the designer-user gap (Barnett & Beasley, 2015). Technological advancements and the internet have expanded opportunities for public participation in urban design. These tools enable the effective communication of design ideas and information, as well as collaborative design projects through virtual design studios, digital platforms, and visual aids, therefore, ensuring a well-informed participation (Carmona et al., 2010). In the maintenance phase, communities can be involved through decision-making or direct participation in site works such as public volunteering gardening programs. In addition to public participation in the design and management phase, they need to participate actively in the use phase, thus optimizing an urban space's sociability is crucial for its success. This can be achieved through ensuring convenience and safety. And offering a wide range of activities and amenities that accommodate different types of users, individuals, and groups (Monfared et al., 2015).

4. Environmental sustainability

The environmental sustainability of public spaces refers to their ability to meet the present generation's needs without compromising the ability of future generations to meet their own needs. In the context of the built environment and urban planning, it involves designing and constructing with the aim of reducing negative impacts on ecosystems and fostering ethical economic systems through the use of renewable resources, minimizing non-renewable resource consumption, reducing pollution, and preserving cultural and historical heritage. Some of the design and management strategies in this regard are: incorporating green elements such as trees, using local and recycled materials for construction and furnishings, installing energy-efficient lighting technologies like LEDs and smart lighting controls to minimize energy consumption, implementing efficient irrigation systems to conserve water resources, and encouraging recycling and waste reduction practices within public spaces (Vadiati & Kashkooli, 2011).

5. Safety

Safety is a basic indicator of people's quality of life in general, security is the second most important requirement after basic needs

according to Maslow's hierarchy of needs. It is a vital factor in ensuring the sustainability of local communities (Monfared et al., 2015). Key strategies for enhancing safety in public spaces include:

- Ensuring public spaces are well-maintained and easy to navigate through clear signage and proper lighting.
- Crime prevention through designing spaces to minimize hidden corners and providing adequate lighting to deter potential criminals, and through space management by providing active surveillance elements (CCTV or guards) at all hours.
- Reducing pedestrian/vehicle conflict by separating their passages to reduce the risk of accidents.
- There is a growing awareness of the importance of keeping urban spaces active by promoting nighttime economies and entertainment options to avoid making them deserted during these periods (Carmona et al., 2010; UN-Habitat, 2020).

6. Sense of Place

A "sense of place" is the qualities tied to a specific location, urban form, and community. Each place has its distinguishable set of qualities, including physical, visual, social, and cultural aspects that define its "sense of place". The physical and visual characteristics include nature, urban layout, architecture, and streetscape (Hu & Chen, 2018). And they shape the first phase of creating a "Sense of a place", which is the "perception" phase that relies on sensual experience. The second phase is "Cognition" which is mental understanding derived from perception and helps form the memory (Marzbani et al., 2020). According to (Levy, 2012), memory, history, and culture are what connect people to public spaces therefore, a well-designed public space should reflect them all. Naturally, different cultural contexts imply different types of urban public spaces' physical features and conceptions (Aljabri, 2014). For instance, public spaces in the Middle East were originally affected by the Traditional Islamic urban planning principles and were perceived then as owned by the communities and vital for their everyday life. But were later reshaped by various political shifts and gained a new perception in the memory of people (Ezzeddine et al., 2018). Creating a "sense of place" in a public space can be achieved mainly by focusing on preserving traditional urban forms and promoting unique ones, as well as other strategies:

- Designing spaces that reflect the local environment and culture.
- Promoting community attachment by fostering a sense of ownership and encouraging social interaction.
- Creating a memorable multi-sensory experience in public spaces through elements like sound, light, color, texture, and scent (Hu & Chen, 2018).

- Promoting walkability which is linked directly to the perception of all the physical and visual features of a place during walks (Marzbani et al., 2020).

The Qualitative Features of a Well-designed Public Realm

Accessibility and Walkability

Adaptability to people uses & needs

Public participation and inclusivity

Table 2: The qualitative features of a well-designed public space that increases social satisfaction, with application examples

Possible practices	World Example
- Clear accessible entrances and exits. - Pathways and walkways that are considerate of individuals with mobility disabilities. - Directional signages in multiple languages to ensure easy site navigation.	
- Multi-functional spaces that can be re-arranged and re-organized to host different events e.g., galleries, playing ground, mobile theaters...etc. - Diverse seating options suitable for families or individuals. - Technology integration which can ensure better usage	Canada Square used to host sports events in London, source: (Carmona, 2019) 
- Participation in the design phase through exhibitions,	

Environmental Sustainability	hearings, voting & public discussions. - Participation in maintenance and management. - Accessibility to all ages and backgrounds.	
	- Greenery. - Sustainable landscape materials. - Renewable energy usage in lighting. - Waste management.	Solar power usage in Dubai Beaches for lighting, phone charging, and WIFI. 
Safety	- Adequate lighting. - Surveillance and guarding done by (Police or security patrols) or (self-guard by placing all seatings in visible locations to other users) or (Locally-organized neighborhood watch).	A Koban “small police booth” located in Taito, Tokyo 
Sense of Place	- Reflecting culture. - Promoting Walkability. - Distinguishable architecture and landmarks.	Piazza San Marco, Venice, Italy 

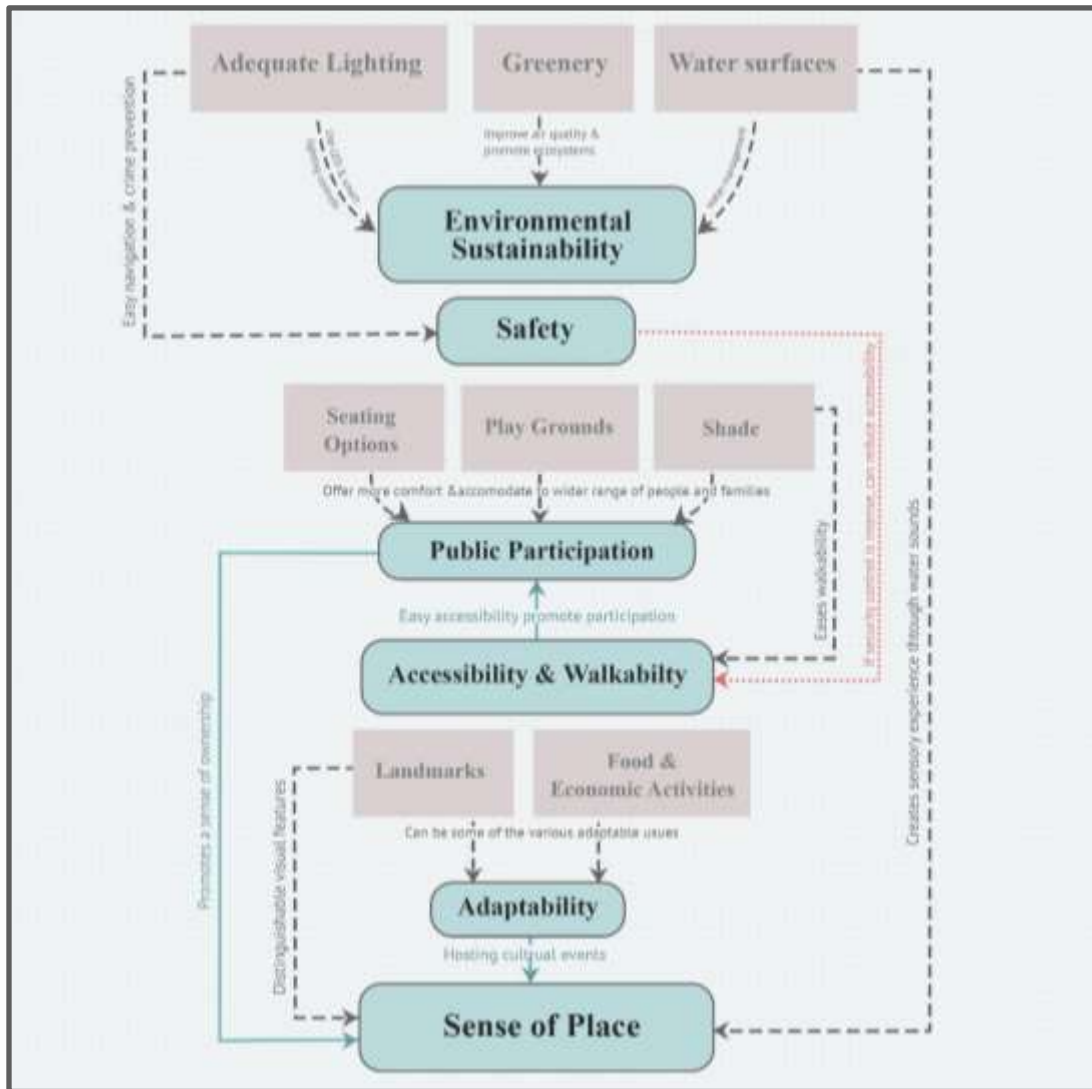


Figure 1: The interchanging relations between different qualitative and physical features. Source: The author.

II. RESEARCH METHODOLOGY

This study uses a mixed-methods research approach to examine and evaluate the design of the public realm in Sharjah's old town, also known as "The Heart of Sharjah". The research paradigm guiding this methodology was a combination of qualitative and quantitative analysis.

The rationale for this methodology stemmed from the need to gain a comprehensive understanding of the features that contribute to a well-designed public realm and their implementation in the specific context of Sharjah's old town. By conducting a literature review, the study aimed to gather insights from existing research and identify key qualitative and physical features associated with user satisfaction and social engagement in public spaces. To assess the current state of the public spaces in Sharjah's old town, a mapping and land-use analysis

approach was employed. Google Earth maps were used to obtain an up-to-date representation of the urban forms, particularly focusing on public spaces. These maps were supplemented with on-site photographs to provide visual documentation and a deeper understanding of the context.

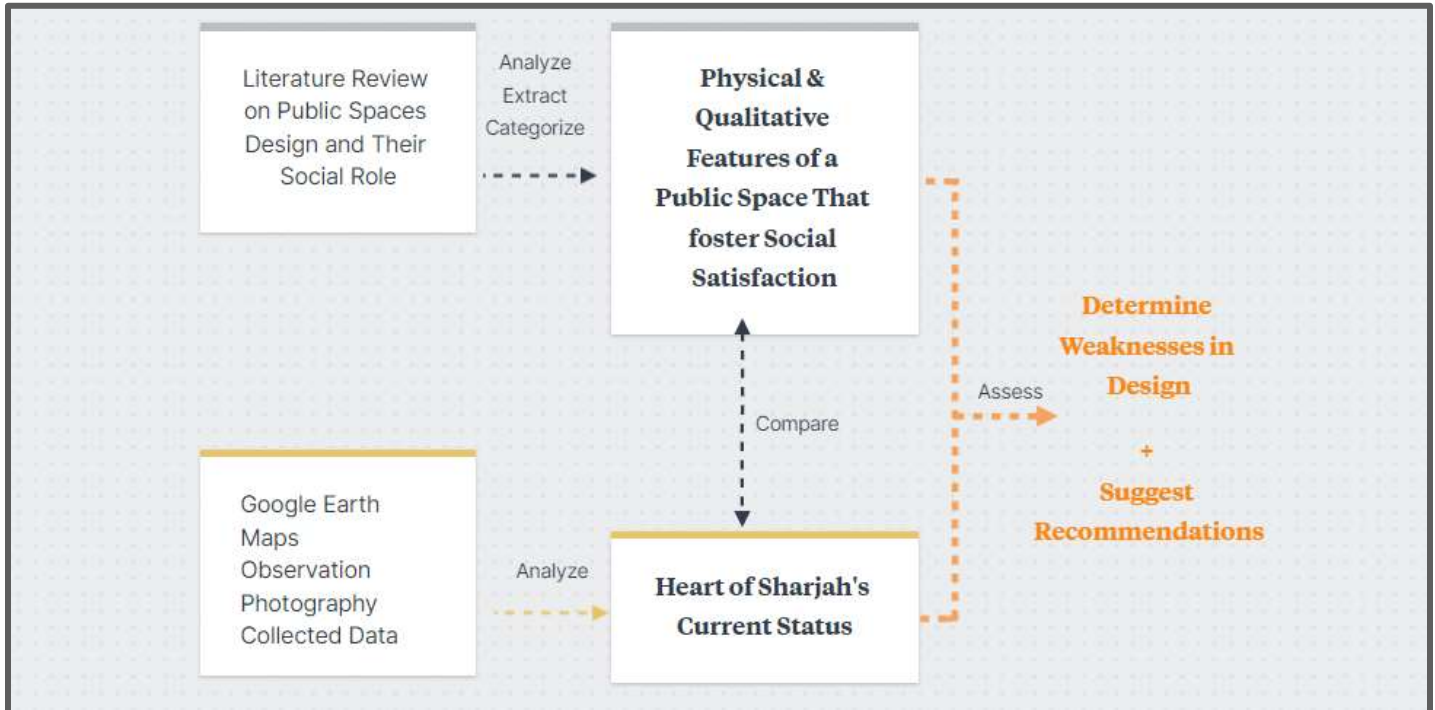


Figure 2: A flowchart showcasing the different stages in the paper methodology. Source: the author.

Using the features extracted from the literature review as evaluation criteria, a design assessment was conducted. A three-degree scale (Highly achieved - Partially achieved - Hardly achieved) was used to evaluate the degree of implementation for each feature. This evaluation allowed for the identification of areas where improvements were needed. Based on the identified weaknesses, a set of recommendations was formulated to enhance the urban space and address the shortcomings identified in the evaluation. These recommendations aimed to improve user satisfaction and promote social engagement in Sharjah's old town.

III. CASE STUDY – HEART OF SHARJAH

Sharjah, the third largest emirate in the UAE, experienced significant development during the second half of the 20th century. The capital city of Sharjah, similar to most Gulf cities, has transformed from a small fishing town into a major city that hosts various international events. Its population has witnessed large growth, starting from approximately 160,000 in 1980 to 1.8 million according to the Sharjah Census 2022 report. This includes around 208,000 Emirati citizens and 1.6 million expats (UAE Population, 2023). The city has been branding

itself as the “Cultural capital” of the UAE. It has been named the “Cultural Capital of the Arab World” by UNESCO in 1998, the “Capital of Islamic Culture” in 2014 by the Organization of Islamic Cooperation, and the “Capital of Arab Press 2016” by the International Government Communication Forum. Additionally, Sharjah is home to numerous museums, including a quarter of all the UAE's museums, and hosts popular events such as the Sharjah Biennial and Sharjah International Book Fair. Sharjah has tourist attractions including modern sites such as Al Qasba and Al Majaz Waterfront and historical areas, namely the Heart of Sharjah (Sharjah City, 2023). As a result of the city's globalization and modernization which started after the oil discovery in the 1960s, and the Formation of the UAE Federation in 1971, wide vehicle road networks were constructed, and old courtyard housing was replaced with modern buildings and parking lots. All of the above led to demolishing the remainder of the traditional fishing town, and therefore losing most of Sharjah's urban heritage buildings that once gave the city its unique urban identity (Radoine, 2013).

The site where Sharjah is now located was first documented in the 1800s when it was a small fishing town near the sea that lived off sea trade, fishing, and small craftsmanship. The old urban layout used to include a courtyard, traditional houses with courtyards, a linear Souq “Pazaar”, a seaport, a mosque, a defensive wall, a fort, and a central square called “Saha”. The “Saha” is common in most Islamic cities and is usually central and accessible by narrow allies (Sikka) and is usually used for many social purposes, such as celebrations or marriage gatherings, and as a trading place between locals and shipping traders (Ezzeddine et al., 2018). Urban modernization jeopardized all of these urban forms and their associated functions, for instance, the economic role of the linear markets (Pazars) and the port had diminished, and the social dynamics of the community were threatened after most “Saha”s were transformed to parking lots or modern buildings.

The introduction of a vehicle road grid has reduced pedestrian accessibility and social interactions between different social groups as priority was given to the roads at the expense of the social and community fabric (Radoine, 2013). Furthermore, the social connections were further weakened in the new suburbs where locals have moved, as they are dominated by the automobile streets without proper sidewalks or inviting public spaces that resemble the old “Saha”s. Naturally, locals nowadays state that “nobody knows his neighbor anymore” (MacLean, 2017). These transitions also established a concept of “Gated communities” and a sense of segregation between locals in their private suburbs, and expats of different economic statuses remaining either in the dilapidated old town or in the modern skyscrapers nearby (Radoine, 2013).

Fortunately, by the 90's people started to recognize the importance of their cultural and urban identity and miss their heritage. This has

reversed the tendency from modernization towards restoration. In 1996 Sheikh Sultan bin Muhammad Al-Qasimi Stopped the demolition of Sharjah's Fort personally, thus initiating the restoration and regeneration process of the old town to reflect the theme of gulf vernacular architecture of the town in the 1950s before the urban modernization practices. For instance, 75% of the structures were turned into the 1950s-era architectural style using the traditional methods of construction, based on the use of mangrove roofs, and bamboo poles bonded by clay. which act as insulation from heat, and natural stones with clay (Sabah & Al-Zubaidi, 2007). The restoration process in the heart of Sharjah involved the documentation and restoration of historic buildings, demarcation of the Heritage Area, and the reconstruction of selected lost structures, including Al Hisn Fort and the city wall. There are 85 listed buildings in the Muriejah and Shuweihin areas that were constructed before the 1970s, 44 are unrecorded and 37 have been restored since 1990 (Kubat et al., 2014). The area known today as the "Heart of Sharjah" consists of the remaining original buildings and the reconstructed ones that try to mimic or reinterpret the layout of the original fishing town (Radoine, 2013).

This research study aims to explore the regenerated/restored urban center, also known as the "Heart of Sharjah", and focus specifically on its public spaces and their potential to restore social engagement and interactions that can substitute the lost traditional forms of social interactions, which the place once possessed.

Mapping the public realm in "Heart of Sharjah"

Following the boundaries defined in the interactive maps of "Heart of Sharjah" on their official governmental website, and using up-to-date Google Earth imagery and observation, a land-use analysis is carried out for the "Heart of Sharjah" area. The main urban typologies identified in this analysis are:

- 1) Newer non-traditional residential buildings that were built around the 1970s in place of the demolished traditional buildings. These can be either medium to high-rise residential buildings and are built in a relatively modern style. They can host offices and shops and are usually in bad structural shape considering their construction date.
- 2) Traditional buildings that are preserved or regenerated, mostly re-functioned traditional houses and linear markets "Pazaars".
- 3) Newer buildings that are built in an architectural style that imitates or re-interpret Islamic traditional styles.
- 4) Parking spaces distributed around most functional buildings or in empty lots.
- 5) Public green patches with a variety of plants such as Ghaf trees, Indian rosewood trees, Sidr trees, and date palm trees.

6) Empty unpaved lots that are designated for future projects, mostly used as parking spaces.

7) Public spaces such as squares that usually belong to the surrounding buildings but are also publicly accessible. The public realm identification in this context applies to the second and last urban typology, therefore, they will be assessed to explore their design potential.

Evaluating the Public Realm in “Heart of Sharjah”

As mentioned previously, for a public space to succeed in its social role, it can use certain qualitative and physical features. In the following, these features will be considered as evaluation criteria to which the public realm of “Heart of Sharjah” will be subjected. A scale of three degrees (Highly achieved - Partially achieved – Hardly achieved) will be used. As a result, points of weakness will be



Figure 3: An aerial map showcasing the different urban typographies in the “Heart of Sharjah”. Source: Google Earth, edited by the author.

identified, and based on them a set of improvement recommendations can be suggested to further enhance the urban space.

1) Physical Features Evaluation

Table 3: Assessment of the application of the physical features of well-designed public spaces in the public areas of Heart of Sharjah

The feature	Observations	Assessment
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1	Comfortable seating	A few seating elements can be spotted in Souq Al Shanasiye, Souq Al Arsa, and calligraphy square.  Yet, most squares such as the Sharjah Art Foundation, and The Sharjah Art Museum's outer squares have no seating. 	Hardly Achieved
2	Shade	Traditional Souqs and the backyards of mosques are all covered using traditional materials with fans. Yet, most public realm is open. 	Hardly Achieved
3	Greenery	The area contains some green patches such as the Urban Garden and the Palm tree patches, and some green elements can be spotted in Souq Al Shanasiye.  Yet, most squares such as the art have no greenery.	Partially Achieved
4	Water features	There are no water features in the area, but it's bordered by the creek and cornice. 	Hardly Achieved
5	Adequate Lighting	All spaces are adequately lit throughout the day. Some of the lighting installations use solar power such as the ones in Souq Al Shanasiye.	Highly Achieved

6	Landmarks	During events such as the Sharjah Biennial, all the public spaces are being repurposed to host distinguishable art exhibitions, workshops, or any art-related activities such as dance shows and film displays. 	Highly Achieved
7	Play Areas	There are no playgrounds in the area.	Hardly Achieved
8	Food options & small economic activities	The area has few food options such as four cafeterias and two restaurants. However, there are no food booths and trucks within. 	Partially Achieved

2) Qualitative Features Evaluation

2.1. Accessibility

To assess the location's accessibility adequately, there is a need to look into all four mediums, that is, private vehicles, bikes, and public transportation.

2.1.1 Accessibility for Private Vehicles:

- The presence of asphalt roads that surround and go through the overall urban site indicates that there is a planned vehicle network within the site but it may not be fully established or completed which harms the overall connectivity and accessibility of the area (Figure 4).
- Connectivity to public spaces through asphalt roads is sufficient. However, the existence of some roads leading nowhere and vanishing raises concerns about the effectiveness of the road network in providing efficient connectivity.
- The distribution of parking across the site is a positive aspect of the vehicle infrastructure. Most parking is free except the ones on Cornice Road and the one in the middle is paid. All have parking for the disabled.
- There are unpaved spaces designated for future projects, which raises questions about the timeline and planning for these projects,



Figure 4: An aerial map highlighting the vehicle road network, the parking lots, and their connectivity to the public spaces in “Heart of Sharjah. Source: (Google Earth, edited by the author).

and harms the overall functionality and aesthetics of the urban site. Additionally, using them as unofficial parking lots raises concerns about safety issues and proper management.

2.1.2 Accessibility for Bikes:

Driving bikes is not very common in Sharjah generally considering the hot climate and the inefficient cycling infrastructure in the area. Heart of Sharjah is an example of this as there are no cycling roads or parking through the area. However, large public spaces and squares can be used as a space for cycling.

2.1.3 Accessibility for Pedestrians:

- Since public spaces such as squares and souqs are primarily intended for pedestrians, they can be reached through pedestrian walkways from parking lots.

- As seen previously vehicle roads are plenty and they are adjoined by sidewalks which allow pedestrians to walk safely and ensure separation between pedestrians and vehicular traffic.

- Pedestrian crossings and signals including audible signals and tactile indicators, are provided along the main cornice road and next to Souq Shanasiye, thus enhancing pedestrian mobility and assisting individuals with visual or hearing impairments in navigating the area.

- Some public areas such as traditional Souqs are preserved for pedestrians, provided with roofs to prevent harsh suns, and provided with fans making them safer and more attractive to users.

- Unpaved areas designated for future projects are difficult to walk through and sometimes necessary to cross to move from one public space to another.

2.1.4 Accessibility through public transportation:

Although public transport services in Sharjah have numerous disadvantages, the public spaces in the Heart of Sharjah are accessible through public transportation, namely bus routes and taxi services. Four bus stops are located on or close to the site borders with less than 10 minutes of walking from any of these stops and public space in the Heart of Sharjah. Furthermore, a sightseeing bus tour goes across the site through its middle.

2.2 Adaptability

The public spaces in Heart of Sharjah adapt to changing needs and user requirements throughout the day or across seasons. This can be attributed to their flexible and multi-functional layout which allows for various setups to accommodate different activities and events. Open areas without fixed structures or obstructions provide versatility in arranging temporary installations, markets, performances, or community gatherings based on changing needs. Thus, the lack of fixed seating options is a plus in this context. An example of this is Art Square, which belongs to the Sharjah Art Foundation but is publicly accessible. It has been adjusted to present artworks, open-air exhibitions, and host performances and activities, especially during the Sharjah Biennale. The same goes for the Falaj Art Center square and the event area near the wall (Figure 5). However, Souq areas such as Souq Al Shanasiye and Souq Al Arsa are the least adaptable considering their fixed layout.

2.3 Public Participation and Inclusivity



Figure 5: The adaptable public spaces in Heart of Sharjah and examples of their different uses.

The site's reconstruction and rehabilitation reflected community needs and aspirations on the city level. It also reflected the local identity and fostered a sense of ownership and pride in locals. However, the urban planning of Heart of Sharjah was carried out in a top-to-bottom manner rather than through collaborative processes that involved input from community members. The design does not integrate foreign cultural influences nor represent non-Emirati resident groups. However, management-wise, events held in the area celebrate all identities of the community and provide opportunities for cultural participation and engagement. Maintenance participation, on the other hand, is readily accessible through volunteering portals where any resident can apply.

2.4 Environmental Sustainability

- Environmental sustainability as shown through integrating green infrastructure into public realms which includes trees, plants, and landscaped areas was assessed in the previous paragraph as a "Physical feature".
- A second environmental practice is water management. There is no evidence of using rainwater harvesting techniques. However, water-efficient irrigation systems are used, as well as water-sensitive design strategies to minimize water consumption and runoff in some public restrooms in the area.
- Another environmental practice is using renewable energy, which is very limited in the area since only a few public space lights utilize solar energy.
- Waste management is used widely throughout the whole city as recycling bins are planted everywhere.

2.5. Safety

The area in general has adequate lighting at night that helps deter potential harmful activities.

Although wayfinding signages are placed across the area, the risk of getting lost still stands due to the confusing uncompleted road/pathways network.

- Most public spaces lack social engagement and appear empty in most day hours especially when there are no pre-designated events.
- There are security members and surveillance in most public areas especially squares that belong to public buildings.

2.6. Sense of Place

This uniqueness is further strengthened by marketing the area as a major artistic and cultural hub in the city where most museums and art centers are situated and a wide range of cultural activities and events take place throughout the year where people can form memories, some examples of this are Sharjah Biennial, Sharjah Heritage Days, Sharjah Ramadan Festival, etc. Nevertheless, walkability is still interrupted by the unfinished roads, the ongoing

construction works, and the weak connectivity between different destinations, but it can be still practiced within traditional markets “Souqs”. In addition, the place’s memory was threatened by the demolition acts. The area’s link to the sea was also weakened by the modernization acts, namely, the construction of the Cornice vehicle road which separated the urban space from its sea view which was crucial in shaping its identity as a historic coastal fishing town.

Table 4: Assessment of the application of the qualitative features of well-designed public spaces in the public areas of Heart of Sharjah.			
	The feature	Observations	Assessment
1	Accessibility	Accessibility for private Vehicles: Highly achieved. Accessibility for bikes: Hardly achieved. Accessibility for pedestrians: Partially achieved. Accessibility through public transportation: Partially achieved.	Partially Achieved
2	Adaptability	- Most public spaces are adaptable such as Art Square and Falaj Art Center Square. - Public spaces with fixed layouts like Souqs are not adaptable.	Highly Achieved
3	Public Participation & Inclusivity	- The concept of urban regeneration is based on community needs. - Top-to-bottom planning decisions. - Volunteering opportunities in event organization and area maintenance.	Partially Achieved
4	Environmental Sustainability	- Smart irrigation systems. - Water-sensitive installments in the restrooms.	Partially Achieved
5	Safety	- Adequate lighting and directory signages. - Few confusing roads. - Deserted after daytime and without pre-announced activities. - Security personnel working all day.	Highly Achieved

		 The public spaces are deserted after working hours and without planned events.	
6	Sense of Place	- Unique traditional architecture. - Cultural events - Weak walkability and link to the sea 	Partially Achieved

I. CONCLUSION AND DISCUSSION

The assessment of public spaces in the Heart of Sharjah reveals weaknesses and strengths, which identify possible areas for improvement. By assessing the physical features of these spaces, it was found that most of them are lacking in urban furniture such as seatings, roofing, amenities, and some economic activities. Incorporating greenery is also very limited to single patches here and there which in turn reduced the environmental sustainability scoring. Water surfaces are scarce as well but the area could compensate by re-establishing its connection to the nearby sea as its defining border and a significant part of its historic evolutions, memory, and sense of place. This can further foster environmental sustainability which in turn also requires expanding green infrastructure and improving improvements renewable energy usage and water management.

Regarding movement patterns, vehicle accessibility is achieved well, with an adequate planned network of asphalt roads and sufficient parking options, but this is at the expense of bike lanes that are non-existent and pedestrian walkways that are limited to some markets, squares, and sidewalks.

The public spaces show adaptability with a flexible layout, which can be useful for hosting different social, cultural, and artistic events throughout the years, thus increasing public engagement and allowing them to form memories that contribute to their sense of that

place. However, fixed areas like traditional Souqs show limited adaptability. Other forms of inclusivity and public participation are partially achieved since the area reflected community needs and vision but lacked collaborative approaches and consulted planning. Safety is highly achieved with adequate lighting and continuous surveillance and security patrols, but the confusing road network poses risks of people losing their way, and the unfinished road construction works pose risks to users' safety and inconvenience to families with baby carriages and wheelchair users. Landmarks and artwork distribution is relative across the areas with some corners being more attractive than others and also offering better seating and shade options. Overall, there is a need to improve the public spaces in the heart of Sharjah with some needs being more urgent than others such as pedestrian accessibility, inclusivity, and environmental sustainability. These changes can promote social engagement and community interaction, help the urban spaces reach their full potential, and help the city as a whole, meet sustainable development goals.

AUTHOR'S NOTE

This work is part of the author's graduate studies and has been conducted as a component of the thesis titled "Assessing Urban Heritage Management Practices in the UAE: The Case Studies of Heart of Sharjah and Khor Dubai". The research presented herein is conducted in fulfillment of the requirements for the author's master's degree at Ankara Yildirim Beyazit University.

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