

March 2018

MEASURING PUBLIC SPACES IDENTITY IN JEDDAH CORNICHE

Walaa El- Sayed Yoseph

Alexandria University, Faculty of Fine Art, Architecture Department, wwloyal@yahoo.com

Follow this and additional works at: <https://digitalcommons.bau.edu.lb/apj>



Part of the [Architecture Commons](#), [Arts and Humanities Commons](#), [Education Commons](#), and the [Engineering Commons](#)

Keywords: Jeddah Corniche, Measuring Identity, Urban Qualities, Urban Literature, Urban Evaluating Process.

Recommended Citation

El- Sayed Yoseph, Walaa (2018) "MEASURING PUBLIC SPACES IDENTITY IN JEDDAH CORNICHE," *Architecture and Planning Journal (APJ)*: Vol. 24 : Iss. 1 , Article 7.
Available at: <https://digitalcommons.bau.edu.lb/apj/vol24/iss1/7>

MEASURING PUBLIC SPACES IDENTITY IN JEDDAH CORNICHE

Abstract

Jeddah; as an Arabian city; has a unique inherited social image in its public spaces. Over long generations, Arabs used to head to the deserted areas, away from inhabited zones or along the coastal lines to spend a social time with their families and friends, practicing some outdoor recreational activities, as hunting, barbecuing, or picnicking. This inherited social image moved into open public spaces inside Arabian cities. Architecturally, it is required a delicate design that reflects this unique character and responds to its requirements. Since the 1970s, Jeddah Corniche development is according to universal style, regardless this special character of public recreational activities. It depended on beautification more than achieving functional areas that absorb the inherited Arabian behavior, which affects negatively the identity in design. The research attempted to measure the identity of the public space in Jeddah Corniche according to its traditional image of recreational activities. The methodology depended on avoiding subjective evaluation by measuring the identity of the urban elements according to the urban qualities that help in fulfilling the community unique requirement, also examining them according to the urban literature that serves a specific behavior. Results and recommendations serve studies of development processes to achieve identity in design.

Keywords

Jeddah Corniche, Measuring Identity, Urban Qualities, Urban Literature, Urban Evaluating Process.

MEASURING PUBLIC SPACES IDENTITY IN JEDDAH CORNICHE

W. S. YOSEPH¹

ABSTRACT

Jeddah; as an Arabian city; has a unique inherited social image in its public spaces. Over long generations, Arabs used to head to the deserted areas, away from inhabited zones or along the coastal lines to spend a social time with their families and friends, practicing some outdoor recreational activities, as hunting, barbecuing, or picnicking. This inherited social image moved into open public spaces inside Arabian cities. Architecturally, it is required a delicate design that reflects this unique character and responds to its requirements. Since the 1970s, Jeddah Corniche development is according to universal style, regardless this special character of public recreational activities. It depended on beautification more than achieving functional areas that absorb the inherited Arabian behavior, which affects negatively the identity in design. The research attempted to measure the identity of the public space in Jeddah Corniche according to its traditional image of recreational activities. The methodology depended on avoiding subjective evaluation by measuring the identity of the urban elements according to the urban qualities that help in fulfilling the community unique requirement, also examining them according to the urban literature that serves a specific behavior. Results and recommendations serve studies of development processes to achieve identity in design.

KEYWORDS

Jeddah Corniche, Measuring Identity, Urban Qualities, Urban Literature, Urban Evaluating Process.

1. INTRODUCTION

Public spaces; such as; parks, trails, squares, and plazas are the art of creating an urban life, they are considered as a reflection of community's usage, identity, and character (Violich, 1985). Jeddah, as an Arabian City, has a unique social image for its recreational activities, it is required being considered in public's spaces' design (Pinilla, 2010). Creating identity in public space is a very critical issue; especially; in a deep-rooted community, whereas designing characters and traits requires applying certain inherited spirit in light of the contemporary image.

1.1 Objective and Methodology

The research attempted to measure how far public spaces of Jeddah Corniche reflect the spirit of practicing the inherited recreational activities, to draw an image of the required characteristics for achieving a unique identity in design. Identity is hard to be measured objectively; communities may agree on a shape characterizes it, but its feedback varies for one to another (Tepavcevic, Stojakovic, 2012). To avoid subjectivity in such sensitive measurement, the research methodology depended on a hypothesized relationship between the identity created in public spaces and fulfilling its social functional requirements (Silva, 2001). The research examined the micro-zones of Jeddah Corniche according to two tools, the urban key qualities, and the urban literature. The assessment process based on the socio-historical aspect of users'

¹ Walaa El- Sayed Yoseph
Alexandria University, Faculty of Fine Art, Architecture Department
wwloyal@yahoo.com

social behavior publicly, and divided into qualitative and quantitative approaches, to examine the spatial system according to the defined theories of urban qualities and evaluate it according to the tangible and intangible literature criteria.

1.2 Related Studies

Some studies have been carried out in this area such as;

A. "Outdoor recreation and leisure patterns in Saudi Arabia, and their roles in determining open space planning and design: The Case of Jeddah's Corniche" (Hanimadi, 1993); It analyzed Jeddah Corniche as recreational public space according to the type of usage. It concluded the weaknesses and strengths points in distributing usages.

B. "Public space and social identity" (Silva, 2001); a study analyzed the social identity of Poblenu Neighborhood by connecting the urban symbolic spaces to some factors such as history, social values, and lifestyle. It concluded a process of measuring the sense of social identity related to the symbolic urban spaces of the neighborhood.

C. "Embodying the City: Identity and Use in Urban Public Space" (Dougherty, 2006); a study discussed urban public spaces' context that embodied the cities to be vibrant places. It addressed methods of reflecting the vitality in cities by embracing community's culture. It concluded some points about the relationship of culture and spatial system.

D. "Identifying and Measuring Urban Design Qualities Related to Walkability" (Ewing, Handy, Brownson, Clemente, & Winston, 2006); a study addressed some urban qualities to examine public parks and plazas. It connected the qualities to the atmosphere of walkability in open spaces; it concluded some the weaknesses in designing streets and sidewalks.

E. "Cultural Identity and Spatial Segregation in the Public Spaces of Lisbon, Criteria for the Evaluation of Public Spaces" (Silva, others, 2001); a study analyzed selected number public spaces of historical and contemporary Lisbon. It stated six criteria to evaluate public spaces in town planning according to cultural identity and spatial segregation.

2. THEORETICAL BASE FOR MEASURING PROCESS

Designing public spaces as an urban life is similar to introduce someone to unknown (Pinilla, 2010), it requires settling some functional features that achieve highly social interaction between human and space. Notably, the theoretical studies in this field are based on the urbanity and literary approaches, where the social behavior in the spatial system is a part of its characteristics. Therefore, the evaluating process based on the urban qualities theories and urban literature criteria.

2.1 The Key Qualities of Urban Public Spaces

The mental or symbolic image of an urban space is reflected by the sincere applying of human activities in the spatial system, which goes according to the following four qualities.

- Sociability: it is a wide term that varies from city to another (Duarte, Beirão, 2011), related to the communities' attitude. It could be defined as a stage in public life that serve to absorb community's needs, requirements and believes, as an extension of community behavior. Sociability recognized and valued in public spaces by achieving welcoming concepts; as available space for sitting, walkable paths, clear tangible or intangible boundaries of the usable zone. It aims to create coexist atmosphere in public space (Beirão, Duarte, & Stouffs, 2011).

- Intimate scale: it is the adjustment of urban context according to the social behavior in the open space (Ewing, Handy, 2009), formed by community type of culture. It is required some common factors for achieving it in public space; as suitable spiritual elements, friendly usable zones, and of course green elements that delight eyes and soothe the souls. Those factors are required to follow and apply a certain social activity in a community (Duarte, Beirão, 2011).

- Amenities: they aren't just servicers but desirable elements increase occupancy (Ewing, Handy, 2009), as mental hospitality in a space, considered as signs of health, welfare, and prosperity elements in a space. Their design required to be as chains of services along users' movement, to extend good coexist. They are many types; furniture, café and food's vendors, electric services and energy supply, information networks, water supplies and sanitation, environmental services, guiding elements and any recuperation means (Duarte, Beirão, 2011).

- Accessibility: it is the approaches, entrances or accesses that linking open spaces to the surrounding (Hickey, 2014). It is not about easy accesses, but attractive linkages both visually (by being comprehended or recognize from a distance) or physically (by the continuity of approaches' elements). Accessibility may be longitudinally along the zone or laterally across it. Good accessibility in a space related to its edges' design, as the borders' elements facilitate the sense of mental accessibility to the urban public space (Beirão, Duarte, & Stouffs, 2011).

2.2 The Literature of Public Spaces

Mentioned qualities are influenced by perceptual dimensions; such as culture, history, beliefs, and values, on one hand, globalization, and modern life requirement on the other hand. The perceptual dimensions are a part of social leisure and human activities in public life (Pinilla, 2010), where people react and behave in public space according to their inherited beliefs and modern requirement. Measuring perceptual dimensions in a space has two main difficulties. First; it is a very subjective matter; inherited trends in design follow designers or authorities' own perspective. Second; the sense of comfort, safety, or level of interest in public space is intangible; the perceptual dimensions may help in attracting individuals, but they don't assess how individuals interact or react in on space. Urban literature has some criteria that may help in measuring perceptual dimensions; those criteria characterize tangible and intangible dimensions in design (Tepavcevic, Stojakovic, 2012). The study stated six criteria for measuring process; as the closest to the social formation of Jeddah Community, such as:

A. Image-ability; it is the recognizable or memorable image of the place (Dougherty, 2006). It may back to specific physical elements or certain arrangements according to culture, which may capture attention, evoke feelings, or create a lasting impression of the space.

B. Legibility; it is the ease of comprehending the spatial system; it enhances orientation in a space willingly (Beirão, Duarte, & Stouffs, 2011), by dealing with elements and shapes that express the culture or social image intellectually in the space (Tepavcevic, Stojakovic, 2012).

C. Visual Enclosure: it is a degree of defining public spaces' borders visually or physically (Duarte, Beirão, 2011); as buildings' line, trees, or any vertical elements border the space. Defining clear border plays important roles in sensing the place comfortably and interestingly.

D. Human Scale: it is the suitable size, texture, or articulation of elements that match the proportions of humans' usages or activities in the space (Pinilla, 2010).

E. Simplicity or Complexity: it is the amount of visual richness in spaces (Pinilla, 2010), depends on varieties of expectations related to inherited aesthetic, or values in communities. It is determined by buildings style, ornamentations, landscape elements, or any visual features.

F. Tidiness; it is the sense of visual order (Tepavcevic, Stojakovic, 2012), its degree is influenced by consistency or complementarity in a scale. It is sensed in spaces by the character of orderly arrangement, as buildings' array, the street furniture chain, or paving pattern.

3. MEASURING PROCESS FOR THE CORNICHE SPATIAL SYSTEM

Users recognize public space and sense its spirit by involving its zones and dealing with its features (Ewing, Handy, 2009). For users, public space is not just an open area to attend; it should meet their needs and absorb their activities flexibly, and adapt their social usages intimately. Based upon; measuring process **carried** out through three approaches. Frist is the socio-historical aspect of Jeddah Corniche as a reference for the inherited social image of the recreational activities. Second and third are the qualitative and quantitative assessments for the repetitive spatial system along the Corniche according to the defined theories of the urban qualities and examine it according to tangible and intangible criteria of urban literature.

3.1 A Socio-Historical Approach

Jeddah Corniche extended along the western coastline of the city (as shown as Fig.1). In the 1970's, it was designed as coastal promenade routes for traffic and pedestrians, for pleasure while driving or hiking (Daghistani, 1993), following Alexandria Corniche (Hanimadi, 1993). The usres' usages forced the municipality to reconsider its concept to be a series of green open spaces for passive recreation activities as major public spaces in the city (as shown as Fig. 2).

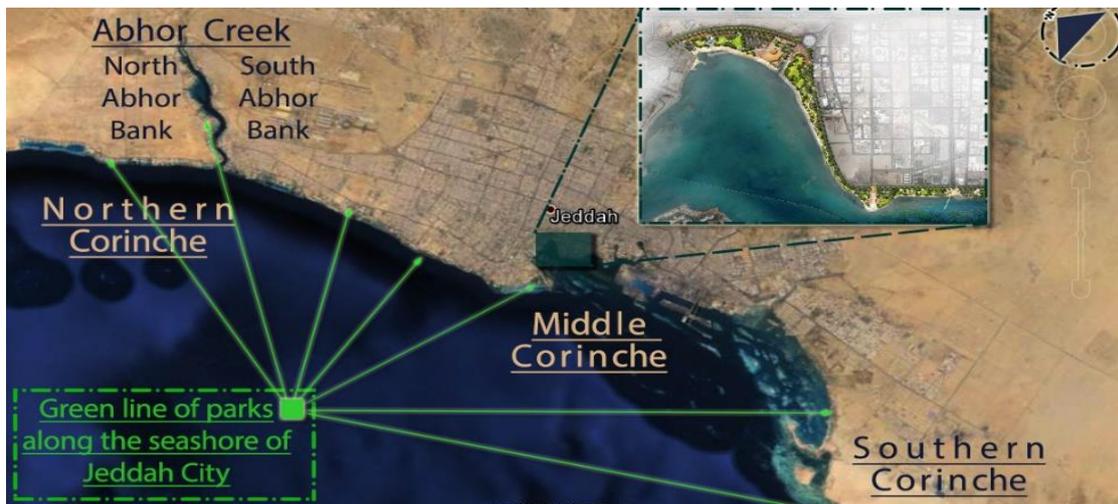


Fig. 1 Jeddah Corniche is about 110 Km, it appears as a thin green line, formed as sequential recreation parks for public use. It is divided into three sections, the Northern; included a northern and southern bank of Abhor Creek; the Middle and the Southern Corniche. Reference: Google Earth, retrieved on June 2016, edited by the author.

The behavior settings (Hickey, 2014); as the environment, whether, time, activities and user are repetitive along the Corniche. The attracted natural environment is the large repetitive open spaces along the Corniche. The weather is an arid hot climate, as the city is situated in the tropical desert scrub biome, at 21°42' N, 39°10'E. The temperature in winter varies from 29°C (82°F) in the afternoon to 24°C (59°F) in the evening. Summer temperature is extremely hot, often breaking the 43°C (109°F) in the afternoon and dropping to 30 °C (86 °F) in the evening. Therefore, the traditionally preferable recreational time for Arab Families is after Asr Prayer, within an hour or more, to nearly midnight. The passive recreation activity is predominant, mostly picnicking (as shown as Fig. 3, 4), besides some rare activities; mostly for men; as barbecuing, swimming, fishing, water skiing or snorkeling. The users are groups of families or some bachelors sitting in remoteness atmosphere along the Corniche. Therefore, the behavior settings are almost repetitive unified and clear one.



website retrieved on June 2016, (edited).



Fig. 3 Walkways are used for picnicking. Inhabitants use spaces according to their inherited habits regardless the space function. Reference: <https://www.jeddah.gov.sa/>, official website, retrieved on June 2016.

This repetitive behavior setting along Jeddah Corniche is easily recognized by visiting the Corniche for the first time, as a repetitive Arabian social recreational activity in public spaces. The three sectors of Corniche share the same image of a deep-rooted way in gathering publicly (as shown as Fig. 1), regardless some differences in urban spaces details or geographical traits. Along the three sectors, the first impression is an obvious mental struggle between the need for privacy and the need for practicing the sacred inherited recreation habits. Women have limited chance to reach the seawater, according to their need for an intensive privacy. Children are provided with a little playing area on the sand, where no child was observed alone on sites, they always accompany their parents or guardians. Some families achieve privacy by their cars, where they drive their car to the nearest point of the seashore, unload picnic food and equipment, sit very close to their cars, women shelter by the opened doors, or may group facing each other in patterns reflects the importance of privacy. Mat or rug and sitting billow are common featured characterized this atmosphere. Bachelors are observed trying to avoid being next to families; whereas families are annoyed by their presence. The inherited behavior as public ethics and social leisure formed a pattern of common leisure image along the Corniche, mostly is passive recreation one as chatting, playing cards, using cellar phone; especially for women, while men have more free space, but it is limited by the absence of privacy. The clear mental feedback is people are attracted to any open area for gathering more than enjoying the sea view (as shown as Fig. 4).



Fig. 4 Arabian Families are picnicking along the costal line, regardless the narrow sidewalk; and crowdedness. Reference: <https://www.jeddah.gov.sa/>, official website, retrieved on June 2016.

3.2 Qualitative Approach.

Universally, communities are worried about shrinking public realm in cities (Duarte, Beirão, 2011), in meanwhile, Jeddah Corniche is witnessing extremely traditional preserving for their social habits publicly. The social values and habits are very sacred and could be recognized easily in public space. Unlike the common status universally; crowdedness doesn't proof the success of zones design or applying inhabitants' demands, where Arabs like to use any open area for practicing their habits. Therefore, the qualitative measurement focused on the competent of spaces in achieving the sociability and intimate scale that examined by urban literature according to the socio-historical aspect.

3.2.1 Measuring sociability

Sociability is examined according to the following points drifted from its aforementioned definition:

A. Usually, families persist in practicing their inherited habits and adapting any available open spaces for that. Observing their activities along the Corniche shows that spaces aren't extensions for their behavior; spaces are designed following the universal style functions regardless the inherited use of Arab families (as shown as Fig. 3-7).

B. The welcoming spatial system in micro-zones that fit the usage is missing; where no element fit the Arabian picnicking type as space shape or area. In addition, there is no clear borders define zones for gathering even mentally (as shown as Fig. 8-9). Accordingly, the visual interaction with the surrounding is disturbed by a conflict between usage and the space function, shape, and size (as shown as Fig. 3- 9).

C. The urban literature that could be recognized through sociability is as the following:



Fig. 5 Arabian females are sitting on any available space, although it is uncomfortable.

Reference: Photographed by the author May 2015

- Social image-ability is not well recognizable; sites miss elements that fit the type of inherited usage. Families create their own micro-zones that conflict with the whole image of well-constructed public space that is created according to universal styles.
- Social legibility is difficult to be realized due to the undefined spatial system of micro-zones for sitting or walking, whether it is due to design (as shown as Fig. 6-9) or usage (as shown as Fig. 5-7). Accordingly, the degree of the enclosure is questionable; the open spaces are an extended plane area without visual or physical defined borders (as shown as Fig. 5, 10).
- Following the universal style causes clear Simplicity (as shown as Fig. 3-10). No features, elements, or orders refer to the inherited aesthetic or values, which affect negatively on the spaces' visual richness.
- Social tidiness represented in well-constructed spaces forms a good welcoming image (as shown as Fig. 10). Notably, the sites' order has no clear arrangement refer to the city heritage or citizens' behavior setting in use. (as shown as Fig. 10)



Fig. 6 Different timing shoots for a kids' area illustrate using of shaded zones, regardless its original function.

Reference: Photographed by the author April 2015.



Fig. 7 Families are sitting by the shoreline in the walkways, turning their backs to the sea. Reference: Photographed by the author March 2015



Fig. 8 The common image of strong popular recreational habit along the corniche. Reference: Photographed by the author May 2015



Fig. 9 A family enjoy sitting away from light, turning back to the sculpture element. Reference: Photographed by the author March 2015 May 2015



Fig. 10 Different shots show well-constructed spaces, with no clear order refer to the city heritage. Reference: <https://www.jeddah.gov.sa/>, official website, retrieved on June 2016.

3.2.2 Measuring Intimate Scale:

Intimate Scale in open spaces is related to usages; in this case, families or groups need a scale combines openness and privacy to suit their culture. Evaluating sociability showed a clear losing in defining usage in micro-zones, accordingly the scale that can achieve intimate feeling is hard to be recognized. The intimate scale is examined according to the following points drifted from its aforementioned definition:

- The relationship between context adjustment and social scale is



characterized by linearity, which causes limited variety to adjust urban context. The long green line along the Corniche vary in width limitedly (as shown as Fig. 4, 11), some areas are wider; especially in front of mosques, but also characterized by open extended green areas. The narrow and wide areas have no common order repeated along with the social behavior (as shown as Fig. 11).

- B. Spaces attached to iconic buildings are favorable for city's inhabitants; especially around mosques. These wider spaces are visually and physically interrupting the continuity and linearity of the green open spaces. They are also characterized by undefined openness (as shown as Fig. 12), some zones have feelings with loose scale like El Anany Mosque, others have feelings with cramped scale like the Island Mosque, this causes a confusing and losing sense of belonging to an urban context.
- C. The spiritual sense of Public spaces needs a certain scale of openness or enclosure; related to the concept of use or inherited values. The followed universal style in design causes loss of sensation with scale or affiliation to zones along the Corniche. Sculptures or artworks along the Corniche don't refer to a certain value or aesthetics (as shown as Fig. 13), so the intimate level or attraction range around them is missing (as shown as Fig. 9, 10, 14).

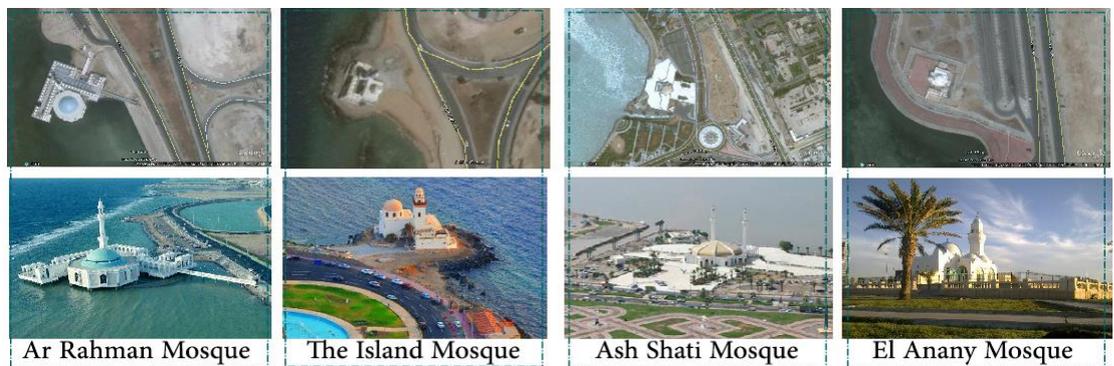


Fig. 12 Four different mosques on the Corniche with undefined surrounding urban context. Reference: Google Earth, <https://www.jeddah.gov.sa/>, retrieved on June 2016 (edited).

- D. Urban literature of intimate scale could be recognized through the following:
 - Image-ability or legibility of intimate scale has no explicit scale expresses inherited recreation habits, where the adjustment of urban context doesn't relate to a specific sense or a value. It characterized by undefined openness (as shown as Fig. 14).
 - According to spaces' long linearity; the visual enclosure is not determined, it is affected negatively by undefined urban context along the narrow or wider area (as shown as Fig. 14).



Fig. 13 Artworks on the Corniche show no spiritual feedback related to socio-history aspects. Reference: <https://www.jeddah.gov.sa/>, official website, retrieved on June 2016.



Fig. 14 Different footages show some sites share the sense of unlimited openness. Reference: <https://www.jeddah.gov.sa/>, official website, retrieved on June 2016.

- Accordingly, the sense of human scale or intimate level is not defined in the urban context. It may not disturb Arab families, where they are attracted to the large open spaces to spend their social time, but it causes a disturbance in recognizing and sensing the space, the equation of required openness and defined zone that eliminates the sense of losing is missing.

3.3 A Quantitative Approach:

Repetitive behavior sitting along Jeddah Corniche may help in creating identified special characters in its public spaces. The repetitive behavior sitting requires a series of design elements serve the space concept and function. The quantitative measurement based on facilities' repetition that could create a repetitive mental image along the Corniche clarifies the unique Arabian character. Measurement process was according to the qualities of amenities and accessibility that examined by urban literature according to the socio-historical aspect.

3.3.1 Measuring Amenities:

More amenities are more spaces that are affluent; their design helps in completing the image of public spaces, where their kinds or varieties connected to community usage.

- Unlike the common status, highly occupation on Jeddah Corniche doesn't mean the success of available amenities, where families are usually attracted to open spaces; even barren ones. They depend on mobility in use; move in vans carrying all requirement for picnicking, such as food or picnic equipment, board games, even sitting bellows and rugs. This summarizes the required amenities in basic needs, such as appropriate place for praying, water supplies services (toilet, sanitation), waste management, and environmental services. Usual welcoming elements such as seats or benches are not suitable for the users' behavior in this case (as shown as Fig. 15).
- The critical issue in designing amenities is referring to inhabitants' culture, by form or function. The most provided common amenities in Jeddah Corniche are branded restaurants or cafés as a sign of the place welfare. They follow in form and function the universal style (as shown as Fig. 15); every facility has its own symbol among many others. There is no unity in design connecting them to the space history, value, or beliefs.



Fig. 15 Some different branded cafes along the Corniche.

Reference: <https://www.jeddah.gov.sa/>, official website, retrieved on June 2016.

- Amenities along the Corniche are not designed as a chain of services; they aren't orderly distributed according to sectors, or density of occupation. The Northern Corniche suffers from a lack of amenities; it may be according to its narrower urban context (as shown as Fig. 16). The Middle Corniche is provided with different types and kind of amenities, although their random distribution. For example, kiosk vendors, toilets, and sanitation are not distributed in pattern suites the behavior setting of remoteness families gatherings. Zones around those facilities are deserted according to the intensity of using that conflict with required privacy for families. The Southern Corniche is provided with some deserted facilities, where their functions are not desirable for Arab families as pergolas and seats (as shown as Fig. 16).
- Urban literature for amenities could be recognized through the following:

- The image-ability of amenities as public art has no unity, order or rhythm express the social image of the place (as shown as Fig. 16). Accordingly, the legibility of amenities as a comprehended image for users to feel the space is conflicted by the concept of use.

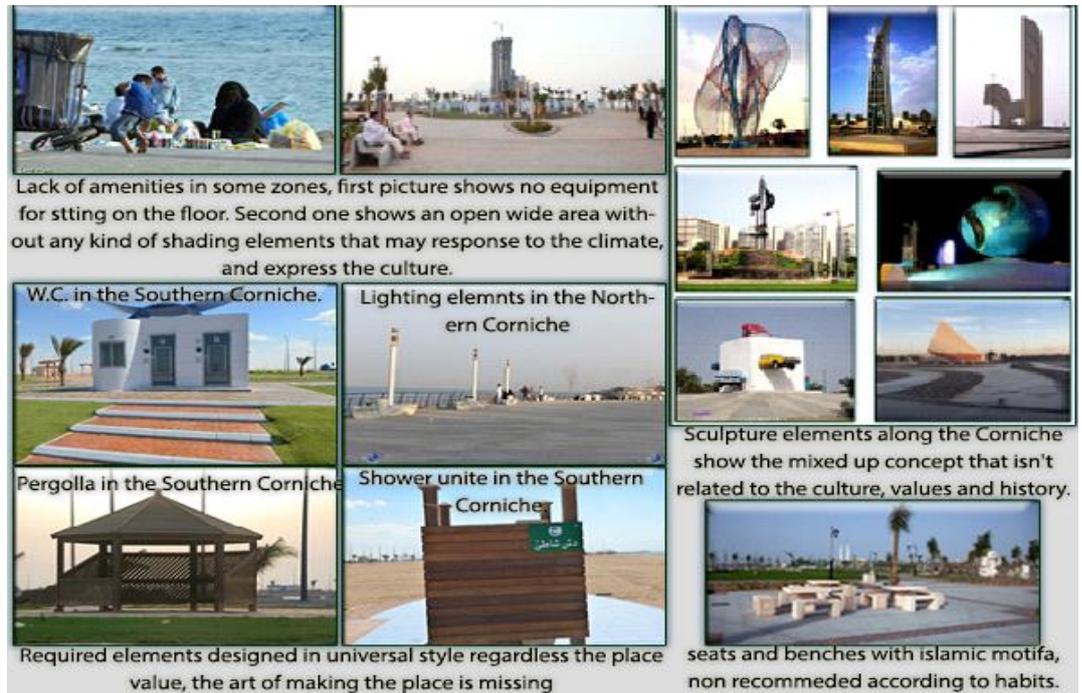


Fig. 16 Different types of amenities along Jeddah Corniche share no unity in design order. Reference: <https://www.jeddah.gov.sa/>, official website, retrieved on June 2016.

- The attracting range or the visual enclosure created by amenities is undefined according to non-conceptual design (as shown as Fig. 9,13,15,16), so they don't work as focal magnified points, where they have no clear concept related to the inherited culture or express the Arabian activities atmosphere along the seashore (as shown as Fig. 16).
- The visual richness of amenities is questionable; they suit the contemporary condition of the Arabian community as welfare stander of life in type, variety, and design, but don't refer or fit the deep spirit of the place or use.
- Tidiness as order or rhymes of their distribution is not achieved in the land-use master plan, or even sensed visually, although they are well- constructed.

3.3.2 Measuring Accessibility:

The multiplicity of accesses enhances the public spaces' success, where they help in preparing a mental image for using or dealing with its micro-zones. According to the linearity of the Corniche spaces, accesses vary between lateral and longitudinal main streets in the city.

A. According to the city planning (as shown as Fig. 1), the lateral accesses are parallel main streets carry the movement from the city east side repetitively along the Corniche; as Price Naif St., Sari St. and El-Corniche St. Mostly, they share the same urban image of wide streets with green-island; almost typical wide and ended with an open horizon (as shown as Fig. 17). The physical linkage, the tree line in the middle has no special trait related to Jeddah culture or history. The edges' design is dominated by a simple plain vertical surface. Therefore, approaching the Corniche isn't rich enough to the spirited usage or activities in the spaces. Unlike Palestine St., it is



Fig. 17. Examples for high-raised buildings; their ground floor are missing activities.

Reference: <https://www.jeddah.gov.sa/>, official website, retrieved on June 2016.

featured by a distinctive visual linkage, which is King Fahad Fountain; it is the tallest water fountain in the world. It may not related to the socio-historical aspects, but it is related to the city and community recent level of prosperity.

- B. The longitudinal accesses along the Corniche are consecutive according to the linearity of its sequential zones. The visual and physical linkage are influenced by Corniche edges; the eastern edge of Corniche is drawn by buildings, the western edge as the seashore is drawn by some tree lines, sculptures, and other features. Buildings' recesses and projections, continues tree lines, even marked crossings signs create different linkages characterized each zone. Iconic buildings play important role in recognizing zones and attracting inhabitants along the Corniche, (as shown as Fig. 18), most iconic buildings on the Corniche are tall buildings with universal modern style, beside some governmental buildings and mosques. Almost every zone is characterized by a certain building, which considered a good distribution of attraction factors. The inhabitants' movement along the Corniche is majorly by auto-vehicles. The fast movement doesn't require small details as it requires a holistic design that facilitates accessing zones sequentially; high-raised buildings and towers suit this image, but they express the universal style more than their culture. Ground floor at high-raised buildings have no activities enhance the interaction with the Corniche public realm; accordingly; there is no caring for human scaling in moving from indoor to semi-outdoor to outdoor (as shown as Fig. 19).

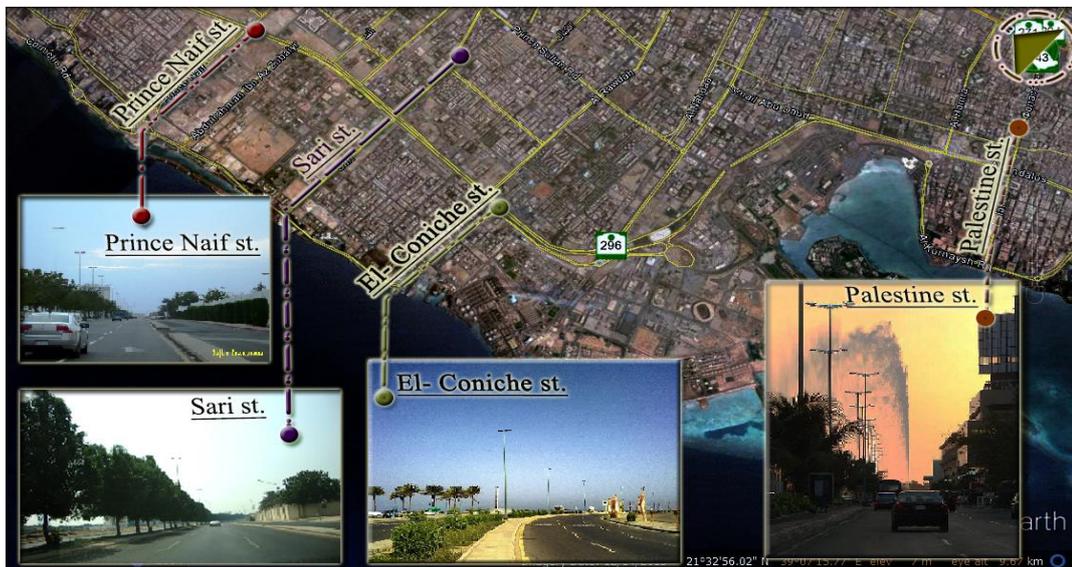


Fig. 18. Different consecutive laterally accesses to the Corniche.

Reference: Photographed by the author June 2015, Google Earth, retrieved on June 2016.

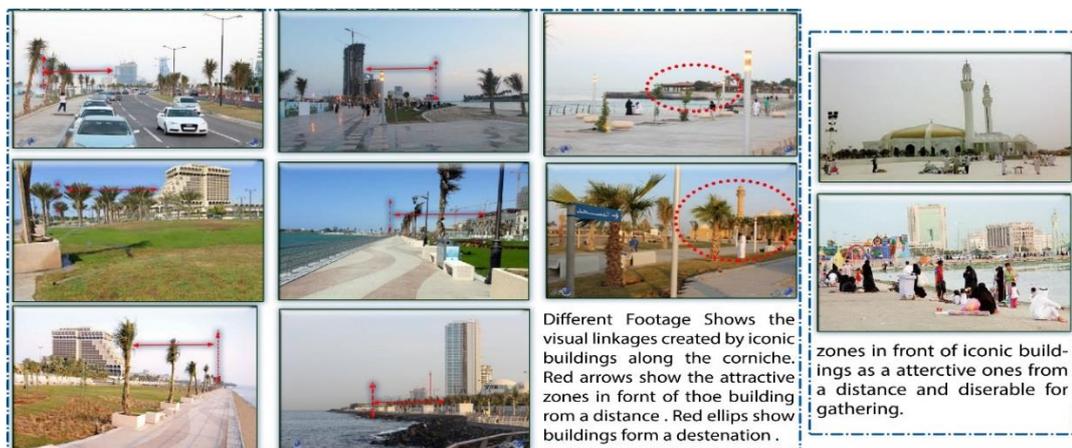


Fig. 19. Accessing zones longitudinally according is facilitated by iconic buildings.

Reference: <https://www.jeddah.gov.sa/>, official website, retrieved on June 2016, (edited).

C. Urban literature of accessibility could be recognized through the following:

- Image-ability of lateral accesses is disturbed by excessive simplicity, there is a lack of iconic elements that refer to the socio-historical aspects visually, to prepare a mental interacting with the Corniche spaces, except for Palestine St. that recognized by King Fahad Fountain. Unlike longitudinal accesses, they have good legibility; their edges are defined by iconic buildings that enrich movement along the Corniche. The approaches' visual enclosure is horizontally open due to two reasons. First; long linear movements by vehicles cause lacking destination, users move along the Corniche until they find a convenient space for use, causing open visual range unlimitedly. Second, there is no appropriate expression refers to Arabia culture or behavior in approaches' design, which is considered mentally open-rang without any cultural limitation. Therefore, the mental accessibility is visually indistinct until recognizing space for use.
- The visual richness in the lateral and longitudinal access is dominated by universal simple design, but the richness according to the socio-history aspect is missing in the public realm.

4. CONCLUSION

Public spaces are an essential part of cities urban life. They continuously reflect the combination of cities' cultural, values, history in urban contexts. Repetitive behavior setting in Jeddah city is almost typical along the Corniche, it forms a unique social configuration that required to be applied in urban spaces' design as a characterized image and specific identity.

4.1 Results

The measurement process of Jeddah Corniche spatial system resulted in the following:

- Sensing the sociability in the Corniche micro-zones is questionable, due to the absence of the mental image that refers to the behavior setting along with its spaces, except for sensing a conflict between the inherited users' activities and space universal style. This is clear in micro zones' form and function, where micro- zones' shape, size, and elements miss the configuration that fit the strong need for gathering publicly and privately at the same time; users always adapt spaces in their way and define their own micro-zones.
- Sensing intimate scale in the Corniche micro-zones is missing, due to the linearity of extended open plain green spaces and the absence of context adjustment according to usage with a defined boundary, tangibly or intangibly. The Wider spaces in front of mosques are physical and psychological achieving the sanctity of the place, but this feeling is interrupted by undefined context or border. The missing unity and diversity in its urban context design impede sensing the major context. Therefore; by interning any zone along the Corniche, it takes few seconds to recognize or sense the space.
- Amenities, as repetitive mental images, aren't distributed in rhyme suits the Arabian behavior setting in the public spaces, in additions, their types are according to universal style more than being a specific kind of use. Their designs as public art, especially sculptures, don't support the mental legibility, they follow the universal style more than referring to a certain concept or the socio-historical aspects. Their concepts aren't convenient enough for families, so the reaction to the common elements is by avoiding or ignoring, that is considered a breaking up with the public realm.
- Accessibility to the Corniche is well-constructed roads that manage traffic and safety perfectly, but they miss the mental or visual approaching in design; especially the lateral accesses that configured as plain simple spines. Their image-ability or legibility aren't rich enough to the social formation, or inherited values. Longitudinal accesses are more convenient due to the distribution of iconic buildings along the users' fast movement. But the inactive ground level in those buildings affects negatively on the visual and physical interaction.

Jeddah Corniche is well-constructed public realm misses the sincere applying of its Arabian users' requirements, to express the typically inherited behavior setting in form and function along with its spaces.

4.2 Recommendations:

Public space identity is an intangible sense could be realized through a delicate design for a specific users' behavior. The results showed the weakness in achieving an appropriate social or cultural identity in design that fit the configuration of Jeddah community. The repetitive behavior setting along the Jeddah Corniche requires an urban design process achieves three equations; the inherited values and contemporary, the openness and privacy, and the heritage and universal style. Those could be utilized in the urban design process by the following:

- The module of urban context is required to fit users' unique repetitive pattern in the public realm, as their behavior setting has a rhyme in use could create a unique identified pattern.
- The micro-zones' shape and area are required to fit the strong ancestor habits of grouping in remoteness atmosphere, the micro-spatial system; as shape and area; is required to achieve segregation for privacy among the holistic public realm along the Corniche spaces.
- The spaces' services, furnishing, and iconic elements are required to follow the inherited values in use, shape, and distributions. The well-constructed amenities success economically, but interrupt the culture image. Amenities' are required to follow users' behavior setting along the Corniche, applying their needs and respecting their privacy, for example, distributing comfort lighting or recuperation means should consider the privacy factor in public life.
- The mental preparation or linkages need visual richness in design; the spaces' edges are required to be provided by iconic or symbolic elements refer to users' culture or values. This aims to avoid the state of indistinct in recognizing or sensing some spaces along the Corniche.

Those points are recommended to be adopted as considerations or polices in the development process for achieving a recognizable identity in Jeddah Corniche public spaces.

REFERENCES

- Beirão, J. N., Duarte, J. P., & Stouffs, R. (2011). Creating specific Grammars with generic Grammars: Towards flexible urban design. *Nexus Network Journal*, 13(1), 73–111.
- Daghistani, A.M., I. (1993). A case study in planning implementation Jeddah, Saudi Arabia. European Research Centre for Urban Environments, University of Newcastle upon Tyne, No. 32.
- Dougherty, D. L. (2006). Embodying the city: identity and use in urban public space. Master Thesis, faculty of the Virginia Polytechnic Institute and State University. Alexandria-Virginia.
- Duarte, J. P., & Beirão, J. (2011). Towards a methodology for flexible urban design: Designing with urban patterns and shape Grammars. *Environment and Planning B: Planning and Design*, 38(5), 879–902.
- Ewing, R., Handy, S., Brownson, R. C., Clemente, O., & Winston, E. (2006). Identifying and measuring urban design qualities related to Walkability. *Journal of Physical Activity and Health*, 3(s1), S223–S240.
- Ewing, R., & Handy, S. (2009). Measuring the unmeasurable: Urban design qualities related to Walkability. *Journal of Urban Design*, 14(1), 65–84.
- Hanimadi, T. H. (1993). Outdoor recreation and leisure patterns in Saudi Arabia and their roles in determining open space planning and design: the case of Jeddah's Corniche. University of Pennsylvania, University of Sheffield.
- Hickey, R. (2014). The psychological dimensions of shared space in Belfast. *City*, 18(4-5), 440-446.
- Pinilla, M. (2010). Public spaces and ecological structure: An opportunity to create a city, a case study from Bogotá. International Workshop Final Report, Center for Sustainable Urban Regeneration, Structure Engineering and Public Image, Tokyo.
- Silva, F. D., (2001). Cultural Identity and Spatial Segregation in the Public Spaces of Lisbon Criteria for the Evaluation of Public Spaces, ISoCaRP Congress, Paper Platform.
- Tepavcevic, B., & Stojakovic, V. (2012). Shape grammar in contemporary architectural theory and design. *Facta universitatis - series: Architecture and Civil Engineering*, 10(2), 169–178.
- Violich, F. (1985). The Search for Cultural Identity through Urban Design: The Case of Berkeley, *Berkeley Planning Journal*, 2(1), pp. 106-126.
- Google Earth, retrieved on June 2016
- <https://www.jeddah.gov.sa/>, official website, retrieved on June 2016.

