

# The Souq Waqif Heritage Site in Doha: Spatial Form and Livability

Raffaello Furlan<sup>1,\*</sup>, Laura Faggion<sup>2</sup>

<sup>1</sup>College of Engineering, Department of Architecture and Urban Planning, Qatar University, Doha, State of Qatar

<sup>2</sup>Griffith University, Brisbane, Australia

---

**Abstract (Purpose)** The aim of this paper is to examine how and the extent to which the urban form of the heritage site of the Souq Waqif in Doha (1) encourages the formation of enhanced levels of social and community engagement (i.e., social life) and (2) can be further implemented in order to enhance social interactions. **(Methodology)** The study investigates the relationship between the Souq Waqif's settlement and users' levels of social interactions. In order to provide an answer to the main questions, in this study the author explores and analyzes (A) the form of the urban fabric of the heritage site and (B) the social activities performed by the users within the settlement. Data is obtained from visual material, users' interviews and survey that explore and reveal how and the extent to which the form of the urban fabric of the Souq Waqif's settlement is the arena of social activities and therefore contribute to enhance the social life of citizens. **(Findings)** (1) The analysis indicates that, compared with car-oriented suburbs, the walkable, pedestrian oriented and mixed-use heritage site of the Souq Waqif encourage people to be socially engaged and enhance higher level of social life: the settlement is the arena where intentional or accidental interactions occur, encouraging a sense of trust and of connection between people and the places they live. (2) Furthermore, the study allows understanding how built forms of the Souq Waqif should be implemented in order to facilitate social interactions.

**Keywords** Built Heritage, Urban Fabric, Spatial Form, Public Realm, Community Engagement, Human behavior, Social Activities

---

## 1. Introduction

Urban life represents the dominant form of existence for the majority of people: cities are the arenas where social relations take place and the interventions within the urban fabric of cities can influence the livability of its inhabitants. Scholars, researchers and practitioners explore the form of cities and urban culture across numerous fields ranging from urbanism, social studies and multifaceted humanities disciplines. Within its disciplinary context and peculiar subject areas, each field analyses theories and methodologies with the aim to contribute to a better understanding of specific aspects of the urban fabric of cities (Stevenson, 2013).

Scholars reveal that the field of Urban Studies emerged in response to the limits of individual fields of investigation and to the consequent need to encourage collaboration and exchange of insights among multiple disciplines investigating detailed characteristics of the city, with the ultimate goal of enhancing livability. The relationship between built environment, social activities and livability

has been highlighted by scholars and researchers (Brown, Dixon, & Gillham, 2014; Carmona, Tiesdell, Heath, & Oc, 2010; Elsheshtawy, 2004; Farr, 2008; Gans, 1965; Givoni, 1989; Hakim, 2014). They stress that the form of the built environment, providing the arena for social activities, contributes to the formation of social interactions and enhancement of livability.

Regardless of the interest to this relationship, direct assessment of the extent to which livability can be enhanced within the Souq Waqif in Doha has not been investigated yet. Therefore, this current study intends to explore how urban forms contribute to the formation and implementation of social life and/or livability among inhabitants, namely within open public spaces located at the heritage site of the Souq Waqif in Doha. The paper argues that the current spatial form of the Souq Waqif facilitates the formation of social activities and that livability can be implemented through the installation of specific physical elements within the Souq Waqif's public realm.

## 2. Background

### Globalization and Built Heritage in Qatar

*Cities are built on both physical layers of settlements and cultures, social structures and memories, which are*

---

\* Corresponding author:

raffur@gmail.com (Raffaello Furlan)

Published online at <http://journal.sapub.org/ajee>

Copyright © 2015 Scientific & Academic Publishing. All Rights Reserved

embedded in the physical built environment (Stevenson, 2013, p. 107).

The built environment of the city, which encloses built forms and monuments, acts as the store of collective and individual memories. Urban landscapes are interpreted as physical and cultural manifestation of social practices. Scholars and researchers highlight that the city, expression of past urban memories (spatial form), cultural traditions (architectural form) as well as of experience of life (social life and livability), is built of physical layers embedded of meanings. This represents a built heritage to be preserved and transmitted (Brown et al., 2014; Carmona et al., 2010; Farr, 2008; Kaspirin, 2011).

Scholars also argue that the built heritage of cities is under threat, because the contemporary process of globalization is reshaping the identity of cities, namely the skyline and spatial form of cities, economies, cultures and quality of life. Recently globalization has become a catch phrase usually mentioned in a negative context because it is typically associated with a loss of place, identity and character of the built environment. Worldwide cities are becoming shapeless entities designed with uniformity. This ‘universalization’, associated with Western hegemony, acquires greater

importance and it is often interpreted as the West trying to superimpose its values and beliefs on the East (Lang, 2005; Zyscovich & Porter, 2008).

*Qatar’s National Vision defines the long-term outcomes for the country and provides a framework within which national strategies and implementation plans can be developed. The program is defined in terms of four pillars: Human Development, Social Development, Economic Development, and Environmental Development (Jodidio, 2015, p. 19).*

This impact of globalization was considered for the undergone past two decades rapid urban development of Qatar and namely for the re-construction of the Souq Waqif, the heritage site in Doha. A document named ‘Qatar’s National Vision 2030’ defines the direction for the urban development of the country. The aim of the document is to rapidly develop a modern country, while preserving Qatar’s heritage, culture and traditional values. The built environment should merge together tradition and modernity, which will characterize national urban and architectural developments. Issues of identity, globalization, and strategies based on a series of values were considered in the renovation and reconstruction of the Souq Waqif in Doha.



Figure 1-2-3. Views of the Souq Waqif (Photos from the authors)

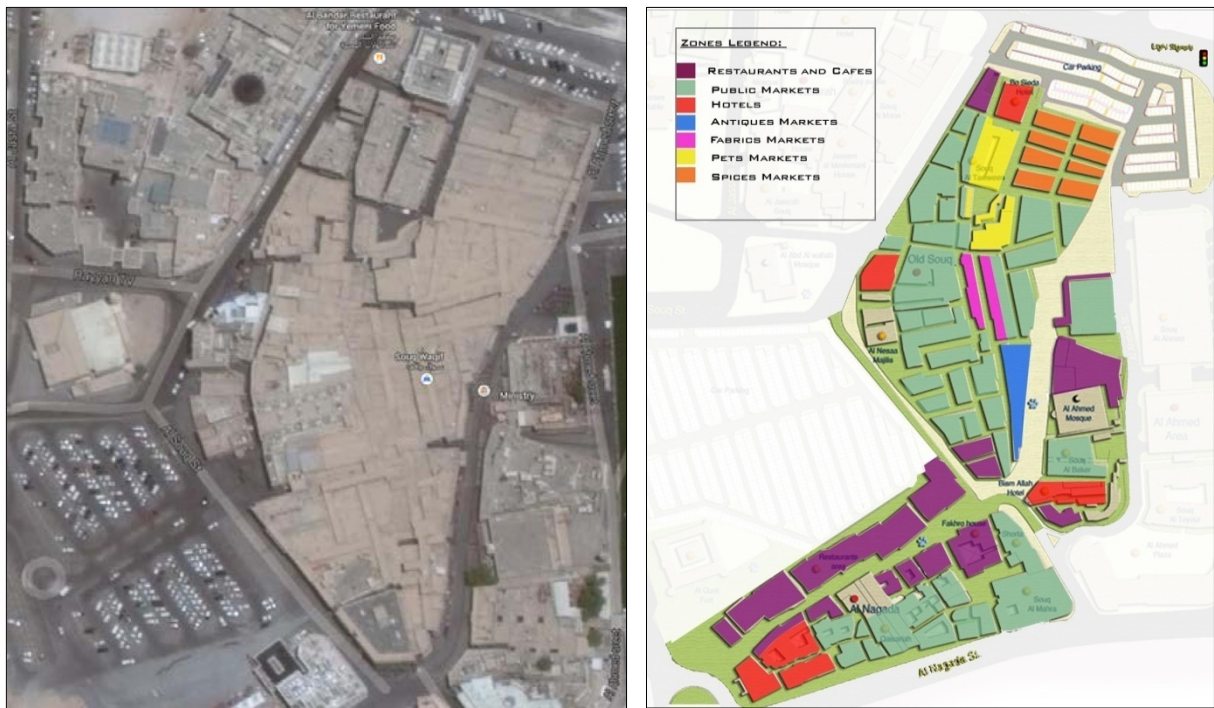


Figure 4-5. Maps Souq Waqif (Photos and drawings from Arch. Awooda and Shurbaji)

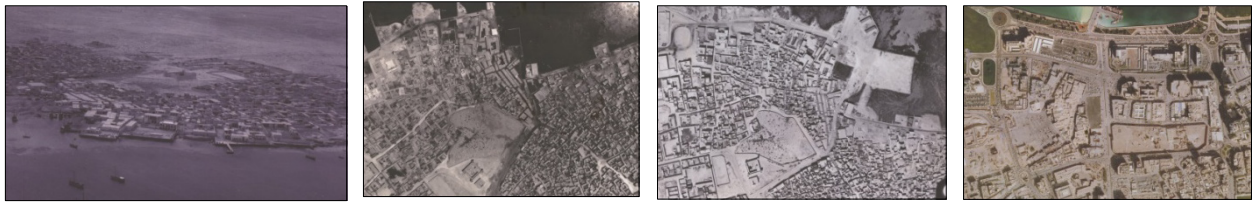


Figure 6-7-8-9. Evolution Maps from MMUP (years: 1947-1952-1955-2005)

### The Souq Waqif Heritage Site: Urban Space and Cultural Heritage

Commonly scholars identify three cardinal urban fabrics within the built environment of Middle Eastern cities: the old city, the modern city, and everything built in the suburbs, whether spontaneously or planned (Aloweid, 1991; Mahgoub, 1999). An integrated contemporary and traditional urban fabric characterizes the built environment of Doha. Many of Qatar's heritage buildings, designed accordingly to the distinctive Qatari architecture character, are located within the heritage site called Souq Waqif, or Down Town Doha (Figure 1-2-3). The site, conveniently located in the district of Msheireb, nearby the Museum of Islamic Art and the Corniche, comprising an area of 164,000 square meters, is one of the top tourist destinations within Doha (Figure 4-5). Qatari built heritage culture is displayed in the Souq Waqif, which is also an ideal place for people to meet for social purposes (Al-Maimani, Salama, & Fadli, 2014; Salama, 2013; Salama & Wiedman, 2013).

The Souq Waqif, founded a century ago to facilitate the trade of primarily livestock goods, was a labyrinthine market near the city's waterfront. At that time, this part of the city was the shoreline of the Arabian Gulf, until developers began turning the water's edge into more land (Figure 6-7-8-9). Souq Waqif (which means "standing market" in Arabic) is a reference harking back to its beginnings as a gathering place around the riverbed Wadi Msheireb.

The area enclosed different types of sub-markets for wholesale and retail trades, with buildings characterized by high walls, small windows and wooden portals, and also open air stalls for local vendors. Locals and Bedouins would travel to the area to trade goods, from cumin and turmeric to fish, sugar, salt, clothes, coal, and wood, and to buy and sell fish, goats and even wool. It was also a gathering space for fishermen.

Over a period of 3 decades before the early 2000s, the market was abandoned as malls and other shopping options were developed in Doha. In 2006 the Souq was subjected to both restoration and reconstruction course, which was launched for the purpose of preserving its architectural and historical identity. While some buildings were demolished, those that could be saved using traditional Arab building construction techniques were reconstructed. The restoration phase was funded by Qatar's Emir Sheikh Hamad bin Khalifah al Thani and his wife Sheikha Moza bint Nasser. With an initiative from the PEO-Private Engineering Office of the Emiri Diwan, the Souq acquired a new imagery returning to its original conditions. The cobbled lanes and

white washed buildings, made using traditional Qatari architectural elements including mud rendered walls and exposed timber beams, look to be from a long-gone era. While it kept its functions, new art galleries, traditional cafes and restaurants, cultural events, and local concerts were introduced as new functions attracting most of the city residents and visitors. The restoration was completed in 2008.

Today, the Souq Waqif in Doha represents the aspiration of conserving the built heritage and culture of a nation. It is considered the most important open-public space in Doha. Also, the Souq Waqif is at the center of many of Qatar's biggest cultural events. In 2012, it was a hub for Doha Tribeca Film Festival, hosting its red-carpet opening and closing ceremonies. Every 'Eid', the site is also the venue for concerts and family shows, along with displays of folk dance and music on weekends. In addition, this destination is distinguished for selling traditional garments, spices, handicrafts and souvenirs, and for hosting dozens of restaurants serving cuisines from all over the world.

### The Design Philosophy for the Renewal of the Souq Waqif

*Aside from the market, there are a number of restaurants and other amenities in the district, including new boutique hotels in a traditional and decorative style...The designer of the project, the artist Mohamed Ali Abdulla, undertook a thorough study of the history of the market and its buildings, and aimed to reverse the dilapidation of the historic structures and remove inappropriate alterations and additions (Jodidio, 2015, p. 231).*

The local Qatari artist, who lived his childhood in Doha, tried to develop a concept in order to restore the Souq Waqif in a traditional way, with the ultimate aim of preserving vernacular architectural forms, decorative materials, construction techniques, local heritage and history. Before initiating the design and planning of the heritage site, he interviewed local inhabitants of the area, he reviewed historical photographs of the site in order to recall and/or maintain the original architectural language and the history of the local markets. At the same, the area offers modern facilities, such as international coffee shops and restaurants. The area also hosts pets and falcons for sale, in order to maintain the continuity with national cultural traditions. Nowadays, the Souq Waqif is considered both a traditional open-air public space used by shoppers, locals, tourists and merchants. It is a project, which embrace modernity as well as respecting local traditions. The architect's goal was to revive the memory of the place: modern buildings built with

contemporary technologies were demolished and modern materials were replaced.

*... Metal sheeting on roofs was replaced with traditionally built roofs of wood and bamboo with a binding layer of clay and straw, and traditional strategies to insulate the buildings against extreme heat were re-introduced (Jodidio, 2015, p. 231).*

...

*About 75 per cent of the structures in the Souq Waqif were restored to their original form ... There is nothing to hide in these buildings and the structure is quite visible. People also did not use colours to decorate the buildings. They retain the natural colour of the stones and the materials used for plastering (Jodidio, 2015, p. 234).*

Modern construction materials such as concrete, steel, structural glass were not used in the restoration of the Souq. The designers sought to revive the memory of the area by demolishing modern buildings and insulating the remaining buildings against extreme heat with traditional methods using locally sourced wood and bamboo imported from Asia. Some elements of the old Souq remain, most notably the Bismillah Hotel, which is considered to be the first in Qatar.

### **The Spatial Form of the Public Realm: Urban Squares, Cafes and Streets**

*The city is itself a concept at the same time as being understood with reference to concepts, which means there is no one definitive set of explanations and no one definitive object that is 'the city'. Cities are the hard physical spaces of built infrastructure, architecture and planning as well as the soft spaces of representation, imagination and everyday life-simultaneously material, imagined and lived. They are constructed through discourse, theory and use as well as at the interface of nature and culture (Stevenson, 2013, p. 9).*

As Stevenson suggests, in order to understand the spatial and social complexity of the city it is necessary to explore cities from diverse viewpoints, namely as being concurrently physical and conceptual, and therefore shaped with built forms, culture and social values. The city is interpreted as a spatially, designed and built, sociological and cultural entity: it is the product of spatial and architectural factors and urban socio-cultural factors, or culture as a way of life (Barrett, 1991; Bonnemaïson, 2005; Hockings, 1984; Inglis, 2005; Rapoport, 1969, 2000). The purpose of this paper is to study the Souq Waqif in Doha, its urban physical form and how social life and/or social interactions affect -and are concurrently affected- by urban form.

As Putnam highlights, the way urban designers and planners design a macro-scale urban setting where communities reside can have an impact on the degree to which people are involved in those communities (neighborhoods). He stresses that the surrounding built environment, enhancing a sense of community, can enrich social interactions among the population (Putnam, 2000).

*Those tangible substances [that] count for most in the daily lives of people: namely good will, fellowship, sympathy, and social intercourse among the individuals and families*

*who make up a social unit ... The individual is helpless socially if left to himself ... If he comes into contact with the neighbour, and they with other neighbours, there will be an accumulation of social capital, which may immediately satisfy his social needs and which may bear a social potentiality sufficient to the substantial improvement of living conditions in the whole community (Putnam, 2000).*

Furthermore, as Rapoport stresses, researchers argue that the way the settlement is used for social purposes is related to climatic conditions. Nevertheless, he explains how this is not a correct assumption: for example, he shows how in some European cities, cafes, town squares and public open spaces are very popular all during the year, while for example in Australia and California, which are very outdoor minded in their use of parks and beaches, towns or the settlement urban areas are rarely used for social activities (Rapoport, 1969) (Smith & Bugni, 2003) (Rapoport, 1969, 1982a, 1982b, 1997, 2000).

Scholars are concerned to explore the role of public spaces as the location of encounters. The design and spatial configuration of a dynamic open public place contribute to encourage people social interaction. In addition, public spaces are key elements to the way people experience the city and its urban space, and/or as a window into the city and its public spatial culture. By public spaces, Stevenson means the following:

*"parks, footpaths, beaches, the verges of rivers and waterways ... the site of intersection and transportation ... publicly funded institutions, including museums, libraries and galleries, and town halls and civic centres, as well as leisure spaces, such as swimming pools. These are the places that are owned collectively by residents and managed by local councils, state or national governments, and are entwined with ideas of citizenship and urban culture" (Stevenson, 2013, p. 53).*

Scholars divide public spaces into three distinctive groups: the urban square, the café' and the street. These spaces are related to the way people interact and to the nature of the social activities performed (Stevenson, 2013, p. 53). For instance the square is associated to the space used by the collectivity; it provides a sense of identity to a specific city and/or nation. Spaces where daily social interactions take place, such as bars, restaurants and shops are identified as café'. Within the street, daily incidental social interactions occur. These places, also defined as the public realm of the city, contribute to make successful cities. Therefore in order to understand how to make successful the city, it is cardinal to investigate the extent to which the spatial form of public spaces (squares, café' and streets) contributes to the formation and enhancement of social interactions among the users.

Previous studies on the public realm could not provide a deep understanding of the way, and the extent to which, the built environment in Doha influences and/or enhance social interactions. Therefore, this study aims to fill this gap. Namely, this study intends to explore how human behavior and/or the built spatial form of the Souq Waqif heritage site

in Doha influences social activities. The study investigates the extent to which the urban built environment is related to human behavior and/or activities. Namely, this study argues that (1) at a macro-scale level, a public open space such as the Souq Waqif plays a relevant role in supporting and enhancing social interaction among the population, and that (2) the findings will allow to better understanding of how built forms of the Souq Waqif could be implemented in order to facilitate social interactions. In turn, the outcome from this exploration can provide a detailed insight into the conceptualization and future development of the built environment in Doha.

### **Urban Development and Cultural Heritage Protection: Identity and Meanings**

Researchers stress that cultural heritage, which surrounds and enriches inhabitants' spiritual wellbeing, is an expression of culture as a way of life developed in the past by a community and transmitted on from generation to generation: it is a memory of the city's past and a vision for its future (Lusiani & Zan, 2013). Cultural heritage can be expressed as either intangible or tangible. It includes intangible heritage, such as beliefs, traditions, practices, values, stories, memories, oral histories, artistic expression, language and other aspects of human activity (Murzyn-Kupisz, 2013). Tangible (or material) heritage is made up of monumental remains of cultures, individual and groups of buildings at a different scale, objects and/or collections of objects. Specifically, it is defined as the qualities and attributes possessed by places and objects that have socio-cultural values and meanings or an expressly historical, archaeological, artistic, scientific, social or technical importance for past, present or future generations. Commonly, the significance for both tangible and intangible cultural heritage can enhance because of its originality or unique connection between a group of people and of the extent to which it serves as surviving evidence of a society, within a certain period of time (Amit-Cohen, 2005).

Researchers stress that world heritage properties are mainly being threatened by two factors: aggressive development based on speculation, absence and/or inefficiency of management strategies and policies. The biggest challenge for the management of built heritage is to provide continuity and compatibility, as the urban setting keeps changing in form and function (Khalaf, 2015). Commonly the discussion on policy making about culture and heritage focuses on monuments protection and grand-scale buildings, neglecting other spheres such as urban settlements. Scholars and practitioners stress that this context should be taken into consideration by practitioners in order to formulate more effective strategies within the field of heritage management. They highlight how heritage plays a decisive role to locate a social group in its historical, social and cultural environment and that heritage protection contributes to social cohesion at the local community. Its uniformity fosters a sense of cultural identity (Nour, 2015).

Cultural heritage is interpreted as going beyond the

preservation of singular buildings and/or artifacts: it acts at an interdisciplinary level by embracing multi-faceted disciplines such as archaeology, architecture, ethnology, landscape architecture, urban design and planning, art history and general history. The purpose is to investigate and protect larger spatial units where wider values and/or diversity of cultural meanings are embedded in the built environment (Khan, 2015). The aim of this study is also to investigate and understand the extent to which the Souq Waqif fosters a sense of identity and how cultural meanings are embedded in the site heritage built form.

### **3. Methodology**

The study addresses the case of the Souq Waqif heritage settlement in Doha, namely how and the extent to which the urban form can be implemented for the enhancement of social interactions and/or activities. The Souq Waqif heritage site is characterized by a distinctive urban fabric comprising built forms or buildings, open spaces and streets, which are the arena for human activity (functional use). Therefore, the study aims at exploring (1) the spatial form and (2) the use of the built environment. This investigation involves analyzing the activities performed within (A) open spaces, (B) streets and (C) buildings.

The analysis of the form and use of the Souq Waqif's urban fabric is undertaken using six methods of investigation: (A) cartographic sources; (B) historic maps (the process of formation and transformation is deduced from their comparison); (C) photographs; (D) site observation of users' activities, (E) on-site survey and (F) interviews conducted with 50 users. While the first three methods investigate the extent to which the settlement facilitates social interactions, the last three explore the nature of social activities performed by the users (Appendix-figure 10-17). In relation to the concept of activities, as Rapoport highlights, it is crucial to dismantle the concept of activities into its variables, in order to understand the level of social interactions within the built environment. Rapoport identifies six components, which, in his theories, represent the system of activities. He highlights the variability of the activity which involves (A) the nature of the activity itself (what), (B) the persons involved or excluded (who), (C) the place where it is performed (where), (D) the order or sequence it occurs (when), (E) the association to other activities (how - including or excluding whom), and finally (F) the meaning of the activity (why) (Rapoport, 1969, 1982a, 1982b, 1997, 2000). Therefore the site observation, the survey and the interviews conducted for this research study explored these six aspects of social activities (Figure 10-17).

Summing the responses on all six items for each respondent generated a table score reflecting (1) the extent to which the Souq Waqif provides the arena for the performance of social activities and (2) how the built environment can be implemented in order to facilitate social interactions.

## 4. Findings

After being rebuilt and renovated, Doha's main heritage site still retains its most active destination, offering traditional crafts and art, and a multitude of distinctive restaurants and cafes. The findings, providing rules of thumb that can be applied for implementing social life and/or livability within the Souq Waqif, are structured into four categories: the square, the streets, the café' and/or restaurants and urban furniture.

### The Square

Participants highlight that squares or open spaces formed by intersections of roads are often spaces where they initially meet before going to cafes, restaurants or for a simple walk at the Souq. It has also been reported that open spaces are not distinguished with buildings acting like landmarks within the area. In addition, it has been highlighted that social activities have also been enhanced through the recent construction of the new underground car parking. On top of the car park there is a park with a water feature, where families usually gather, namely on weekends and in the evening, when the weather is cooler. Therefore, it is concluded that squares and/or open spaces within the Souq are just means of transiting and connection.

### The Street

The Souq Waqif has one main street where cafes and restaurants face, with small alleyways leading off on either side (Figure 4-5). These act like gateways to a maze of corridors packed with stalls selling goods, from dates to herbs and spicy, kitchenware and tools of various use. In contrast with open spaces, the streets of the Souq are not just means of connection, they add up very much to the experience of the heritage site. These linear networks range from wide to narrow streets, covered and exposed, air-conditioned and naturally ventilating streets and 'sikkas'. Streets are surrounded by old Qatari buildings' facades, which resemble the main character and cultural identity of the Souq Waqif. 'Sikkas' are one of the famous features in Qatari old Souqs, which forms a secondary network, in turn connecting different areas. Some of these streets and Sikkas are private, and some are opened to public.

Although many of the goods for sale in the Souq Waqif are not locally produced, visitors can also find traditional goods such as home wares, local honey, ceremonial daggers, Arabian perfume, ornate wooden chests, and visual art from the Gulf region. Despite a proliferation of touristy souvenirs (for example baseball caps and t-shirts decorated with the Qatari flag), it is common to see into the labyrinth families shopping for their everyday needs: cooking pots, saffron, preserved lemons, cloths, nuts, toys, pashminas, trowels, spades and watering cans, plates, traditional men's sandals, fashionable stilettos, and Qatari national dress. Therefore, in addition to the spread of restaurants and cafes, the area is a functioning market. Tourists and residents purchase everything from traditional garments to giant pots used for cooking traditional dishes. The Souq Waqif is renowned for

its selection of spices from the region and South Asia (sumac, saffron, preserved lemons), and for selling colorfully wrapped chocolate and sweets. After shopping, the purchased goods can be ferried to the car in a wheelbarrow by one of the porters.

Falcon, prized birds playing an important role in Qatari life and used for hunting both in Qatar and abroad, can also be found in the streets of the Souq Waqif. Also, a recent addition to Souq Waqif is the Animal Souq, where animals from turtles to baby rabbits are sold. A recent trend of dyeing rabbits and chicks pink and blue has emerged, presumably to make the animals more attractive to buyers.

The walking area is not well occupied by people in the morning. On the other hand, at night many people enjoy walking in Souq Waqif streets and visiting the shops. The streets of the Souq Waqif are very crowded in special events like EID, as everybody is free and there are many traditional activities according on site. Residents and tourists are interested in knowing more about the tradition of the country and locals enjoy sharing traditional activities related to their culture.

### The Cafes

These range from Western cafes, combined with traditional and Arabic cafes and restaurants that resemble the live of the old streets and social interactions of old Qataris. Arabic Restaurants, which represent the majority, serve Qatari, Lebanese, Turkish, and general Middle Eastern food. During the summer months, the restaurants and cafes provide fans and mist sprayers to keep customers sitting outside cool as they have their meals. In the cooler winter months, cultural performances and concerts featuring traditional Qatari sword dancing take place nearly every weekend. Also, the Souq Waqif Art Center has reopened after a two-year closure. It is located near the French restaurant, Le Gourmet, and it houses galleries on the ground floor that display work by local and international artists. In addition, there's also a library, which is open to the public.

Other new additions to Souq Waqif are Al Mirqab, Al Najada, Arumaila, Msheireb, and Al Jasra Hotel opened in 2012. They offer a total of 147 rooms, featuring traditional Arab architecture fused with luxury. They also house 12 restaurants, from fine dining to casual snacks, in some cases located on a roof terrace with scenic views of the Souq Waqif.

Restaurants and cafes are not busy in the morning, namely on weekly days. They are busier on weekends and at night, when people often dine out with their families, relatives and friends. Many people visit the restaurants for a few hours for 'shisha' only. Participants highlighted the smell of shisha as uncomfortable namely for families with kids. For this reason, families sometimes would prefer to take something to drink or eat and sit in the square areas, at the cross of the streets.

### Urban furniture

Respondents highlighted the need of installing urban furniture, elements (utilitarian and decorative) and/or objects on streets and open areas of the Souq Waqif, for various

purposes. It was stressed that the addition of these elements would contribute to encourage and enhance social interactions and/or livability within the heritage site.

The first element mentioned by respondents was (1) planting (Appendix-figure 18-25). Plants could be added in several spots in the wide opened areas as they might provide shade in addition to making the atmosphere more pleasant. There is a lack of green areas and/or planting in the public realm of the site. In addition, green areas might be integrated with (2) benches (Appendix-figure 26-33), where people might publicly and freely seat, without necessarily entering a café, a restaurant or a shop. Currently, it was noticed that benches might be added within locations for random walkers to stop and rest, since benches or areas where to seat are currently missing within the Souq. Most respondents highlighted the need of adding public benches, not belonging to any restaurant or café, where people would be free to take a drink and sit in the public outdoor area. Seating benches might be added next to the intersections, at the end of the shops streets and also between restaurants, as it is the most crowded area. This would allow people to sit while deciding in which restaurant to dine, or simply to rest. It was also stressed that the addition of (3) sun shading devices would also contribute to enhance livability of the site (Appendix-figure 34-41). During daytime, the sun-light is very strong, and users tend to look for shaded spots in the street, as noticed through observation of the site and participants' behavior. For example, some people working in shops sat on a bench outside their shops and used a kind of fabric as shading device protecting their head from the sun. Within the different open areas of the Souq there is a need of shading devices. Cause of the lack of sun-shading devices, many people prefer to not visiting the Souq in the morning and/or afternoons. Participants often mentioned the need of implementing open public spaces with (4) water features, as a way to both reduce the effect of sun heat and creating a relaxing sound effect (Appendix-figure 42-49). This would enhance livability. It was also stressed that there is a significant need of (5) additional signage directing people towards the most popular attractions, destinations and/or cafes and restaurants (Appendix-figure 50-57). Many participants suggested adding more signage on the intersections of the Souq since users usually do not know where they are heading. Namely, they stressed the need of adding signage to the main access areas to the heritage site: the new parking area and the open public spaces.

## 5. Conclusions

As Korllos stresses, the built environment, as well as its built forms, should provide the setting for human activity (Korllos, 1980, p. 247). Ross (1991) also highlights that in the contemporary development and modernization of the built environment, practitioners should not ignore or fail to take into appropriate consideration the individuals' specific social needs. He stresses that often settlements are built

through an imposed formula dictated by standardization, speculation and/or for profit purposes where users do not have a deciding role in the creation of the built form or they cannot put a visible imprint on it.

Researchers highlight that over the last several decades, the urban fabric of cities has been less often designed in a way that resembles the traditional, mixed-use, pedestrian-oriented model and, as a consequence, the development of the built environment has been moving in a direction that had a negative effect on social interactions and/or capital. Most modern suburbs are car-dependent designed, because this is the most diffused trend. The tendency toward building car oriented and less walkable communities is the result of speculative policies, of public zoning codes that clearly promote transport by private vehicle. This trend deemphasizes public transport, and discourages the building of mixed-use, pedestrian-oriented neighborhoods. Changing this trend will require consciousness and formulation policies towards the creation of new pedestrian oriented towns and neighborhoods, the revitalization of existing traditional neighborhoods, and the discouragement of sprawls of car-oriented communities.

Mixed use and pedestrian oriented neighborhoods, usually labeled as "traditional" or "vernacular" and typically found in older cities and older rural towns, enable residents to perform daily activities (e.g., grocery shopping, going to the park, taking children to school) without the use of a car. Many of these neighborhoods have places of worship, a local tavern, a coffee shop, or restaurants within walking distance. This setting encourages walking because pedestrians are not forced to compete with cars along busy highways or to walk across expansive parking lots.

This research study reveals that the form of the urban fabric affects users' social interactions and thus social interactions. Namely, the findings indicate that the pedestrian oriented and mixed-use settlement of the Souq Waqif encourages users to be socially involved. This study enables to better understand how the built environment influences human behavior and/or activities, which can enhance inhabitants' social interactions and/or capital. Therefore, it is hoped that the outcome revealed through this study could help in translating these research findings into practice, namely into shaping and implementing the urban fabric of new communities with the purpose to enhance social interactions.

Social activities and built form are key components of a comprehensive concept, social capital, also defined as the social networks and interactions that inspire trust and reciprocity among citizens. It is revealed that individuals with high levels of social capital tend to be involved in their communities, to gather more frequently with friends and neighbors and to be more engaged in economic development. There is a relationship between social activities and livability. An understanding of how urbanization, as the development of the urban fabric of human settlements, can contribute to enhancing social capital is important in order to improve livability.

The Souq Waqif, site heritage of Doha, including its heritage and socio-cultural values, must be safeguarded. The site must be preserved not only because it is a landmark of the great history of Qatar, but also as a resource to teach cultural and social values. This can encourage creating an appropriate urban fabric for Doha today. In addition, since Qatar recognizes the crucial issue of social sustainability in 2030 vision, the outcome from this research study can contribute to define the approach in designing and/or implementing open urban spaces. In turn, this would enable the public spaces along the city to enhance livability of the city.

### 6. Future Research Opportunities

In relation to future research opportunities, an interesting issue raised during this research study is related to the way and the extent to which the built environment affect health in general and/or how car-oriented, drive-through sprawled communities discourage physical activity and, on the other hand, encourage obesity and other associated health problems. Car-dependent sprawls contribute to social isolation that negatively impacts on inhabitants' health. Consequently further studies analyzing the relationship between social activities and health could be engaged to provide a deep understanding of how the urban fabric of the community can impact on inhabitants' health.

### ACKNOWLEDGEMENTS

We would like to acknowledge the support of Qatar University for creating an environment that encourages scientific research. This study was developed as part of a research project scheme funded from Qatar University, College of Engineering, Department of Architecture and Urban Planning. Also, we would like to acknowledge the effort of the contributors in this research study. The dedication and enthusiasm of Architect Sara Awooda and Architect Mariam Shurbaji have been admirable, namely in collecting relevant visual data and cardinal documents for the purpose of this research study. Finally, the authors thank the anonymous reviewers for their comments, which contributed to an improvement of this paper.

## Appendix

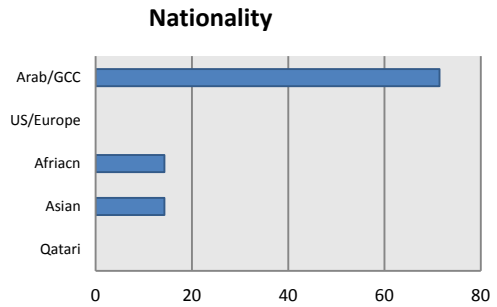


Figure 10. Nationality of the Souq Waqif Visitors

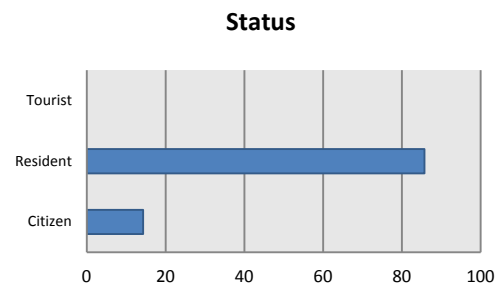


Figure 11. Status of the Souq Waqif's visitors

### How often do uou visit the Souq

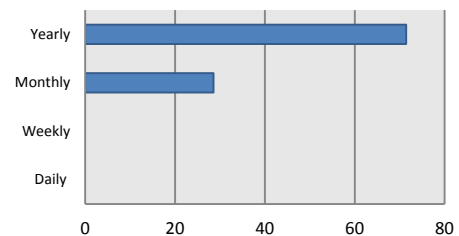


Figure 12. How often people visit the Souq

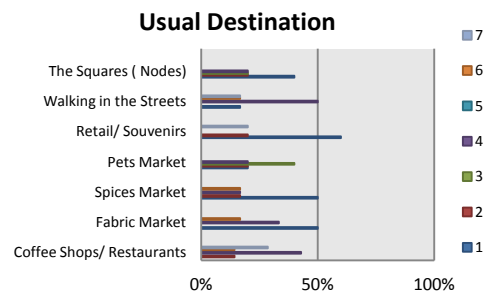
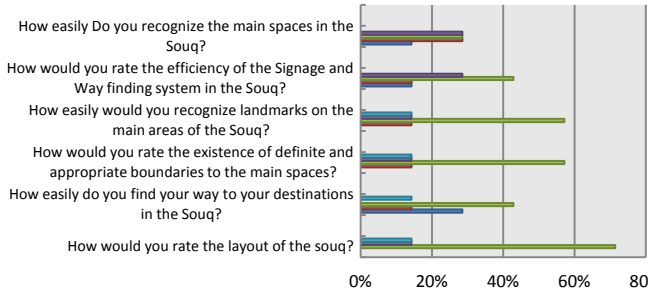


Figure 13. Visitors' usual destination

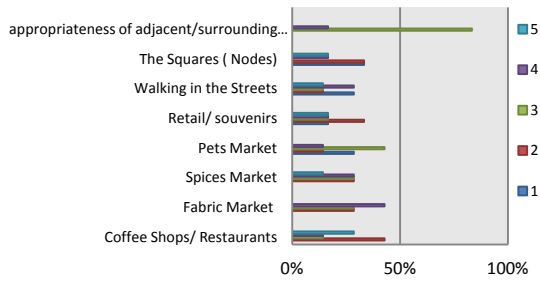


**The Souq's Layout**



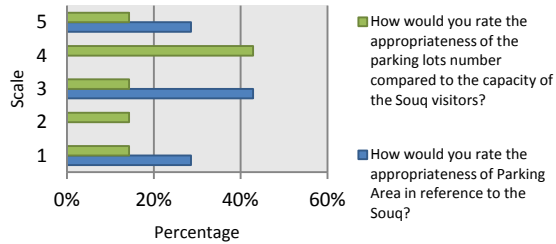
**Figure 14.** Visitors opinion of the Souq Waqif layout

**The Atmosphere**



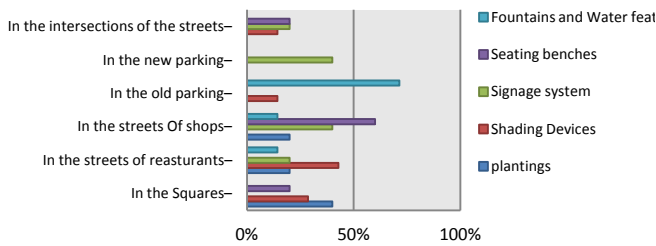
**Figure 15.** The Souq Waqif atmosphere

**The Parking Area**



**Figure 16.** The parking area

**Please Specify where do you want to add:**



**Figure 17.** Modifications on the Souq Waqif

**Category 1: Planting**



**Figure 18.**



**Figure 19.**



**Figure 20.**



**Figure 21.**

## Category 2: Benches



Figure 22.



Figure 23.



Figure 24.



Figure 25.



Figure 26.

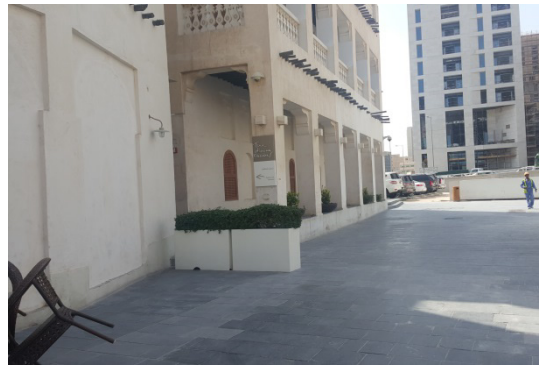


Figure 27.



Figure 28.



Figure 29.

### Category 3: Sun Shading Devices



Figure 30.



Figure 31.



Figure 32.



Figure 33.



Figure 34.



Figure 35.



Figure 36.



Figure 37.

### Category 4: Water Features



Figure 38.



Figure 39.



Figure 40.



Figure 41.



Figure 42.



Figure 43.



Figure 44.



Figure 45.

### Category 5: Signage



Figure 46.



Figure 47.



Figure 48.



Figure 49.



Figure 50.



Figure 51.



Figure 52.



Figure 53.



Figure 54.



Figure 55.

## REFERENCES

- [1] Al-Maimani, A., Salama, A. M., & Fadli, F. (2014). Exploring socio-spatial Aspects of Traditional Souqs: The Case of Souq Mutrah, Oman. *Archnet-IJAR, International Journal of Architectural Research*, 8(1), 50-65.
- [2] Aloweid, A. M. (1991). *An Evaluation of urban housing in The Kingdom of Saudi Arabia*. Doctor of Philosophy, UQ, Brisbane.
- [3] Amit-Cohen, I. (2005). Synergy between Urban Planning, Conservation of the Cultural Built Heritage and Functional Chnges in the Old Urban Center-The Case of Tel Aviv. from Elsevier
- [4] Barrett, R. A. (1991). *Culture and Conduct: An Excursion in Anthropology*. Belmont: Wadsworth Publishing Company.
- [5] Bonnemaision, J. (2005). *Culture and Space. Conceiving a New Cultural Geography*. London and New York: I. B. Tauris.
- [6] Brown, L. J., Dixon, D., & Gillham, O. (2014). *Urban Design for an Urban Century-Shaping More Liveable, Equitable, and resilient Cities*. New Jersey, USA: John Wiley & Sons.
- [7] Carmona, M., Tiesdell, S., Heath, T., & Oc, T. (2010). *Public Places Urban Spaces-The Dimension of Urban Design*. New York, USA: Routledge.
- [8] Elsheshtawy, Y. (2004). *Planning Middle Eastern Cities - An Urban Kaleidoscope in a Globalizing World*. US: Routledge.
- [9] Farr, D. (2008). *Sustainable Urbanism - Urban Design with Nature*. United States: Wiley.
- [10] Gans, H. J. (1965). *The Urban Villagers, Group and Class in the life of Italian-Americans*. New York: The Free Press.
- [11] Givoni, B. (1989). *Urban Design in Different Climates: World Metereological Organization Publication*.
- [12] Hakim, B. S. (2014). *Mediterranean Urbanism - Historic Urban/Building Rules and Processes*. New York: Springer.
- [13] Hockings, J. (1984). *Built Form and Culture: A Case Study of Gilbertese Architecture*. Doctor of Philosophy PhD, University of Queensland, Brisbane.
- [14] Inglis, D. (2005). *Culture and Everyday Life*. New York: Routledge.
- [15] Jodidio, P. (2015). *The New Architecture of Qatar*. New York: Skira Rizzoli.
- [16] Kaspirin, R. (2011). *Urban Design-The Composition of Complexity*. New York, USA: Routledge
- [17] Khalaf, R. W. (2015). The Reconciliation of Heritage Conservation and Development: The Success of Criteria in Guiding the Design and Assessment of Contemporary Interventions in Historic Places *International Journal of Architectural Research-IJAR*, 9(1), 77-92.
- [18] Khan, H.-U. (2015). Architectural Conservations as a Tool for Cultural Continuity: A Focus on the BUilt Ebvironemtn of Islam. *International Journal of Architectural Research-IJAR*, 9(1), 01-17.
- [19] Korllos, T. S. (1980). Sociology of Architecture: an emerging perspective. *Ekistics*, 47(285), 470-475.
- [20] Lang, J. (2005). *Urban Design - A Typology of Procedures and Products*. United States: Routledge.
- [21] Lusiani, M., & Zan, L. (2013). Planning and Heritage. *Journal of Cultural Heritage*, 3(2), 108-115.
- [22] Mahgoub, Y. (1999). Architecture in the United Arab Emirates, from [http://images.google.com.au/imgres?imgurl=http://victorian.fortunecity.com/dali/428/uaearch/Saeed5.jpg&imgrefurl=http://victorian.fortunecity.com/dali/428/uaearch/uaearch6.htm&h=459&w=556&sz=68&hl=en&start=3&u m=1&usg=\\_\\_KsvRxyPc\\_evhxnsRRuFCOGUIj0o=&tbnid=fXmVjLKYuW3gYM:&tbnh=110&tbnw=133&prev=/images%3Fq%3Dvernacular%2Barabic%2Bhouses%26um%3D1%26hl%3Den](http://images.google.com.au/imgres?imgurl=http://victorian.fortunecity.com/dali/428/uaearch/Saeed5.jpg&imgrefurl=http://victorian.fortunecity.com/dali/428/uaearch/uaearch6.htm&h=459&w=556&sz=68&hl=en&start=3&u m=1&usg=__KsvRxyPc_evhxnsRRuFCOGUIj0o=&tbnid=fXmVjLKYuW3gYM:&tbnh=110&tbnw=133&prev=/images%3Fq%3Dvernacular%2Barabic%2Bhouses%26um%3D1%26hl%3Den).
- [23] Murzyn-Kupisz, M. (2013). Cultural Heritage in Building and Enhancing Social Capital. *Journal of Cultural Heritage*, 3(1), 35-54.
- [24] Nour, H. (2015). Reconsidering the Waqf: Traditional Mechanism of Urban Regeneration in Historic Muslim Cities. *International Journal of Architectural Research-IJAR*, 9(1), 18-30.
- [25] Putnam, R. D. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.
- [26] Rapoport, A. (1969). *House, Form and Culture*. New Jersey: Prentice-Hall.
- [27] Rapoport, A. (1982a). *Housing and Identity. Cross-Cultural Perspectives*. New York: Holmes & Meier Publishers.

- [28] Rapoport, A. (1982b). *The Meaning of the Built Environment: A Nonverbal Communication Approach*. Beverly Hills, California: Sage Publications.
- [29] Rapoport, A. (1997). Systems of Activities and Systems of Settings. In S. Kent (Ed.), *Domestic Architecture and the Use of Space: an Interdisciplinary Cross-cultural Study* (pp. 9-20). Cambridge: Cambridge University Press.
- [30] Rapoport, A. (2000). Culture and built form: a reconsideration. In K. D. Moore (Ed.), *Culture - Meaning - Architecture: Critical Reflections on the Work of Amos Rapoport*. Brookfield: Ashgate Publishing Company.
- [31] Ross, H. (1991). Household Compositions and Use of space. *Social structure for Sustainability, Fundamental Questions Paper No. 11, Centre for Resources and Environmental Studies, Australian National University Canberra*, 64-72.
- [32] 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.
- [33] Salama, A., & Wiedman, F. (2013). *Demystifying Doha*. UK: Ashgate Publishing Limited.
- [34] Smith, R., & Bugni, V. (2003). Designed Physical Environments as Related to Selves, Symbols and Social Reality: a Proposal for a Humanistic Shift for Architecture. *Humanity and Society*, 26(4), 293-311.
- [35] Stevenson, D. (2013). *The City*. UK: Polity.
- [36] Zyscovich, B., & Porter, D. R. (2008). *Getting Real about Urbanism: Contextual Design for Cities*. Washington: Urban Land Institute.