

Sense of Community in Al-Wakrah City: Strategies for the Development of Sustainable Communities in Qatar

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Abstract: In the State of Qatar, the intense and rapid urban development based on hosting upcoming mega events, as envisioned by Qatar’s National Vision (QNV-2030), have raised concern about community stability as it faces modernization in both physical and social aspects. A declining sense of community amid has been associated with interactions within urban amenities and form that trigger social problems, diminish a community’s well-being and delay development. The integration of a community within the urban physical realm contributes to the development of sustainable communities. The research study aims to identify major urban concepts that contribute to resilience in both socio economic and demographic context. Qualitative community sustainability is investigated in Al-Wakrah city neighborhood through site visits, observation and interviews in order to establish a measure for urban characteristics that are catalysts for sustainable community development in future urban planning decisions.

Keywords: Al-Wakrah, Sense of Community, Urban Form, Resilient Community

INTRODUCTION

During the last two decades, increasing urban forms and the lack of a profound understanding of social norms in relation to their built environment in Qatar caused negative effects such as the loss of compactness and community ties, which has historically been a major feature of the Islamic city [1-7]. Scholars argue that this global phenomenon has caused urban sprawl, characterized by residential communities distant from city centres and allowing the occupation of foreign occupants within the city centres [8, 9].

In turn, this has led to a decrease in social ties and cultural behaviour. Attempts to recover or diminish the loss of identity in such places can be seen in district like Msheireb, where the urban development attempts to reassemble urban environments that bring back cultural patterns and ties through architectural features and planning (cf. the Msheireb exhibition) [10-15]. Therefore, this research study identifies the urban concepts most associated with community attachment in Qatar, in hopes of modeling resilience in urban development.

Along with the literature about multidisciplinary concepts exploring sense of community in the context of city planning, the old pearling city of Al-Wakrah in the State of Qatar is selected for the study of interrelations between community and urban forms, as it has maintained a solid sense of heritage and community ties. The research examines “community as a place, community as relationships, and community as collective political power” [16] “using a qualitative methodology to evaluate sense of place from the ‘Environmental Protection Agency’s Community Culture and the

Environment’, highlighting milestones such as definition of community goals, identification of factors that capture the essence of a place, measurement of community characteristics, analysis of results, and best practices” [17]. In addition, site , demographic and sociocultural values and input within the physical environment is examined in selected nodes that influence the intangible heritage in the urban context of Al-Wakrah, giving it the unique sense of community amongst other cities [18-20]. An understanding of the forces supporting the transit oriented and general development and influencing the sociocultural and heritage stability [21, 22] allows to propose a process for aggregate community and urban resilience spawned through the physical environment, [23-27].

The community development process focuses on the development of human ecologies by empowering the community with the development of physical amenities as economic and environmental resources while in return’ sense of community acts as a mechanism to stimulate the healthy development of the environment and the people who inhabit it.

BACKGROUND

New Urbanism investigates the interrelationships between social and physiological aspects within the neighbourhood context [28-30]. Accordingly “the social doctrine of New Urbanism is integrated with the social community formation science literature” [31]. Membership, commitment and mattering between the social and physical realm are the product of a balanced sense of community layered from dynamics of shared experience, history, values and public place and externalities, such as commerce transport systems and multiple professions [32, 33], which influence peoples sense of social and place belonging. As envisioned below, the sense of place defines community behavior.

Programming for local communities and value of public place that has more priority to these communities must support the feeling of local life.

Demographic characteristics such as similarities in norms, knowledge, tradition and history are main factors influencing community and place development as communities’ layer history, tradition, heritage around urban surroundings [34]. At the same

time, minority groups compromise to a degree that reflects their values and needs [32]. Normative translation is mirrored in the aesthetic organization of space and the city’s overall image, both social and physical [16].

“The key to resilient communities is to locate available local assets, connect them with one another in ways that multiply their power and effectiveness” [35].

This strategy enhances the socio-economic activities in a city. Land use planning and policy makers are the primary factor in enabling development and property distribution, which serves the social development of public spaces. Policy makers influence planning decisions and urban patterns of property distribution, land use, and development, community empowerment and community economics. The formation of high interactive areas enhances the political bond between community members as does the Majles extension in residential zones, which stimulates male society members’ political network. Accordingly, a sense of authority between members becomes the guiding force for authority decisions (Diagram 1).

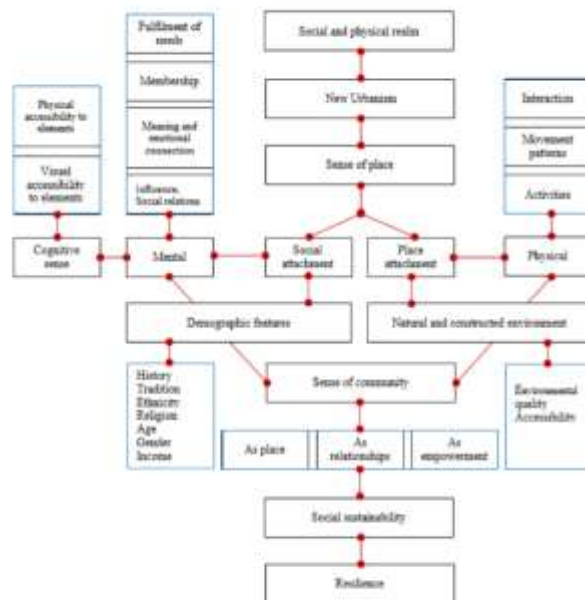


Diagram 1- literature concepts integration sequence Source: Author

Variables of the Physical Realm

Traditional urban spaces’ transition hierarchically from macro to micro depends on the local community, attention from

pedestrians and other mobile entities, social identification, and community identity”[17].

Public places in city centers create relationships through continues motion and interaction

[36]. Alhara and Albaraha traditionally offered physical features that enhanced environmental control and walkability where major experiences and socio-economic interactions happened similar to today's commercial hubs and squares, also influenced by religious factors that formulate major social nodes such as Islam-mosques. Using water features and green space in public spaces is both a traditional and modern urban design approach. Studies have shown that improved climate control, social behavior and enhanced interactions lead to positive experience and memory of those areas, thus increasing a sense of wellbeing [37].

However, modern city networks pose challenges of connectivity, land use, accessibility, and relation to facilities and social hotspots, while seeking to support an integrated infrastructure that promotes walkability and pedestrian interactions with urban elements such as art, historic designs, and socially significant materials [38]. Narrow streets and close buildings provide shade and funnel sea breezes in more traditional cities, providing comfort for pedestrians even in warm seasons. The replication of traditional urban forms and textures allows pedestrians freedom of movement as well as interaction with textures, shapes and materials resembling the past. Urban forms should provide harmony rather than unity in their relation to the human scale and social manners and customs. Compact urban areas are more visually appealing than sprawl, increasing public-social interactions through high density and mixed use. Also, when individuals prefer large homes, urban areas require a newer interface still [39].

Layers of accessibility and visual connection affect both vehicles and pedestrians' accessibility. "More interaction can be created indirectly through use of local services or public transport" [40-43]. Also, the introduction of metro systems provides a means of economic growth, social and community sustainable developments, with nearby creation of residential, commercial, retail, cultural, and other major attractions of critical importance for economic diversification. In

addition, sustainable development promotes pedestrian activity, which in turn enhances the pedestrian perception of the physical context and/or its heritage features.

FINDINGS

Site analysis

Al-Wakrah has 299,037 occupants [44]: 36% Qatari nationals and 49% Muslim, 15% non-Muslim non-Qataris. Generally, the occupants are conservative in traditional and religious behavior. Most are long extended families who shaped the authentic fabric of the city giving it the profound sense of belonging as well as socio political empowerment that extends its influence to local government development decisions. The socio-economic status of the local occupants is generally high, this allows engaging in high cost activities which promoted the growth of entertainment such as boat ownership, shopping and dining in addition to the open (Majles) meeting halls found in almost every Qatari residence which promotes social network on a residential level.

Specific nodes were analyzed within the research study in accordance to the morphology of the commercial social hub around Al-Wakrah street. The literature reveals that major developments occurred in Al-Wakrah during 2013-14. Accordingly, in-depth interviews were conducted with high-profile community members and occupants related to that time frame. The interviews of 20 locals and 20 non-locals aimed to explore the "strongest predictors of 4 senses of community: (a) expected length of community residency; (b) satisfaction and involvement with the community; (c) the number of neighbours one could identify by first name to measure factors called social bonding and behavioural rootedness; (d) relation of individual to city forms in the context of selected urban form nodes; (e) mobility patterns" [32], while considering economic, social, religious, physical, and social contexts. By that, resilience towards development is revealed through associations between physical and demographic qualities.

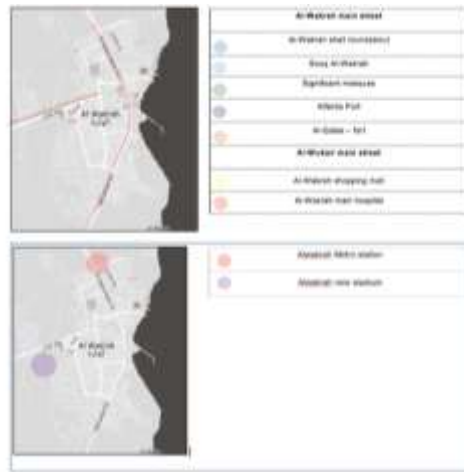
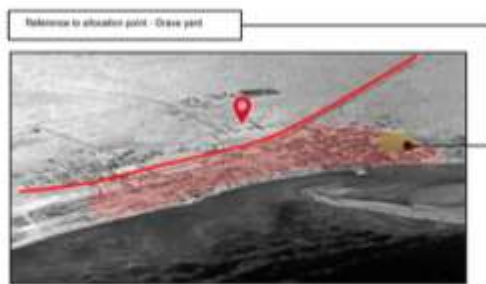


Fig-1: Highlighted Al-Wakrah Street and major study area nodes

Connective Tissue

For the occupants, Al-Wakrah main road resembles a main gateway to the city and holds an important historical value. Together with the developing metro station, it serves as a main connective fabric and commercial strip. The road serves as a major extension to the industrial city of Museieed South and

to Doha north, making it a high demand line. However, the development of walkable access points in the commercial hub of the street has not been developed or considered yet. This raises the issue of residential Euclidian planning zones disconnected from high commercial hubs of the city where major community ties formulate.



1940s: The road to Doha, leading out of the top of the photograph, with the square fort visible in the centre.



2004: The road to Doha maintained and developed, at the top of the photograph, with the square fishing and pearling fort developed into a linear port (Alfarda). The development of residential blocks into land is visible, and the old town fabric is seen deteriorating.



2010: Active revitalization of the old town at the souq and Farda area. The main connective tissue has maintained its original shape while development continues.



2017: Recent view showing development of the souq and Farda area making it the heart of the developing city.

Fig-2: Morphology of Alwakrah street area

Al-Wakrah street, beach, old town, city center and the southern coastal area major development of the city plan initiated in 2008. The doctrine of the plan was social, cultural, and economic sustainability of street and city for the growing occupants' numbers and (local, foreign) for tourism and economy development purposes. The General Authority for Tourism in Qatar safeguarded rehabilitation of historic sites in accordance to Qatar National Vision whilst enabling the accessibility and functionality of these sites. In 2014 the old Souq was completed to become once again the commercial hub of the city [45] with strategic connection to Hamad International Airport and the developing transit station. Full collaboration amongst Qatar museum authority and the public tourism

authority is vital to prevent exploitation of heritage areas in the process, as further development of much needed entertainment and leisure infrastructure required for tourism, world cup stadium and transit fabric is operating [46].

Developed highlighted nodes and developing form features (Al-Wakrah metro station and the new Al-Wakrah stadium) are generators of community and physical bonds. As the old Al-Wakrah road and new Alwukeir road connect all social nodes in the commercial line of the city. The exposure to these nodes serves as a stimulant for sense of place, belonging, and attachment through memory and history those factors heavily into community sustainability.



Fig 3 - Key view of nodes, with visual exposure from street level. Source: Author, 2017.



Fig4- Areas of high activity and significance in the surrounding streets. Source: Author 2017



Fig5- Relative activity patterns related to key zones.

Source: Author 2017



Fig 6- General land use zoning showing residential developments around the town center, Source: Author, 2017

Existing Nodes

The shell roundabout at the north end of Al-Wakrah Street is considered a major landmark of the city, with street which mirrors heritage memory of the pearling activity and accordingly creates memory and place attachment for both occupants and visitors through cognitive qualities and allocation. Multiple historic heritage areas are around Al-wakrah, majorely in the old town. Mosques are especially significant as they offer hierarchal reflection on Al-Wakrah's community, reinforced by the religious requirements and bonds of 85% Muslim community members. The interactions around these mosques offer connection and sense of wellbeing between occupants.

The most interactive mosque is Al-Wakrah Mosque, serves as a main Friday and Eid prayers owing to its location near the historic Qalaa fort (Museum) that serves as a reminder of political history through its preserved form and artifacts, which give visitors insight into the history of Al-Wakrah, namely on the front of Al-Wakrah Street and on the open green area around it. The variation of old and recent mosques on the roadside draws on both past and present through architecture and heritage forms, saturating the street with levels of modernity that embrace the city's history. The interactions of pedestrians around mosques is increased during prayer calls allowing casual assessment of community occupants behavior and norms amongst each other and visitors to the area, and contributing to individuals' sense of safety and well-being.



Fig 7- Approaching shell roundabout in Al-Wakrah, with mixed-use building strips seen along the road. Shell roundabout in Al-Wakrah. Source: Author, 2017.



Fig 8 - Al-Wakrah Mosque near the fort, view from Al-Wakrah Street. Source: Author 2017



Fig 9 The fort museum Source: Author, 2017



Fig 10- Souq area 2004.



Souq area 2014. Source: Google Earth



Fig 12- Green areas. Source: Author, 2017

The Souq's urban regeneration started in 2014 was governed by local development strategy concentrated on walkability and pedestrian activity, marking the entire Souq as a carefree zone. Historic Qatari village features, known for their compactness, on

which New Urbanism thrives, were replicated with narrow Sikkas and Harras. In addition, intense architectural aesthetic elements serving as climate and visual stimulus are visible. Old shows along the beach walk and the preservation of buildings such as the

house of Sheikh Ghanim Bin Abdulrahman Al-Thani played a major role as artistic initiatives of cultural heritage stimulation and experience. The Souq has become a major socio-economic hub that generates communication and recognition between locals and nonlocals embracing local culture. The convenience of the seafront walk adds to the stability of social activities. However, it lacks green scape that will enhance walkability, livability and wellbeing.

The old port's is connected to the Souq by high levels of walkable areas. The Souq was regenerated in 2004 and continues to function as locals were able to engage shipwrights and involve numerous layers of

fishermen from different communities, all contributing to increased opportunities of economic wellbeing. Exploration and tourism in the port opened additional guide and ship trips job opportunities for lower income community members experienced in the field. Personal entertainment and private businesses along the port activities created a community layer throughout common activity and interests that preserve fishery and pearling artifacts and fabric for future generations contributing to memory, experience that strengthen social ties. Most local shows and traditional ships are owned by Qatari locals and operated by foreign lower-income skilled community members or have been donated for the city's beach art.



Fig 13 - The port area (Alfarada). Source: Author 2017

The construction plan ongoing in the old town area and Alwakrah street aim to transform the line into a social hub and a preferred waterfront destination. However, currently there is a lack of nearby hotels, ease of foot transportation, family-oriented street formations, walkability infrastructure, shading and safe accessibility between residential zones and the commercial coastal hub. The main Al-Wakrah road is a three-lane 14-meter-wide with pedestrian central separator and side lanes where cars can enter retail complexes or park parallel. Interviews were concluded. It was revealed that male interactions are more convenient around Al-Wakrah street, whereas families avoid the cross and linier commercial space. More family and female pedestrians are observed in the car-free zones in Souq Al-Wakrah.

Although the investment for Al-Wakrah's tourism, stadium and the transit station will boost the economy, the community ties remain a major consideration for the success of the city as the new transit station will bring increased demand to the area. With loss of cultural stability, the city will be vulnerable to changing dynamics along with the new demand.

Interviews show that 70% of community members fear for community ethics and street identity, worrying that their own visits to city center and leisure core heritage areas might regress during the density and

new values along with tourist industry. Resilience towards these issues shall come from a balanced connection between the new development and existing community preferences in order to establish a balanced sense of place for the locals and non-locals, who are an intangible part of the authentic and unique city image. Residential zones also lack social stability currently due to sprawling patterns causing distant separate villas and minimum neighborhood walkability infrastructure. However, many houses architecturally reflect traditional features and engage in Majles chiefly male activity contributing to the continued social network that could be much improved with consideration of the above issues. Female members of the community organize visits and trips to markets and retail hubs for social interaction. This system of open Majlis has given the community a sense of empowerment by allowing discussion of well-being and neighborhood issues. In each neighborhood, there is a common house, usually that of a well-connected community member, where most local males gather weekly or monthly without invitation. From the interviews, 80% of local individuals stated that the Majlis plays a major role in sustaining neighborhood standards and community ties despite the private style of family life.

Though non-local members do not engage in the Majles social network, 90% experienced social sustainability in weekly activities in social areas such as the Souq and during Friday prayer gatherings.



Fig 14 - General land use zoning shows relation of residential developments around the central town. Source: Water mark Author, 2017.

Transit Station and Stadium Development

The effect the transit development has on the social development of the area and the efficiency of the corridor activity intended is based on the travel pattern modes and access to desired areas of the public and local residents. Central activity hubs need to be within proximity walking distance ranging within 500m-1 km to residential and station zones. With community walkable zones consideration during development, the accessibility of transit stations to market hubs and amenities grows. Accordingly, accessibility, activity of

the street and social interactions will increase. Many of the stations interior designs are inspired by traditional features of Qatar, as well as the stadium of 2022 FIFA World Cup design which was inspired by the Qatari pearling and fishing shows. This creates an additional heritage oriented public land mark connecting the city's visitors further to the community story and pride. However, the location of the stadium near large residential lots and mall guarantees increased activity and demand in the area threatening community's perception of place.



Fig 15 The areas likely to be affected by rises in demand caused by metro and tourism development. Water mark Author, 2017.

DISCUSSION AND RECOMMENDATIONS

Based on New-urbanism approach that “promotes mixing residential, commercial and public spaces, mixing different housing types, narrow lots, pedestrian friendly streets, and celebrating local history, climate, ecology, and building practice”, improving community ties and wellbeing [31, 47] shall be the doctrine in deciding future resolution for the above mentioned threats to the area, due to modern development. As locals are minority in numbers, they need to be the main focus group in finding improved solutions to maximize their connections, both socially

and physically, to city social hubs in terms of place, relationships and collective power, while embracing the needs of the future demand in tourism development. Urban spaces function successfully when their design contributes to creating a sense of place that allows users to equally identify themselves with heritage and development. Therefore, the following principles should be adopted:

- Architectural thoughtfulness of building facades— using heritage inspired elements which serve as reminders of community unique heritage.

- Connective tissue between city nodes must reflect continues sense of place for users by focusing on safety, comfort, walkable areas, whilst still remaining relatively connected to vehicular movement and parking areas.
- Stopping points in linear walking zones and linear streets increase time spent in the area, thus strengthening the social network, and should be enriched with prominent architectural qualities that deliver function and reflect perception of the local image and preferences [48].
- Harmony amongst development features is significant amongst existing buildings, perspective view, social manners, customs, and needs. New Urbanism promotes community relationships through tight-knit buildings and neighborhoods connected to social areas with high social activity.
- Retail and leisure centers are catalyst for social interactions that develop community ties. Locating the most active building, such as a mosque or major retail or leisure hotspot, prominently along the street edge helps lay out the entire city:
- The size and scale of these buildings is significant, as views perception changes from distant to additionally contributing to the sense of place and attachment through compatibility between human scale and built forms.
- Heavy traffic and pedestrian activity tend to increase where tall buildings serve as magnets for exploration and landmarks. Building as mosques and political service buildings are perceived as reminders of heritage and community order increasing resilience to identity weakening.
- Situations that encourage locals to engage in public activity help regulate social behavior. In relation to the social fabric of the city, original local occupants reflect on the local behavior and demand traditional expectations. As is the social gathering doctrine of daily life of locals that empowers this tight knit community resilience and reflects on authorities' decision making.
- Similar demographic characteristics need to be enhanced when planning, development that embraces local livability preferences will help relocate local society towards the central city hub adding to the authentic traditional norms amongst the changing social fabric in the social hub.
- Privacy and religious aspects are crucial in reflecting the true essence of the city, development cannot diminish the physical fabric that reflects this image as it plays a significant role in place belonging and pride.
- Social economic factors significantly influence well-being as well as community members' use of modern technologies and local assets. Equity must be a primary consideration when establishing commercial and public spaces, lest doing so decrease members' engagement and senses of community and place.
- Current local occupants prefer large villas and less compactness, thus finding a solution around these preferences is required. Applying compactness in connective areas between residential and social commercial hubs that transition gradually will promote walkable spaces and social engagement towards the central main street area.
- Walkability promoted through safety, comfort (through shading); soft scape. Local architectural and heritage considerations reflection in the physical realm must be taken into account
- Visual stimulation towards heritage and community place making is a tool to enhance community connectivity with the physical realm in walkable space.

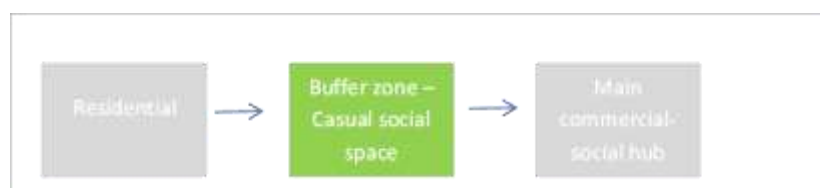




Fig 16 - The roads most likely to encounter density issues that will influence the community's well-being. Source: [unintelligible]



Fig 17 - Source, Water mark Author, 2017.

Contribution to Knowledge

This research study contributes to the knowledge in the field of urban planning and regeneration of existing historical settlements in Qatar and the Middle East region. Furthermore, this research study provides an investigation related to Al-Wakrah city, which has not been done prior to this research. This piece of knowledge should create an important reference and a reflection of the current urban development in process towards the formation of sustainable communities in Qatar and in the Region.

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