

PERSIAN GULF ATLAS

ARCHITECTURE , SETTLEMENT & URBAN IDENTITY

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Process

This research program was done based on the cooperation agreements with the University of Westminster and outstanding researchers who introduced by the university.

Settlement, architecture and urban identity as well as Persian Gulf geography were the main theme of the study to preserve academic and scientific aspects of the Atlas.

Atlas's design and composing, in the form of a Memorandum of Understanding with London Metropolitan University, was entrusted to a professional team.

Atlas was presented at a ceremony alongside "Settlement, Architecture and Urban Identity of Persian Gulf" international conference, at Royal College of British Architects (RIBA), on World Habitat Day, in England, at 2009.

It is worth noting, "Settlement, Architecture and Urban Identity of Persian Gulf" international conference, based on an agreement with UN-Habitat, was held as one of the main event of the World Habitat Day, by attendance of the United Nations' senior managers, in England.

These researches were submitted to London Metropolitan University for implementation and preparation for release.

The scientific and executive quality of Atlas was confirmed by two colleague universities and is also confirmed by the United Nations.



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Around the world, there are numerous and varied patterns of settlements, which based on the geographical ground and climate conditions have been consciously and intelligently created. Behind each of these solutions, there are years of creativity, experiences and skills of architects. These experiences, based on sustainability knowledge criteria and regardless of social classes and wealth, have created innovative pattern of settlement.

Precise and deep attention to the issue of human settlement calls for recognition of each of these essential and fundamental civilization areas. Due to lack of the ancient settlement patterns recognition, and ignored concepts of urban identity, contemporary cities have been built regardless of the basic structures of living and habitation in the a scale of house and a city and the quality of environment have been unbelievably degraded.

The Valuable efforts of “IAARA” and “BLP-MERC” in formulating “Persian Gulf Atlas of Settlement, Architecture and Urban Identity”, as one of the most ancient center of the world civilization, are admirable.

It is hoped, these efforts develop in all around the world and by applying the valuable experiences of predecessors an appropriate field could be provided to using these experiences in building and development of the contemporary cities.

Dr.Joan Clos

*Under-Secretary-General and
Executive Director, UN-Habitat*



Many experiences, in relation to human settlement, lies in this ancient land. Hot and humid climate, as a serious and great challenge, lead architects to build sustainable settlements in the beautiful boarder of Persian Gulf, with creativity and wisdom and of course this has happened during thousands years history.

Today in the chaos of urbanization and widespread threat of instability, the need to notice and deep understanding of sustainable settlements could be feel more than ever, by emphasize on local knowledge, recognition of spatial values and past human experiences, especially in areas of the world civilization. This attitude needs to be addressed in a multilateral process of understanding the importance of settlement, understanding local architecture and recognition of the various identities of cities.

This work has been well done based on the worthy study of researches by IAARA's efforts, under valuable supervision of the United Nations Human Settlement Programme, and in cooperation with the University of London Westminster, and at the end London Metropolitan University.

On ups and downs of this hard way, the valuable cooperation of sponsors helps to implement this project, which is so admirable.

I hope with foundation of "Persian Gulf Atlas" in the near future, we could take another important step toward introducing an important part of sustainable human knowledge to the world community.

Seyed Mohammad Mojabi
Chairman of Persian Gulf Atlas

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Kish







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Palm Trees



SUSTAINABLE IDENTITY

**Prospects of New Paradigms for the Built
Environments of the Persian Gulf**

Nader Ardalan



AnyScanner

SUSTAINABLE IDENTITY**Prospects of New Paradigms for the Built Environments of the Persian Gulf**

This essay will address on-going academic research and professional applied design studies related to re-conceiving the principles and aesthetic basis of future built environments of the Persian Gulf Countries to better achieve their phenomenal and cultural sustainability potential. The study is partially based upon the successful research findings of the Year One Pilot Studies focused upon the United Arab Emirates and sponsored by the UAE. These findings were published in summary by 2A Architecture & Art Journal, winter, 2008 Edition in Dubai. A Harvard Kennedy School Middle East Initiative Grant for 2009/10 will allow both an anthropological and architectural research continuation of this general topic.

These studies are also complemented by my current professional practice in the region and over forty years of built work in the diverse countries and bio-climatic cultural zones that surround the Persian Gulf.

Our studies commenced with a series of key research questions that have generated the framework of our exploration and that still remain to be fully answered:

- Q1. How have decision makers and creators of the new developments in the Persian Gulf made their key decisions? In particular, how have they incorporated concerns for the environment and culture in their programming, planning and design process, aside from the standard considerations of material function, economics and marketability? How has environmental responsibility and cultural relevance been defined and managed in the design/build process?
- Q2. With specific reference to the GCC countries, do the new developments exhibit a particular cultural character and narrative? One view might be that identity deals directly with a particular civilization's world view of ultimate reality; if that is so, what civilization is being represented in these new developments? If there are shortcomings in this respect, how can they be improved?

What role does globalization play in these narratives?

The Current Situation

The topic of Sustainable Human Settlements and the well being of the marine environment of the Persian Gulf is a vast challenge. It requires considerable, ongoing multi-disciplinary research, more in-depth and breadth surveys and documentation, detailed analysis, discussion and new Public Policy Initiatives. The Iraqi coastal edge, while limited in geographic size provides access via the Shatt al Arab to the Basra Port, while draining into the Persian Gulf the entire drained marsh lands and waterways of the Tigris Euphrates Valley. Oman, further removed from the Persian Gulf, offers a more benign picture of development, but ironically the most rapid urbanization.

However, all sides are contributing to the unfortunate pollution of the marine environment by their offshore and onshore oil industries that spill or seep vast amounts of oil into the waters; by substantial tanker discharges that also introduce invasive alien predatory species that endanger local fisheries and marine species; by urban dumping of raw sewage and industrial waste; by desalination and power plants and by intertidal urban developments that destroy biodiversity and coral resources that all cause the Persian Gulf waters to be one of the world's most polluted

The current findings of our research and from an evaluation based upon several sustainability criteria, such as the One Planet Living Principles, indicate that the majority of current planning, design, construction and real estate practices and models that have been used, particularly in the GCC region since the 1990's to now demonstrate serious shortcomings.¹

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This working conclusion is principally due to documented observations by various international agencies and professional critics of the following phenomena:

- The region's high energy and resource consumption that showed Abu Dhabi in 2007 had the world's highest carbon footprint per capita;
- Urban and Persian Gulf water pollution, as specifically recorded in the State of the Marine Environment Report 2003 by ROPME² that showed the four primary causes related to:
 - 1) Oil industries
 - 25,000 tankers, 60% world oil transported through the Persian Gulf
 - World's highest oil pollution risk-1.2 M. barrels/year spilled
 - Hydrocarbons in water exceed by 3 times North Sea Levels
 - 2) Wars from 1980 to 2003
 - Iraq/Iran War (1980-88) = 2-4 million barrels spilled
 - 1991 Iraq Invasion of Kuwait = 2 million mines, 730 oil well fires
= 9 million barrels spilled into Persian Gulf
 - 3) Natural occurrences
 - Shallow water, 50M average depth, slow moving-3 year cycle
 - Persian Gulf's high water salinity & unusual high temperatures,

- Uneven urban quality and cohesion, lack of human scale plus traffic congestion that is evident from even a casual drive through any of the urban centers now experiencing rapid growth;

- Unresolved socio-demographic dynamics due to the majority of the resident populations of the GGC being expatriates of widely diverse ethnic and economic backgrounds. They do not have citizenship status and associated rights, with limits to freely perpetuating their respective cultural values and personal self-realization dreams, while actively helping to build a “Global Image of Unlimited Prosperity”. As a late phase of modernism, globalization magnifies these structural problems by superimposing onto them populations from starkly different backgrounds. The resulting cultural disorientation, alienation and identity crisis remain to be resolved. What is the path forward?

Prospect

The forms of nature are meaningful. They are resultants of a fit for purpose. Similarly, the forms of the built environment, such as cities and architecture, must ultimately be fit for their bio-climatic/cultural context or they will not be efficient to maintain and finally will not survive. This ecological observation can apply to the existing conditions of the Persian Gulf and its surrounding built environments, where economic determinism rules have principally dominated development in the last decades with the noticeable retrogressive and destructive shortcomings observed above.

Imagine then what the prospect might be for these communities in the next decades if more positive and constructive values based upon a more holistic ecological fitness and well being of human processes approach became the motivating rules that governed development in this region.

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Such a model was proposed by Ian McHarg, the acclaimed Ecological Planner, in his seminal book entitled *Design with Nature*.³ He proposed that in order to holistically comprehend an environment, such as the Persian Gulf region, an inventory of all its ecosystems and life processes be made to first understand the systemic issues involved in the region and then to determine the most adaptive processes to achieve the least-social-ecological-cost to maximum social-ecological benefit solution. Without having the benefit of such an informative and detailed inventory and analysis available, but based upon our investigations to date, such as those published by ROPME and reviews of Master Plans for various regional cities and major projects, the following observations and impacts can be made generically about the prospects for the Persian Gulf Region:

1. The Marine Ecosystem will reach pollution Tipping Point in the near future due to the four primary causes already discussed above. The ROPME proposed mitigating steps include⁴:

- Conservation and restoration of Marshlands of Mesopotamia
- Integrated Coastal Area Management Guidelines and Legislation to harmonize development activities in the coastal zone, with member states to prevent, abate and combat further pollution from land-based activities.
- MARPOL Convention to be ratified by member states to prevent further pollution from ships.
- Conservation of biodiversity legislation and Establishment of Protected Areas to prevent increasing mortality of fish and coral.
- Sea-level rise and rising water temperature will increase threats to marshes and mangroves that protect coastlines and support healthy ecosystems

2. Built Environments need to avoid building in the coastal intertidal zones to protect biodiversity and adopt more sustainable development strategies for water desalination, power generation, sewage and waste disposal. Sea-level rise and storm surge will increase threats to coastal developments and infrastructure.

3. Transportation strategies already under way to build regional rail system, more mass transit networks, and use of alternative energy systems for vehicles, with development of micro-climates to encourage pedestrian movement should be strongly encouraged.

4. Agriculture will face increasing heat, pests, weeds and water stress. Encouragement of alternative agricultural systems, such as hydropon-

ics, need to be developed in close proximity to urban settlements. Greater water saving approaches to agriculture must be legislated.

5. Socio-Cultural Patterns exhibit many unresolved socio-demographic dynamics in the region to be considered. In the GCC the majority of the resident populations are expatriates of widely diverse ethnic and economic backgrounds, with more than 70% of the work force being non-nationals. However, in these lands of great prosperity, many live in poverty. In Qatar, for example, 40% of non-nationals in 2003 were below poverty level as compared to only 1% of nationals.

6. Health and pathology have been proven to correlate with environment. In one of the hottest arid and humid environments of the world, further stress from increasing heat waves due to global warming will impact human health and quality of life, especially in cities, where high density, heat sinks caused by over emphasis on 24/7 air conditioning, atmospheric pollution, noise and urban tensions exist. Mitigation of these impacts through creation of naturally cooler microclimates and more healthy environments by changing the current building and urban patterns need to be encouraged.

7. Water has been an issue of critical concern in this desert region. Iran and Iraq at least have adjacent mountain aquifers to draw upon and rivers that traverse their territories, but in the GCC, except for Oman, all the other five states fall in UN category of "Acute Scarcity" of water. However, water consumption in the GCC ranks highest per capita in the world at 300-750 litres per day.

8. Energy demand will increase with population growth, while global warming trends will also increase demands for cooling. These forces will result in significant increases in electricity use and higher peak demands. New more energy efficient, environmentally more adapted building prototypes using mixed-mode cooling systems need to replace the current not-fit for purpose models. Once demand is reduced, alternative renewable sources, such as solar, wind, bio-fuel and others, need to be developed and used in grid connections with standard power generation networks.

9. Economy to adapt to the more ecological, sustainable patterns of life and urban settlements needs to be encouraged and promoted through incentive programs to support a more stable and energy efficient pattern of existence in this region. Innovative project construction loans and financing based upon long term energy and water savings can help promote greater use of sustainable strategies.

"If developing countries and their businesses seize the initiative on energy productivity, they will cut their energy costs, insulate themselves from future energy shocks, and secure a more sustainable development path- benefits that are all the more desirable given the current global financial turmoil."⁶

Sustainable Design- Case Studies

A brief review of the status of sustainability consciousness and mitigating activity in the region indicates that of the eight Persian Gulf countries, it might be said that the UAE and Kuwait may be the most active in developing and supporting environmental issues. The UAE has related more prominently to the land aspects of sustainability through the Abu Dhabi ESTIDAMA and the UAE Green Building Council in Dubai programs of sustainable guidelines with great focus on Energy and Water.

However, an important program of waste management has been recently initiated. Qatar has recently initiated their Qatar Green Building Council activity and the Heart of Doha redevelopment in downtown Doha is the prime example of sustainability guidelines being applied to a new project. However, one only wishes that such sustainable initiatives had been integrated in the original overall development of the much publicized Education City project in Doha.

Two selected case studies will be discussed to illustrate the specific characteristics, issues and challenges that projects based upon sustainable standards have considered, and what lessons can be gleaned from such mitigating design approaches that are being taken in the region.

Desert Retreat – UAE

In 2007 when thinking about the Desert Retreat, an intimate, private extended family place for a UAE National in the remote deserts of that country, I came to the conclusion that what can be valuable in the design theme and its architecture is to set a high standard of archetypal significance. Not just to repeat the historic “pastiche” version of traditional architecture, nor the aseptic “Avant Garde” devoid of culture, but to search for what Joseph Campbell called the “Monomythic” and primordial common ground narratives of space, time, forms, signs and symbols from the region and around the world to be realized in a unified New Creation of traditional values and contemporary opportunities.

Saudi Arabia has recently initiated its Saudi Green Building Council, but few projects have actively incorporated LEED or BREEAM Sustainable Standards. Bahrain and Oman probably have lagged the most in this field; Iraq due to continued internal strife has had little opportunity to consider this subject, with the other countries falling somewhere in between. Iran, due to imposed sanctions, internal issues and its more limited public and private investments in urban development, has neither shown great attention to sustainability standards nor apparent excesses in energy or water consumption patterns. It remains the “Giant in the room” that hopefully once stirred and released from its encumbrances will become a leader in sustainable development.

In keeping with the essential nature of the site, the retreat is to be constructed of architectural concrete made from the red sand of the site, washed and blended with exposed aggregates from the adjacent Hajar Mountains to alleviate its visual heaviness. Teak and sandstone completed the material palette that complements the ecologically adapted oasis landscape selection. The place should evoke a primordial sense of the origins of mankind, somewhat as the historic remains of the region give one the awe inspiring sensation of ancient beginnings.

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Client: Aldar Properties, Abu Dhabi, UAE
Professional Team: Architects: KlingStubbins, USA
Design Consultant: Ardan Associates, LLC, USA

The Intelligent Tower, Doha, Qatar
Introduction

The typology of high-rise architecture presents us with a significant design challenge today as we strive to reduce the energy consumption of buildings as a means of achieving sustainable development.

High-rise typology places great value on occupant access to natural light and views. To meet this demand, the ratio of perimeter envelop to floor area is typically high. As a consequence, the solar gain per unit of floor area is high and the energy required for cooling, significant. This is particularly true in the Persian Gulf Region where the solar gain is extremely high and the opportunity for natural ventilation is seasonally limited.

While keenly aware of this phenomenon, this project won in an international design competition in 2007, recognizes that architecture, like all complex systems, is the resultant vector of myriad criteria. Beauty, function, land use, financial return, all rightly demand consideration. Each one battles for primacy, each seeks optimization.

The Architectural Design

Materially, the building exterior is a unitized, high performance, curtain wall system with non-reflective, minimum-tint glass and first quality aluminum panels. The exterior is light in color as is appropriate to the environment and in harmony with the Qatari traditions of white architecture. The criteria governing the selection of internal materials and finishes will include: utilization of regionally available and recycled

materials; non-endangered natural materials; low emitting paints, carpets, adhesives and sealants; and the use of construction IAQ practices and a Green housekeeping program.

The Engineering design focused on generating energy, while reducing energy consumption.

The building will employ a number of energy generating strategies including wind turbines and photovoltaic panels. Energy saving strategies will include: exterior sun-screening devices; triple-layer, high performance glazing with integral shading device; controlled day lighting; natural ventilation; chilled beams; under-floor air and telecommunication distribution; occupancy lighting controls; efficient lighting and plumbing fixtures; gray water re-cycling; central district cooling; construction efficiency and waste minimization strategies; digital control energy management system; full building commissioning for optimized energy efficient operation.

Current computer modeling software affords the opportunity to simulate the performance of these strategies early in the design process. These simulations are parametric and thereby clearly quantify the relative impact of each strategy. Knowledge of the cost/benefit of these strategies – capital and operating costs – early in the process allows the owner to make informed choices prior to the refinement of the documents. Therefore, solar arrays and wind turbines will be located in the two building finials. Given the pace of development of these technologies, they were located where they would not only achieve optimum output, but where they could also be replaced when more effective models were available.

The vision for this 70 story tower grew out of our knowledge and experience with the functional demands on first-class, commercial office towers. The design proposes a modular, flexible workplace that supports organizational and technological change and ensures a high quality indoor environment for every occupant, while reducing energy consumption and operational expenditures. In addition, the building design and the contracting process will facilitate rapid construction. Together, these factors will establish the building as a leader in Doha, Qatar office market.

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In summary, the Intelligent Tower will be at once a beautiful structure resonating with the traditions and aspirations of Persian Gulf States, an effective office building fostering a creative and productive workplace, and an efficient machine minimizing energy consumption and sponsoring innovative sustainable technologies.

Client: Persian Gulf Organization for Industrial Consulting, Doha, Qatar

Professional Team:

Architects: KlingStubbins, USA

Design Consultant: Ardalan Associates, LLC, USA

Engineers: ARUP, USA, Qatar

These projects, to name just a few, have not been fully implemented, they exist as theoretical constructs that have not as yet been lived in and tested. These initiatives are cutting edge design proposals to address and directly mitigate both the more tangible energy efficiency and sustainability issues and the equally important, but less tangible cultural aspects.

Values and Design Opportunities

However, McHarg continued with a somewhat controversial hypothesis: "Historically, the Judaic-Christian attitude has been based upon Genesis and, quite contrary to Islam, emphasized the conquest of nature. Man was separate from the temptations of carnal nature and must have dominion over the bestial earth; he must subdue the earth... With only partial lapses by the European Romanticists of the 18th C., the history of Europeans' attitude to nature has been one of exploitation and conquest."

In response to the civilizational and cultural identity issue addressed at the beginning of this essay, it may be instructive to review the basic attitude of Islam to nature that echoes the same Biblical sources as the Judaic-Christian view, but with a significant difference. The much respected ecological planner, Ian McHarg in his seminal book *Design with Nature* made the following paraphrased and very salient observations on this issue:⁸

While Islam emphasized that man could metaphorically make paradise on earth and make the desert bloom, his responsibility and relation to nature was that of stewardship, he was both the custodian of nature and the servant of the Divine. Due to the intensity of new development in the GCC and looking at the urban forms and architecture being built there today, the predominant models that have been followed seem to be those of Los Angeles and Las Vegas with regard to contemporary urban patterns and zany Avant Garde architecture, while resembling Disney Land wherever Pastiche gestures toward the traditions of regional architecture have been concerned. This leads to the question: are there no more valid design alternatives?

Of course, Iran and Iraq in this region lag behind in urban developments for their own reasons, but the civilizational question as it relates to architectural style remains the same.

Can the new generations of the Islamic cultures of the Persian Gulf today become the "Visionary Stewards of the Persian Gulf Environments" and rise to the challenges of contemporary opportunities and globalization while remaining true to the values and aesthetic principles of their ancient heritage?

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The unique identity of each of these places along the Persian Gulf waters, of these millions of new pioneering inhabitants at this time, building these vast testaments of the human spirit in the 21st century deserve intensely more meaningful signs of their diversely rich civilizations than what is being realized today. Can the next phase of development realize a more authentic, environmentally sustainable and civilizational narrative relevant for the identity images of this region?

Art, architecture, the city and their relation to the natural environment of the Persian Gulf, offer the major opportunity to the creative decision maker, be it institutions or the individual, not only as a vehicle of economic gain, nor only as aesthetic satisfaction, but also a powerful semantic conduit between the microcosm of earthly existence and the macrocosm of timeless existence- between myths and profound beliefs of ancient civilizations and contemporary times, between the Collective Unconscious of humanity and the individual psyche.

Further Design Explorations

Now moving into the future esthetics of expression, it has been said that the functional domain of holistic aesthetics is based upon the simultaneous and profound awareness of the hidden and the manifest aspects of external reality.⁹ The artistic search to the deepest mysteries of this quest centers upon the personal and direct state of confrontation with reality in its broadest aspects, requiring no intermediaries and may lead to an epiphany. In the contemporary secular world in which most architects labor, how to express this transcendent, spiritual experience not only through the canons of organized religion becomes the architect's prime search.

What can we learn from other pivotal historic periods of creative expression to abstraction, preferring instead symbolic color and form as the means of expression in an attempt to reach a higher and deeper dimension of meaning, the most pervasive of which is that of the spiritual. It is a reaction against the limitations of the pervading rationalist and materialist world views of contemporary society. The role of the artist/architect is to free and reinvigorate modern design with greater meaning.

Maurice Tuchman's essay in the *Spiritual in Art: Abstract Painting 1890-1985* observes that: "The five underlying impulses within the spiritual-abstract nexus - cosmic imagery, vibrations, synesthesia, duality and sacred geometry- are in fact five structures that refer to the underlying modes of thought".¹¹ To these should perhaps be added three more key impulses.

The first is a silent sense of the unity of existence – at Oneness with the infinity of the universe- which was a pervading theme of the earlier 19th C. Transcendental Movement, characteristic of the writings of Emerson and Walt Whitman in America that continues to influence many creative individuals today. This theme is also the core of the *Wahdad-i-wujud* (unity of existence) thinking attributed to the 12th C. Andalusian mystic Ibn Arabi that had considerable and direct influence on later metaphysical contemplatives, including Emerson, and can be a vital source of inspiration for those who would taste of its elixir.¹² James Lovelock, author of the Gaia Theory, advances the concept of looking at all existence on the Earth as one living organism, thus helping to possibly bridge the beliefs of science and faith.¹³

Art and architecture, therefore, offer an opportunity to the creative person not only a vehicle of aesthetic satisfaction, but also a conduit between the microcosm of earthly existence and the macrocosm of timeless existence- between myths and beliefs of ancient civilizations and contemporary times, between the Collective Unconscious of humanity and the individual psyche.

The second is the appreciation of alchemy by the artist/architect as a method of dealing with matter. Alchemy becomes a metaphor not only for the transmutation of external matter from its "dark heaviness to light", but most importantly for the creative person himself. The alchemical experience holds for the artist/architect the potential for a complete psychological catharsis that can both illuminate and purify his spirit.

"Light releases the energy trapped in matter". - Frank Lloyd Wright¹⁴

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The third is the idea of Archetypes, as conceived by Plato and later explored in depth psychology by Carl G. Jung in what he termed the "Collective Unconscious".¹⁵

"Architecture is the embodiment of myth". - Louis I. Kahn¹⁷

Through contemplative practice, the resulting comprehension of the above impulses is often characterized by a sense of the universe as a single, living substance of which humans are an inseparable part. Further, inherent in this sense is his role of stewardship of Mother Earth, Gaia. Even if by this effort one is only able to catch but a brief and passing glimpse of an aspect of the systemic unity of existence, the creative attempt is still inspiring and fulfilling. The creative challenge then is how to express most saliently the perfume of this glimpse.

This approach provides a peculiar kind of 'field' of consciousness or world view as the context for the 'Creative Imagination' to take place. The activation of the Creative Imagination may be of an audible nature that transcends mere conventional tonal or linguistic frameworks through music, song, poetry or verse. In a similar manner, it may be of a visual nature in the form of light, color and matter expressed through art, architecture or movement. In both cases, the imagination is set into vibrations through abstract, transcendent symbols of this "perfume" that have a propensity to pulsate the heart and thereby to touch the soul.¹⁸ The soul serves here as the *modus operandi* within humans to spontaneously sense the ineffable and the sublime- to go beyond the mere phenomenal to higher levels of realizations about the realities of existence.

Such then is the nature and framework of this holistic, sustainable identity quest. It is a quest to shift architecture from a kind of machine-inspired functionalist aesthetic to a more holistic sustainable and spiritually inspired design approach. The resolutions to these values and aesthetic questions remain elusive, but provide profound inspirations for more meaningful answers that touch the individual soul and collective humanity.

“When you become the pencil in the hand of the infinite,
When you are truly creative... design begins and never has an end”.
- Frank Lloyd Wright, 1914 ¹⁹

Concluding Observations

To truly understand the key issues of sustainability and cultural identity, we need to begin with a cosmic, systemic awareness of the context of human existence on both a tangible, phenomenal level and a less tangible, cultural level. We need to become aware of the particular world views of the indigenous civilization, the Genus Loci of the place and optimum ecological fit of proposed developments. The mandate of good design is to elegantly realize this holistic vision in physical reality.

Such an approach may provide an important methodology by which a common ground can be found between the profound world views of traditional civilizations and the highest aspirations of contemporary innovations in art and architecture. Without such a common ground the new creations lack a sense of place, are environmentally unsustainable and appear as alien usurpers of an existing civilization, thus causing the Identity Crisis that is observable in the Middle East and particularly in the new developments of the Persian Gulf. It is a quest to shift development goals and architecture from a kind of machine-inspired functionalist, nature dominating approach to a more holistic sustainable and spiritually inspired design approach. The resolutions to these values and aesthetic questions remain elusive, but provide profound inspirations for more meaningful answers that can touch the individual soul and collective humanity, while designing in harmony with nature.

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Charak Port, Hormozgan



Minab, Hormozgan



Minab, Hormozgan



A short taxi ride around the Persian Gulf

Gwyn Lloyd Jones



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This essay explores the cultural identities of three emerging modern cities to the south of the Persian Gulf: Kuwait, Dubai and Abu Dhabi. These three cities have experienced a remarkable growth sponsored by their natural oil wealth since the Second World War and have changed beyond all recognition from the original settlements that were dependant on sea trade and pearl fishing. The dramatic population and infrastructure growth and the mechanisms of planning rapid urbanisation are described in this essay. A brief historical overview provides a regional context that considers the influence of: Islam, globalising empires and nation building. Furthermore, the historical built environment as a manifestation of past cultural practices is contrasted against the present architecture and its cultural meaning, and the relationship between place, culture and architecture within the domain of globalisation is reviewed throughout.

Frank Lloyd Wright was invited to Baghdad, Iraq to design an Opera House in January 1957, a brief that he developed into a new Cultural Quarter and which he selected a site during a flight over the city. Wright often quoted his respect for The Arabian Nights tales, and indeed within Wright's home in Oak Park there was an illustration from The Fisherman and the Genii in his children's playroom. His enlarged Cultural Quarter scheme was a personal fantasy, but it was prophetic of the fantastical schemes and a search of identity presently being undertaken within the Persian Gulf. In fact, a new Cultural Quarter is presently being planned on Saadiyat Island off Abu Dhabi. The influence of Wright within the Persian Gulf area is reviewed as a global architectural practitioner who respected the architecture within the region, yet muddled his way between Arabian and Persian precedents, he mused in *Architecture and Modern Life* (1937): "[t]he opulent Arab wondered, striking his splendid, gorgeous tents to roam elsewhere. He learned much from the Persian; the Hindu, learning from the same origins."

This essay is a summary of a six-day visit to the Arabian Peninsula, where a number of taxi journeys to specific sites provides a narrative on Kuwait, Dubai and Abu Dhabi. My research engages in conversations with academics, residents and migrants alike, I collect souvenirs and write postcards, visit tourist sites in the city centre and in the peripheral suburbs. The brevity of the visit and the use of taxi rides to sites acknowledge that my observations are preliminary and speculative. Wright's encounter with the Middle East was at the end of his career when he was sustained by his own myth and was producing his own legacy – these last schemes represent a questionable application of his Organic Architecture credo.

The Arabian Peninsula

Situated at the centre of the region named the Middle East by Eurocentric governments, the Arabian Peninsula was the centre of ancient civilisations and global trading routes that have fostered early global encounters. The cities of Mesopotamia and Babylon were part of the 'fertile crescent' that linked the Persian Gulf to the Mediterranean Sea, and there was evidence of the Mesopotamian civilisation on Failaka Island near Kuwait in the 3000BC. The Arabian race were first noted in 850BC by Assyrian writers describing them as a "nomadic people of the North Arabian desert," these were in the Adnanais stock, whilst there were a second settled grouping called the Qahtanis to the south and west of the Peninsula. Alexander the Great expanded his Greek Empire to the East in the third century BC and established a fortress on Failaka. The Roman Emperor Augustus took command of the whole region around the first century, and they remained dominant in the area for the next three centuries and established the pre-modern global trade route that linked Asia and Europe via the Middle East - known as the Silk Route. The Roman Empire was succeeded by the Byzantine and Persian Dynasties.

The Islamic Caliphate rule lasted two centuries and established an Islamic architectural movement that embraced and adapted existing buildings, and later developed new distinctive forms, decorations and construction. A number of scholars have identified the internal concentrated space within Frank Lloyd Wright's architecture and houses which was derived from Japanese architecture. One of the most remarkable early Islamic constructions was the founding of the capital city by the second Caliph al-Mansur in 762-766AD. The so called 'City of Peace' lies within present day Baghdad and possessed a circular plan form with the royal palace and Mosque at its centre, it was mentioned in literary sources with on evidence of its built form.

The Prophet Mohammed was born in 570 or 571 AD in Mecca, and established the Islamic faith that Muslims believe to be "the ultimate faith, which completes and perfects the two other heavenly religions – Judaism and Christianity." The Holy Koran forms the basis of Islam and its social codes direct all aspects of life so that "there is no separation between religion and politics." The faith propagated quickly and by the time of his death in 636 AD, the Prophet "had succeeded in welding the scatter and idolatrous tribes of the peninsula into one nation worshipping a single, all-powerful god." Thereafter, the Caliphates expanded the Islamic faith, so that by 711 AD it extended from Spain to Persia. This religious movement had a number of cultural consequences that were closely related; Arabization and Islamization. The Arabic language contained in the Koran began to dominate, and "Arab" began its gradual change from the name of a beduin (sic) nomad of the Arabian peninsula to its present meaning of anyone whose culture and language are Arabic" so that now one fifth of Muslims speak Arabic. Consequently, "Islamic architecture is given to hiding its principal features behind an unrevealing exterior; it is an architecture that does not change its form easily, if at all according to functional demands, but rather tends to adapt functions to preconceived forms, which are basically the contained internal spaces." Wright used enveloping masonry walls to remove its occupants from the city and to define internal spaces, a spatial manipulation that he used successfully in the Larkin Administration Building (1902-6), Robie House (1910) and the Johnson Wax Building (1936-9). There are spatial similarities in these concepts to traditional Islamic space, but Wright does not acknowledge this link, and his knowledge of Islamic architecture was from literature sources, such as The Grammar of Ornament by Owen Jones that he discussed at length with Louis Sullivan. Furthermore, when reflecting on past architectures he admires the brick domed constructions of the 'Persians' remarking that their "masonry dome was erected as an organic part of the whole structure." In 1905 its population was estimated at 20-25,000 and trading records identified a regional network with wood from Bombay and Karachi, rice from Calcutta, sugar and coffee from Iran, spices from Zanzibar, and Iron and nails from India and Europe.

The defeat by the Christian crusaders in the tenth Century and a further attack from the Mongols in the thirteenth century made the Arabians withdraw into "retreat and isolation." However, another Muslim Empire founded by the Turkish warrior princes was begun in the thirteenth century and conquered the last remnants of the Byzantine Empire before proceeding to annex Persian and the coastal Arabian states. Within Arabia the four centuries of Ottoman rule were doubly disappointing as they had lost their status as rulers of the Islamic world and Arabic was no longer the dominant culture.

Kuwait

Despite the importance of Failaka Island in the development of the Persian Gulf, Kuwait developed separately taking its name from the Arabic for 'a small fort'. In 1950, Sheikh Abdullah al-Salem al-Sabah was installed as figurehead by the British, and was made the ruling Emir after independence, forming a paternalistic ruling dynasty that has propagated in other Persian Gulf states. In 1756 a Danish explorer noted it had 10,000 inhabitants "who live on the produce of peals and fishing" and possessed a fleet of 800 sailing boats. Also by the eighteenth century the British were active as mariners protecting their Indian interests and trading with Basra. In 1859 Kuwait signed a treaty with the Ottoman Empire, but were wary of their power and in 1899 signed a new treaty with Britain which gave Kuwait greater protection to their emerging sea trade. These new nations (Iraq, Iran and Saudi Arabia) were engineered to dilute Arab influence, but they have not brought long-term peace to the area. As early as 1920 Kuwait came under attack from neighbouring tribes requiring the building of a new city wall that controlled access to the city from the west. There have been three successive Persian Gulf conflicts rooted in the contradictory aspirations of a national identity and a pan-Arabic state. Kuwait has suffered from all three conflicts, and was occupied by Iraq in 1990 under the premise of a wider Baathist Arabic movement. A coalition of forces lead by Pax-America freed Kuwait and restored the agreed boundaries and distribution of oil reserves.

Oil was discovered in Kuwait in 1934, but it was not commercially extracted until the end of the Second World War. The existing city was an excellent example of an integrated desert city exhibiting: a protective outer wall, a rich organically ordered plan formed by layers of accretion, a close knit low rise building mass with narrow lanes, and a democratic city with two storey buildings. However, by 1950 Kuwait's population had increased to 150,000, of which half were immigrant workers, and traffic congestion was acute which led the Kuwaitis to commission Minoprio, Spencely and Macfarlane (MSP) in 1951 to prepare a master-plan. The new city was based on the British New Town Plan precedent with a new road network, clear zoning, and a protective green belt. MSP had recently completed the plan for Crawley in West Sussex, and Minoprio admitted "We didn't know anything much about the Muslim world and the Kuwaitis wanted a city – they wanted a new city..." Gardiner explains the new form of the city: "[t]he road plan – and the city plan was primarily a road plan – arose from the five gateways of the wall; the roads radiated out from these gateways and, together with three intersecting ring roads, formed the boundaries of the new township (or neighbourhood units)." A review of the aerial images in the Architects Journal (AJ) in December 1973 shows the dramatic change in the city, as Jamal notes: "[the] first master plan was simply the imposition of western technology onto an established Arab society." Gardiner highlights a parallel process that was directed by the English architect Leslie Martin with the aim of achieving better build "quality" in Kuwait.

Kuwait's confidence and growth continued, they gained independence in 1961 and their population in 1970 was 733,000 of which 47% were Kuwaiti. A democratic constitution was inaugurated with the first elections in 1962, thereafter the democratic Assembly has had fitful existence, being disbanded by the Emir on a number of occasions. The population increase required a second masterplan to control growth and Colin Buchanan and Partners (CBP) was appointed in 1969. However, the process and the final masterplan were not successful as indigenous Kuwaiti planners began to question the wisdom of foreign consultants and highlighted a cultural confrontation. In the article AJ in 1973 on the second master plan Jamal identified major flaws with western urbanisation:

"Rapid urban growth resulting from implementation of the plan will speed up material changes in the society without compatible cultural change. Traditional Kuwaiti character will not be reflected in the new urban and physical environment, while the traditional environment will deteriorate further.

Generally speaking, Kuwait should not assume that economic growth equals, or automatically brings, personal social happiness. The Kuwaitis' way of life should not be geared to consumption or wasteful living as seen in the West."

CBP published a subsequent rebuttal in May 1974 (AJ) and a third article in the in October 1974 (AJ) dismissed the whole masterplan as a failure "all copies of the plan have been lying locked up... for the past three years," because it was it could not be read, understood, approved or implemented by the local planning authority.

Four international architectural practices were asked to analyse the city plan and to work on specific case studies, they summarised the urban critique in five points: maintaining the waterfront as recreation, “making the area around the Seif Palace a special site, reintroducing residential areas into the city”, preserving and expanding the old souks and bazaars, and maintaining the old city wall as recreational green belt. The detailed proposal by Alison and Peter Smithson for Kuwait Government Buildings was a poetic vision and a critique of the new architecture within the city, they proposed a new urban fabric based on: a low building form, a grid orientated towards existing mosques and related to the existing fabric, an open structural system allowing for breaks for buildings of special interest, and an overhanging building form typology that provided shading for pedestrians beneath. In the evening I catch a taxi to the northern edge of the Kuwait to visit the Water Towers (1979) and I was impressed by their futuristic design, combining a functioning water tower, revolving viewing platform and a restaurant. It is claimed that its design was inspired by a perfume burner with a long tall neck and a spherical base reservoir, it was a plausible connection and now perfume burners were made in the image of Kuwait Towers! The rise in the oil prices in the 1970s boosted Kuwait’s income and allowed a number of the case studies to be progressed but not the Smithson’s scheme. Additional master plans were prepared by western consultants in 1977, 1983 and by Kuwait Municipality in 1993, and the latest plan in 2003 was a collaboration with CBP and Kuwait Engineering Group. The destruction of the existing building fabric continued and the call for reflection by Jamal was not heeded.

I met Dr Omar Kattab at the University of Kuwait in the early afternoon and we reviewed a number of ideas concerning Wright, although Wright’s work in Iraq and Iran was well known, there was no record of him visiting Kuwait or his architecture within the city. We went for a drive towards the city progressing down one of the radial through-fares, we pause at one traffic light to view an impressive capitalist skyline of tower blocks gleaming against the blue sky. Kostof identifies the urban skyline as “shorthand of urban identity” and “when the city centre ends up as an aggregate of tall office buildings, we recognise that the city image has succumbed to the advertising urges of private enterprise.” Further on, we slow down at Al-Soor Street, the site of the former city wall and view a remnant from the 1920s fort that was now beside a highway widening scheme, with little evidence of the ‘green belt’ or recreation at this junction. Kultermann comments on the progression from utility to culture: “the water towers in... Kuwait... are significant signs of a shift from technology and its dominating negative impact on the human environment towards a positive use for necessities, entertainment and beautification.”³⁵ Viewing the futurist design from close up the circular blue / green tiles decorating the water spheres were brilliantly executed despite having a covering of dust. It was design that had fulfilled its role as an international icon yet immensely practical, and at 180m high the observation tower was the tallest structure in the Persian Gulf in 1977. I entered the larger tower and pass into a golden lift carriage that took me up 120m to the observation level that was completely glazed with in a triangulated space frame so that I could view the city and the ‘Persian Gulf.’ At the lower level there were a set of photographs documenting the damage carried out by Iraqi invasion of 1990, and up the curved stair was the observation level with a rotating floor. It was twilight and the sun set rapidly over the city that was now illuminated by its tall office towers. Being the festival of Ramadan the fading light brought respite for residents from the days fasting and at 82m there was a restaurant that was serving a buffet. Most of the diners were well dressed Arabians whilst most of the servants were Indian or Filipino.

The next day I met with Dr Yasser Maghoub of Kuwait University at the Central mall which was next to the Ghani Palace Hotel by Saleh Al Mutawa (2002), I noted that the hotel was like staying at the Imperial Hotel by Frank Lloyd Wright (1923) with its heightened sense of cultural intensity. The hotel was modelled on a Yemeni town house with white washed walls, inset coloured glass, intricately detailed timber screens and balconies, and projecting timber joists and water outlets. Inside, the thin atrium was modelled on a traditional alley with an open arcade of shops and projecting screened balconies forming an intense Arabic cultural representation. Dr Maghoub had identified Al Mutawa’s work as possessing “Kuwaiti traditional architecture in his buildings” but these forms are also of a wider Arabic consciousness. Driving around the suburbs, Dr Maghoub tells me that the parked cars were a problem and that the new building code prohibited any parking on the street. Despite the romantic assertion of a Garden City typology, the inspiration for Kuwait was the British New Towns, and as Gardiner remarked “the city plan was primarily a road plan.”

We drove to the Tareq Rajab Museum and pass a number of Water Towers stationed along the 5th circular highway, these were giant rep-

resentations of palm trees often grouped together to form an oasis. They were a brilliant design for retaining water, yet had architectural presence in their conception and scale, and I was always thrilled to see them by the road side. The Museum was in Jabriya district on street 5, and in block 12 and we got lost for a short time whilst we negotiated the numbered suburb which was made doubly difficult with the museum being housed in a basement. We eventually found the imposing villa, it was the one that exhibited the most Islamic character on the street. There were a few guards outside and they opened a traditionally carved wooden door for us and we proceeded down the stairs to the galleries. The Museum had an eclectic mix of good quality artefacts from across the Islamic world, there were garments, jewellery, pottery, guitars, old doors, firearms and antique copies of the Koran. We discussed Wright's legacy and I posted a number of theories concerning his broader appeal within the Persian Gulf area.

Gwyn: Are there any distinctive building types in the city with the organic design? Have you heard of the Minoo Island Resort project by Taliesin Associates?

Dr Maghoub: There were no buildings built by Wright in the Persian Gulf. I know about his work in Iraq and Iran but not Minoo Island. Do you think that the planning outside the city centre with its dispersed motorised suburbs have any relation to Wright's Broadacre City? Not at all, the city planning was based on the garden city typology and not Broadacre.

But I think that the Mile High Tower by Wright was concept that has caught on in the Persian Gulf with Burji Dubai, and now the 1001m tower proposed for the new Silk City scheme. The size of the tower is inspired by the 1001 tales from the Arabian Nights.

That's very interesting, Wright talks a great deal about The Arabian Nights in his Baghdad work, and used it to convince his client of his cultural awareness, despite confusing Persia with Arabia.

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Furthermore, Kuwait has developed as a typical "City on the Highway" possessing all "four main foundations" to propagate a motorised suburb that were identified by Hall, these included: new roads to open up land, zoning of land uses, government mortgages, and a population boom. Wright eulogised the road network, "[a]long these grand roads as through veins and arteries comes and goes the throng building and living in the Broadacre City of the Twentieth Century." The original Sief Palace was built at the turn of the twentieth century and its new neighbour looked an interesting low level building with an abundant Arabian surface decoration, but it was heavily fortified as were all the other public institutions. It was disappointing that the state institutions were so detached from each other and the public, with the Persian Gulf Road dividing the buildings, and no space for a democratic collective gathering. His Broadacre City vision was based on a decentralised settlement that was part prophesy and part trend planning experience of the emerging Los Angeles urban condition in the 1920s and 1930s and was a particular American view point about travel, democracy, freedom, and architecture. Whilst the political aspirations for Broadacre were never realised, the form of suburban development has been universally successful and as Wright proclaims the city of the future could be "everywhere and nowhere" I would contend that Kuwait was similarly affected by possessing a suburban condition that lacks an identity related to its geographical situation and environmental conditions.

I took a short walk along the Persian Gulf Street at end of the day with the heat gradually waning, I took a closer look at the impressive National Assembly Building (1985) with its iconic sweeping entry canopy of white concrete that reflected the tradition of the prominent door to any closed city or house, and the vestibule was where the "encounter with the outside takes place." The Assembly has 50 members that may include women (none have been elected to date), and they represent its 3 million population, but the 65% migrant workers do not have a vote and limited rights within the country. The elected members check the legislation proposed by the Prime Minister and the Cabinet and after the last election in 2008, it was dominated by religious conservatives. Beyond the Assembly and a short walk away were the Sief Palace, Foreign Ministry, Grand Mosque, and Stock Exchange. At the Foreign Ministry the guards were preparing a small feast as the sun was setting and offered me some drink to join them. I shared some Vimto, and dates and we chatted briefly, but my Arabic was not very good - I kept my observations to the climate, complaining that it was hot. They wanted to know where I was from and did I like Kuwait, then enquired: "Do you like Muslims?"

Dubai

The seven Trucial states under British mandate since the end of the First World War joined together to form a Federation called the United Arab Emirates in 1971 when the Britain withdrew from the region. An Emir from the each Emirate has representation at the Supreme Council of Rulers, which elects the Prime Minister (usually from Abu-Dhabi) and the cabinet. An elected advisory body was begun in 2006, and was the first democratic institution in the federation. The service was very smooth, but significant problems have plagued the Metro with the biggest complaint being ticketing and the two levels of service being offered. The Emirates has a population of 4.5 million with about 80% migrant and expatriate workers. The most urbanised Emirate, Dubai has a population of 1.5 million and the second largest income from oil. The city has expanded beyond all recognition from its modest settlement on Dubai Creek to embrace international shipping, property development and tourism. The original development was led by the leadership of Sheikh Rashid Be Saeed Al Maktoub who increased the shipping capacity within the Creek and founded the largest man-made harbour at Jebel Ali as an economic free zone. Property development within the Emirate has expanded along the coast, inland and on artificial islands within the Persian Gulf. Tourism has thrived with continuous sun, resort hotels offering niche experiences, and extensive shopping opportunities. Ideally situated with a seven hour flight from London and Hong Kong, Dubai can justly claim to be at the cross roads between East and West, but the 'sex on the beach' incident exposed a clash of cultures, an "ideological schism" that questions the intentions of both cultures.

The city was masterplanned at a number of intervals, but the plans were never enforced or updated to maintain control, it was left to the market mechanisms such as land speculation coupled with tax concessions to direct development. The first masterplan in the 1970s extended the old settlement in Dubai Creek outwards using the existing routes and maintained the grain and character of the old city. Subsequent plans have sought to control the expansion to the west of the city, but were often overtaken by new developments. The last Vision 2010 plan was a set of goals - reminiscent of a mission statement.⁴⁹ The free city concessions allowed foreign ownership to promote a Media and Internet City, and despite their 'free' title, these cities adopted traditional capitalist high-rise glass clad building typologies – a disappointing form of 'free' expression. The offshore appendages such as the Palm trilogy, and Dubai World, have created a new coast line and exclusive housing enclave with hotels and other tourist activities. Marketed at the eighth wonder of the world the utopian Palm was formed to maximise the beach front to each suburban dwelling – propagating a not in my backwater exclusivity. Each dwelling though was reliant on air conditioning, car ownership and a four-lane highway connection to the mainland – a poor manifestation of the eighth wonder of the world.

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I caught a ferry across Dubai Creek to Deira, and we cruised slowly past a number of traditional Dhows that still operate along the Persian Gulf. Deira was the thriving commercial district under the glare of the afternoon sun with a bustling street culture full of migrant workers who were busy talking, meeting, and shopping. I caught a taxi to Dubai Mall and it was relief to get into the cool taxi, and I caught glimpses of the Burji Dubai – the worlds tallest tower on the skyline. We eventually make it out of the traffic and onto Sheik Zayed Road and pass through an impressive canyon of skyscrapers, a homogenised high rise strip that was best summarised as the "monotony of the exceptional."⁵⁰ We pulled off the highway to an underground car park and entered the exquisite world of the Dubai Mall complete with ice rink, cinema, aquarium, restaurants (all closed for Ramadan), clothing shops and department stores. It was a fully integrated leisure destination that was carefully climatically and socially controlled - an escapist dream from the scorching sun, desert, and migrant workers - the opposite of Deira. I arrived in the evening at the impressive modern airport and sought out the newly inaugurated Dubai Metro. At the station not everything was going to plan and despite displaying the two new metro lines, only ten stops on the red line were in operation and I joined the other confused tourists and migrant workers in a queue of for tickets. Once on-board, the excited passengers began to take photographs of each other using cameras and mobile phones - it was a very touching shared experience. In a good-humoured article, the local English paper challenged its four reporters to cross the city using various transport options, the winner was the car, followed by the taxi, then the Metro (which had broken down), and finally the bus.

In the morning I explored the old settlement around Dubai Creek, the former fort was now part of Dubai Museum that was housed underground. I followed a path around a number of Arabian experiences including: a Bedouin tent, small workshops, a fishing dhow, a pearl diver

and a gift shop. There was a special presentation on the rapid development and the leadership of the ruling family over the last 50 years that made a convincing case of manifest destiny – Dubai style. The historical Bastakai quarter was nearby with a recreated collection of traditional homes turned into cafés, restaurants, galleries and administration centres. I wandered around the narrow lanes unhindered, and it was slightly un-nerving with no other people around and only the occasional door and projecting screened balcony. These ‘traditional’ houses were finished in the same light brown earth hue and had a wind tower with projecting timbers at each corner. Inside the renovated homes were common courtyards with a tree and or a cloth cover for shading, and despite being a manipulated tourist experience the spaces were evocative of an obsolete lifestyle. At the information desk I was told that the best view of Burj Dubai was from the Star Atrium, but even from this viewpoint it was impossible to contain the soaring tower within my view finder.

At over 800m tall the Burj Dubai tower represents the ultimate expression of global production and identity, designed by the American architectural practice SOM, built by migrant slave labour from poor emerging nations, constructed in the Middle East for apartments that may be occupied by a multitude of nationalities – a contemporary tower of Babel that was built on sand! The world's tallest building carries a certain status that Dubai obviously craves, it represents the latest feat of architecture identity and branding. The plan and profile of the Burj Dubai are certain similarity to Wright's Mile High Tower (1957) with a triangulated plan, diminishing mass, and a stepped profile. At the recent exhibition in the Guggenheim, Bilbao (2009) it states that the brief was for a television antennae and that Wright developed it into a tower to house “all Illinois state government offices and consolidate commercial, governmental, and civic functions.” It is difficult to know if the tower was a serious proposition with Wright describing it like an asylum for government employees and urbanists: “the Mile High would absorb, justify, and legitimize the gregarious instinct of humanity. But Wright was prophetic of the need to build ever taller towers, as noted Kuwait are planning a 1001 meter tower, and in Saudi Arabia a Mile High tower is being planned on the Red Sea near the city of Jeddah.

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Abu Dhabi

The wealthiest Emirate, Abu Dhabi has a population of 1.6 million and the largest land mass and income from oil, and the city itself has a modest population of 630,000. Under the leadership of Sheikh Zayed bin Sultan Al Nahyan the Emirate has branded itself as the cultural and sporting destination within region, offering a different Arabian experience to Dubai. On the bus journey between the two Emirates, there was hardly any break in the linear sprawl, past internet city, power stations, docks, billboards advertising new developments, and fenced off areas that were perhaps prisons or labour camps. As we approached the city of Abu Dhabi I noted the airport, the new grand prix racing track, a large building with a circular form that looked like a giant plate on its edge, and the new Grand Mosque. The bus station had a number of repeated arches similar to the Marlin County Administration building but was painted a strange green colour. I caught a taxi to the Cultural Foundation where I hoped to view the Saadiyat Island exhibition. The Foundation was a successful modern interpretation of an Arabic courtyard with thick enclosing walls a courtyard and a pavilion building. Furthermore, it was constructed and finished with concrete and its arches were lined with magnificent blue tiles. Inside there was a similar play of finished concrete with expanses of blue patterned tiles and offset with a timber stair and ceiling. I ventured upstairs to look around an open gallery, but

As I approach the Emirates Palace Hotel, I recognised a triumphal arch with a large image of the ruling family. The Hotel itself was reminiscent in civic character and scale of the Mogul architecture from Pakistan and India. At the reception I was ushered across the hotel towards the exhibition spaces, where the eager staff welcomed me and an Australian woman offers to show me around. She recaps the official view of the scheme and I listen attentively whilst she proudly explains the five sections to the exhibition: introduction, inspiration, context and masterplan, and cultural vision - with detailed models and drawings of four cultural icons. According to the marketing information, the 27 sq km Saadiyat Island development comprises of seven themed experiences that include: the Cultural Quarter, Al Marina, Saadiyat Beach, Saadiyat Promenade, Saadiyat Reserve, Saadiyat Lagoon, and South Beach. I was confronted by a typical bedouin tent with a number of women dressed in long black garments weaving gifts. There was the air of lethargy at the Centre with no exhibitions on show during Ramadan, I enquire about the Saadiyat Island exhibition and the guard tells me to visit the Emirates Palace Hotel galleries where, he claimed, ‘I

would wear out my camera.' The description of the concept recall a variety of global spatial experiences, for example: the total population of 150,000 would be similar to Hollywood or Oxford, and each district was marketed as a known identity - South Beach in Saadiyat would be like Daytona Beach in Florida. Introducing his scheme in the Architectural Forum (1957), Wright proclaims "that a great culture deserves not only an architecture of its time, but of its own." The cultural disorientation would be bewildering! Within the Cultural Quarter itself, "four pearls" were located on their own island projecting into the Persian Gulf and looked back towards Abu Dhabi, these include: the Guggenheim Abu Dhabi by Frank O. Gehry, the Classical Museum (Louvre Abu Dhabi) by Jean Nouvel, the Performing Arts Centre by Zaha Hadid and the Maritime Museum by Tadao Ando. Underlying the whole concept was the premise that Abu Dhabi was a brand and that culture was a commodity that could be freely traded, and that tourists would willingly fly to Abu Dhabi to experience an Arabian setting for western art. These two organic inspired designs for the auditoria display a potent architectural image. However, as Jencks comments on the Baghdad scheme, "Wright loses control of his geometry and allows it contradict function, material, construction, structure, freedom [and]... organic architecture." Likewise the gratuitous form making by Hadid may be considered sensual and 'organically' inspired, but lacks functional and material integrity. For Wright the Cultural Quarter was a continuation of the imagined cities of the past, whilst Hadid's scheme engages with the imagined identity of the city belonging to the future.

Frank Lloyd Wrights Cultural Quarter in Baghdad seems almost naïve in comparison to the scale of Saadiyat Island, yet both projects were indulgent architectural fantasies to promote a cultural identity. Wright used historical references from ancient pagan, Christian, and Islamic civilisations within the proposal, he cites: the ancient cities of Mesopotamia and Babylonia, the original garden of Eden, the circular 'City of Peace' by al-Mansur, and the imagined court of Harun ar-Rashid from The Arabian Nights. No doubt these cultural citations would of pleased the regime of the Hashimite King Faysal II, who was not even an Iraqi. The centrepiece of the Cultural Quarter was the Grand Opera and Civic Auditorium, based about the intersection of two circles, one for a revolving stage and other for the auditorium that was to house 1600 seats for an opera with an additional 3700 seats for "conventions or patriotic celebrations." Hadid, explains a less bombastic concept: "The central axis of Abu Dhabi's cultural district is a pedestrian corridor that stretches.. toward the sea... The sculptural form of the Performing Arts Centre emerges from this linear movement, gradually developing into a growing organism that sprouts a network of successive branches... the performance spaces, which spring from the structure like fruits on a vine and face westward, towards the water." Furthermore, the Performing Arts Centre's "organic design will have five theatres, a music hall, opera house, drama theatre and a flexible theatre with a combined seating capacity of 6,300."

My short trip around the Persian Gulf has probably contributed to the myth of Frank Lloyd Wright within the region where he attempted to secure his own legacy within a fantastical scheme, and one could easily imagine the tale of the 'Opera House and a Cultural Quarter' contained within the meta narrative of The Arabian Nights as Wright attempts to escape death and gain immortality with one final grand project

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Wind Catcher, Charak Port, Hormozgan



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Lenge Port, Hormozgan



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Reflections on a Wind Catcher: climate and cultural identity

Susannah Hagan



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PART 1

The Wind Catcher

The wind catcher is part of a natural ventilation system seen in certain hot dry climate zones. It is a raised building element either facing in all directions, or facing the prevailing wind, to «catch» it, bring it down into the building, and cool it with moisture from fountains, pools and *salsabils* – carved stone surfaces over which water runs. Once re-warmed by people and activities, the air rises through a central tower and is pulled out of the top of the building by the same breeze that drove it inside in the first place. If there is no breeze, wetted hemp mats can be placed over the openings of the wind catchers. This moistens and cools the air as it enters. The cooling makes the air drop downwards, creating its own breeze. The wind catcher is thus a very sophisticated piece of low technology AND a characteristic element of an architectural style, a style that seamlessly and elegantly combines performance and form, climate and cultural identity: traditional Islamic architecture. In a contemporary context, however, are the same means of preserving and perpetuating architectural identity available to the Persian Gulf States, or to any other region where traditional built culture is colliding with the hegemony of a high and universal technology?

Architecture has been debating identity ever since the International Style hove into view, though it was hardly the first international style. Roman Classicism reached right across its empire. Islamic architecture spread all the way to the Far East. The connection between built culture and so-called «globalisation» is not one of style, but of western industrial technology, western financial might and western expertise imposing themselves on the rest of the world. Globalisation goes deep economically and, I'd suggest, is only a veneer politically and culturally. The highrise block housing an Islamic family and that housing a Christian one neither helps nor hinders their very different ways of life. Human beings are both far too entrenched in their ways, and far too adaptable, to allow one stage set or another to interfere with their habits and traditions. Up to a point. And where that point is is the real question. When does the built environment impede the living out of a culture? And which culture? The culture of the past, or an emergent culture grappling with enormous external forces? The cities of the southern Persian Gulf have grown so quickly in a few decades, they couldn't possibly have produced a perfect synthesis of disrupted traditions and disrupting economics and technology in that time. The question is where do they go from here?

Once one slows down the alarmed gaze, difference proliferates everywhere, and globalisation is seen to be pervasive but limited. There is, for example, an enormous difference between poor developing countries and rich ones. Poor developing countries find it very hard to resist western economic penetration. Rich developing countries have more control over what they do and don't let in. The rich countries of the southern Persian Gulf are certainly in the second category, though in the realm of the built environment, western industrial technology has obliterated traditional material culture - more totally, in fact, in the west than anywhere else. We have, though, been here before. The discussion going on now in the Persian Gulf states was going on in the 1960s, 70s and 80s in the developed and the developing worlds. Then, the architectural reaction to a universalising industrial technology, so-called 'post-modernism', was as heartfelt as it was ineffective. The first call to arms was historicist post-modernism, with its desire to 'enrich' architectural modernism with architectural history. It ranged from the mildly necrophiliac (eg Phillip Johnson's AT&T Building, 1979) to the entirely necrophiliac (eg Quinlan Terry's Richmond Riverside development, 1987), from pastiche to exact imitation, of primarily classical architecture. The second revolt was 'Deconstruction', aka 'Deconstructivism', originally a philosophical assault on the construction of meaning in language, translated over-literally into architecture by Peter Eisenman, Coop Himmelblau and others. Both rebellions against architectural modernism operated entirely within modernism's dominant technologies and industrial ways of making, and did nothing to redirect its energies.

The First Way: Deep Return

Technology

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At the same time, however, there was a much deeper resistance that would have dented a universalising technology and the global economic system that supports it, had it been able to compete economically. In Vandana Shiva's book *Monocultures of the Mind*, there is a strong connection made between biological and cultural monocultures, and between biological and cultural diversity.

Diverse ecosystems give rise to diverse life forms, and to diverse cultures.
The co-evolution of cultures, of life forms and habitats has conserved the
biological diversity on this planet. Cultural diversity and biological diversity
go hand in hand. (Shiva, 1993: 65)

For Shiva, ways of making and living arise from particular ecosystems and their particular climates and materials. Hence traditional vernacular architecture: a human adaptation to a particular ecology, and functions as part of that ecology. A deep return of this kind, with different ways of life contingent upon different physical habitats, therefore requires a return to vernacular craft economies, and in the 1960s and 70s, just such a return was called for. In the developed world, it informed the Luxembourg architects Leon and Robert Kriers' 'rational architecture' of the 1970s, a name chosen in deliberate challenge to the rationalism of architectural modernism. In the developing world, the work and writings of the Egyptian architect Hassan Fathy was there even earlier, in the 1960s. What united these two was both valid and unrealistic. If the style wars of architectural post-modernism were a superficial return to a lost past of visual identity, Fathy and the Kriers' work was a return to ways of making and ways of organising space. But the deeper the return, the more elusive it is.

Fathy's intention was to recover, not just an aesthetic, but an entire way of life, the life before Egypt began to modernise under Abdel Nasser, losing much of its building craft culture and the identity it provided in the process. The symbol of cultural recovery was, for Fathy, sun-dried brick construction, used in Egypt since the pharaohs, and until the advent of breeze block in the 1950s, the basis of every village in the land. The arches, domes and vaults natural to such a material gave rise to an architecture suited to, and characteristic of, its locality, but Fathy was

forced to train up builders in the old techniques because there were so few traditional craftsmen left, and the majority of his countrymen weren't with him. The Krier brothers, like Ruskin before them, also condemned the industrialisation of building technology as alienating and unhealthy for its workers, and destructive of the centuries-old fabric of European cities. It was, however, too late to go back, even with patronage of a nostalgic royal.

Typology

Resistance had, for Fathy and the Kriers, another weapon in its armoury: typology. Almost forgotten now is the amount of heat and light generated in the 1970s by the revival of interest in historical building and urban typologies – the traditional urban grammar that made up the distinctive languages of cities worldwide, and which architects like Fathy and Krier reproduced, much as so-called 'New Urbanism' reproduces them now. Krier:

Against the anti-historicism of the modern movement we repropose the study of the history of the city... The history of architectural and urban culture is seen as the history of types. Types of settlement, types of spaces, types of buildings, types of construction... The roots of a new rationalist culture are to be found here, as much as in L.N. Durand's Typology of institutional Monuments [sic].
(L. Krier, 1978: 41)

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Most violently rejected was the Modern Movement's reversal of the relation between solid and void, the erasure of a continuous urban fabric and its replacement by free-standing objects. This rupture was, and is, particularly violent in the Middle East, between a climatically protective urban fabric, and the sizzling open spaces of 'modern' development, which requires unsustainable quantities of air conditioning to achieve acceptable levels of interior comfort, and makes the external spaces hotter than the desert.

Fathy was also at pains to recover, not only lost building crafts but disappearing urban typologies. The climatically unwise overscaling and/or gridding of urban fabric had begun in colonial interventions in the 19th century, and were continued by indigenous rulers in the 20th and now 21st centuries, in a desire to modernise and be seen to be modernising. Today's nostrums for 'the sustainable city' are nothing but a re-hash of this traditional fabric-centered life that Fathy, the Kriers and others were demanding in the 1970s, now repackaged as energy-saving because mixed use, and therefore walkable.

The Second Way: Critical integration

In spite of the relevance of much of the critique both Fathy and Krier made of the depredations of mid-20th century architecture and urbanism, the rejection of industrialisation within a built context was doomed. The developing world hadn't fully attained an industrialisation to repudiate, and wasn't about to deny it for themselves because the west had already experienced the full force of its disruption. The west was also enjoying the full force of an accompanying rise in living standards. And so, in both the developed and the developing worlds, a more complex position of both/and evolved, with varying degrees of success. This is the French philosopher Paul Ricoeur from the developed world:

There is the paradox: how to become modern and return to sources; how to revive an old dormant civilisation and take part in universal civilisation.

(Ricoeur, 1965: 276-7)

And from inside the paradox, the Iraqi architect Rifat Chadirji:

There is no alternative but to bring the cultural development of Iraq into harmony with this process of internationalisation, while at the same time

maintaining the nation's traditional characteristics and qualities.

(Chadirji, 1986: 41)

The question was, and is, WHICH traditional characteristics and qualities? Not traditional building technology, which did so much to determine traditional visual identity. Chadirji himself is the epitome of a harmony between a dominant internationalised culture and his own, drawing on the long history of Iraqi architecture and on western modern art and architecture to construct a synthesis. In his book *Concepts and Influences: towards a regionalised international architecture*, published in 1986, this rapprochement is presented again and again, with, for example, Corbusier's Ronchamp and a traditional Baghdadi house feeding into his design for an administration building for the Baghdad city government.

In abstracting and deploying traditional elements, Chadirji is also deploying traditional means of mediating between climate and interior. The environmental advantages of a climatically differentiated building envelope are energy-efficient as well as culturally grounded – the thick walls and green and watered courtyards effectively modifying microclimate. Chadirji achieves what Kenneth Frampton explicitly argued for in his writings on the developed world's equivalent at the time: Critical Regionalism. There were many versions of Critical Regionalism's culturally inflected modernism, from the cultural specificity of Carlo Scarpa to the abstraction of Tadao Ando, but the most relevant for this discussion are those architects who focussed more on the relation of the building to physical site than to historical context, based on the assumption that the two are bound up in a dialectical relation anyway. Kenneth Frampton, the best known theorist and promoter of Critical Regionalism, was explicit, and opened up the way for climate to return as an expression of culture:

Critical Regionalism is regional to the degree that it invariably stresses certain site-specific factors, ranging from topography ... to the varying play of local light across the structure ... An articulate response to climatic conditions is a necessary corollary to this. Hence, Critical Regionalism is opposed to the tendency of 'universal civilization' to optimize the use of air-conditioning etc. It tends to treat all openings as delicate transitional zones with a capacity to respond to the specific conditions imposed by the site, the climate and the light. (Frampton, 1992: 327)

This is a modulated echo of Fathy, who says:

... [I]f you take the solutions to climatology of the past, such as the wind catcher ... and the marble salsabil with carvings of waves on them for the water to trickle over..., you will find that they create culture. With today's air-conditioning, you have removed that culture completely. (Fathy, 1986: 15)

For Critical Regionalism, air-conditioning should not be 'optimised'. For Fathy's deep return, it should be abandoned altogether, because in losing a place-specific response to climate, you lose a source of differentiation in the built environment.

The Third Way; Climate and Identity

The mushrabiya has a practical function as a sun screen in front of an opening that expanded to include a cultural role as well, hiding the

women of a Muslim family from public view, but allowing them to see out. The devices of modern technology have long since snapped any such connection between climatic and cultural function. Air conditioners are not tied to any one set of tectonics or to any one culture. But we're no longer at the beginning of this trajectory. There have always been architects in the developing world, and within the Modern Movement itself, demanding a synthesis of the regional and the universal, and now there are more. Even more important, now clients in developing countries are beginning to demand the same. The 'Heart of Doha', a 35 hectare development in the centre of Doha by Allies and Morrison, Arup and others, is to be part of what the Sheikha of Qatar describes as «a rising homeland that confidently embraces modernisation and proudly observes tradition» (<http://www.dohaland.com.qa/HOD/index.html>, 2009). A responsiveness to climate is part of this observation of tradition, and the 'Heart of Doha' masterplan reproduces the dense, tight, self-shading knit of historic Arab cities and towns, albeit with much higher buildings. In several planned large-scale new developments in the Middle East, one sees some form of obedience to traditional urban solid-void relationships and their traditional climate-adaptive morphologies. The fact that the resulting savings in fossil fuel energy are more often than not paid for with oil revenues is an irony that has yet to work itself out, as is the fact that this return to traditional typology is achieved with a large contribution from western designers and engineers.

PART 2

The Wind Catcher

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Bio-climatic design in developed countries is effecting its own resistance to the hegemony of high technology, for predominantly environmental reasons rather than cultural ones. Regardless of whether or not you think global warming is a conspiracy to undermine Ferrari, the rate of extraction from, and pollution of, a hapless planet overrun by a species rapacious to the point of suicide, means these environmental reasons are now as important as the older cultural ones, especially if you view the cultural and the environmental as bound up with one another. An elegant efficiency of construction and operation is now de rigueur at the scale of building and city. In environmental design, this is achieved by any means necessary – by active strategies, that is, mechanical and/or digital – by passive strategies, which use the building fabric to mediate between inside and outside, and by hybrid strategies – mixtures of both active and passive means. Because the building envelope is now often returned to its original protective function, performing some of the work it did before the advent of mechanical engineering, its materiality intensely important again in terms of reducing energy consumption. It can also inflect a contemporary building towards its cultural, as well as its climatic region.

Traditional vernacular architecture is a treasury of techniques and ideas that are shamelessly borrowed by bio-climatic architects everywhere, so that there's now some two-way traffic: western high technology streaming into the developing world, and low energy techniques gliding back into the developed one. The reproduction of traditional styles isn't involved in this borrowing, but the influence of tradition is pervasive. The circle of fresh air in-stale air out, driven by the buoyancy of hot air, the so-called 'stack-effect', can be seen reproduced in different ways in much bio-climatically designed architecture in the west. In not only undemanding domestic buildings, but in large public and commercial buildings with complex programmes, there are traditional, stack-driven passive ventilation techniques. It's simply that the air isn't usually coming in through wind catchers; it's coming in very often at cooler ground level, and then expelled through atria or chimneys.

These techniques have become new bioclimatic typologies in the west, but they are equally applicable to the climates where they originated, within a context of contemporary architecture. In hot humid climates like Malaysia's, for example, where Ken Yeang has developed what he calls 'bioclimatic skyscrapers', protected from solar radiation by a series of layers, some built, some grown. Closer to the traditional model are Brian Ford's Torrent Labs in India. Here, the means of circulating fresh air are virtually identical to the vernacular, but the wetted mats

used to cool the air and make it drop on windless days in the traditional system have been replaced by micro-ionisers, which spray the hot air as it enters at roof level. As the sprayed air cools and falls, it pushes down and into the floors below, cooling them. As it is warmed again, the air rises and evacuates through vents. Out of the wind catcher and the *salsabil* has come PDEC: Passive Downdraft Evaporative Cooling, which can be used at an urban scale as well. The 'cooling towers' in some of the open spaces of the 1992 Seville Expo were using PDEC.

In borrowing vernacular environmental techniques, therefore, we are not talking about borrowing vernacular styles, unless the architect and/or client is after such an imitation. The architectural language used in most bio-climatic architecture is entirely contemporary, and most of the materials are industrially manufactured. Environmental design is not an answer to a perceived loss of cultural identity or to totalising modes of production, unless it is deliberately pushed in that direction. Climatic regions are not the same as political or cultural ones. An adobe building could be sitting in the hot dry American south west or hot dry Syria. On the other hand, if Chadirji is right, then bio-climatic design goes some way to achieving his conciliatory objectives:

No truly excellent regional architecture can be achieved unless in some sense it blossoms from within its own culture. Iraq must therefore possess its own regional technology before it can have its own [contemporary] architecture. (Chadirji, 1986: 43)

In building terms, the Persian Gulf states do possess their own regional technology, a traditional, sophisticated low technology, and bioclimatic design is one way of enabling architects to integrate this with a universal high technology. At urban scale, bioclimatic design is also a way of integrating traditional morphologies that were also, among other things, clever responses to climate.

There's been a tendency in architectural discussion to present the part for the whole – the extreme modernist development of Dubai as representative of the entire and varied Persian Gulf. And there's been a tendency to lament what's been lost in this development. But if built fabric emerges out of established cultural identity, and that established cultural identity is changing, then the built fabric will inevitably change as well. The challenge, surely, is not to resist that change, but to direct it past the crudities of modernist zoning and 'my skyscraper's weirder than yours', past climatic dementia and democratic deficits. Modernity is emancipatory as well as disruptive. There is nothing to lament in a rise in living standards and an increase in opportunity, as long as everyone and everything (ie the environment) benefit. This is a question of governance, not architecture. Architects can – and indeed should – propose, but governments and clients dispose. There is an emerging desire in the Persian Gulf to import the new ways of thinking and doing being adopted in the west, not those being discarded by the west. If this shift continues to gain ground, then climate can provide a more regionally grounded means of negotiating between an unrecoverable past and a less delirious, but more viable future.

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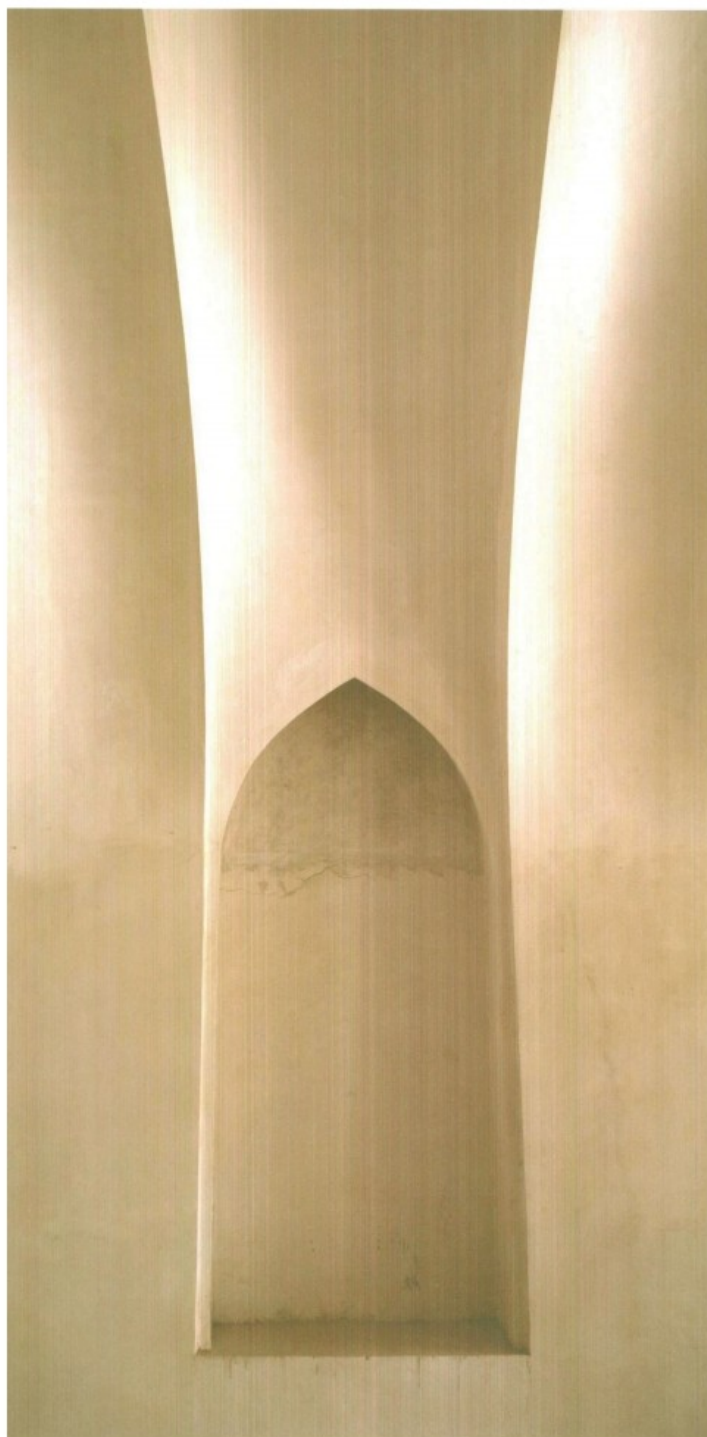
Laft, Qeshm



Lenge Port, Hormozgan



Delvar, Bushehr



The Tent: Early Persian Gulf identity

Abeer Al-Saud



AnyScanner

The present now differs from the past. In the Persian Gulf area, an urban city structure clearly dominates today, since many cities have openly adopted a more modern architecture – some based on western models, others on Asian typologies – and yet many have managed to fuse this with an indigenous, more regional kind of architecture. The habitat of these Persian Gulf cities has undergone many changes over the years for to many reasons: historical, political, religious and sociological. In order to understand how these factors influence the existing habitats in these cities, we need to consider the first form of habitation in the area: the tent, which in its basic form still represents the original form of dwelling for most people in the Persian Gulf region. This form of habitation even still exists in the region, albeit with major aspects of modernization. The tent as a result doesn't only provide us with a model of the original form of habitation; it also provides an insight into the ways of life of many local inhabitants. Therefore, this paper will propose to examine this subject in order to show the role that social traditions and norms continue to play in the modern habitats of countries like Saudi Arabia on the southern side of the Persian Gulf, where the strength of tribal patterns are still very evident, and where the legacy of tent living remains influential.

Some recent realities were highlighted by various scholars, in their book *Tribes and power* they state:

'Yet the realities of the 1990s, and perhaps even earlier, provide ample evidence that in certain Middle East countries, the tribal factor has not only been strengthened but become decisively manifest. Tribal networks have not only endured but have taken new and varied forms. Modern 'socialists' or 'nationalist' elites bent on progress, or liberal monarchs with their eyes set on modernization, reinstated an already active tribal value system and deployed tribal networks in mobilizing allegiance or restructuring modern political social institutions. Tribes, driven from nomadism to sedentary agriculture to urbanism in less than a century, mutated in terms of forms, structures, leadership patterns, environment, and material or symbolic capital. But tribes were not passive entities; they retained their solidarity networks and value-systems, and held to their belief in: ideology of fictive or real common lineage, a communality of interests, the reciprocity of obligations, common residence (in city or provincial town quarters) and importance of marriages and alliances. The tribes' flexible response resulted in various elastic forms of group solidarity. These, in turn, provide spaces for social, economic, political and cultural action. These spaces have grown into a wide and complex area and this empirical reality raises many questions.²

And specifically for social scientists, societies are particular and their histories always singular – yet in many cases one can see the reproduction of comparable processes and patterns: tribes and their chiefdoms recur in different periods and also in different societies which have no contact with each other. What collective and individual interests link them that are reproduced through the tribal system? What is the meaning of the contemporary resurgence of tribalism at a time when the dominant discourse for over two decades has been couched in the language of world processes and globalisation? What exactly is a tribe in various Middle Eastern contexts today?

The current proliferation of tribal phenomena is simply relegated to the old prosaic categories of tradition/modernity as mapped by the linear scale of progress. Yet, there is much empirical evidence that the breakdown of the old social structures under the influence of modernization and globalisation has produced some unanticipated consequences. This classical category was the *differntia specifica* of the agrarian epoch, or the pre-industrial age. In this era, the Khaldunian dichotomy of pastoralism and agriculturalism presents two antagonistic and complementary modes of existence: one revolving around nomads organized in tribes, the other on sacred empires anchored in central city-states. A dynamic equilibrium existed between the two wherein nomadic warriors, united by solidarity, would conquer centres of civilization and assume power for a period, but then disintegrate within the walls of the city. He saw this confrontation between civilization and nomadism, as the essence of human existence. To him tribes, and their meaning only in contradiction to the city, or city-state. These two poles lived in uneasy tension, a dynamic symbiosis known as the Khaldunian cycle.³

The four key aspects of Ibn Khaldun's theory are:

1- solidarity and origin, which demonstrates according to Ibn Khaldun that the fruit of the line of descent, and equally, its utility, lies in the 'asabiya' or solidarity, particularly because of feelings of social pride and mutual defence. Which is fundamentally linked to power and competition.

2- Hierarchy, according to Ibn Khaldun, the solidarity groups, militate to attain the first highest rank in a tribe. This regrouping could not have been accomplished without strong competition between groups and the monopolization of power by one of these groups, the one that held the chieftainship. Held the ultimate power that resulted in hierarchy. Which is the origin of social organization and superiority over men and dynasties.

3- Ultimately the notion of solidarity is relative: it is not related exclusively to the solidarities of a common origin but also to the hierarchical solidarities that flow from the localization of power in one group. Therefore, tribal spirit and completion among solidarity converge in the (state) localization of political power (mulk) and the establishment of a superior solidarity- englobing and incarnated in the dynastic state (dawla).

4- The explanation of Ibn Khaldun on the collapse of dynasties, as a result he offered various explanations for such collapses: new tribal and supra-tribal solidarities and thus to oppose the successive dynasties weakened by time, the luxury of the settles life and power.⁴

The previous points offer fascinating insights into aspects of Arab culture, but now in our modern day and age we are obviously faced with new issues and questions. Nonetheless, there are strong continuities.

Recent realities still provide ample evidence that in certain Middle East countries, like Saudi Arabia, the tribal factor has not only been strengthened but become decisively manifest. Therefore we can say that Tribal networks have not only endured but have taken new and varied forms. What is the meaning of the contemporary resurgence of tribalism at a time when the dominant discourse for over two decades has been inherent in the language of world processes and globalisation? And that is mainly because these doctrines are foreign and unfamiliar to the area and its people. Therefore people have increasingly gone back to what they believe in originally. Same can be seen within the modern habitats in the area. By not understanding the social needs and climatic conditions, which the basic tent originally offered. Several building types surfaced that do not solve or satisfy the needs of the users. As we will observe later on.

Historical aspects

It is also worth outlining some historical context. The recorded history of Saudi Arabia is perforated by large gaps, but from an Islamic perspective, certainly, Saudi history is usually divided into two periods: pre-Islamic and the period after the birth of Islam. Its cultural history, however, began long before Islamic history, and it was during the pre-Islamic period that the distinctive desert culture of Arabia evolved.

Moreover, even in the Islamic period, the history of the country has been far from uniform. Prior to the process of rapid modernization that began in the mid-twentieth century, extended family dynamics had remained relatively stable since at least the advent of Islam around 1,400 years ago; many Saudis in fact date their family structure to pre-Islamic times. Patriarchal refers to family authority being concentrated among the male elders, although elderly females did have some influence; patrilineal refers to tracing descent through the male line; patrilocality refers to family members always living in close proximity; endogamous refers to choosing spouses from within the same tribe, extended

family, or social group; and polygamous refers to the act of having multiple wives. Although partially diluted, most, if not all of these characteristics still exist in present times.

Social patterns in the Saudi Persian Gulf area

Before the twentieth century, Persian Gulf settlements in what is now the eastern province of Saudi Arabia were almost entirely confined to some towns and villages in the two great oases of Al-Hasa and Al-Qatif. These oases represented a fascinating confluence of two groups: the ancient and non-tribal settled population of the Persian Gulf coast, who mingled with the tribes' people of inland Arabia (known as Najd). Traditional Saudi culture thus tended to evolve among sedentary inhabitants of towns and villages located wherever water was found – in scattered oases and along dry river bottoms as in the central region, and in the larger oases and fishing villages of the eastern Persian Gulf region. Settlers had a symbiotic relationship with nomads, providing them with food and dry goods in return for protection from other, marauding tribes.⁵

It has often been noted that Saudi people tend to form a closed, extremely conservative society, due in large part to the harsh climatic conditions and, particularly in the central region, to physical isolation from other social groups. What most distinguished Arabia from surrounding regions was the fact that these extreme hardships and distances endowed the nomadic Bedouin tribes with significantly more power. This could result in conflict with settled peoples, but it could also flower in cooperation between the two groups in the proliferation of trade routes, and indeed the traditional rivalry between nomads and settlers in Arabia should always be seen as disturbances on the surface of a deeper interdependence between them. While some tribes in Arabia, such as the Al Murrah, can claim to have been purely nomadic, these were the exception. All this has important consequences, for many scholars link Saudi society to the strength of long-standing tribal affiliations, and point out that virtually all Saudis are still socially organized into extended families. It is certainly a factor that contributes to the slow social dynamics of the country.

Also Saudis still regularly visit family members, particularly those of an older generation. Women routinely pay visits to each other during the day, while men work during the day and socialize at night among themselves. This pattern of work/rest is totally based on tribal and Bedouin social patterns as mentioned previously.

Architecture and urban settlement in the area

It is essential to note that the eastern region of Saudi Arabia has always been fairly autonomous while also ruled by both the Ottomans and the Saudis.

Geographically, the eastern province is a strip roughly 200 kilometres wide that runs from the Kuwait border in the north to the sands of the 'Empty Quarter', or the Rub 'al-Khali, in the south. Its Persian Gulf shore, stretching from Kuwait to Qatar, defines its northern boundary, while the whole of its western side is naturally divided from the central province by the Dahna sands that join the Nufud desert in the north to the 'Empty Quarter' in the south.

The distinctive cities in the eastern region are: Al-Hasa, Al-Qatif, Dammam, Dhahran and so on. Other towns such as Jubail, Dammam and Al-Khobar were once small fishing villages, but are no longer. Dammam has grown into the administrative and commercial capital of the region, and Jubail as the most recent of planned cities is the most dynamic industrial centre.

The division of labour within the traditional family was delineated by gender. Centuries of adult gender separation have created within traditional Saudi extended families gender-based dynamics. The primary male roles were as providers and protectors of the family, working outside the home. The primary female roles were as nurturers and managers within the home, in which all the women in the family tended to band together to influence family decisions. Yet the seclusion of women inside the home and the restriction of their mobility in public are pre-Islamic norms.⁶

We can still see the common use of keel arches that curve up to a point in the centre, is something that occurred all over the southern Persian

Gulf region.⁷ Plasterwork decorations in grander houses, notably in the Al-Qatif oasis on the coast, were intricate works of art. This artistry was similar in design and quality to that found in Bahrain. In the centre of Qatif we find that the houses are of several storeys. The lower rooms have small windows, whereas the uppermost storey has large arched openings piercing their walls to allow extra ventilation. In the Al-Hasa oasis there is a much humbler style in traditional dwellings. The reed and branch huts called barastis that were once common throughout the Persian Gulf, have all but disappeared.⁸

Al-Hafuf oasis on the other hand has buildings that are distinguished by their fine proportions, both in dimension and decoration. As seen in some mosques in the area. Also the use of thick walls for dwelling, whether of coral rock on the coast or limestone as seen in some markets, Souq al khamis (thursdays market), these walls provided insulation and were stuccoed inside and out with smooth layers of plaster both for decoration and protection against the hot weather. The first modern houses were built of reinforced concrete and cement blocks, and were surrounded by cement block walls. Houses were generally of two stories with high ceilings, stuccoed with cement, and often painted in pastel colours. Interiors were usually painted a beige colour. Metal began to replace wood for windows and door frames as well as for external doors.

Tents

The bayt sha'r or the tent of the badu in the desert is a sophisticated structure that has developed over centuries into the deceptively simple housing it has become. Traditionally, tents were made from woven goat's hair and provided shelter from the weather, including occasional rain.

Tents can also be moved to any part of a country where there is something of value to the migrants. They can be struck when that commodity is no longer there in sufficient quantities – whether it is weather or fodder – and moved on to another location. In doing so the migrant benefits the land. Nowadays the tent is used by the tourism industry and by many families, particularly in the winter months. Rarely are traditional tents used by anybody other than families that can still afford to keep and maintain them so it is the canvas variety. However, a more dispersed arrangement was usually necessitated by the relatively scarce supply of feeding for the animals and, perhaps access to water. In this case the head of the tribe would take the better area and the other tents would spread out over whatever distance was necessary to provide for each family group. Tents are also distributed with regard to the closeness of family relationships, close families having their tent guy ropes overlapping.⁹

Bedouin tents thus even in ancient times consisted of two chambers for a men's area and a women's area. The two sections have long had a multitude of other tasks. The men's section performs as a guest area usually from the afternoon until night-time, and at night an extended part of the tent with no roof can also seat guests. The women's section is divided by a partition from the men's section and is where all other activities were performed, such as for sleeping, weaving, family gatherings, children playing, and eating. Cooking and baking is mostly done outside of the tent in an area in the camp which is dedicated for this purpose.

Yet the continuous use of tents in cities offers a striking insight into the society and its adaptation into modern times.

Modern house design

Because Saudi Arabia's culture was relatively untouched by contact with colonial rule in the twentieth century, its basic family structure and traditional domestic customs have maintained the same pattern. Yet at the same time, recent urbanization poses a major challenge to the preservation of traditional cultural values. Nuclear families moving to the cities have neither the proximity to relatives and close family friends, nor the mobility to visit back home regularly. Traditional closeness provided support systems in small towns and villages, with the more affluent often living in extended family compounds of multiple nuclear families (similar to Bedouin camps). As compared to the traditional mud houses.

Another demand was the introduction of reinforced concrete; although seemingly inappropriate in desert climate, allowed for wider spans, hence larger rooms. It also allowed for larger, wider windows to be filled with the newly imported glass, uncommon in traditional construction. Electrical wiring and modern plumbing became synonymous with the imported architecture.

Yet basic house design in Saudi Arabia today can seem very modern with its use of sophisticated materials. But in terms of their interior planning, these new houses still rely on the basic tent principle of two separate sections dividing men and women, which in turn separates the guest section and family section.

Another direct approach to solving the demand on housing involved the construction of high-rise public housing by the Ministry of Public Works and Housing. This approach was met with social apathy; due to the lack of cultural considerations such as the extended family structure, the relatively large number of persons per households and the stigma attached to living in public housing.¹⁰

Another aspect that resulted due to rapid modernization is the higher land prices in towns and cities, meaning therefore that people generally have to live in smaller houses, and in closer proximity to each other, and yet social norms are not used to such proximity. Therefore higher walls and gates are often built to separate houses from each other, ruining the facades of the dwellings as we mentioned previously.

Also pressures on domestic space is producing some unexpected consequences, as reflected in many modern houses by the phenomenon of using of tents outside the main house but still inside the enclosing periphery walls, allowing the owners to receive guests who otherwise could not be welcomed in small houses. It creates a fascinating hybrid of traditionalism and modernization.

Because of the previous reasons the use of tents in the cities takes new form and functions such as:

1. The use of tents for the purpose of extra space especially in smaller houses that is often used for entertaining guests and members of the extended families that are not socially accepted within the domain of the house such as male cousins or the husband's brothers who are not accepted to socialise with the women or the wives in smaller houses.
2. Or as a nostalgic traditional element especially in large palaces.

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Other kinds of tents are used in a variety of forms and materials as a novel way of using the historical motifs, although it has to be said that much of this sort of design results in empty pastiche.

Conclusions based on tent and modern habitation:

1. rapid change in Saudi Arabia has transformed its people in a very short time from simple life; nomadic or semi-nomadic, resulted in a very fast modernization on all levels, yet cultural values change on a very slow level as reflected in modern houses and their planning.
2. Basic house design can be very modern with the use of sophisticated materials. Yet in terms of interior planning, houses still has the basic tent principals two separate sections that divides between men and women.
3. This rapid modernization resulted in higher land prices therefore, people had to live in smaller houses, in close proximity to each other, and social norms are not used to such proximity. Therefore higher walls and gates are used to separate houses from each other. As well as large partitions that ruins the faced of houses.
4. Modern house materials are not suited for the climate so air conditions are used, mostly wall mounted units that drips on the outside walls and ruins the paint or building materials.

The use of tents is also a symptom of the ongoing importance of family structure and traditional values in Saudi Arabia, and seems likely to continue as a key hybridising feature of its architecture. All this shows that modernization is never fixed or standardised, but instead offers Saudi architects and builders the chance to devise new kinds of design which I would argue also remain culturally specific to the traditions of the country. And I hope that people generally should learn from the ways of the past specifically in tents and modifying it with new uses as well as introducing new building materials to suite their social patterns and tradition as well as climate.

There is a saying I translated from Arabic that says:

“When there is no better thing, you take what exists as the better thing.”¹¹

Notes

- ¹ Faleh Abdul-Jaber, Hosham Dawod, Tribes And Power Nationalism and Ethnicity in the Middle East (London: Saqi books, 2003), p. 6.
- ² Ibid,
- ³ Gellner, Earnest, Muslim Society, Cambridge: Cambridge university Press, 1981), pp. 86-9; Ibn Khaldun, al-Muqqadima, Cairo, n.d., p.110, 150-3, p.154.
- ⁴ Faleh Abdul-Jaber, Hosham Dawod, op. cit., pp.50-2. By: Pierre Bonte
- ⁵ David E. Long, Cultures and Customs of Saudi Arabia (London: Greenwood Press, 2005), p.24.
- ⁶ These norms are based on the ancient middle Eastern concept of modesty that is as old as recorded history.
- ⁷ The Ottomans first occupied the region between 1552 and 1663/1664, and again in the nineteenth and early twentieth centuries.
- ⁸ William Facey, The Story of the Eastern Province of Saudi Arabia (London: Stacey International 1994,200), p.50.
- ⁹ Mubarak, F., Cultural Adaptation to Housing Needs: A Case Study, King Saud University, Riyadh, Saudi Arabia, p.6
- ¹⁰ Ibid,
- ¹¹ An Arabic quote by a wise man.



Bushehr



Charak Port, Hormozgan

Global Market or Colonialism?

British Architects in the Persian Gulf 1950-1980

Tanis Hinchcliffe



AnyScanner

In the July 1977 issue of *Building* magazine, there is a report on an RIBA conference on the Persian Gulf States, and in the same issue there is an artist's impression of a £3 million multi-storey tower complex in Doha, Qatar by a consortium consisting of White Young and Partners of Qatar and London, Arabian Design Associates of Doha assisted by Hughes and Polkinghorne, of Norwich.¹ Leafing through the magazines, particularly of the 1970s, it is not unusual to find articles chronicling the activities of numerous British firms working in the Persian Gulf, and it could be claimed that this work kept the architectural profession in this country afloat, especially during the recurring periods of recession in the post-war era. My intention here is to investigate the activities of British and American architects in the Persian Gulf from the 1950s through the 1970s, and to ask whether the work done in this region was a feature of an incipient global market in building, or a prolongation of colonialism in what has been historically a contested location. Further, has this regional building history set precedents which are difficult to discard even today?

With the break up of the Ottoman Empire in the early decades of the twentieth century, Britain and France established Mandates which were intended as temporary administrations until such time that it was deemed prudent to allow the indigenous peoples within the old Ottoman Empire to rule themselves. France took control of Lebanon and Syria, while Britain took control of Iraq, Iran and the areas around the coast of Arabia. Britain's interest was primarily the transport routes to India, but after 1912 when the Royal Navy switched from coal to oil, the supply of oil assumed an increasing importance. Mindful of their increasing reliance on oil, in 1914 the British government bought the controlling interest in Iran's Anglo-Persian Oil Company.² Both Iran and Iraq resented British interference in their internal affairs, and this was especially true of Iraq which in 1920 was not really one state, but three distinct regions with little to hold them together. Saudi Arabia and the Persian Gulf States were able to maintain more equable relations with Britain, largely because their populations were small, and a series of treaties with the ruling sheikhs around the Persian Gulf, ensured Britain could maintain the required stability along the coast and direct control of the Aden Protectorate.³ Since oil was discovered in Saudi Arabia only in 1938, the great wealth of that country became apparent only after the War. Convinced that the opportunities overseas were immense, he opened an office in Baghdad in 1955. City plans and infrastructure were undertaken by British firms, along with architectural work, and as Squire notes the planning of Baghdad went to Minoprio and Spencely, Basra to Max Lock and Squire got Mosul, not that any of them had time to do much work on their plans before the revolution in Iraq in 1958.⁴

In the next administration Doxiadis was given the task of producing a design for Baghdad. Like the English architects he seemed to make little distinction between different ethnic and religious areas, and in fact his Ekistics approach was supposed to erase differences through a rationalist mentality.⁵

Given the pre-War history of the Persian Gulf region, particularly that of Iraq and Iran, it is a wonder that British architects made any headway there at all during the 1950s. It says something for the strength of the local desire to modernise the material fabric of these countries, that western engineers and designers were encouraged. In post-war Britain itself there was the will to modernise, a task in which architects would take an active part, but in the immediate post-war years the draconian cancellation of American lend-lease agreements in 1945, led to a crippling lack of cash, especially for public sector work.⁶ The architect Raglan Squire, recounted that in the 1950s when his practice needed a boost, he read a paper that commented on the fact that there were 22,000 fully qualified architects in England, while in the It might be asked, besides Max Lock, how much experience the British architects had in planning large urban areas. But this claim is modified by the warning that 'A planning consultant can find himself in the difficult position of trying to explain a plan to an audience who have little or no conception of what town planning, as it is practised in highly-developed countries, really means'.⁷ This clash of cultures becomes a leit motif in the journals as time goes on and as the projects funded by the increasing oil revenues become larger and more ambitious.

As mentioned previously, it had been important for Britain to keep the Persian Gulf region on side while India remained such a vital part of the Empire, but it was the discovery of oil which kept the British there after 1947. The Persian Gulf States assumed inordinate importance to the British economy, with Kuwait in 1967 becoming the single largest foreign holder of sterling.⁸ Suddenly, very poor and neglected territories acquired a degree of importance far beyond anything they had experienced before. Areas which had managed with almost no infrastructure were transformed with roads, oil wells and refineries, and desalination plants. Buildings for schools and hospitals, previously unknown, were required along with commercial spaces. Not having needed these buildings before, the Persian Gulf States had not developed a profession of designers, and therefore it was understandable that they would look outward for professionals more expert in producing buildings of all types.

Those architects who ventured into the Persian Gulf, found a building environment totally different from anything that most of them had previously encountered, with excess heat and light a factor in early designs, while the procurement of materials and equipment was a perennial concern, even compared to conditions back in Britain. However, even in the 1950s there was awareness that the issue of cultural specificity was important, although it was not always clear what this meant. In the 1957 issue of *Architectural Design* devoted to the Middle East, it was noted that 'Serious architects seek to develop a regional style: perhaps within the next decade they will have found the way'.⁹ There were dark suggestions in the journals that some architects ignored local sensibilities, but it was never the architects under discussion, always someone else. Whether it was a town plan or the design of a hospital or school, there was a consideration of how local tradition and culture could be accommodated in building types and plans unfamiliar in the region. This was particularly the case in the Persian Gulf. It was possible to take a very functional approach, which suited those buildings needed for strictly utilitarian purposes such as desalination plants. More difficult were buildings such as hospitals where functionalism needed to be tempered with some cultural sensibility.

The desire for modern building and technology had provided a strong incentive since the 19th century for the regions of the Middle East to engage with the West. The desire for modern technology did not always coincide, with a preference for western culture or politics, which may have been a misconception laboured under by the West. At mid-twentieth century, 'Modernity' had a certain prestige, and countries coming into sudden wealth, could be expected to seek some of that prestige for themselves.¹⁰ It should be remembered however, that at the same time the Middle East was seeking to transform its physical fabric with modern buildings, America too and to a certain extent Europe, were changing the face of their cities. The Persian Gulf States were not trying to keep up with an already well-established modernism, but with a contemporary process that was happening at that time. In other words, they were not playing catch up, but regarded themselves as the present or even the future, and this is reflected in the title of a feature in the *Architectural Record*, which asks if the Middle East is the 'new frontier'.¹¹

However, there was a lot of building needed, and much of it involved infrastructure undertaken by large contractors such as the British firms Taylor Woodrow, Laings and Costain. Architectural work, on the other hand, was varied and satisfied the demands of a wide variety of clients; for example, Raglan Squire and Partners became involved with Hilton Hotels, which along with Intercontinental Hotels and Holiday Inn were building extensively in developing countries in the Middle East, the Far East and the Caribbean. Squire claimed that every Hilton Hotel was different, and his experience of these hotels ranged from Tehran and Bahrain to Cyprus and Tunis and to Jakarta.¹² But as Annabel Wharton has pointed out in *Building the Cold War: Hilton International Hotels and Modern Architecture*, there was a formula which incorporated the accepted luxury of contemporary America with a modicum of regional decoration.¹³ The Hiltons provided a comfortable familiarity for western visitors, but they also satisfied the desire of the ruling elites for a palpable modernity, sometimes in the face of great difficulty and expense. Wharton makes the telling point that Hilton did not pay for the hotels, but relied on local investment, thus ensuring the support of the financial community at any rate for the shiny new buildings, which with their monumental scale often changed the urban landscape, and emphasised the shabbiness of the traditional fabric.¹⁴ Many young British architects, fresh from the Schools or the War, were looking for work in an overcrowded profession, when competitions began to appear for work in the Persian Gulf States. In 1952 an RIBA competition for the Dohar State Hospital in Qatar was won by the young husband and wife team of John R. Harris, and Jill Rowe, fresh graduates of the Architectural Association. When they won the competition, they had already worked on the Building Research Laboratories in Kuwait, but they were figuring out from first principles how to design what was possible as well as what was appropriate.¹⁵ The innovation extended to contract and management so that for example the foundations of the hospital could be built while the London office was still producing the working drawings, thus demonstrating to the population the political point that a new hospital was imminent. This was just the beginning of a long association of John R. Harris Architects with the Middle East. In 1958 they produced a plan for Dubai and subsequently designed six hospitals there. They opened an office in Kuwait and also in Tehran for the work they undertook for the National Iranian Oil Company. In 1961 they produced the first development plan for Abu Dhabi, and then they went on to do work in Bahrain, Sharjah and Oman.

There were also buildings commissioned by local governments which could produce interesting work beyond the accepted modernist formula. In 1966 Trevor Dannatt won a limited international competition organized by the International Union of Architects on behalf of the Saudi Government for a conference centre and hotel in Riyadh. This large project was completed in the mid-1970s, but the generosity of the spaces and the simple forms give the complex a timeless quality.¹⁶ Anglo-American architects are often uncomfortable with religion, at least in the recent past; hence many found the omni-presence of Islam and the other religions in the region a struggle. Be this as it may, it is noticeable that from Dannatt's complex are absent those pointed arches, decorative tiles and grills which seem to be the limit of regional references of many buildings in the Persian Gulf at this time.

While work in the Middle East continued to grow during the 1950s and 60s, it was after the oil crisis of 1973 that the region's impact on architectural practice reached a global scale. In 1976 Edmund Dell, Secretary of State for Trade, compared the expansion of the Arab countries as 'the nearest modern industrial equivalent to the booming days of the American gold-rush'.¹⁷ We have become used over the past year to take in our stride references to billions of dollars, but in 1975 The Central Planning Organisation of Saudi Arabia was forecasting that the government would be spending \$27 billion a year on construction by 1980.¹⁸ The resulting interest was enormous, since the very crisis which brought such wealth to the oil producing countries was pushing the industrial countries into recession. Dispiriting statistics continued to appear in the architectural press chronicling the fall in new commissions for British architects at home.¹⁹

Although Britain was historically the colonial power in the Persian Gulf, America had by the 1970s a long history of involvement in the area, since their interest in oil pre-dated World War II. Saudi Arabia's first oil concession in 1933 went to what became the Arabian American Oil Company (ARAMCO), and when oil was discovered in Dhahran in 1938, the company took control of the refining, marketing and pricing of the oil. They also developed the area with their own infrastructure and established what was in effect an American company town. Indeed, the American government fostered Saudi Arabia as their particular ally in the area, and their minister even likened the Kingdom in the 1940s to 'a gigantic aircraft carrier, astride the Middle East'.²⁰

Subsequently American architects and engineers undertook a significant amount of work in the Middle East, a fact reflected in the June 1975 issue of *Architectural Record*, devoted to opportunities for designers in the area, and chronicling the experience of architects already working there. The Americans were much more up front than the British about the cultural conflicts incipient in the relations between clients and western designers. They recognized the resentment felt at the 'demeaning' attitudes of many Americans, but they noted that 'These leaders are also conscious of their image, and the superficial image that many want – for better or for worse – is that of America'²¹. The efficiency of American methods was appreciated, especially since time was regarded as of supreme importance. There was very much a concern among leaders in the Persian Gulf that building, along with diversification, should take place while the oil revenues lasted, so that the region would not sink back into obscurity when it could no longer provide oil to the industrialized economies.

The *Architectural Record* advised on how to get commissions and mentioned the need for a reliable Agent who was able to set up face-to-face meetings with clients. Sometimes Western architects had to wait around for weeks before their all-important meeting, and, they were reminded, this was without benefit of alcohol and the usual western entertainments such as movies²². When it came to the contract, many westerners found that the time scale for the necessary design and building work was unexpectedly tight, and the expense of building, beyond what they were used to. Scarcity of materials and transport costs were a consideration, and as one architect said, how do you mix concrete when the water temperature is 100 degrees?²³ It became more common for the architectural journals to cover work in the Middle East and even to devote whole issues to working in the region. In January 1976 a new journal, *Middle East Construction* was launched with a quotation from Le Corbusier on its cover and a remit to circulate free of charge to 'qualified readers' in the whole of the region. From the early issues of the journal it becomes clear that construction was viewed as a vital element in the British government's export drive, especially as it was considered that Britain was falling behind other countries such as America, Japan and Germany²⁴. The stiff competition between industrialized countries for work in the oil rich areas signals the change in the balance of power between those commissioning the work and the providers of the design and construction services.

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As mentioned earlier, even in the 1950s there was an awareness that instant modernisation could wipe out any previous cultural traditions. By the mid-1970s and the oil boom, this situation seemed even more likely. Hans Neumann of Perkins & Will International described a sensitive plan for a new town near Tehran which had been rejected out of hand by the clients because it included traditional elements. 'They didn't want to hear the word bazaar. It was a shopping center'²⁵. On the other hand, Charles Hoyt criticised much recent work by westerners as 'poorly planned and built, and its designers have copied the appearance of (for example) Miami in the 1950s'. This concern coincides with the discovery of 'heritage' in America and Britain, and could reflect western preoccupations just as much as modernism did twenty years before.

British architects too were aware of the cultural dimension of their activities in the Persian Gulf. Scott Brownrigg and Turner made a calculated decision in 1974 to get involved in Middle Eastern projects, and opened offices in Doha and Dubai. When they came to design the Abu Dhabi Trade Centre their architect, as a spokesman explained, "completely misread the client's requirements", and had assumed the client's interest in prestige and their desire for ostentation and wealth.

Some of the advertisements to be found in the architectural press at this time are as telling as the comments by the architects involved. An advert from the RIBA Journal of 1977 for Syston Rolling Shutters presents a whole dramatic scenario, which speaks volumes²⁶. An Arab, the former colonial subject, emerges from his limousine to be greeted by a smiling commissionaire, the uniformed representative of British colonialism, since the commissionaires were staffed by former army personnel. 'Times may be changing' states the text, and we must remember that this was when people from the Middle East were flooding London's West End, eager to spend some of their oil wealth. The text goes on to say that 'We care about maintaining standards, we never cut corners. We care about the personal touch, we're never slow to respond to your needs and problems'. This suggests that there are others who will do all these things, especially if they are dealing with Middle East clients. Much has happened since, in the way of regime change and revolution, shifts in balance of regional power, and in the politics of oil.

When we regard the present condition of architecture within the Persian Gulf States, it is good to remember that where we are now, began in the post-War rush to modernity, and the self-interested involvement of western architects.

The advert is based on that old schoolboy joke, how do you make a Venetian blind? The crudely drawn, cigar smoking arab, with a set of Deans blinds as eye shades is posed in front of some oil derricks, and the text concludes with the phrase, 'If you have to blind an Arab, try our service. It doesn't hurt at all'. Less subtle than the previous advert and perhaps so over the top as to be innocuous, it did appear in a special issue of *The Architect* devoted to the Middle East, with translations into Arabic.

If nothing else, these advertisements demonstrate an ambivalence in the construction industry to working in the Middle East in the second half of the twentieth century. In the July 1983 issue of the RIBA Journal dedicated to 'Architecture Overseas', Hal Higgins of Higgins, Ney and Partners made the comment that 'The mistake that many western architects have made is to come into the Middle East with set western notions and to construct buildings which are unsuitable in a traditional sense. This attitude shows a certain contempt for the place in which they are building'²⁷. A second advertisement, appearing in the journal *The Architect* in December 1976, reflects something of this attitude²⁸. Architectural firms such as Scott Brownrigg and Turner attributed their continuing existence during a period of severe recession to their work in the region. And for many British architects, it was an opportunity to work on a scale they could never dream of at home. On the other hand, the Middle East countries with new untold wealth sought to satisfy their desire for modernity without really understanding the implications of this move. But when it came to thinking about architectural heritage, as the west finally got around to doing in the late 1970s, it could be asked whose heritage. That of the ruling elite? The indigenous people? Or the great mass of foreign workers drafted into a country such as Kuwait, where by the mid-1980s 60% of the population was made up of outsiders, mostly Palestinians?²⁹

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In May 1977 the RIBA Journal assessed the past 25 years of British architects in developing countries such as those in the Persian Gulf, and the conclusion of Michael Austin-Smith was that architectural assistance was not enough, since undiluted western architecture could be inappropriate³⁰. As Austin-Smith says, 'It is no good building a dozen hospitals or schools if there is no way of producing the necessary medical or teaching staff'. Then he goes on to say: 'There is therefore a great opportunity which is opening up for a whole range of British expertise to be applied to a large number of building programmes in a way which will ensure that our knowledge and expertise is used to solve the problems of the countries concerned and not to saddle them with inappropriate buildings'. And we see that they are off again on another quest to run peoples lives for them.

Notes

- ¹ Building, Vol 233, 1 July 1977, 42, 81; Royal Institute of British Architects Journal, Vol. 84, May, 1977, 229.
- ² W.Taylor Fain, *American Ascendancy and British Retreat in the Persian Gulf Region*, New York, Palgrave and Macmillan, 2008, p. 15.
- ³ Ibid., p. 231.
- ⁴ Ibid., p. 198.
- ⁵ Panayiota I.Pyla, 'Baghdad's Urban Regeneration, 1958, Aesthetics and the Politics of Nation Building', in Sandy Isenstadt and Kishwar Rizvi, *Modernism and the Middle East, Architecture and Politics in the Twentieth Century*, Seattle and London, University of Washington Press, 2008, p. 99.
- ⁶ W.Taylor Fain, *American Ascendancy*, p. 22.
- ⁷ Ibid.
- ⁸ W.Taylor Fain, *American Ascendancy*, p. 3.
- ⁹ *Architectural Design*, Vol 27, March 1957, 72.
- ¹⁰ *Royal Institute of British Architects Journal*, Vol 84, May 1977, p. 198.
- ¹¹ *Architectural Record*, Vol 157, June 1975, 101-8.
- ¹² Squire, *Portrait of an Architect*, p. 205.
- ¹³ Annabel Jane Wharton, *Building the Cold War: Hilton International Hotels and Modern Architecture*, Chicago, University of Chicago Press, 2001, p. 4.
- ¹⁴ Ibid., p. 7.
- ¹⁵ A.E.J Morris, John R.Harris Architects, Kent, Hurtwood Press, 1984, p. 5.
- ¹⁶ *Architectural Review*, Vol 157, April 1975, 194-219.
- ¹⁷ *The Architect*, Vol 122, December 1976, 25.
- ¹⁸ *Architectural Record*, Vol 157, June 1975, 105.
- ¹⁹ For example *Royal Institute of British Architects Journal*, Vol 84, October 1977, 447.
- ²⁰ W.Taylor Fain, *American Ascendancy*, p. 22.
- ²¹ *Architectural Record*, Vol 157, June 1975, 102.
- ²² Ibid., 103.
- ²³ Ibid., 106.
- ²⁴ *Middle East Construction*, Vol 1, March 1976, 5.
- ²⁵ Ibid.
- ²⁶ *Royal Institute of British Architects Journal*, Vol 84, October 1977, opposite page 437.
- ²⁷ *Royal Institute of British Architects Journal*, Vol 90, July 1983, 4.
- ²⁸ *The Architect*, Vol 122, December 1976, 62.
- ²⁹ *Cleveland, A History*, p. 467.
- ³⁰ *Royal Institute of British Architects Journal*, Vol 84, May 1977, 198.



Hendijan, Khuzestan, 2009





Bushehr



Hendijan

a model of an informal city

Torange Khonsari



Hendijan is a historical city on the Persian Gulf and is situated within the province of Khoozestan with 3000 years of history. It has a disputed population of approximately 46,975 inhabitants. The temperature in the summer can reach 50 degrees Celsius, when all public facilities are ordered to close down. In the winter temperatures fall to 5 degrees Celsius and the rainfall equates to 200ml of water a year. The small scale of the city and its dry, yet ecologically diverse climate with close proximity to the Arab states makes this part of Iran rather unique in its identity. This paper will look at Hendijan through its informal makeup, which determines its unique identity. The paper will in comparison look at the formal structures in the city against which informalities exist. In European cities the informal emerges as part of the or in reaction to the formal. This paper will assess if this is the case in an Iranian context taking Hendijan as a case study.

Most Iranian cities are shaped and designed formally. This formalism leads one to think that they operate as formal cities where institutions regulating them enforce an organisational structure that makes them function. Although they are designed formally and have most of the formal institutional structures in place they function informally. Informality is made up of social networks and relationships that gives the city its identity but also allows it to function on a day-to-day basis. The city of Hendijan predominantly low rise goes hand in hand with the informal social city which was encountered in this case study. The shaping of the formal city through social relationships can only happen if there is something to shape. Objects, spaces and settings receive their meaning through social and everyday involvement of its inhabitants. These meanings are ingrained within the identity of the city and can stay, change and speak through the life of the objects that host them.

This informal structure of social relationships and networks, which stems from the cultural code of "tarof" in Iran, does not enable western models of city regulation and management to function.

"Tarof" is what Iranians do as a sign of politeness. In Iran it's rude to be direct and "Tarof" is a method of reaching an answer politely and slowly. To a westerner this may seem frustrating as it's a way of time wasting, to an Iranian it's a way of life. For example, you get out of the taxi and ask the taxi driver the price for the journey, he tells you that for you it's free and don't mention money, he doesn't mean it he is doing "Tarof" to be polite and pleasant. Whatever your opinions about "Tarof" it's a key cultural trait and becomes very important in analysing small cities in Iran that are shaped through social relationships. "Tarof" brings with it a whole baggage of other attributes. In a society where you use "Tarof" there is abundance of time and time efficiency is not critical to survival, this point is really important. In western society we

don't have time to waste, its all about production and efficiency and is required for capitalist survival. "Tarof" can seem dishonest which is not its best attribute, you say something you don't deeply mean, but it did not emerge for dishonesty but to be polite and maintain a pleasant social relationship. The problems are not with the attributes of "Tarof" but with how Iranian society has developed, changed and has been educated within contemporary Iranian culture. In the name of modernisation unconsidered western models have been applied both on society and the urban fabric in Iran and the conflict between those models and local cultural qualities begs for new ways of thinking about the construction, habitation and management of Iranian cities and their societies.

In a cultural climate where politeness and pleasantry is engrained in its language to maintain social relationships and due to oil production, its time is not dependent on efficiency, how can we create local cities?

The city '..... is situated at an interface, halfway between what is called a near order (relations of individuals in groups of variable size,and the relations of these groups among themselves), and the far order that of society, regulated by large and powerful institutions"

Henri Lefebvre, writing on cities: Blackwell publishers, 1996, p101

Social exchanges change the image and identity of a place. The informal engagement that affects the reading of the city can be both public and displayed publicly or public and displayed privately. In Hendijan the traditional houses are all about social exchange and interaction and the level of interaction in different spaces of the home are clearly marked. As seen on the sketch the main living quarter in a traditional house was modestly in the front, which is different to other traditional houses in mainland Iran. You enter a sheltered entrance and there are 2 living quarters on either side, one for guests and general living quarters and one for sleeping. In these houses the control of the private and the semi private is much less than other traditional Iranian houses. At the end of the courtyard is a palm tree garden. From this garden there were doors to the neighbouring houses to access this predominantly female working environment. Also as the neighbouring houses were usually family this area operated like a sustainable workshop around the resource of the palm tree and became a key space within the public realm of the private home. The trees provided shelter for the people whilst their leaves were used for making plates, sofreh (cloth on the floor to eat from), bowls, bags and fans. The date fruits were of course a staple part of the diet, which they used in many ways.

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For women the home is both the private and the public arena where relationships are developed, be it parties, meetings, fashion shows or beauty salons. For men this arena shifts between the inside to the outside the home, in its parks and market places but mainly on pavements in front of their shops and workplaces. These places become re-appropriated to effectively deal with everyday life so integral to understanding an informal city.

"Informality is a structure of actions that contain both harmonious and contradictory relationships. "

Michel s. Laguerre, The informal city: Macmillan press, 1994

In the western context informality implies that it is a separate reality to the formal structures yet dependent on it. In Iranian urban context informality is the reality of how the formal system operates. Informality becomes an extension of the formal system.

In the west the relationship between the formal and the informal is described as

"The difference between formal and informal organisations is that while the former is a system of consciously coordinated activities, the latter is unconscious, indefinite and rather structure less"

Gross,B.M, Behavioural science and education administration, university of Chicago press, 1964, pp33-72

In Hendijan the formal structures that govern the city do not appear to be formal, as the west knows it, but very much like an informal organisation where management is rather fluid and organic. The formal becomes ceremonial; it celebrates the hierarchies that in reality act informally. The formal ceremonies mask the informal operation of the formal structure. What this ambiguity once accepted needs is the reduction in the hierarchical decision making and the presence of decision makers in the city spaces rather than at their desks.

“ I define informality as a structure of action”

Michel s. Laguerre, The informal city: Macmillan press, 1994,p 21

Informality requires a place where actions are carried out, such as the pavements, homes, leftover spaces in the city, door ways etc. They also require actors who will act within these spaces. Informality becomes an expression of ones socialisation and ones routine of everyday life is it by city inhabitants or city decision makers.

In Hendijan like many Iranian cities, planning laws can not be implemented because of ‘tarof’ and importance of empathy over rules. Talking to the planning officer in Hendijan I heard the story of a poor man who could not afford to comply with the planning laws, what should he do but let him build whatever he can to have a roof over his head. Larger scale cities have other stories that are not relevant to this case study. The other very important quality in Hendijan that casts it as an informal city is the fact that people all know each other or are somehow related to each other. This completely changes the way you govern and design a city. Hierarchies are much more fluid. Local councillors and the Mayor at the top of the hierarchy are related to fisherman at a lower social hierarchy. This actually starts to dissolve ideas of hierarchy seen in larger cities. This enables the formal structure to be aware of the informal needs and desires which begs the question of how do the formal desires of the government meet the needs of such an informal city.

Informality can be read in two ways either one may decide to display informal behaviour like the planners allowing people to build so they can have a roof over their head or ones behaviour can be defined as informal by others, reflecting the situation of the women holding public events in private spaces of their home which will be described below.

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In Hendijan every encounter in the public sphere followed a personal story: the Sea navigators who read the stars at night to navigate the boats to their destination, to childhood memories of fathers coming back from fishing and throwing the huge catch of the day in the yard for the family to sort out. The major impressions that made Hendijan and its spaces special was not the new damn, the vast number of concrete streets they were spending millions to build or the new asphalt factory but rather the numerous stories told by its inhabitants and the places in the city that they related to. These stories once mapped start to connect and build on collective memories and strengthen social relationships related to city spaces. These stories start to add value to the fabric of the city, give it a history and an importance to the architecture and the objects that hold those stories regardless of their aesthetic value.

Hendijan’s development and physical construction of the city is seen from the standpoint of technology and western inappropriate case studies. The films promoting the city are proud of the new roads they are building, the new asphalt factory, new equipment for services etc, however the livelihood and software of the city is completely independent to the hardware of the city that the formal system is so insistent upon. When in a city like Hendijan you have a population who are either friends or relatives, the mass has the potential to be much more central to decision making process through everyday social exchanges than a central formal structure. The informal social structure understands the public spaces of the city by its constant presence and use of those spaces. The formal system can become part of that knowledge and hence holistic decision making by increasing its presence in the public realm. In Hendijan this is absolutely possible as long as methods by which decisions are made and spaces developed are not as the western failing model of public consultation or even worst no consultation.

In Hendijan being taken around from shop to shop to meet people who were either friends or related to my guide it became very clear that the shop is rooted clearly within the identity and the construct of public realm of the city. This is where men meet to chat about business, life, play games and have tea. The moment I entered as a stranger accompanied by a local, informality occurred. The idea of shops as an integral part of the public realm needs to be incorporated in design idea for Hendijan and its identity. This never happens in large cities where small shops are demolished to make space for large-scale shopping malls. The tree lined streets and pavements now start to make more sense as an extension of these informal private spaces within the public realm. Their shade allows the overspill of conversations and tea drinking onto the

streets. Hall talks about these spaces as unstated and low key.

“Because it is unstated, not because it lacks form or has no importance Informal spatial patterns have distinct bounds and such deep, if unvoiced, significance that they form an essential part of the culture”

Hall, E. The hidden dimensions: New York: Doubleday, 1966

This means that the notion of informal space becomes interchangeable with that of personal space. A space where emotions, memories, narratives are created freely without boundaries and constraints. Sitton challenges architects to build public structures that meet both the formal and the informal needs of the users.

Informal spaces can also be transitional spaces. Rooms in a house with a public function. This was seen in Hendijan with ladies hairdressers advertising in a residential street with spaces in the house occupied for such public function. Whilst talking to the lady hairdresser, it became clear that her room was interchangeable; it became a space for fashion shows for women, by women. The function of such informal space may also be transitional and be changed as need be.

“Informalisation of urban space can also be seen in terms of both supply and demand”

Michel s. Laguerre, The informal city: Macmillan press, 1994, p31

The informal spaces in a city are best examples of what is required in the city. In over controlled cities, the informal is created, as everyday needs cannot be met by the formal spaces. Mapping informal spaces tells us about a place, its needs and desires. The municipality's role is first to recognise the importance of these informal spaces then, have the ability to read them and finally to communicate the needs of the city to the formal structures that hold the purse strings. The best gift for the city is to reduce the limiting and top down condition and design of its formal and public spaces. This does not mean that the city no longer needs formal spaces but rather that the hierarchy between their importance is equalised. In Hendijan this actually happened. The formal public spaces such as parks were filled with people as spaces of leisure after working hours. This space and its transformation were as significant as the pavements in front of shops being occupied during working hours.

The changing identity of the formal space and its transformation into an informal space is largely dependant on informal practices carried out in such a place over time. Taking the example of the formal parks in Hendijan being informalised by local uncontrolled use creates this changing identity, which is a display of local desires and needs. As seen in the traditional architecture in Hendijan encounter is important in the production of informal personal or collective space. In Hendijan and other parts of Iran entire pieces of architecture were built on different notions of encounters or indeed non-encounters, experiences, narratives and memory. Designing in informality was part of an age of architecture without professional architects but local 'craftsman' who incorporated needs and desires as part of the knowledge of design and build. The question is how can architects who are not part of the informal structure of local inhabitants have the knowledge to create such holistic and appropriate contemporary architecture? Is it the idea of an expert which is the problem or where that expert positions itself in the order of expert and user?

The Institutions

In Hendijan at first glance formal Architecture seemed restrictive and rather confused in its organisation of hierarchies. After spending an hour in the mayor's office it became clear that the architecture in this formal institution was not at all restrictive but rather informal. People entered and left, waited if needed to get their work done, answered mobile phones and it resembled a bustling public space rather than a mayor's office. This was a refreshing situation to a person with western views of such institutions and walls and doors that separate the decision makers from the users. Designing public buildings with the idea of the mayor's office being a fluid public space with public access is a much more interesting model that perhaps the west can learn from.

“Informality is a social construction”

Michel s. Laguerre, The informal city: Macmillan press, 1994, p11

This social construction starts to shape places and spaces in the city as mentioned above, both in the public and the private sphere. The public dominated by men and the private dominated by women. If these relationships be it through narratives or other means are mapped they start to visualise the city's unique social construction.

Today farming is greatly reduced due to unpredictable weather conditions and more competitive markets. Although present farming families are not living in the city, past farming families who gave up farming moved into the city. [See fig. 11]. Conversation with local shopkeepers also proved that a lot of people who currently live in the city grew up on farms and still have knowledge about farming and horticulture. This skill and its transfer for other contemporary applications within the city like urban collective farming or community food gardens can start to build a new economic context for Hendijan, which can complement an informal local economy. Hendijan has abundance of fertile land, sun and the river Zohreh. [See fig. 12] A new strategy for cultivation of community led food gardens or farms for neighbourhoods can start both the education of collective engagement and economic assistance.

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Informal space may also be interstitially located within the formal space and it is how the two relate to each other that become the key in their independent existence or their future formalisation. The example of such an interstitial space in Hendijan was the main ‘foyer’ area in the same municipal building that held the mayors office. This foyer space at the heart of the building was where one enters, waits, asks for information and gathers for informal chats. It was the main and direct public space of the entire building, formal in its context but informal in its nature. This became an interstitial space, which can go either way depending on how its future is perceived. It can retain this existing position or become an arena where informal groups come to express a collective concern and desire or, a place where the city informs its citizens about collective citizenship, social engagement and showcases their future aspirations for the city. The latter, which is a formalised use of the space starts to address a public function and becomes part of both a formal and an informal public realm of the city. The potential of this interstitial space located in the heart of the building and immediately off the entrance is that it can have the duality of formal and informal use. The importance of interstitial spaces and their duality is that they can coexist and one can start to inform the other. It starts to bridge gaps between the informal users and the formal decision makers. The places where this happens becomes spaces where everyday experiences and memories of inhabitants start to take shape. In Hendijan this space ‘the foyer’ becomes a key place to program and take seriously in breaking hierarchies and allowing citizen engagement.

What one does not see in Hendijan and indeed in Iran are organised community groups where collective desires are expressed and actioned. There are no grass root community or voluntary groups, which leaves the question how the informal structures in Iran can change relationships in the formal structure and act within interstitial spaces where formal and informal meets? The answer may differ from city to city of different sizes. In Hendijan it lies within its close and unorganised system of social networks. It's about a key player in the city becoming active in social projects in the city, discussing the ideas with friends and family and starting to implement them. It is however extremely important who these informal leaders are connected to. Do they solve problems that the city can't do? Are their contacts limited to their neighbourhoods? Where does the money come from to support such projects? These leaders should sit between the shorayeh shahr (local councilors) and the community. What is interesting in Iranian cities but was not so visible in Hendijan is the phenomenon of informal street vendors and roaming markets. Street vendors become key actors in informalising urban spaces both spatially and economically as was described by Michel s. Laguerre in his book the informal city. Either the weather plays a part in the lack of informal street traders or lack of demand. What proves significant however is the fact that informal trade does not have to take the shape of informal markets or street venders in Hendijan; they are integral to the informal culture of the city and its identity.

The money in every Iranian city is the main issue. The lack of organised community groups and lack of public grants for them to access

means that the money needs to also be secured informally. Either they are gained by having citizens with money being part of the groups or sponsorships from local businesses. These local businesses can become part of the group and decision making for projects can be put to a vote. The main question here is if Iran is culturally ready for such bottom up processes. These projects can also happen at very low-key local levels and don't need to be government initiatives and it is in this scale that they have a potential to succeed if they collaborate with localised formal structures.

Localised formal structures are the mayor's office, the planning department and other departments that deal with the city and the local councillors. The mayor and the councillors are voted in by the local residents so it goes without saying that a mayor who is elected carries an informal dimension with them because of the way they have come to power. This was quite clear in the way the mayor's office in Hendijan operated. This localised formal structure needs to be aware that the informal system has a more fluid ability to change and has a liberating impact on the formal system, which can stifle progress.

Formal and Informal Economy

Farming

There really was not enough time to research this topic in detail so the focus will be on the 2 main trades of the city both past and present. The existence of the river Zohreh in Hendijan meant that agriculture was a very active trade and in 1900s an experimental farm was created by the government to experiment with the kind of produce that can be cultivated in Hendijan and to what quality. The produce was mainly for export whilst locals traded the goods informally with each other. This trade was not always based on monetary exchange but exchange of goods of for example dairy goods for vegetables.

Fishing

Fishing is still a very large industry in Hendijan, which has brought with it other industries such as motorcycle and motorboat repairs. Fishermen have boats to fish and motorcycles to get to the shore.

A predominantly fishing community with approximately 50% of the population involved in the business means that hardly anyone from Hendijan buys fish from a shop or a market. As described before in Hendijan people are either friends or related and for this reason they will always know a fisherman from whom they buy informally or indeed get given the fish for free. We are back to "Tarof". This formal and informal relationship between international trade and local trade that builds relationships through "Tarof" needs to be taken seriously. The informal trade is local; it's about establishing relationships and sustaining them. The international trade is important as a formal structure to enable economic profit to sustain the informal trade of cheap or indeed free fish to friends and family.

Conclusion

Although this paper concentrates on the idea of localised settlement and identity the point has to be made that the city also has a more global identity which comes from its close proximity to the Persian Gulf, the Arab states and indeed other continents. In the context of this paper the interest is with the population that came back to Hendijan and brought with them stories, treasures and goods rather than those who settled in other countries. There were old stories of making sofreh and dishes from the palm tree leaves and trading them for fabric with Kuwait to stories of trips to Dubai and Bahrain for holidays rather than cities in Iran. This orientation towards the south is key in understanding the identity of these cities as well as focus on the very localised city structures.

The notions of Tarof and informality sets Hendijan within its cultural context and begs a different approach to urbanism and citizen involvement which needs to be taken seriously if these cities are to retain their tailor made identity, which is screaming to be saved.

These cities require facilitators not master plans, they need experts that can position themselves outside their existing roles who can help the citizens read their city than experts that come for a day to design them.

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Deylam Port, Bushehr, 2009



Abadan Khorramshahr & Deylam

Two Cities Two Stories Two Identities

Nasser Golzari/ Reza Pourvaziry



Setting the Stage

The history of some cities are coiled with legends, political and economical upheavals, revolutions, occupations etc and the two symbolic cities of Abadan and Khormashahr in the southern Iranian province of khozestan, are not an exception with their hybrid identity of global oil and local resistance. Add to this the specific unique climatic conditions with its related cultural practice confused and part responsive old fabric, then you are in for a treat. These two historically iconic cities are so geographically close, less than 10km apart yet; they are so different in their sub cultural practices, their urban fabric, house typologies and their political symbolism. Some argue that their differences and contradictory journey, in terms of urban structure, urban identity and everyday habits are complimentary, while others may argue their link is their climatic conditions and their attitude towards waste and consumption of energy and their denial of their past practices. A close look at the habitation and the political history of these two cities, on the North edge of the Persian Gulf, could provide us with some clues on how rich oil cities have been shaped by their specific local climate and the pressure of brutal global market with its oil demand. The presence of oil in this region and more specifically in Abadan has completely dominated the contradictory development of the life of the local citizens as well as being instrumental in the destruction of its climatically responsive building fabric. These two Port cities grow in importance after the discovery of oil/gas especially since WWII, as the largest oil producing city in the world, and more recently due to their geographic location of bordering with a number of oil producing countries.

Both cities have become economically active during the Pahlavi dynasty between 1915-1979, when Oil income increased from '\$22.5 million in 1954 to over \$19 billion in 1975-76'¹. The increase in the Oil income and its production however had little to offer to the locals and the economic gap between the local majority and the transient wealthy minority (mainly Europeans and Americans) grow drastically as we got closer to 1978. Iran's oil and its geographic location, being next to then the Soviet Union, was important to US at all levels including the control over its oil as well as its cultural. The invasion of global market became noticeable during the 1960s within all the industries and people's everyday life. Hamid Naficy in *Life and art the new Iranian cinema* explains, "Regional media influences in Iran were replaced by global interests. American companies began selling all kinds of products and services, from feature films to television programmes, from TV receivers to TV studios, from communication expertise to personnel training: in short, they sold not only consumer products but also consumer ideology."

Naficy goes on to explain that the first Iranian television station, which was commercially based and privately owned, was established by Iraj Sabet whose family was the agent for Pepsi-Cola and US advertising agencies imported its programme as well as dictating all the TV commercials there were broadcasted in Iranian TV. The products like Pepsi Cola and Winston cigarettes in the late 1960s and early 1970s became an image and a symbolic representation of 'western' world for the upper and the middle classes. Ironically the similar imagery and products, coca cola and king Burger, are used in the film 'Goodby Lenin' by Wolfgang Becker (2003) to show the arrival of global capitalism in the east of Germany after the fall of 'socialist' planned economy of the eastern block. In fact what was alarming about the arrival of American consumer product was their association with the culture of pleasure for the working and middle classes. When the first Pepsi / Coca cola factory opened in the west of Tehran with its glazed façade exposing the process of filling the bottles with the drink, many working class families will go pick-nic in front of the Pepsi cola factory rather than the park!. This intrusion of 'brand' culture and its metaphor of American / western desire is described in the work of controversial Iranian Female poet, film maker and writer Forugh Farrokhzad (1935-67), in her «Someone Like No One Else» (1965), :

how splendid is the bright light
 how splendid is the bright light
 and I wish so much
 that Yahya
 could own a push cart
 and a Coleman lantern
 and I wish so much
 that on the push cart of Yahya among the watermelons
 and melons
 I sit
 and go around the Mohammadiyah Square
 ah . . .
 how pleasant to go around the Square
 how pleasant to sleep on the roof
 how pleasant to taste Pepsi Cola
 how pleasant to go to Fardin movies
 and how much I enjoy all these things
 and I wish so much
 to pull the hair of Sacid Javad's daughter.

and

Someone from the shower of fireworks in an
 evening sky of Topkhanah Square⁵
 comes
 and spreads a cloth
 and distributes the bread
 and distributes the Pepsi Cola
 and distributes the City Park
 and distributes the whooping-cough syrup
 and distributes the registration day at school
 and distributes the hospital waiting-room numbers
 and distributes the rubber boots
 and distributes Fardin movies
 and distributes the clothes of Sacid Javad's
 daughter
 and distributes whatever does not sell

and gives us our share
I dreamt . . .

Farrokhzad who was one of the most unconventional, and I would say that she was one of the most descriptive of the socio cultural situation of Iran of the time. She was able to bring in every day culture of the masses, here reference to Fardin (a commercial well known actor) in the same work she states "I dreamt that someone is coming I dreamt of a red star". (Insert Ref.)

Arrival of the global American market and its culture, which was mainly benefiting for the elite minority, created a major economic and cultural gap between two classes in the Iranian society. This was not only very tangible and visible in Tehran, Iran's modern capital, but even more representative and reflective in cities like Abadan and Khoramshahr. Presence of economic gap is seen in some of the early Iranian movies, specifically Amir Naderi (who was born in Abadan) master pieces 'Tangsir' 1973 and 'the runner' 1985 where depth of oppression and local anger is bravely and masterly documented.

Importantly both cities of Khoramshahr and more specifically Abadan did play a critical role during the Nationalisation movement of Oil Industry in 1950s and at the decisive moments of victory of the Iranian revolution in 1978/79 against the Shah. It has been argued that the two key events that were the turning point for the victory of the revolution was the oil workers strike in December of 1978 and the burning of Rex cinema in Abadan in the ' Black Friday ' of August of 1978 where over 400 people were killed.

106 From the high of 1970s and the heroic fight of the oil workers against Shah's dictatorship² came the cities suffered their most devastating physical, human and economical losses during the 8-years of Iran /Iraq war 1980-88. Even after 8 year of war and occupation by the Saddam Hussain's Iraqi who was backed by American and French weapons, they did not give up and managed to resist and fight till the Iraqi forces were driven out. Abadan and more specifically Khoramshahr became the symbol of another historic political achievement.

Despite containing rich layers of political and economical events, which in itself offers a living reference and a symbolic representation of the socio-political history of Iran, these cities have been given little attention or resources to reflect these to any visitors to the city. The unique urban planning, spatial character and architectural detailing which could also offer a platform for discussions and debates related to the climatic context and cultural identity of habitation specific to this region, have also been ignored and unappreciated.

Instead we have to rely on the un-documented local knowledge from older generation which lies there in a sad state of affairs with its residents' admiring the 'myth' of the good old days and the glitter that existed for a few elite during the Pahlavi Regime. The

City Space

Looking from a bird's eye one is fascinated by the existence and regularity of an active agricultural land around the city of Abadan. The well-mannered palm forest -- which exports a good percentage of world's Dates -- hugs the city in the north and the east west, protecting it from the desert. It is an image one does not expect to see, as the city is hardly known for anything but its oil resources.

Abadan, almost an island of 63km long by 3-19 km wide, is in the province of Khuzestan in southwest of Iran, positioned in the furthest point of entry to the Persian Gulf, sharing borders with Iraq on the west and Kuwait on the south.

The airport on the west, like the main national railway, is shared by both cities of Abadan and Khoramshahr, 11 km each way. On landing at

the airport you can feel the heat in a pleasant manner. That is only if you avoid arriving any time between 12.00 noon -6.00pm. During the summer time of these 'boiling' hours, you could hardly find anyone around, the airport is closed and the heat is simply unbearable.

Coming from Tehran, Abadan is extremely calm and well mannered; there is a surprising absence of the smell of petroleum/oil -- the very thing that modern Abadan has become known for --, a smell that was so present when I first arrived at airport in oil rich city of Baku. The reason/link behind such absence was very consciously planned, and will be clarified later with its relevance to the city's colonial urban planning.

With its current population estimated at 420,000, Abadan's history pre dates Islam to Sasanian Dynasty (AD 224-630). There are written legends that the city, initially, became known for its salt and mats when it was originally developed as a port city during Abbasid rule of Sassanian Dynasty. In Iran there is never any shortage of legends and un-official stories that offers more tangible insight into the life of the city than the written history, which mostly appears inconsistent. It is believed that Islam's Prophet Mohamad and its first leader Imam Ali made references to Abadan as places of 'paradise' or place where 'palm gardens and mosques come together making it an ideal- god's creation- as a place of rest for Hajji's, visitors to Mecca, stay'³. It is important to realise that after the birth of Islam there were regular movements across the river from Iran to the Saudi cities of Mecca and Medina by the Muslim Hajji pilgrims.

A city like Abadan positioned on the edge of water and the desert, was able to offer a perfectly developed urban setting for the Muslim travellers. The then mature Iranian urban architecture with its gardens and the courtyards, embraced the Islamic mosque. With a central pond celebrating water -- an element used as a practical response to climatic condition, and was later had developed into a poetic cultural ritual -- the inclusion of mosque in the garden became, to the Iranian/Persian architecture another variation of the Persian garden and court yard typology. This version of the Persian garden typology, replaces the private mansions within the traditional gardens, with the mosque making the garden more inclusive. So for prophet Mohamad and other new leaders of Islam, arriving at a place where new typology of mosque is adopted to an already existing sophisticated urban space symbolised a new paradise, taking full advantage of climate and the new cultural practices. According toSome of these Mosque gardens and mosque courtyards are still present in and around in Abadan⁴.

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Sadly Abadan for the younger generations in the province and rest of Iran is related to Oil and the 8-year of war rather than the gardens, waterways, court yards and the climatic inventions.

There are other fewer consistencies legendary about the city with references to Asghalan (a city in the north of Palestine 1948- now under occupation of Zionist government, which prophet Mohammad made comparative analysis between the two cities in terms of their beauty and paradise-like experiences)⁵.

City of Flames: Abadan and Petroleum

The city is visually and physically divided to west and east by the Iran Oil Refinery Complex and Petro Chemical Complex. The floor area of (ORC) and (PCC) occupies nearly 1/3 of the city, which are dominant elements that seem to constantly remind people of the global forces of Abadan. As you drive or walk around the city, the flames of the oil refinery and the Petro Chemical Complex are visible, and dominate the place from all directions.

There is a mysterious feel about the petro-chemical refinery with its domination of the city. It is like 'the castle' of Kafka. 'the impossible space to penetrate --literally and metaphorically --', with all the bureaucratic and mysterious layers of power⁶. The citizens speak about it, the secrets inside it, the divisions it created during the Pahlavi, the money it brought, the foreign engineers and managers there were implanted from outside, the way in which the whole city was designed around it all in an exclusive, secretive and inaccessible manner. The stories you

hear from locals about the past life of the refinery also creates specific images within your mind; this alien object, the global representative is still untouchable. In the past and present, it forms a part of the identity of the place and yet, is unable to identify itself with the everyday life of the city.

Finally we enter 'the castle'.

On the other hand almost the entire south and southwest borders of Abadan, are shared with Iraq. This adds into the everyday lives of the citizens the memory of the war, when Abadan was under siege for 18 months of the 8-year war. Driving around the city, almost every taxi driver tells the experience of war and draws it graphically as if it was yesterday. The half-demolished and bullet-damaged buildings, are strong reminders of those moments. This psychological presence of the war, which ended 23 years ago, is still of concern.

In 1905, the whole region was indirectly dominated by colonial role of Britain expressing itself, symbolically, in Anglo-Persian Oil Company (APOC). In 1908 oil and gas were discovered in the city of Masjed Soleyman, in north of Abadan. In 1910 APOC builds its first oil pipeline refinery in Abadan, which transformed Abadan into a global city. Within 25 years it became the largest oil refinery in the world yet, there was extreme poverty and inequality experienced within the local community. Before nationalisation of oil, nearly 80-85% of the wealth was in the ownership of the British government. This contradiction of wealth, poverty and elitism remained with Abadan in different forms even after the nationalisation of oil during the Pahlavi period up to 1980s, and to some extent until today. Neither the British, the Pahlavi governments nor the Islamic republic governments have explored the climatic wealth and potentials of these cities; instead they all relied on presence of gas and oil.

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The city of flame – historically -- seems to have been a transient city. Its population increased immensely during the discovery of gas and oil and the development of this industry; most of which were skilled workers and engineers brought from outside the province and abroad. It is believed that at its peak, between 1950-70s the only 7-9% were from the province of Khuzestan. The other 90% lived outside the province, and many from outside Iran, from Europe, mostly British workers and USA. Some only travelled to Abadan to work in oil industry. This transient community was unfamiliar to the climatic and everyday habits of the locals which left its strong imprint on the character and spatial formation of the place⁷. (FOOT NOTE - similarities with Dubai of 1990s and 2000).

The excessive use of Euro/American staff and technicians was a deliberate policy and a tool to control by colonial powers. In 1951 when AIOC was nationalised Britain not only they imposed economic sanctions and used their warship to blockade Abadan in addition they also withdraw all their technical personnel as well as its 300 administrators from Abadan. Iran's attempt to bring in technicians and consultants from other countries, " the United States, Sweden, Belgium, the Netherlands, Pakistan, and Germany all refused to make their technicians available to the nationalized Iranian industry"

The transient community brought with it its own architecture, urban planning and living habits that did not relate to Abadan and the logic of living in this specific climate. This is reflected on the street layout and building typologies that were built during 1960s- 1970. Later, when the city was attacked by Iraq in 1980, this community was the first to leave the city, and moved as far away as possible from the war zone area and never returned since leaving the traces alive until today. The local shopkeeper who was one of the few who did return told me:

'People went away partly because the government was too busy trying to fight the war, as well as being extremely surprised by the attack and did not provide any protections or facilities for those fleeing from Abadan. But we had to come back after all it is our home. This was not the case for the Tehrani's who left Abadan and never returned'.

The return to full working condition of the oil refinery by 1997 resulted in renewed economic and employment activities. Once again the new working community seems to be a transient one, but mostly Iranian. The government of Islamic republic took a number of measures including some financial help to encourage people to move back to the city, yet the new arrivals appear to be mainly from other provinces.

Non Place

This continuous migration and loss and gain of population have made Abadan a servicing city, a 'non-place', serving the national global market. With little attention or vision to develop a local market and sustainable local community using the strong climatic and cultural resources to develop a clear identity for Abadan, a typical city of the region, this will remain a critical on-going debate of what should be the physical identity of cities of this kind within the cultural context of the cities in this region?

Hashemi Rafsanjani, Iran's first president after the war, between 1989 to 1997, headed an extensive move for reconstruction. He was more in favour of free market, supporting private sector investment and development lead by market forces and the newly developed concept of real estate. It was more in line with what was happening in England during the conservative governments of Margaret Thatcher. The reconstruction and re-development after the war would have been ideal for both these war-damaged cities, where a locally and environmentally driven regeneration programme with a socially sustainable agenda, would have been in line with the policies of the Islamic republic government. But all that seems to have taken place, is the promise of a 'Free Zone' area in Abadan, similar to the Island of Kish and Dubai, which will only leave the locals out and more critically will offer an unsustainable development. The notion of 'economic free Zone' in such a specific context and climate is not something that Iranian locals appreciate or benefit from.

Adding to the above layers, it is not clear why the 1990s reconstruction projects that created -- the so called California oasis in the Iranian Desert⁸-- 'Arge-Jadid' almost from nothing in the middle of the desert, did not include Abadan and Khoramshahr in. Because of the important historical positions the two cities hold as the fantastic climatic wealth, there is a real argument that they deserve more attention. They could become exemplar of urban reconstruction related specific local condition, both in climatic sense as well the way that the city is used.

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It is also not clear why some of the Bonyads -- charity Foundations set up after 1979 revolution, and have been very effective in management and re-distribution of wealth of the upper class minority of Pahlavi's period -- have not been active in nationalisation of banks and regeneration of empty properties and other organisations within this region. INSERT MIKE DAVIS QUOTE)

The number of properties that belonged to the elite of Pahlavi's regime -- some of which represent the imported colonial architecture from the Dutch and the British, yet interesting architecturally, are still unoccupied and left to ruin. They could be the prime examples of how one may be able to redesign and bring them back into the climatic and cultural context of Abadan. The question however, is why?

In the 1980s, some reconstruction activities took place in the region which followed the British 'free market' model, setting up a direct link between development, land ownership and fast return of profit. Given the status of the two cities, this was not the type of re-construction that Abadan or Khoramshahr needed. Neither was the Introduction of 'Free zone', which took place in cities like, Arge jadideh, or island of Kish. Good and Bad Old Days --The Theatre of Silence Abadan and the Oil politics

The layout of the city and the location of colonial buildings within the gated communities reinforce the surreal and theatrical nature of the place. The alien pitched roof, 1930s and 'Arts & Crafts' style of different buildings -- mostly un-occupied -- only reinforces this theatre set which is silent. This THEATRE OF SILENCE, has little life inside, not only due to lack of habitation resulted from the drop in population after Iran/Iraq war, but also in the way that they are disconnected from their different neighbourhoods with wide roads, so unfamiliar with the climate and the traditional layout of the southern cities in this region. On the other hand an oil rich city of 1940s, became the centre of political activities of the Tudeh Party, -- Tudeh in Farsi means 'masses' which was Iran's communist party and the liberal party of Mosadegh, Iran's Prime minister in the 1950s, leading to nationalisation of oil.

1950s, and post WWII in general, in Iran was a critical period where USA begun to mussel into Iran trying to replace the British colonial

domination of the oil region. This orchestrated influence is documented by Farmanfarmanian memories Blood & Oil, p287, ' Jerry Doohr first deputy of American Embassy in Iran and an influential political figure was well known for his strong views against the unjust policies of Britain in British-owned Anglo Iranian Oil Company (AIOC)',

Iran's share of the profit from the oil initially was 15% only which was then increased to 20%, just before Iran Nationalised the Oil, with a longer lease given to British and up to the nationalisation of Oil Britain owned over 51% of AIOC while Britain had 100% control over the running of the company and all its employers. After American backed CIA/MI6 military Coup d eta in 1953, Iran's share was increased to 25% but the actual ownership of Iran's oil Consortium was divided between the American 40% , British 40% Dutch/French 20%!

' One afternoon Doohr told me you should throw out the British Oil company , every time I saw him he will repeat this and would say' create new condition, what is wrong with it, whatever happens we, the American would send our ships and would buy your oil'. George C Mc Ghee assistant Foreign Minster who was married to the daughter of Everette De Golyer the oil giant from Texas, travelled to Abadan to create a more fairer condition for the negotiations with Anglo Iranian Oil Company'. Farmanfarmanian Oil & Blood p287.

George Mc Ghee was not only married to the daughter of Everette De Golyer, but was a partner in of his oil appraisal company of De Golyer and had discovered ' a sizeable oil field in Louisiana' (The PrizeDaniel Yergin p452) .

However America 's role of arbitration between Iran and Britain gradually changed and by 1950s it was more concentrated in replacing Britain . Marry Ann Heiss in her essay

THE UNITED STATES AND GREAT BRITAIN NAVIGATE THE ANGLO-IRANIAN OIL

CRISIS, explores"the shifting Anglo-American relationship regarding the Iranian oil

110 nationalization crisis of the 1950s. It breaks U.S. policy toward the oil crisis into three rough phases of involvement: the era of U.S. benevolent neutrality; the era of Anglo-American partnership; and the era of U.S. domination"

The interest of USA and their concentrated activities in Iran and the Middle east started before the WWII , see ' Multinational Oil Corporations and U.S. Foreign Policy - REPORT Foreign Policy and Antitrust: The Cartel Case and the Iranian Consortium' .

The Americans played a double edge sword in Iran. On one hand, through their personal advise, Doohr and Mc Ghee, they supported and encouraged Iran believ that the British policy on Iran oil was wrong and unfair, and on the other hand when it came to the critical moment of nationalisation of the Oil and british sanctions against Iran , they supported the British and spied on Mosadegh by CIA. The Americans also planned the coup d eta, with active participation of CIA & MI6, that brought down the democratically elected prime minster of the time Mosadegh who lead the nationalisation of Oil workers in Abadan and many intellectuals in Tehran and Abadan played an important role in the nationalization of the oil company with their continues marches and protests between 1947-1951. The Iranian oil workers who had been united under the organized leadership of the Tudeh Party had organized their first strike against their pay and living condition in 1946. The British forces and the help of some Iranian armed forces crushed the demonstrators killing over 50 people.

Abadan is privileged to be surrounded by waterways on 3 sides. The river of Arvand on the south bordering Iraq, Bahamnshir outlet of, Karun river on the north/west and the Persian Gulf entry on the east, which should provide further natural wealth in addition to its gas and oil as well as palm trees and Dates. These logically suggest that there should be more than enough reasons for investors to be interested in developing the city in an intelligent way, but it is clearly not the case. The new Mayor's slogan "think global act local", catch phrase that has been used many times, needs to be unpacked and readjusted to the specific LOCAL condition of Abadan. The municipality has, within the new planning policies (UDP), allocated the north river front to be a Family Park with recreation, motorcycling, horse riding and other leisure activities to make the most of the local condition. It is named Jazeereh Shademani, or the Fun Island. It is hoped that other potential places of urban regeneration of the city will be included.

On the south, overlooking the palm forest is the Arvand River with its great potential for evening parade and walks for families. The south also has the interesting view of the Iraqi border, which offers the constant memory of the war and disputes over the years between the two countries. The southern dusty wind, is a real environmental hazard. There are two main causes of the aggressive dusty desert wind. One is the continuous loss of farming and agricultural land both in Iraq and Saudi Arabia, bordering Abadan on the south of the river and Persian Gulf. The second being the refusal of the Saudi Arabia's Government, since the Islamic Republic has come to power, to treat its non-farming desert land to stop ecological and environmental pollution by the prevailing wind. Of course the Islamic republic does not have the same international backing and power as the Pahlavi's Shah to put pressure on Saudi to stop this eco-environmental pollution. So southerly desert dust regularly covers half of the south of Abadan and other Iranian cities on the coast of Persian Gulf.

Continuing on the south of the city, there is an important old Sikh Temple that presents us with an appropriate climatic model. Its peaceful court yard with sensible optimal ratio of court yard size to the height of surrounding walls. Its width provides sufficient protection from the dust and noise from the street, creating a shaded court yard. Its entrance is articulated with a small and delicate 'watch tower' responding to the city scale. The back of the temple yard faces the River and the Palm trees with its high wall, protecting the courtyard from sandy/dusty wind of southern desert. A devise that could have been used more in the new buildings and the hotels facing the south.

The wide platform hovering over the edge of Arvand River on the south in front of the lively fish market offers itself to the evening parade, if sufficient provisions were provided. The creation of correct public spaces, tailor-made to the culture and climate of Abadan could provide the bases for socio-economic regeneration. The urban strategy needs to help the local trades and the use of city in 'comfort' for different communities. An inclusive approach to public spaces that respects the habits, abilities and taste of different age groups and genders. In the context of Iran of today, this is critical. As the forces of Globalization and Global capitalist market is yet to dominant and change the entire life style of people.

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The economic sanctions on Iran by the United States and some European countries over the last 30 years, has forced the country to concentrate on developing its own industry from oil, gas, car manufacturing to building materials amongst others, using alternative passive climatic methods to reduce the use of energy which does not rely on oil income. The sanctions have also resulted in the return to some of the old practices within the local trades in terms of re-use and recycling materials and objects which has helped the local economy to survive. In many of the local markets you can amend and repair every household object. The re-cycling of objects and building units have taken place due to economical pressures, rather than for environmental reasons. This self-sufficiency has equally slowed down the pace of global forces; the local craft industry is alive but has been, to some extent equally affected by the introduction of imported machinery. This has collaged the production of building elements from a totally local to a mix of local and Chinese or Turkish product. This has also resulted in a situation that we are unable to accurately assess and judge the quality of locally made elements. It is however critical that both central and local government supports the local industry and provides customer confidence.

Identity from Global to Urban Scale

Despite the clear and specific cultural and climatic characteristic of Abadan and Khoramshahr, there is confusion about their contemporary and future identity, and how it should reflect itself in public spaces, urban grain house typologies as well as individual building envelope. The presence of oil and gas during the Pahlavi between 1950- 80, should have brought intelligent city planning- relevant to climate- social reform, reducing the gap between classes, and decent infrastructure, all of which are critical for a sustainable and healthy city.

Instead, it brought colonial architecture of Europe as well as a depressing increase in the class system and the complete destruction of city's urban infrastructure. The income from the rising oil prices during the 1970s in the global market did lead to the creation of some local em-

ployment. But there was little fundamental training within the industry to enable a degree of self-sufficiency from the Shah's American and British masters.

This extensive reliance of the Pahlavi governments, and to far lesser extends Islamic Republic; on oil income, has resulted in the creation of a city with extreme wealth and poverty⁹.

In the 1960s & 70s the wealth from natural resources, mainly in oil /gas, were mirrored on the surface on the image of the city. The 'European' look, the 'city of fun', nightclubs, bars, disco pitched roof buildings, wide roads. The Casinos, outdoor swimming pools, nightclubs with expensive hotels and 'western style' villas aimed at the few elitists mainly from capital and Europe. Indeed the locals were not allowed to use these facilities even if they dressed differently. These members only provisions included cinemas, swimming pools, and restaurants. In our taxi round and discussions with the local's stories painted some of the realities of the city, "we were able to see the private pools from our roofs and dreamed about swimming in them, but those who died have taken the dreams with them. The clubs were the same. Even if we were able to borrow some nice and clean dress to go, they would have recognised us and were not able to smuggle our way in".

The European copied houses and the North American town planning, were mainly the residential place for the high ranking engineers and managers of the Petroleum. Some had 10/ 12-bed room, while the workers and low ranking technicians units had 1 and 2 bedroom apartments.

112 As is currently the case in the Persian Gulf cities like Dubai, Bahrain, Kuwait etc, the engineers, were from outside and used the places as temporary residents. These villas are carefully located on the West of the city, while the workers apartments were located on the polluted air and desert dust area of the east and south.

Need for a new Strategy

An environmental response at urban scale 1; 10000 + human scale of 1:1

The urban planning model applied to these 2 cities in 1950 & 60s is not the one to follow as a sensible respond to the environment and the socio-cultural habit of the place. The north American wide boulevards and the gated neighbourhoods, as seen in Dubai, with no shading provision no transitional zones rely on full air conditioning and double coolers.

The municipality seems to be busy spending a large chunk their annual budget on road widening rather than serious environmental improvement of the urban open spaces. Almost every municipality in Iran, small and large, is responsible for roads widening environmental damage. Ignoring the need for plenty of shading, vegetation, public transportation, improving the standard of buildings envelope and preserving the climatically and cultural correct building types.

If a city, with an average of 45-55 degree C summer temp is to function effectively and efficiently, some key issues are to be given careful consideration. The scale of urban space, the relationship between vertical and horizontal spaces, its shaded spaces, its streets and alleyways, its public open spaces, zones of transitions in the city as well as the individual buildings.

This is critical for the way that the city works, how it uses its natural resources to create comfort for social interaction in daily live inside and outside the buildings, economical well being of the city and of its residents.

Poor planning from environmental and climatic points of view has reduced the percentage of useable external urban spaces during most

hours of the day, specifically during the long hours of summer days. Too hot to be around, so time is spent in doors within poorly build homes, offices and shops resulting in the use of extensive air conditioning.

Lack of awareness of the climatic context and a positive response to it is not new. What is new is the denial of this issue and the refusal to learn from the old city, its fabric and court yard and roof top living typologies, some of which are still in operation.

Very little of the Abadan of the old, pre discovery of oil, remains. It is almost invisible and forgotten. We will need to look at other cities in the region, to understand the urban scale, the street patterns, the everyday cultural habits and way they influenced the buildings and city. The urban pattern of the traditional cities generally, consisted of the main street followed by the narrow one and then into narrow alleyways and then leading to the courtyard of the house which was raised, terraced, with shading and over hang in front of the rooms. This hierarchy of movement from the main external public space into internal private space had an environmental as well as cultural logic. This is more evident in the old fabric where within the old fabric of the city of Deylam where you can clearly see the relationship between, the entrances of the rooms within the courtyards, and the entrance to the courtyard and the alleyways and their orientation towards the city and the breath from the sea.

The rooms-court yard- alleyways are carefully related to the sea breath, an intelligent thinking, which provided passive cooling into the courtyards. This is and URBAN RESPONSE at 1:10,000 scale for the comfort of bodily scale at 1:1.

The entrance of the courtyards when located on the direction of the west& south Westly wind, would then dictate the positioning of the entrances into the rooms.

The entrance to the rooms are then positioned to catch the wind and intensify the cooling by hanging a thin curtain which would have been sprayed to keep the place cool. The typical court yard would have had trees, plant (for cooling) as well as small pond within the court yard and the rooms been raised above the ground. (Insert section and plan of typical house RP)

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Abadan typical high street includes shops with living or offices above, bakery (Nanvayee), teahouses, butchery and many small units, a part from the public bakeries, Nanvae, and Tea Houses, have traditionally been, and still are, the key part of the identity of the city¹⁰. The freshly baked Nan, which takes place 3 sessions in a day, before breakfast, Lunch and Dinner plays an important urban and social role.

The small bread making kilns were also available within the courtyard of the houses¹¹. In the hot climates of these cities, it made more sense, environmentally, to have domestic kilns within the court yards which if placed within the correct location of the court yard and linked to a bed room/sleeping room, it could act as passive energy system.

Abadan of 1930s & 1940s Fast Moving Transient City

Abadan marked the centenary of discovery of Oil, which had a great impact at all levels, last year without any noticeable event!

The city population increased from 120,000 to 420-450,000 by second WW. The practical expansion of the town was, fundamentally based on location of the Petro Chemical and the Olli refinery. Later in 1940s, with the presence of the British and European experts, the city's planning became more influenced by the ideas of the Garden City movement mixed up, to some extent in its formal expression, with ideas of Siedlungs as appeared in Berlin or Stuttgart in the 1920s (INSERT IMAGES FROM BERLIN SIDLUNG RP). These mini cities (Shahraks) had some of the key elements missing from those experimental Siedlungs. These were the self-contained neighbourhoods with shops, clinics, nursery and critically low rent social housing. As stated by Ronald Wiedenhoeft, Berlin Housing Revolution German reform in the 1920s (p10), 'An important predecessor to the housing revolution of the 1920s was the garden cities movement, in Germany as well as in England and the Netherlands. This influential idea was, in fact, a plan for social reform of workers housing, which involved relieving overcrowded urban centres by building self-sufficient, free standing new communities away from the cities.'

Later on after WWII, with the influence of American ideology in most aspect of people life style and town planning outlook became more dominant in Iran and the Middle East with gated communities, casinos, bars and off licences located stratigically in the main squares of the city, private open air swimming pool, tennis courts, wide Boulevards, large American cars, Pepsi Cola, Cigaret adverts and many other symbol of Americanisation of 1950-60s.

These combined with the dense and deep hedges around the mansion type houses and the exclusive neighbourhoods created cities within cities.

The aim of these gated neighbourhoods was to protect the elit from the locals. Sadly none of that has changed since the collapse of Pahlavi dynasty and the gated mini-towns-Shahraks- still exists and still fragments the city .

The city was built around, and for, Anglo Iranian Oil Company (AIOC). By mid 1940s Oil became Iran largest industry and AIOC the largest employer in Iran. It is not clear if there was a real long term and sustainable urban strategy for expansion either by the British and not surprisingly, by the American colonialists during the Pahlavi period.

The climatic condition calls for a real environmental strategy for the city to work

The issue of what you do between 12.00-19.00 pm during the long summer months (over 4 months) when the city goes to sleep, the siesta.

The old city was arranged for movements around shaded, transitional spaces, morning shades and afternoon shades. (INSERT IAMGES ON NARROW ALLEYWAYS RP)

There were transitional zones, places /court yards with trees and ponds, cooling spaces, and far less hard concrete paver or polished stone creating extensive reflective surfaces (INSERT DIAGRAMS ON NARROW SURFACES RP) , These sensible practices have been given up in favour of use of polished stone and wide centrally located entrances in order to create a grand image .

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Simple Climatic Moves

Within the context of 1950s of where environmental awareness and sensitivity to cultural identity was not a priority for colonial power, it is not a surprise that the urban organisation and planning which was implemented by British and American companies or imported ideas is so contrary to the physical and cultural specificity of Abadan. However in 2010, it is expected that local institutions, the Abadan Municipality and the Cultural heritage (Miraseh Farhangi) should be more responsive and produce more intelligent alteration to historic buildings and public urban spaces. The work produced over the last decade , including design of public parks, the street furniture, surfaces, building envelope and traffic access schemes reflects similar lack of cultural and environmental awareness. The open green spaces with no shading and transitional zones, use of polish reflective stone on entrance spaces, inappropriate play equipment order from European catalogues imported from Dubai which are designed for European space.

The urban planning strategy of Abadan in 1950 was based on the logic of priority for and the protection of the privacy of high class/elite transient citizens who had come form Tehran or other European cities. Gated neighbourhoods and mansions, wide roads for fast moving cars, as a local reminded us the ‘ Abadan was like a European city with American Chevrolets resembled a strange mixture. It was like us watching an American movie filmed in American suburbs but the houses looked European, it was confusing but we liked it, it was also unreal because of the type of people who were driving the cars. They never walked on the pavements or in the streets. We only had a glimpse of them from a distance and behind their fenced mansions. They represented a maximum of 10-15% of the population of Abadan, but it was funny to watch them’.

In addition to above gated mansions, the surreal flues of the Petroleum and Oil refinery complex, which is apparent form within and outside of the city, could characterise Abadan, there re other, seemingly elements of identity within this city.

- 1-The Art Deco Buildings,
- 2- the two rivers, which run both on the south and north of the city,
- 3-the '1000 HOMES' project , so specific to its climate- unlike the other houses of oil engineer workers,
- 4- The 2 historic cinemas, Naft and Rex, each symbolic to a specific socio-political period.
- 5- Summer 'roof top living' building types which were designed by the local architects who worked for the British during the '1000 homes' project and managed to introduce culturally and environmentally appropriate changes to the typical housing which was built in 1960s.
- 6- Typical Bakeries, in door – within court yards- and out door
- 7- Brickwork buildings and their details
- 8- Trenches and the exposed drainage system

Needless to say that Abadan has glimpses of some fine European Garden City town planning including some references to the Dutch and German Siedlung (check spelling) of 1920. The modifications introduced by the Iranian architects/engineers to '1000 Homes' project for the oil workers is a good example of cultural and environmental identity of the city and its representation in architectural form and lay out with roof top living.

City of Air and Retreat - Deylam

If you could give marks to a city for its air quality, its gentle horizontal soft sandy beaches, of Deylam would score 8 out of 10, while for cultural specificity of its architectural detailing, its fascinating varied front doors, its wind chimneys, use of local materials and urban wind tunnels the city will obtain 9 out of 10. And 10 out of 10 if the new buildings of the past decade did not so violently and blindly, ignore the climate and culture of the place.

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Only 2 hours away from Abadan, this small fishing town has managed to maintain some of its old urban fabric and place and cultural identity. The port's old town planning seems coherent within the city and how it is accessed. The actual port building is one of the must be seen 1930s modernist classic. Built in the 1950s, a streamlined series of modernist vocabulary, horizontal windows with sensible south facing overhang providing shade, linear eaves, stretching beyond windows and canopies and thin metal frames windows. The western wing of the building, with a Medesohnian smooth geometry, has a 3 storey semi circular end leading to a rectangular section with a cubical volume articulating the entrance to the port yard. The other interesting building to be noticed in this port complex is the Shilat (fishery). It is an industrial ice making building with typical Jean Prouve type of portal frames , faced fixed sliding farm type timber and steel door with all expressed fixings. The ice making refrigeration machinery for the fish still is in good operation.

The large fishing boats with impressive traditional wooden structure, are tied together and connected to the wooden platform providing access for the fisherman as well as strangers travelling directly from Deylam to the southern cities of Persian Gulf including Dubai, Basra, Kuwait. These are familiar tactics of catching the wind as it comes from the sea and the west and tunnel it through narrow shaded alley ways creating cool moments. These are effective when the alleys are narrow and tall enough to create shading throughout the whole day on either side depending on morning or afternoon. Berndt Löttsch in his 12 Golden Rules for Building in

Desert Cities Rule states

NARROW LANES: Buildings along narrow lanes cast shades over each other. The effect is even enhanced by upper stories extending over some dead end street or 'Kuche', thereby making the best use of urban space in residential areas. IN addition to climatic advantages of narrow alleys forming a maze of branched and twisted lanes with dead end streets, they offer a most important defence strategy against

intrusion of mass motorization- maintaining a chance for human street life and places for children to play in safety, guarded by the elderly. Tea houses and workshops may also extend on public space.”

This spatial organisation which may have been developed as a response to climatic conditions but has created other situations that we now associate ourselves with more. The issues of children playing in the alleyway under the shade. In our walk about in Deylam the children's playground and the park were unoccupied to Municipalities dissatisfaction, as it had eaten a large percentage of their budget. We actually came across many children who were in and around the old fabric where shading existed, and this was their first comment when asked why they are not using the playground ‘too hot’. Practicing Siesta, in a hot climate, is most sensible in terms of conserve and use of energy related to the day temperature. Stop work at the heat of the day instead of continuing to work by increasing the use of air conditioning. After lunch you contain all the energy from food and heat of the day and re-launch at cooler time of the day, early evening. You can then release the conserved energy and avoid extensive use of technology to work against nature. This habit is well practiced in Abadan, Khoramshahr and Deylam in the Municipalities there with rooms allocated for the afternoon snooze.

Old city fabric – urban scale

The old urban fabric and its sophisticated climatic response is an important part of this study. Similar to many desert cities, the alleyways within the old fabric uses the wind tunnel effect, direct the sea breeze, creating cool stopping moments during the heat of the day. The alleyways are narrow enough to provide shade in the morning and afternoon on one side or another, a common practice in a sustainable Compact City design (Insert Mike Jenks). The Walls were made of local stone- Marjani stone, which, sadly, is no longer used in any of the new developments.

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Most of the houses, within the old town fabric, are raised 2 – 3 meters above the rising sea level to catch the sea breeze. In addition it avoids the rising damp from sea water and marks the public/private threshold between the courtyard and the house. Of course the windows of the buildings above the ground offers a different quality of light and views from the rooms, a level of privacy and other related cultural practices.

Predictably most of the new buildings, within the old and new city fabric, have ignored this practical INVISIBLE technologies which has resulted in the foundation and the base plinth of many of the new buildings have gradually been damaged and eroded with rising damp and high level of salt content.

Deylam has also fallen into road widening trap. For the municipalities this is a sign of modernisation and political point scoring. For a town of 15,000 population the 16-18 meters wide North American or the French style Boulevards is unjustified urbanistically and environmentally.

These irrelevant transportation project in Deylam, which is a carbon copy of road programme of most, if not all, the Municipalities all over Iran, has been the most damaging aspect of last 2 decades of city planning in Iran. Every Estate agent will tell you with great excitement when selling you a property that there is a new wide road planned for the area which will increase access to the area and lead to increase in ‘the value of your property’. This damaging trend in the property market, where every road widening project seems to lead to massive increase in property value, overshadows its numerous damaging social and environmental side effects. It ignores the environmental consequences of wider roads which bring more cars, more air pollution, more sound pollution and traffic jam over a period. The social and economic aspects are also damning. The wide roads are mainly result of demolition of the old fabric and old community where most of the local population will be relocated.

The wide roads can create a divided community /neighbourhood with less likelihood of people using the street as a public space to walk and use in the evening as is the tradition for most families in the warm climate of the region.

The above may well be a common knowledge within contemporary Architects and urban designers, but from our discussions and engagements with the municipalities there was a worrying lack of awareness of the issues. The kind of Planning theories of post WWII and the 1960s with wide carriageways, spaghetti junctions, extensive flyovers and its damaging social implications has been challenged over the last 15 and more.

Conclusion : Invisible technologies and the Bodily scale

The journey through the three cities of Abadan, Khoramshahr and Deylam is a valuable learning experience both in terms of what could be done, what practices has to be stopped and what is to be avoided in a context where climate and cultural practices are interwoven.

The contemporary lazy practices has created a culture of over consumption and waste of energy. These 'modern' technologies are difficult to control and mostly ineffective in creating an stabilised healthy and cool environment.

Reliance on Air conditioning, houses, cars, work space, some houses have 2 air conditions in full blast, means that you can deny the need to build different type of buildings and cities in the heat of south from the ones in Tehran or rainy north of Iran. The poor quality building fabric and the loss of many traditional and passive techniques and elements, which have been developed over many years to address climatic challenges, have resulted in over use of energy and complete loss of any specific physical and spatial characteristics buildings and cities used to have in different provinces of Iran.

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The enclosed local market and the positive result of the difficulties that the global market has had in penetrating Iranian cities fully, specifically in the Persian Gulf region, means that there are still signs and fragments of hope remaining in parts of the cities. You can trace back and find sophisticated invisible and passive techniques have been used within buildings as well as the cities themselves to deal with the climatic. More importantly how people's every day habits and cultural practices have complimented these methods and become part of certain daily traditions as well as memories of public and semi public spaces.

What Can be Kept

There are small acts which can improve and make the living conditions more comfortable and sustainable in Deylam. The use of appropriate street furniture, correct use of planting, vegetation, provision of shading complete new urban strategy for open public spaces which could encourage the use of the city during the summer and spring with high temperature. The cars currently have to be fully air conditions as there are no shades in the street anyway to either protect you or the car and the streets are too wide. At the same time, we could become more alert about how small changes and basic moves can help to create comfort with passive measures which would be most sustainable. This is important for the economy of cities like Deylam which can not rely on the income from Oil or gas and need to be more self-sufficient.

The rooms within houses are located carefully. The sleeping rooms/bed rooms are located within the direction of cross ventilation from the entrance and through the court yard space. The kitchen, a source of heat, is away from seating room 90degree to it. And the sitting room is the best of them all. It is located on the external wing of the court yard with doors/windows opening out between court yard and outside, providing an extra ordinary condition for cross vent.

In today's urban planning in Iran, be it a city in the north of the country or the south, seems to be the same widths for the roads, same or-

ganisation in terms of lack of any hierarchy from public to private, same problems of lack of shade, zones of transitions. New technology, of cheap heating and cheap cooling has resulted in the lazy approach to city planning or is it just lack of knowledge or lack of thinking? And what happens if you cannot afford the fuel bill, or just cannot afford the electricity bill, what do you do for summer or winter. A problem not unique to Iran.

The city needs to celebrate its recourses, a part from oil. The city has great natural resources, which could be used to attract national and international visitors. It has fantastic dates, its fishing, palm forest, its music, its climate specially during the Autumn and spring, the desert the sand and the rivers. Its close geographic location for the visitors to other Persian Gulf cities and to the Imam Hussain Shrine in Iraqi city of Basra. In our discussions with locals and the municipalities the importance of institution and public practices against the culture of waste were raised again and again. It seemed an issue far away and almost a luxury due cheap fuel, but soon it would become a matter of survival specially for the less well off as Iran is importing the global inflation and the Government seems to become less and less interested to develop sustainable economic growth. It is time to act now, as there are still traces of low-tech practices that every one can afford to do to reduce the use of energy and most importantly to create a sustainable healthy environment, which is locally, and culturally lead.

Notes

- ¹ Fred Halliday, *Iran: Dictatorship and Development*, pp. 10, 15, 138-9; S.D., "Iran: The Forging of a Weak Link," *A World To Win (AWTW)*, 1985/2, p. 38)
 - ² We will find out later how the climatic condition formed the bases of its colonial urban planning by the British in 1940s and followed blindly by municipalities ever since.
 - ³ reference
 - ⁴ inter reference
 - ⁵ reference
 - ⁶ 'The Castle is a novel by Franz Kafka. In it a protagonist, known only as K., struggles to gain access to the mysterious authorities of a castle who govern the village where he wants to work as a land surveyor. Dark and at times surreal, The Castle is about alienation, bureaucracy, and the seemingly endless frustrations of man's at tempts to stand against the system.
[http://en.wikipedia.org/wiki/The_Castle_\(novel\)](http://en.wikipedia.org/wiki/The_Castle_(novel)) (accessed 25.5.2010)
 - ⁷ insert reference
 - ⁸ Davis, M., & Monk, D. B. (2007). *Evil paradises: Dreamworlds of neoliberalism*. New York: New Press.
 - ⁹ it is gratifying that in the last few years several hundred employees have been sent abroad for post-graduate courses and Masters and PhD degrees in technical fields. Considerable efforts have also been made in recruitment, further education and training. In addition, one should emphasize that a valuable pool of knowledge and experience from the past, as well as those built up during the war years, is still contributing to Iran's hydrocarbon industry operations. Most of those who had left the industry or had gone into retirement have joined the private sector and continue working for the industry as consultants and contractors.
- 'While a strategy of direct confrontation may have helped Iran cope with intensifying U.S. sanctions, it has also forced local development of manufacturing capabilities, with limited international support. The country has in recent years coordinated an effort to develop local infrastructure for supporting the needs of the oil sector requiring roughly \$2 billion of annual imports of parts and services. Iran has set up a series of manufacturing companies that manufacture a wide range of parts such as special pipes, valves, and gaskets. The technology for manufacturing such products is either developed locally, or obtained through joint ventures with foreign firms. Moreover, for parts which can not be locally produced, sourcing has been systematically diverted away from the West' *Middle East Economic Survey*, VOL. LII, No 1, 5-Jan-2009
- ¹⁰ Compact Design principle: the argument for grouping of buildings reducing the heat gain and heat loss in buildings (*Low Energy Design*, p49 3.4)
 - ¹¹ The traditional earth stove located in the corner of the gardens or sometimes under the ground is very common and still in practice both in Iran and some middle eastern countries.



Sirik to Jask



Borazjan, Bushehr



Delvar, Bushehr, 2009



Traditional architect, Bushehr

Bushehr

Paradox of Continuity and Change in Bushehr as a Persian Gulf City

Aydinli, S. & Karababa, A.



Bushehr, with both its architectural and urbanistic themes dating from the Elamite era 2000 BC, to the civilization of Shoush (Susa), Ardeshir of Sassanid dynasty and its cosmopolitan image of today is a “port” playing an important role in the commercial relations of Iran. Continuity and change are both opposing yet complementary concepts in a world where global issues and local values are put on the agenda (Aydinli, 2001). Bushehr, due to its geographic location with access to international high seas, rich resources, marine products and facilities, extensive plantations of palm trees, rich oil, gas, and mineral resources, as well as various tourist attractions, takes advantages of valuable economic potentials and national wealth (Bushehr Investment Committee with Cooperation of Commerce Org., 2009). The city’s geographic advantages with a rich variety of cultures and natural resources, with the value systems and life-styles define its idiosyncratic identity, defining thus the configuration of the city. This urban identity can be easily experienced in the Old Quarter of Bushehr with many examples of traditional Persian Gulf architecture from the period of 1870 to 1920. The Old Quarter of Bushehr is rich with ecologically satisfying housing settlements having unique spatial configuration taking its roots from the Iranian Islamic Identity. The Old Quarter represents the spirit of time and space creating an aura that can be experienced as having certain physical forces (organic narrow streets, rhythmic openings, displacement of solids and voids in different scales) as well as psychological, social, mental forces which construct the integral part of the lived space creating the sense of place. In this context, we have tried to understand and to interpret the environmental potentials and affordances of Bushehr as a narrative with both its visible and invisible dimensions emerging from continuous unfolding of overlapping spaces, materials, technologies and details. Beyond its physicality we tried to read the environment as a place of events, activities that represents the enmeshed experience consisting of the tension between reality and possibility. These superimposed images and written documents including our notes and urban traces grasped during this discovery journey provided an access to deeper underlying questions about Bushehr. Subsequently, a broad picture of the city emerged that allowed us to discover the new relations, to articulate the network relations of how the city was perceived as ‘legible’, how it was read in political, social and economic terms, and how the image of the city might be represented and promoted in marketing terms.

A weeklong observations based on personal experiences, without any previous hypothesis or structured prejudices, helped us establish the research idea during our visit to Bushehr. This research method based on experience and discovery lets us read the city as a narrative in all its

dimensions simultaneously allowing us hence to understand its paradoxes. Michael Axworthy (2007) draws attention to the apparent paradox that Iran and Persia are the same country. The image conjured up by Persia is one of romance: roses and nightingales in elegant gardens, fast horses, mysterious, flirtatious women, sharp sabers, carpets with colors glowing like jewels, poetry and melodious music. This dualism has been reflected on the configuration of the typology of the houses and the urban pattern creating its aura. The aim of this research is therefore, to discover the architecture of city / city of architecture with its specific aura, which exhibits some traces reflecting its cultural, social, ecological, spatial and temporal relations. The recent master plan prepared by the Municipality in 2008 explains how the city will grow towards the southwest and east. The master plan shows that individual housing settlements are spread in the green areas, palm groves and that the small industry is segregated from other facilities, such as schools, health centers and coastline recreational areas. Maritime facilities, industrial and nuclear power plants influenced the development of the city in course of time providing both opportunities as well as threats.

General Issues That Compose the Big Picture of Bushehr

Bushehr has an area of 1,442 square kilometers, occupying approximately 6.2 percent of the entire Province and has a population of 205,297 people (2006 census). Bushehr is one of the important ports in the Persian Gulf Region with an international airport, and highways connecting the city to Ahvaz in the northwest and Shiraz in the northeast. A secondary coastal road links Bushehr to Bandar-e Abbas in the southwest¹. Furthermore, the Shiraz – Bushehr railroad joining this province to the Iranian railroad network facilitates the land transfers to the province. The city of Bushehr is divided into two by the military base, and Bushehr airport. The city centre is located at the north embracing the old city and the industrial part of the city, which is considered as the developing area in the master plan is located at the south.

While these global issues are providing a power to the city, they may become a threat when the balance is not well defined between global and local. Bushehr is not affected by the current global economic recession, since the Islamic Economy (closed economy)² is not integrated with the global economy. This separation that prevents global developments affecting its economic growth can be considered as an opportunity in terms of its independence. Iranian Islamic Identity that poses both threats and opportunities plays an important role in it being an example of in-between reality in cultural identity studies.

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Bushehr is one of the chief ports of Iran and is at a distance of 1,218 km from Tehran. It is called Bandar-e Bushehr because of its fishing and commercial port. The main reason for the establishment of the port facilities was the strategic location of Bushehr, which comes up to the sea as a peninsula in the shape of an anchor, providing safety and protection for the ships and boats through its natural form. Moreover, due to its special geographic position great wealth was acquired through it and the representatives of foreign companies as well as of the foreign consulates such as Britain, Germany, Russia and the Ottoman Empire – were located in this area; some of which have buildings that were preserved until present time. It is possible to see all these British influences on the architecture in the Old Quarter of Bushehr, making its spatial aura unique in the Persian Gulf Region. Furthermore, the antiquity of this historical region goes back to the Elamite era 2000 BC in which Bushehr was known as Lian³.

During the meetings with the Governor⁴ of Bushehr and other government authorities, the Governor certified that the recent global economic crises didn't affect the economy of Bushehr, since the Iranian Islamic economy with regard to Islamic justice is independent. Although foreign investment in Bushehr is increasing according to the Governor, Bushehr's locality has been preserved since everyone has recognized its idiosyncratic Iranian Islamic identity based neither on capitalism nor on communism. Iranian Islamic Identity, which takes its roots from Iranian and Persian cultures, has been hugely influential on architects. Urban designers in Bushehr's municipality stimulate social responsibility and environmental sensibility. With the design of high rise buildings not allowed, and all contemporary building being designed in a relatively humanistic scale.

The city was economically depressed until the 1960s when the government initiated a major development program. In 1975 the government

in cooperation with Germany began building a nuclear power plant at Bushehr located at twelve kilometers from the site of the Center. This facility was only partially completed when it was bombed by Iraq during the Iran-Iraq War (1980-1988). As long as there is no balance between the local values and global issues giving rise to tension called as sustainability, by closing all the doors to the Global World in accordance with the rigid rules of Islamic economy, all opportunities created by this resistance transform into threats. On the other hand, Bushehr has local power because of its geopolitical position - today Bushehr nuclear power plant is capable to generate over 1000 MW electricity and Gas – and this creates a dynamic balance between the so called tension of the local and global; in other words its “locality” can be used as a power within the global world.

Due to Bushehr’s attractive geographic location with its proximity to target markets, products, export and import terminals as well as industrial infrastructures and marine products (Bushehr Investment Committee with Cooperation of Commerce Org., 2009), it has an increasing trend in attracting foreign investment. Bushehr’s industries include seafood canneries, food-processing plants, and engineering firms. Its economic capabilities constitute a background for significant and efficient opportunities for investment⁵ in various sectors including upstream and downstream oil industries, gas and petro-chemical energy consuming industries, mineral processing, and dates among others. Despite these promising developments for future welfare in Bushehr, today unemployment is still increasing (24.2%), partly as a result of a sluggish economic performance, but also because of a dramatic demographic growth over the last twenty years.

Modern Bushehr was the first city to introduce lithography and to develop new industries such as ice-making and electricity, long before many other Iranian cities. The people of Bushehr were among the first Iranians who got acquainted with magazines and newspapers, a number of which were printed and published in Bushehr. Education therefore has been a priority among the people who live in Bushehr and the ratio of educated population has been high compared to the rest of the country. There are many buildings consecrated to education in the Old Quarter of the city. Saadat High school at the Old Quarter built in 1899 is one such example and is the first modern school in all southern Iran. Spatial configuration of the school, which was built by Moin altujar Bushiri. Most new buildings having a contemporary architectural style are built as cultural centers, but are giving religious education within their walls. With many unauthorized schools providing religious education in the city, the education system has fallen even further back than the beginning of the 20th century said a member of the local authorities that was criticizing the education system.

Bushehr today has four colleges and universities - Persian Gulf University, Bushehr University of Medical Sciences, Islamic Azad University of Bushehr, Iran Nuclear Energy College - serving the areas’ potential. By considering the above mentioned issues constituting a broad view of the city, it is possible to read the potentials of the architecture today in Bushehr, consisting of contradictions and complexities. Both concrete and steel construction technologies are used in new housing and office buildings that can be seen in a global context.

Discovering the old quarter in Bushehr via ecology

The Old Quarter of Bushehr was built in 1810 next to the port, presenting one of the rarest and most superior types of coastal architecture in the Persian Gulf Region. Besides the archeological relics and historical monuments, there is a high level architecture best represented by the Old Quarter of Bushehr.

The pattern of the settlement in Old Quarter of Bushehr has a unique character with its narrow streets sequentially open to squares creating a rhythm of opening and closing, in other words, its character depicting enclosedness and spaciousness similar as the houses’. Furthermore one of the most striking features of Bushehr is its relationship to water; since the land comes up to the sea as a peninsula the sea surrounds the land and can be seen from every point in the Old Quarter. The topological order of both the old city and architecture in relation to each other with superimposed images consisting of visible and invisible dimensions. The two collage works illustrate this spatial character of some paradoxes such as outsideness and insideness, spontaneity and predictability, tensions and resolutions, balance and instability, rhythmic coherence and continuous unity. These opposing but complementary attributes of the Old Quarter provide some clues for the design of togetherness, belonging and wholeness that are necessary for harmonious social and ecological relationships. All these concepts form multi-layered

meaning structures facilitate the reading of the city as a narrative; of understanding its potentials of how architecture can be site specific; of how contextual tendencies are crucial for harmonious social and ecological relationships in architectural configuration.

The spatial configuration of the streets / voids and houses / solids emerges in accordance with its regional, climatic and cultural factors, through which the Persian Gulf Region's peculiar local spirit brings together man, nature and values of Iranian Islamic Identity. Every part of a unified whole relates to the central idea of this identity; that is why the Old Quarter settlement can be considered as an ecosystem in itself organized in a way that it takes its roots from multiple layers. It is possible to discover the deep ecology while experiencing – reading the city as a narrative: narrow streets are channels of both movement of people and movement of the air. Because of their spatial configuration, both social, perceptual forces and climatic issues create continuous channels providing an overall urban quality. Narrow streets opening to squares, accompanied with a school, mosque and market acquire a specific character with their color. It is obvious that because of the climate the lifestyle in the Old Quarter is dependent on outdoor living, making hence the courtyard the most important component in the configuration of the house. Apart from the courtyards, an outdoor living area on the first floor has a similar spatial character, which in a traditional Turkish house is called “hayat” meaning “life”. “Hayat” is a place connecting different rooms, hence being an in-between space; conceptually it is neither the inside nor the outside (Kuban, 1995). Today, the lack of outdoor living areas in modern houses (balconies aren't substitutes of “hayat”) bring about public spaces where people come together and socialize in the urban life. People come together in public spaces in the city, especially at the seaside or religious buildings of the courtyards, sitting on the ground without taking into consideration gender differences. Especially on Friday nights men and women of every age crowd all the streets and public spaces. Open markets, entertainment spaces / theme parks, seaside promenades until the middle of the night play a vital role in the livelihood of the City. Public space images are superimposed in a collage work to illustrate the everyday life in Bushehr in which both traditional values and global influences can be observed.

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The modifications and intersections of the volumes between the street level and the first floor of the house dramatize its meaning in terms of the composition of the solid / massive walls on the ground floor - shaped according to the street - and the configuration of the upper floor(s) based on the spatial organization of the rooms exhibiting a variety of the triangle bay windows; the narrow streets make it necessary to arrange these bay windows called console / “çıkma” also representing the relationship between the upper floor(s) and ground floor in one direction, creating hence a rhythm. Massive wooden doors with their ornaments increase this dramatic contrast with solids and voids. Balconies covered with high / 1.5m wooden parapets which are constructed by moveable wooden bands, provide both privacy and shades the interior without interrupting the air circulation. Privacy is an important concept in the Iranian architecture exhibited by the high garden walls, first floor bay windows and massive ground floor configurations. The origins of the concept of privacy goes back to pre – Islamic periods. There are some spatial - temporal relations of privacy with hidden meanings that can be better understood by experiencing the city. For example, the entrance doors of many houses have different forms of knockers producing a different sound by which the residents can discern the gender of the visitor. The ring shaped one is used by women whereas the pendulous one by men. Another way to promote the separation of sexes according to the Islamic way of life, the house is divided into two quarters; the *birun*, situated towards the outside of the house, for men and their male guests; and the *anderun*, situated towards the interior of the house, for women, their female guests and for the domestic help (Mazumdar and Mazumdar, 1997). The wind catchers called *badgir*⁶ at the top of the buildings provide air circulation inside the buildings as a natural cooling system replacing the modern air conditioning devices of today. Courtyards and local building technologies such as *badgirs* exhibit the interwoven relations between the life-style and the configuration of the physical environment that constitute the ecology. Open water canals in the middle of the street follow the street turns and are configured with drainage wells. Today however, due to the growth in population and the increase in new buildings, the drainage system doesn't work as well, and water canals have become open sewers that couldn't be embedded in the ground, which is at same level as the sea.

It is possible to learn how to enhance the quality of life from the Old Quarter of Bushehr by analyzing the ecology in which the mutual relations in the urban pattern between the cultural values, social relations, climatic issues, traditions and the way of life and the configuration of houses. The typology of houses and urban pattern has similar traces which take their roots from the idiosyncratic Islamic way of life. A

labyrinth of organic streets providing privacy also create narrow voids between buildings shading the street and the buildings themselves; and these narrow channels also constitute wind channels that provide air circulation at the street level.

In Bushehr, the ecology of the old city is not limited with environmentalism, but perceptual and social relations for the benefit of human beings, such as experiencing the color of the city represented by its contrasts. For example, the cool color of the sea creates a contrast with the buildings in the Old Quarter built with limestones covered by mud plaster with a warm color. This unique technique of using limestone with mud plaster applied over it during the constructions of houses creates an organic and dramatic effect. Furthermore, the limestone provides insulation with its layered and porous structure. Lime mortar is also used for insulating water in cisterns. Additionally, this colorful built environment becomes a background for the women wearing black chadors; moreover occasionally seeing women with colorful dresses walk next to the women with black chadors also creates a similar contrast. The colorful windows that have become the symbol of the city refer to the Iranian Islamic Identity which is also represented by colorful fishing boats⁷ The colorful world created in the city is reinforced by the inexhaustibility of contrast of women with black chadors. The colored windows mentioned above called "orsi" give both a mystique atmosphere in the interior and prevent mosquitoes from entering within. The city consists of many colorful fragments that constitute the aura in which ecology, social interaction and the inexhaustibility of contrast represents the spirit of time and space.

The Old Quarter of Bushehr has been supported by the Building and Housing Ministry with 30 billion dollars to realize the regeneration project to create vividness and vitality at the quarter. The ministry has an incentive to develop this area with new investment projects; one of these is restoration of the coastline wall to transform it into a recreational area for Bushehr. In the regeneration project for the Old Quarter, an ecological approach to understanding the whole physical and natural affordances of the Old Quarter becomes of considerable importance for creating a contemporary livable environment. The past should not be disregarded and the wheel reinvented each time a new home environment is designed on behalf of sustainability.

Sustainability can be defined as an integration of the local values that require continuity and global issues that refer to change in which cultural, social, perceptual, ecological issues are related to each other creating a unique aura. This paradox creates a constant dialogue with the city when its topological order is experienced and read as a narrative. Sustaining the old city with existing buildings, organic streets with canals, courtyards, amorphous squares, triangle bay windows almost touching each other, huge massive doors, wooden sun control elements on surrounding balconies, French balconies with specific details should be preserved through the contrasting topological order with a potential of complementary forces that hold the past and present together. In spite of the regeneration project done by the municipality, the restoration of some buildings are undertaken without considering the environmental sensibility that would create balance between the new and old. The promising steel construction as an extension of the existing building at the Old Quarter will be the new architectural school when the construction is completed adding a contemporary mark to the old city without dominating its image. Historic preservation in Bushehr which is an old and global city with its image represented by both local values and global formations has opposing, but complementary forces that hold together the traditional and contemporary configurations on behalf of sustainability. Interference with the historic environment requires creation of the stage of the 21st Century life without losing its "aura" and the essence of all historical testimony that is transmissible from past to present to future. Bushehr has cultural codes carrying urban traces hidden and waiting to be discovered in the 21st Century where the old buildings should not be "frozen in time".

There are several edifices⁹ in the Old Quarter located along the seaside some of them are restored and used as official buildings of the government. A series of influential factors stemming from Persian Islamic Identity can be experienced both inside and outside of the mansions in which typical house plan schema with the courtyard as a common space provide an access to all the rooms on the ground floor. Colored glass windows, wooden doors with ornaments, serially laid wooden beam floors, and other details provides an in-between spatial character for the contemporary use of the buildings.

This huge demolished-looking building called Omaret-e-Malek building was built by French architects at the end of the Zand dynasty and is waiting to be renovated. It is currently occupied by homeless and marginal people who are not aware of its value.

The extension building to the Shaikh Hossain Chahkutahi Tomb is a brutal example of historic preservation. the concrete columns are plastered on the existing building depressing it, yet dominating its power. It is possible to imagine how the tomb will disappear when the construction is completed. Bushehr represents cultural codes carrying urban traces that are hidden and waiting to be discovered for 21st Century where the old buildings should not be “frozen in time.”

Questions of Iranian Islamic Identity of Bushehr within the Global Culture

Today, Iranian Islamic Identity is a phenomenon under the “congregation society” outlook where interpenetration of state and society, representation and administration is required. A tendency towards identities from ideologies exists all over the world today; each cultural sphere is going to generate its own technological systems for its distinctive life-style. Hereafter, Iranian Islamic Identity should be deconstructed in relation to recent developments in the global world; otherwise this identity can easily become materialized. Under the influence of marketing strategy within the context of globalization all the cultural dynamics, may exist in the exchange place. In order to avoid falling into the trap of marketing “locality”, the architects, urban planners, authorities, politicians, decision makers should be aware of the potentials and affordances of the idiosyncratic features of Iranian Islamic Identity. The collage work illustrates that it is possible to see the fragments of global world in Bushehr from the Iranology window, which symbolize locality reflecting Iranian Islamic Identity.

Preserving the “locality within globalization” refers to dynamic spaces that flow instead of static places in which the conflicts between the local values and global issues that create tension give rise to a dynamic milieu. Although global issues represented by change and local values requiring continuity have a paradox, they complete and nourish each other. Locality is not only a process that constitutes the “other” of globalization, but also the specific countermove that transforms the configuration of the city. Iranian Islamic Identity should be rediscovered through the globalization lens; in the light of the deconstruction of Iranian Islamic Identity, old spaces with new ideas create unique identities by oscillating between change / global and continuity / locality.

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In order to be able to preserve the ‘locality’ within the context of globalization, the authorities, decision makers, politics, local governments, architects and urban designers should be able to read the city with its all potentials and affordances. The Old Quarter of Bushehr has multi-layered meanings and intangible channels waiting to be discovered. In order to discover the multiple potentials of Bushehr in terms of new connections or unseen relations, first the city has to be read as a narrative with its unique time and space relations by focusing on the power of geography, history, its rich cultural variety, social relations and life styles with relation to each other. The most important issue is to be aware of affordances of cultural codes, which are archetypes; they shouldn’t be transformed into stereotypes. In the Old Quarter of Bushehr, windows with colored glasses can be considered as cultural archetypes, which were produced, in specific handmade techniques. When they are re-used in new buildings, they lose their invisible character because of the mass production becoming hence a stereotype. Some other cultural modifications that lead to superficial imitations in architecture become a threat when the locality cannot be understood within the context of globalization. Visual fakeness emerges in this new architecture if the authenticity is motivated by marketing strategies without referring to the collective memory that has a crucial role on building a new Iranian Islamic Identity. In the conceptual level, the narrative functions as a meta-code transmitting onwards the essence of historical and cultural events. In other words the existing cultural identity should be deconstructed through its narrative in order to be able to see new potentials that will be adapted to contemporary conditions and possibilities.

Cultural identity having its roots from ancient Persian civilizations and Zarathustra values is specific to Northern / Iranian part of Persian Gulf Region and different from the coastal cities of other countries considering its historical, religious, political, economic, psychological and social networks. Besides, the one party government in Iran with a congregational ideology is obstructing ways for new developments by

pressuring the media, and the press. In order to understand this complex network system having contradictions it cannot be reduced to the knowledge provided by the analytical research methods. Understanding the whole phenomena as a network system allows margins of sense given by effect and percept experiences which create multiple new paths and new connections.

According to the Governor of Bushehr, the Islamic revolution has been the antidote to maintain the Iranian Islamic Identity that belongs to Iran. He claims that, although Shah Pahlavi who was the admirer of western culture wanted to destroy Iranian Islamic Identity; he was not successful. This is the paradox of being a closed society; not to imitate the western culture, maintaining its locality, but on the other hand, not being able to be involved in the global world which could present an opportunity for both information exchange as well as providing commercial benefits. However, Bushehr has not being affected by the global crises and similarly has not been able to profit from the economic booms within the global world. The balance between the global issues and local values is required to go beyond this paradox. Bushehr being on the Persian Gulf Region has a potential to set this balance up because of its power emanating from its natural resources and cultural heritage. These potentials will give rise to the emergence of its cultural identity, maintaining its locality within the global context. In the course of 21st century, Iranian Islamic Identity should be deconstructed; and rethinking its potentials will give rise to represent both change and continuity without losing its aura.

Concluding Remarks

This article focuses on a holistic understanding of the sustainability of Bushehr in the light of the Iranian Islamic Identity and its influences on the configuration of the city, emphasizing the future developments with the concept of "locality within globalization". In this research based on experience and discovery, both visual and written documents are overlapped in order to understand the architecture, settlement and urban identity of Bushehr within the context of global capitalism, the issue of ecology, and locality within globalization that constitute a narrative. Overlapping ideas consisting in the narrative are strengthened by the superimposed visual images in thematic relations. Thus the research process proceeded in a nonlinear form, having no beginning and nor an end point, in order to remain open to new ideas for new developments. This nonlinear process in which all the contradictions were brought together with relation to each other, allowed us to see the resistance to the global influences of Western values but yet still responding to change. One can see this as a reflection of the Iranians' continuing sense of their uniqueness and cultural significance.

Furthermore, global culture absorbs locality if the process doesn't proceed with tensions and antagonism. Antagonism opens the doors for culture – space relations in the context of globalization. According to antagonism cultural identity can be defined as a tension between the sameness and difference because of the global fluidity. Thus Iranian Islamic Identity should be deconstructed in accordance with the contemporary and revolutionary possibilities consisting of the tension between the local and global. Although Iran is a country with an ancient tradition of monarchical splendor, revolutionary Islamic Republic⁹ has too many paradoxes, which can be seen as a potential for global fluidity.

By considering sustainable living conditions consisting of change and continuity, architecture and urban design should promote cultural development through global fluidity. The deep ecology movement is not proposing an entirely new philosophy but is reviving an awareness, which is part of our cultural heritage. It is possible to deconstruct a new Islamic Iranian identity preserving its locality within the globalization, unless the architects and urban designers, who are responsible to create livable environments in the 21st century, should read the city as a narrative. In doing so, Bushehr as a Persian Gulf City with its cultural heritage, natural resources and its idiosyncratic rules in the Iranian Islamic world-view will assimilate both its continuity and change on behalf of "locality within globalization".

Notes

- ¹ Bushehr is connected to the other parts of the country by three connective axes; the first one passing through Bushehr- Borazjan-Kazeroun and Shiraz, which is the first and main axis of the land transportation with the central areas of Iran. This axes is about 320 km long,. The second is the connective axis of Bushehr-Mahshahr-Abadan which is extended parallel to the coastlines of the Persian Gulf and is 690 km long. The third one connecting Bushehr to Kangan and Bandar Abbas is 921 km long (Bushehr Province. (n.d.). Retrieved August 21, 2009, from <http://www.ibchamber.org/Magazine%2015/3.htm>).
- ² Since the Islamic Revolution in 1979, as a result of embargos, the Islamic Republic of Iran has had a closed economy.
- ³ During the 1st and 2nd Millennium BC, the Peninsula of Bushehr was a thriving and flourishing seat of civilization called «Rey Shahr». Many relics have been found in this regard related to the Elamite era and the civilization of Shoush (Susa). These structures of «Rey Shahr» are said to be related to Ardeshir of Sassanid dynasty and «Rey Shahr» was formerly known by the name of Ram Ardeshir. Thereby through the passage of time it came to be called Rey Shahr and thence Bushehr (Iran Chamber Society. (n.d.). Iranian Cities: Bushehr. Retrieved September 1, 2009, from Iran Chamber Society: <http://www.iranchamber.com/cities/bushehr/bushehr.php>).
- ⁴ In the course of this research, several meetings were conducted with the Government, Mayor, Head of Iranology Center, Head of Anthropology Museum, and other authorities in government offices.
- ⁵ Examples of investment opportunities in Bushehr are infrastructural such as access to Bushehr International Airport, access to port facilities for unloading and loading purpose, and maritime terminals for freight and passenger transport to other Persian Gulf States. Presence of huge oil and gas fields in the province has led into the consideration for a potential in marine industries in Bushehr such as constructions of marine structures and investments in that industry with shipyards for the production of fiberglass and wooden vessel building and repair shipyard islands across the port. There are also potentials of investment for air, marine and land transfer of products as well as appropriate capacities in fishery and palm culture sectors (Bushehr Investment Committee with Cooperation of Commerce Org. (2009). The Focus of Investment Opportunities, Bushehr Province. Bushehr).
- ⁶ Badgir is a Persian architectural element called a wind catcher; one of the many examples of energy efficient designs from the ancient world. Iranian term for wind catcher refers to a tall chimney-like structure which projects above the roof of a building to expel warm air in the day and trap cooler breezes at night (A'zami, A. (2005). Badgir in traditional Iranian architecture. Passive and Low Energy Cooling for the Built Environment, (pp. 1021-1026). Santorini).
- ⁷ Traditional ship-building is known as one of the oldest and most important handicrafts in Bushehr, which dates back to the time of Nadir Shah. The elementary material used in ship building is the forest wood resistant against moisture, called teak-wood, which is imported from India and some other kinds of materials supplied from inner resources.
- ⁸ Iranology, Antropology Museum, Customs Building, Art and Architecture School are some examples that are restored; British Consulate, Haj Reis Mansion and Old Bazaar are examples of buildings not yet restored.
- ⁹ The first ten years after the Islamic Revolution, having a charismatic religious leader, application of populist politics, religious symbols and concepts accompanied by hostility with outer enemies help to sustain the legitimated Islamic Identity. In the following ten years, as a result of developments giving rise to changes on the positions of urban people undermining religious and revolutionary aspects of political, social and economic life brought about a division of identity among the people; and this identity issue has been one of the basic conflict areas of political arguments. The data we obtained from various sources show that besides underdeveloped economic and technological areas, growing population and wrong urban management have taken a swing at the process of urbanization.

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Delvar Museum, Bushehr



Lenge Port, Hormozgan

Delvar Ahram

A Tale of Two Cities in the Persian Gulf Region

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Tangestan is one of the municipal towns of the Bushehr Province with two dissimilar but complementary townships Delvar and Ahram with different geographical locations, offering different dynamics and different possibilities. Delvar is located alongside the Persian Gulf, whereas Ahram is at the hinterlands of Tangestan. The climate is hot in both the coastline areas and the hinterlands but the coastline is more humid. Hence Delvar is the littoral and commercial town of Tangestan, while Ahram is the agricultural town. Furthermore both cities have the same iconic figure, Reis Ali Delvari martyred in World War I, making their existence important and co-existence inevitable. In this regard we have tried to read, understand and interpret the environmental potentials and affordances of Delvar and Ahram by experiencing both cities, through their relations with each other due to their distinct and common features. In order to introduce this relation with respect to the subjects such as urban identity, economic conditions and ecology in the context of locality within globalization we have tried to read both cities as one narrative. In this narrative we are trying to constitute a structure of some kind that can unfold the relations of the interdependent elements such as Reis Ali Delvari, the Iranian Islamic Identity and the Persian Gulf City in the global world. By photographing the environment / looking at it through the view finder while listening to the authorities who gave information about these cities during this discovery journey made us combine all the visual and verbal documentations with relation to each other. As a complementary step, by combining the documents given by the municipalities of Delvar and Ahram and the government of the Bushehr Province to the images and clues from our personal experiences and by discovering new relations / articulating network relations, and figuring out an interconnectedness among them, a broader picture of the two cities as a whole began to appear.

We had referred to space metaphors such as geography, map, network, patterns to understand the whole global dynamics and localities of Delvar and Ahram as a unity, both via visual documents such as photographs and different scale urban plans, master plans, and written documents including our notes during the discovery journeys at the two cities, which were a kind of observation without having any hypothesis and structured prejudices that directed our research idea. All the documents - both visual and written documents - are overlapped in order to understand the architecture, settlement and urban identity of Delvar and Ahram in the context of global capitalism, the issue of ecology and locality within globalization, while constituting a narrative. Overlapping ideas, in the narrative, are strengthened by the overlapped images created in thematic relations.

We believe that providing the main facts of the administrative relations, as well as the social and economical structures that are related to the climatic conditions of Tangestan will offer a better understanding of the interrelated subjects of urban identity, culture, ecology of both Delvar and Ahram as separate but also connected entities, in the context of locality within globalization.

The aim of the research is to overlap the differences and similarities of two cities giving their unique characteristics, leading to a multi-layered and generative structure of a unified identity, rather than differentiated parts of a whole. We tried to understand this unified identity as a phenomenon composed of fragments that consists of physical entities as well as events, social relations, cultural dynamics of which the most important is the iconic figure of Reis Ali Delvari in order to grasp some clues with relation to their original cultural identity, making them unique in the global world.

General Issues of Two Cities

Tangestan, with a 1,926 square kilometre area, occupies 8.3% of the entire provincial area and is the fourth largest municipality of the Bushehr Province. Tangestan comprises two townships: Central (Ahram) and Delvar with two towns and four rural districts (Bushehr Province, 2009). Delvar, which is the littoral township of the Tangestan Municipality, is located at the northern coastline of the Persian Gulf, 40 km away from Bushehr while Ahram is 60m above sea level, and 57 km away from the capital city.

According to the census of 2006 the population of Delvar is 3,256 and that of Ahram is 12,500. The employment structure of the city of Delvar is mainly seasonal, since the climatic conditions affect the lifestyle of the people living in the Persian Gulf Region. In Ahram 80% of the population work in the agriculture sector and 20% work at official positions or for the government. Although Ahram is considered as a semi-desert area, because of the mountainous geography there is an air circulation causing the heat but it is less humid compared to Delvar. Therefore contrary to Delvar in which the main income is from marine products and maritime commerce, the main income of Ahram is from agriculture.

A Hero of Two Cities: Reis Ali Delvari

Bushehr province is considered to be the major southern gate of Iran's golden ancient history and civilization. The main reason that Delvar receives attention is its strategic importance as one of the coastline cities of the Persian Gulf in the Bushehr province. For 150 years, Delvar was the gate to the rest of the world, with access to international waterways Southern Persian Gulf States and Far Eastern States such as China, Afghanistan, Pakistan and Africa. Camels on land carried goods from inner parts of the country such as Ahram and were loaded onto ships from Delvar.

In World War I the British occupation exceeded Bushehr, and expanded to Delvar. Reis Ali Delvari had resisted for six months and on September 3, 1915 when he was posed to attack the British troops at Tangeh Safar gorge, he was gunned down from behind and martyred by one of his treacherous companions when he was 34 years old. Therefore while reading the economical, cultural, social entities of Delvar and Ahram as a narrative he is regarded as a reference point. It has been noted that the government and the municipalities of Delvar and Ahram are offering this heroic event as part of the Iranian Islamic Identity in terms of an example of a tool to unite the citizens through various methods. For instance the park on the coast is one of the reminders of the triumph against the British. The inhabitants of Delvar use this park as a public space, especially at nights, when the weather is cooler. It is also very common to encounter statues of Ali Delvari in the squares and his paintings on the walls across both cities as well as a character in cartoons in the country.

An Influence on Two Cities: Iranian Islamic Identity

Local authorities claim that the history of Delvar dates back to at least 150 years ago and Delvar is one of the few coastline villages with a known history. As stated above, the history as well as the urban identity of the city is closely related to the national heroism of Reis Ali

Delvari. Delvar and Ahram are differing from each other in regard to their urban developments, due to their specific characteristic locations, climates and economic activities in relation to the Persian Gulf. For instance the British invasion during the World War I made a significant shift in the settlement of Delvar. After the World War I, the village moved away from the sea, to the interior (to the east). Thus today the settlement area neither has a physical nor a visual relation with its seaside or its beach.

Today in Delvar it is possible to see the houses built 50-100 years ago with an "L" shaped typology as spatial organisation, still used by their habitants.

These openings both to the courtyard and outside, provides a natural air circulation keeping the interior cool. This "L" shaped typology is a delicate example of the site-specific architectural solutions to ecological problems. We have observed that the restoration of the house and its regeneration as a museum is done with solicitude in order to preserve the spatial character of the idiosyncratic "L" shaped house, specific to Delvar.

Ahram on the other hand has developed along the main axes where all the commercial and public buildings are situated. The main axe begins with the square with Reis Ali Delvari Sculpture and the Palm groove where the old city was formerly located; the area still has urban and architectural traces.

Ahram has faced several floods through its history and the old city was destroyed in a flood 200 years ago. Although some traces about the houses can be found in the palm groove it is not possible to find adequate traces from the old city giving information about the civil architecture in order to figure out the urban identity.

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In Ahram there is a characteristic housing typology in the newly developing areas.

The typology of the new houses takes its roots from the castle, which makes the spatial organization at different levels but incorporates western influences in both the inside and the outside of the house at the same time. The ground floor is generally composed of a living room and kitchen/open kitchen with a decorated service opening; and a garage as well there is/are one or two rooms having half floor steps. This creates a dynamic spatial effect which is specific to this town. This housing typology is being applied to the new houses in the new residential area in Ahram and in all residential areas of Delvar; the only difference between the two cities being the construction technology and materials used. In Ahram the façade is less ornamented compared to Delvar. The ornaments of the façades reflect the tension between the local values and global influences. Houses are hidden from the street by their high walls overlooking the street providing a privacy creating a courtyard. The pattern of the wall is also specific to this area; the colour and texture of the stone and their weaving technique comes together with the reinforced concrete frame system. Some new houses have a two-dimensional outdoor wall standing freely thus transforming the free space into 3D volumetric masses providing both privacy and voids that can be used as a courtyard.

In the middle class families while the parents use "L" shaped old houses in Delvar, the married children live at newer buildings. It is possible to experience the tension between the local values and global influences, as well as ecological approaches in the housing area. The natural air conditioning is provided by east / west, south / north openings in the "L" shaped house. Conversely, in new houses in order to reduce the effect of the sun/ to keep the house cool, windows are covered with foil paper or reflective glazed windows are used, also providing privacy. This privacy issue is closely related to the Iranian Islamic Identity. All the rooms open to a common room in the new houses, while in traditional houses the rooms open to the courtyard which functions as a common room.

According to the holistic approach, ecology, not only the physical environmental conditions are the issue; but also the social, cultural, political, economic issues, in interaction with each other are also crucial in order to understand and describe the ecological problems. On the other hand, ecological awareness will only arise when we combine our rational knowledge with intuition for a nonlinear nature of our environment.

It has been understood that the separate but collective life of the families continues in the houses with gardens. Since the land is vast and the population density is low, there is no necessity to construct 5-6 storey high buildings in the city. However "L" shaped building form, which

initially emerged from ecological reasons, seems to be abandoned for the benefit of contemporary materials and products, such as reflective glazed windows or air conditioning. It is possible to observe that the form of the old houses function with the ecological solutions and traditional way of living and possibilities of the building materials are used efficiently in this purpose. The contemporary way of living in the city does not seem to be changed even though the form of the buildings is altered. Although the new houses reflect the tastes of the inhabitants and a common identity, with its successful proportions and solid-void balance reflected in the façade, the contemporary building materials and techniques has not been evaluated in an efficient way that can lead to a spatialization of local values, ecological and sustainable perspectives, within the global/contemporary world.

It should also be mentioned that some other cultural modifications that lead to superficial imitations in architecture become a threat when the locality cannot be understood within the context of globalization. If marketing strategies motivates the authenticity, a visual fakery emerges in the new architecture. Windows with coloured glasses considered as cultural archetype of the Bushehr province are used in new buildings thus loosing their invisible character and hence becoming a stereotype. In it is possible to see this difference between the real and fakery, the first image is an example of the archetype while the second image is an example of a stereotype/imitation.

An Urban Development Potential of Two Cities: Persian Gulf

Delvar and Ahram as opposing but complementary poles of Tangestan benefit and suffer from the Persian Gulf. While Delvar benefits from its proximity to the Persian Gulf through maritime commerce and marine products and has a great potential for touristic development along its coastline; however it suffers from the barren salty soil, which impedes it from farming. Conversely Ahram because of its climate and location at a distance from the sea is suitable for agriculture, but does not have a development potential because of its distant relation to the central commercial routes, both land and sea. In this regard we observed that the urban development and urban identity of both cities are shaped through this tension.

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The wide ranges of agricultural products are, at the same time, considered as high quality products. For instance the tobacco produced in Ahram was chosen as the best tobacco in the province one year, and another year the wheat was chosen as the best wheat of the province. Citrus is another important agricultural product cultivated at the village of Haiz, which is 30 km away from centre of Ahram. Nonetheless among other agricultural products of Ahram the most significant one is the date, the fruit of the palms.

The municipality claims that the best dates of the Bushehr province are cultivated in Ahram. Various kinds of dates and also Hareck (a type of unripe eatable date) are cultivated in Ahram. Date production is a very demanding job for farmers, since its pollination and collection requires a considerable labour force. However palm grooves are not just an income source for the city but also an indispensable component of it. In this regard, it can be interpreted that the development of the urban settlement area of Ahram is organized according to both palm grooves and farms. While the residential and commercial areas of the city are located along the main axes, because the farms require a considerable size of land, they are situated on both sides of the city outside the settlement area. Furthermore the possible urban development of Ahram has a potential to continue along this main axe together with the agricultural lands. The word Ahram is a collegial form of the word 'Eram' meaning the 'Garden of Paradise'. Ahram is famous with its palm grooves where the best dates of Iran are produced. It has abundant lands, unique natural water sources and appropriate climate for cultivating various kinds of agricultural products. As there are numerous citrus fruits, orchards and plenty of natural springs around this area, the income of the inhabitants is primarily from the agriculture sector. Even the people working at governmental or official positions cultivate agricultural products.

A result of cultivating various kinds of agricultural products in Ahram is that they were traded to other Persian Gulf cities. In the past, it is evident that the coastal region of the Persian Gulf was an important trading and commercial centre for traders belonging to different areas. The maritime commerce with the Persian Gulf is beneficial for the inhabitants of Delvar. Therefore although Ahram does not have a coastline to the Persian Gulf, the commercial activities take place through maritime transportation from Delvar. In the south of Mohammad Ameri

Village there is a port used for commercial sea transportation. In Delvar 200 ships are used for commercial purposes. Furthermore there are small shipyards for building fishing boats (vessels).

As a Persian Gulf City, the marine product cultivation is another income source and also a development potential for Delvar, since 22.6% of the shrimp production within the Bushehr province is carried out from this city. Delvar is separated as north and south, due to of this economical activity. Mohammad Ameri village is located at the south coast of Delvar with a population of 2,000 people. This village has a potential 5,000 people who can be employed at the shrimp production industries since hundreds of pools are established close to the beach for this purpose, with inlet and outlet systems technologies, a jetty and shipyards. Therefore Mohammad Ameri village has a potential for urban development based on further investments in the marine products production sector.

Contrary to the shrimp production, agriculture cannot be counted on as an economic locomotive in Delvar since the soil in the coastline of Delvar is salty. In the residential towns the soil is considered to be appropriate for a low number of plantations and there is a limited area for agricultural activities. Therefore agriculture was not developed in this part of Tangestan, but in Ahram as mentioned above.

Natural beauties of Ahram, meaning "Garden of Paradise", are not limited with palm grooves and various fruit farms but also mountains and mineral water springs. And the urban development of Ahram is continuing in the southeast of the city, where the mountains and mineral spring waters are located. The natural spring water is a domestic tourist attraction of Ahram, where people come and visit at the time of Newroz. The ground water (hot spring), and the huge mountain row that is surrounding the city from the east are the main sources of the mineral water spring. The hot spring water is viewed as a health source able to be cure illnesses. In order to provide better service to the visitors, a facility consisting of pools and changing rooms, which are separate for men and women, was recently built. A child playground is accompanying the facility, acting as a public space, mostly used at nights and especially at Newroz celebrations. The former spring water pool is still outdoors, supplying the water of the pools inside the building. The municipal guesthouse is also located in the vicinity of the mineral spring water facility. Although Ahram is not benefiting from the tourism facilities since it is currently a seasonal economic activity, with its natural beauties it has a potential for future tourism sector investments such as accommodation and entertainment places, along with the urban expansion. The houses in the new development area are also built in the characteristic housing typology specific to Ahram.

On the other side, tourism is one of the major income sources of Delvar and at the same time it is a potential for its further development. The house of Reis Ali Delvari, has been restored and turned into a museum about the English invasion of Iran and the defence against British troops appealing to domestic tourists. Some of Reis Ali Delvari's personal items, as well as historic documents of his time referring to the British occupancy of Bushehr and the defence both in Bushehr and Delvar, and various types of guns and horse caparisoning are exhibited in this museum. Newroz celebrations create a festival atmosphere both in the courtyard and outside the museum, which are used as public spheres where people come from the neighbouring provinces and stay at the tents around the museum.

The importance of the museum of Reis Ali Delvari does not just arise from its social and cultural relation to these cities and the inhabitants, but it is economically essential for them. Reis Ali Delvari Museum can be counted as the most important tourist attraction point within the Bushehr province. There are no other tourist attractions or tourism facilities in the city apart from the museum of Reis Ali Delvari. Furthermore another handicap is that in the county of Tangestan there aren't any hotels, and only 13 restaurants in total. The tourists stay in tents or in those 13 hotels in Bushehr when they visit Delvar and Ahram during the Newroz celebrations. On the other hand, in Bushehr there is a hotel called "Hotel Delvar". This contradictory situation emphasizes both the importance of Reis Ali Delvari as a symbolic figure not only to the city of Delvar but also across the province and that there is actually a lack of interest and investments in the tourism sector in Delvar.

In 2006 the municipality must have become aware of this lack of interest in the tourism sector and Delvar's high potentials, which comes from its geographic location on the coast of the Persian Gulf, with a unique landscape and historical attractions. Thus tourism investments

for Delvar appeared on the agenda of the municipality. In this regard a comprehensive analysis has been done in the research report on urban development based on tourism. The research report for the master plan of Delvar provided to the municipality in which a SWOT analysis was also included, contains a thorough analysis of Delvar on its social, educational, economical, topographical properties, possible tourism opportunities as well as examples from the western world, that are offered as models/exemplars (Maab Consulting and Engineering, 2008). Delvar, with its long beaches, having a unique kind of sand on its shores, and historical attractions, has a high potential for the extension of the tourism industry, creating touristic recreational complexes, tourist villages, marine Parks, etc. However the local values and global influences should be well balanced in order not to be affected negatively from the global capitalism that annihilates the local culture by replacing it with global culture of global capitalism.

Taking this research report into consideration the municipality has prepared a master plan for the coastline of Delvar with the aim of the tourism investments in the coastline to increase as well as the number of foreign tourists. In this master plan it is interesting that outdoor sport facilities for men are designed separately from indoor sport facilities for women. The power of contrast dominates all sections of lifestyle as well as the taste culture / the culture of aesthetics even though the people have deep cultural roots of beauty. In this regard, the balance between local values and global culture should be achieved in the subject of tourism as well. The local values whether they comprise contradictions or are dissimilar to other cultures, by offering uniqueness should be commercialized as an attraction of locality within globalisation. For instance Reis Ali Delvari as an iconic figure carries a risk of becoming kitsch when adapted to tourism in the global culture, and loose its identity as a symbol of the Iranian victory over the Imperialistic forces. Hence it is very essential to preserve the locality within globalisation, and offer these localities as a powerful cultural entity, rather than convert them to just another tool for global capitalism. The restoration projects of historical edifices would also accompany the contemporary coastline planning. For instance the contrast between a restored building as a hotel at the seaside and the new facilities would create a tension and aesthetic whole that can attract tourists, both as a scenery and facility. Furthermore these kinds of investments would vitalize the economy by demanding a new labour force, providing a new income area for the citizens.

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It has been noted that neither the recent economic boom nor the current phase of economic recession in other countries has affected the Bushehr province. The Governor emphasized that the global economic crises did not influence economy of Bushehr province, since Islamic economy with regard to Islamic justice is independent. Although the world investment in Bushehr province is increasing with globalisation, its locality has been preserved while the people from all over the world discover its idiosyncratic Iranian Islamic Identity, which has emerged neither through capitalism nor communism. The development projects are not being suspended under any economic condition whatsoever. However at the decision-making level, there are some administrative uncertainties. For instance the Cultural Heritage Tourism and Handicrafts Organization does not yet seem to have an autonomous tourism policy in order to apply the coastline development project with no further delays.

Although Ahram is the centre of Tangestan, and a more developed city, Delvar shows more promise for future developments, considering its possibilities primarily because of its coastline on the Persian Gulf. The proposed urban design and planning explains how the functions are to be arranged considering the urban growth and sustainable development in Delvar. Tourist attractions of Delvar play an important role in developing a new urban plan. Martyred Reis Ali Delvari's Museum is a dynamic for the city's development for domestic tourism as well as international tourism. The coastline of Delvar, especially its unique sandy beach is another potential for urban development via international tourism investment opportunities focused on the entertainment sector. In this regard the urban development proposed for Delvar in the master plan, is based on the coastline with its long beaches.

Furthermore Delvar has some advantages as being a potential for becoming a special economic zone of the province in comparison to Ahram by neighbouring the Persian Gulf coast, by its proximity to the customs office and jetty, neighbouring the provincial capital, and its proximity to the airports in Bushehr, Shiraz and Assaluyeh, as well as being close to the coastline road of Bushehr – Delvar and main road of Isfahan - Shiraz. Ahram is benefiting from its agricultural potentials and today it is considered as the centre of Tangestan, however Delvar, by using its advantages of being a Persian Gulf Region city, is capable of further developments in regards to its economical investments in tourism and commerce.

The famous fort of Tangestan, which belongs to Zar Khezer Khan is to the north of Ahram. The fort is an excellent example of cultural heritage in the Persian Gulf Region showing specific local techniques and details. It includes four towers and a rampart apart from the private facilities for the use of the residents. This major surviving monument holds a memory from World War I where 9 British men and 3 women working at the Consulate were held as hostages. Besides its historical significance, its architectural emphasis on the cultural world heritage is very important. According to our observations, its location at Ahram, which gives an idea that, it is a site – specific architecture and its overall spatial quality both on the outside and interior is unique in the history of architecture. It is possible to understand that the power of geography, a rich variety of cultural values and life style had defined this unique spatial configuration. In experiencing the Castle, it is easy to understand how architecture can be site-specific, how integrative and self-assertive tendencies can be necessary for harmonious social and ecological relationships in the configuration of architecture.

The work on the restoration of the Castle continues, having no sensibility to preserve its spatial character and idiosyncratic details for instance the detail of conjunction of wooden beams and the wall. Furthermore sun-dried mud-bricks are produced to implement to the ruined walls; however the workmanship is not as good in the details even though traditional materials are being used in order to remain loyal to the original. The restoration of this huge building should be the product of a fully coordinated collaboration between specialists from various fields; there should be cooperation between universities and various institutions such as Cultural Heritage Tourism and HandiCrafts Organization.

In spite of the fact that the influence of Reis Ali Delvari's heroism on the current and future economical and urban developments in both Delvar and Ahram is undeniable, his influence on the social and cultural issues are also important. In this regard similarly to regeneration of Reis Ali Delvari's House as a museum, in Ahram, Kelat Fortress, also known as Zar Khezer Khan Castle is being restored by the municipality, and is being planned to be used as a museum. This is a significant issue both as an urban development potential and also historic preservation attempt regarding the environmental sensibility.

Castle of Zar Khezer Khan as a cultural monument can be experienced through its spatio-temporal relationship, since it articulates this experience into multilayered meanings, reflecting the character of the journey through time. Although there is a paradox between continuity and change, it creates an inexhaustibility of contrast that gives rise to an attractive point of the living environment. Sustainability of an environment with its old buildings can be achieved by preserving them with an awareness of the inexhaustibility of contrast and its complementary forces that hold traditional and contemporary issues together. Without having such awareness during historic preservation, architecture loses its essence and it becomes an object of nostalgia within cultural globalization. In order to cope with this danger, we have to understand the paradox of the old city and global place, which require both continuity and change with their memory -place and dynamic contemporary lifestyles. This paradox also provides a constant dialogue and interaction with environment in which inexhaustibility of contrast stimulates us giving rise to a prolonged perception and hermeneutic experience.

A holistic way of seeing, thinking and understanding both cities as spatial and social structures that can be associated with their narrative spaces, is required. Both understanding the existing environment as a narrative space and re-designing that narrative space as an extension of its spatio-temporal entity, involves the holistic approach to intervention for historic preservations. Through this approach it is possible to determine strategies for future investments on urban developments.

Concluding Remarks

Tangestan is a unique city having two townships which are telling their own individual stories as well as being an integrated whole. Cultural identity, specific to Northern / Iranian part of the Persian Gulf Region includes its historical, religious, political, economic, psychological and social networks. This network system with its complexity and contradictions cannot be reduced to the knowledge provided by the analytical research methods; it allows margins of sense given by effect and percept experiences, which in turn generate multiple new paths and new

connections. Therefore multi-layered structures of two cities are tried to be read as a narrative, through their spatial configurations emerging from the local issues such as the iconic figure of Reis Ali Delvari, the influence of Iranian Islamic Identity and the economic, social, cultural and climatic effects of the Persian Gulf in relation to “locality within the context of globalisation”.

In experiencing the urban pattern of both cities, we can interpret how these interdependent concepts are interwoven as a whole and can be developed further with the maxim “think locally and act globally”, referring to the deep ecology movement, which is not only limited with the subject of physical environment but the social, cultural, political, economic issues, in interaction with each other and also crucial for the development of the city in a sustainable way. In the Persian Gulf Region, understanding the potentials for globalisation with respect to tourism gives an idea about the concept of “locality within the context of globalisation”. For instance the master plan prepared for Delvar exhibits the development of the city in relation to its identity, with both threats of Dubaization and opportunities of creating a new concept about “locality within the context of globalisation”, through which it is possible to preserve the locality being aware of kitsch.

Notes

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Iran is divided into 30 Provinces that are administrated by appointed governors. One of the provinces is Bushehr with an area of 23,000 square kilometres located at the southwest of Iran and the Northern shore of the Persian Gulf. This province consists of 9 provincial towns – Bushehr (capital city), Tangestan, Jam, Dashti, Dashtestan, Dayyer, Deylam, Kngan and Genaveh– 22 Districts, 29 cities and 43 rural districts, with a population of 826,412 people according to the last census. Bushehr Province. (n.d.). Retrieved August 21, 2009, from <http://www.ibchamber.org/Magazine%2015/3.htm>

²

When British soldiers tried to occupy Delvar, Reis Ali Delvari, who at the age of 25 joined the militia that fought for constitutional uprising in the south of the country as a leading figure, was the commander of Tangesier fighters against British invasion.

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It is believed that the surrounding area of ‘Tedumari’ in Tangestan is a reminder of a trading clan reputedly from central Asia, i.e., the ancient ‘Tedmer’ and ‘Palmer’ tribes (Tangestan (Ahram). (n.d.). Retrieved August 20, 2009, from Official website of Iran Tourism and Touring Organization: <http://www.itto.org/city/?cityid=243>).

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The mountain row has a negative effect on the city since the seasonal river flow caused floods in rainy seasons for hundreds of years In order to prevent Ahram from the floods, the Ahram Dam was constructed recently and is also used for watering the palm groves.

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Public sphere refers to the perceptual - tangible and intangible - process of a critical individual in the global world; where he/she constitutes a web of relations in a -local- space-time. Therefore in public sphere individuals link local to global as well as global to local, through their spatiotemporal experiences (Karababa, A. (2009). Public Sphere as Spatiotemporal Experience. Istanbul: I.T.U.).

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The master plan consists of touristic accommodations such as hotels, camping area, pool and cascade, restaurant, market, seating areas; sports facilities, entertainment, cultural facilities, sea food market. Aqua park, park, puzzle area, sand games, artificial lake, tennis courts, fitness centre, seaside volleyball, handcraft exhibition and place of sale, palm groves, open performance stages and cinemas, museum, symposium hall, festival space, ritual meeting places, play ground, fishing rituals, traditional music stages, swimming area for women and swimming area for men, multi purpose hall for women, restaurants for women, football and volleyball halls, workshop places, theme park, bike path, entrance axes and entrance square are proposed for domestics and foreigners (Maab Consulting and Engineering. (2008). Delvar Tourism Zone Master Plan Field Analysis and Tourism Development Plans).

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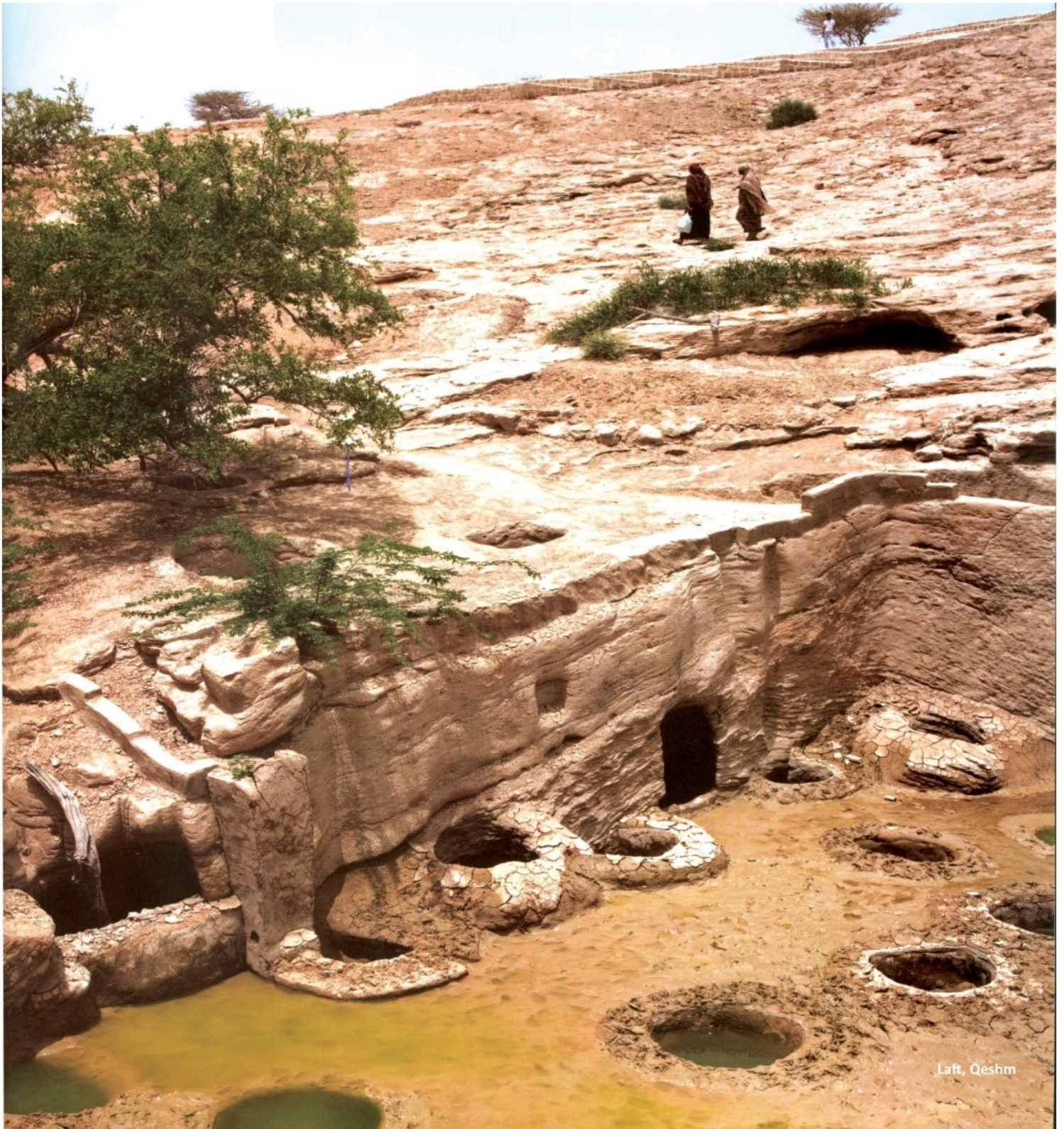
Targeting 603,604 tourists in the coastline by 2018, which was 77,105 in 2006. It should also be mentioned that the number of foreign tourists visiting the Bushehr province was 8,060, among 1,200,000 tourists who visited Iran in 2006. (Maab Consulting and Engineering. (2008). Delvar Tourism Zone Master Plan Field Analysis and Tourism Development Plans).

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Reproduction of real and replacement of real with the non-real causes transpiration of “pseudo-object”, instead of object. At the end of an understanding of reality, which is based on borrowing, a sugar bowl formed telephone can be designed.



Siraf, Bushehr



Laft, Qeshm

Banak

an Green Oasis in a Hot Land

Reza Shafaei



1. Research brief

This research is an attempt to explore the notion of 'urban identity' in a local habitat and its role in 'sustainable development' within the current globalisation conditions. Urban identity is a theme which is closely related to the culture, climate and lifestyle of the people. The city which will be looked at is 'Banak', one of the coastal cities beside the Persian Gulf in Southern Iran. Banak is a very small town attached to Kangan city on the half-way of the main coastal road which connects two major sea ports; Bandar Bushehr and Bandar Abbas. Whilst analysing the contemporary conditions in the city, this research offers a broad picture of urban, architectural and cultural identity in the region at this juncture in the spread of globalisation. The aim is to represent the actual condition which is happening in the city as well as to depict a critical view to its future. Since there is not enough categorised information about Banak, this research has occasionally referred to the related data about Kangan, due to their close proximity and commonalities. In addition, the research approach is mainly based on the primary data such as interviews and observations.

When addressing the urban development in the private, public and global scale, this essay explores the themes of cultural identity, climate and comfort as well as economic status in this specific settlement. This would be achieved through exploring the following issues: Firstly, how is global capitalism affecting or changing the city, whether in boom economics or economic recession? Secondly, how are the new conditions of globalisation affecting or changing the traditional architecture and conditions? How does the community deal with the cultural identity along with global social changes? How does this community represent and symbolise its cultural identity? How does this community use the habitat and settlement and the patterns of habitat? How does this society live within visible and invisible contextual layers? How is their everyday life and lifestyle in the private and public scale? Lastly, How is climate change affecting or changing the city, and what steps are adopted to deal with this problem? How this community deal with local climate along with global changes?

2. Introduction to the context

2.1 Location and profile

Banak is a small town located in the south of Iran and in the South-East of the Bushehr Province. It is also an old habitat of the Kangan County. Banak, which is situated away from the sea, is an agricultural-base settlement laid on the north side of the Persian Gulf.

With approximately 200 kilometres distance from the capital city of the Bushehr Province, the geographical

location of Banak is 52°2'E and 27°47'N. At an average altitude of 10 meters above sea level, the city lies mainly on level ground. The general mild slope of the ground is from the North-East (Zagros Mountains) towards the South-West (Persian Gulf). The area of this 'half-way city' is 461 Hectares.¹

Banak's coast neighbours the sky-blue waters of the Persian Gulf, the Dayyer city in the West, the Zagros mountains, the city of Dashti in the Fars Province in the East, the city of Jam in the North and the city of Kangan in the South.¹ Kangan is a small city which is completely attached to Banak and consequently these two cities profoundly interplay one another. Although these two settlements are interrelated together with a range of socio-cultural and economic commonalities, dependences and interplays which do not let them live separately, result in their inhabitants trying to represent themselves by their own distinct identities. However, they are separated with respect to the political divisions. Therefore, this situation that makes them a single human habitat regardless of political boundaries, calls for further research on these interplays. Located on the main East-West coastal road along the Persian Gulf, this city has been used as a half-way place housing people and products which come, stay and leave. This land consists of a good soil of high quality which makes it one of the most suitable places for agriculture within the region. Although the city is situated nearby the sea, it is not known as a seaport due to its distance from the sea and due to the lack of harbour. Therefore, as Banak depends on Kangan Port for sea transport, it is not in a direct sea connection with the other Persian Gulf regions.

2.2 Historical facts

Banak is known as an old and traditional settlement although it has been recognised as a 'city' having municipality since 2003 i.e. approximately six years ago.¹ It is also one of the interesting places in the northern side of the Persian Gulf, due to its natural and cultural attractions. Today, the city fabric is composed of four main districts which are named as the "Northern Area", "Southern Area", "Central Area" and "Imam-Reza". The "Central Area" is where the initial core of the habitat is taken place, and is represented by two urban elements; the old mosque and the bazaar. These two main urban spaces, where one is a religious centre and the other an economic function, play an important role in the social life as well as the physical structure of the town. This area historically represents the initial stages when this community settled down and was formed in approximately 100 years ago. The local inhabitants still call the old areas, remained from old Banak, with their local names such as 'Shouikhat' and 'Jetha' meaning camel herder. Then, the areas developed to shape the "Northern Area" and "Southern Area" during the years between 1963 and 1996. These two areas, where are generally shaped before 2007, include the immigrants especially the tribes around and the nomads who have gradually settled down in this context. In its recent step, the city is developed towards the mountains on the North of the main road, which has shaped an area called "Imam-Reza". Today, its physical development also has a more possibility to grow towards the North i.e. the foothills.¹

2.3 Geography, nature and climate

The climate is hot and humid with very hot summers and mild winters. Statistics reports that the highest temperature reaches 52 while it can low to 0C. In the summer, a wind called 'Hundred and Twenty Days Wind' blows in this region. This dry and scathing wind, which is known as 'Tash Bad' which means 'Fire Wind' in the local term, sometimes impacts highly on the city life and its comfort. In addition, earthquake and flood are two of the main natural events which should be considered in any development in this area.²

This region has a low rate of precipitation which lasts for four months from December to March. Therefore, this place has always confronted with the lack of water resources. There is no surface water or permanent river flowing in the region; but, as it is situated between mountain and sea, there are a number of seasonal rivers passing through the city, which are most of the times completely dry.² This condition along with some physical interventions on the waterways, has caused the seasonal flood especially in recent years.

The beautiful mountains and a forest park with forest trees in the East as well as the pleasurable green croplands in the West are the main

natural potentialities and attractions of the city. In addition, traditionally, man-made environment such as architecture had interestingly adapted with this specific environment, climate and nature.

Agriculture

While mountains are in the East of the town, croplands are situated in the West between the city and the sea. However, the agricultural productions are based on underground water resources. Although it is situated next to the sea, underground water resources are soft, sweet and usable so that people traditionally built water shafts to meet their needs. The main agricultural productions include tomatoes, dates, wheat, barely, onions, eggplant and other green vegetables.

2.4 Population and Culture (gender, generation, ethnicity, religion)

According to the statistics in 1964 (1345) Banak, as a village in Kangan's rural area, consisted of 1486 people but the population has reached more than 10000 in the recent years, which has led its area to be known as a city. In this new-recognised city, statistics in 1996 indicates that only 8.7% of the population, 4.76% men and 7.65% women, are educated. Regardless of the low rate of educated people, this proportion highlights that in terms of gender women are noticeably more educated than men in this settlement.¹ Recent statistics point out a growing rate of education, which signifies the provided conditions already for change in future. But, lack of higheducated forces has resulted in its dependence on the other cities in professional fields as well as its failure to provide expert forces in the energy industries around. The fact that 84% of the population is 6 years-old and older shows that Banak has an increasing rate of a young population which 70% of them are educated.¹ This invites a proper action for responding to youth's needs including job, education, entertainment etc.

154 The population's language is mostly Farsi (Persian) with a local dialect which is highly related to the 'Persian Sivandi'. Due to the close interactions with the Arab countries on the other side of the Persian Gulf, a group of the people speaks Arabic.¹ It is slightly different from the Arabic accent of those countries and has adapted more to the context because of their close land relationships with the near societies e.g. Kangan.

Banak basically houses a religious community and the religion in the City is principally Islam, the majority are Muslim-Shia and the minority of people are Muslim-Sunni.¹ As these religions have historically experienced an integrated life in this settlement, today also these different ethnicities still continue their peaceful life beside each other due to their vast socio-cultural commonalities and roots. As one of the inhabitants, Mr. Jamali, said Sunnis who are now the minority have a noticeable participation in the religious, national and cultural events in the city either in public or private scale. For example, the religious mourning called 'Tasoua-Ashoura', which is dedicated to Shia, holds greatly in this city so that most of the people from different groups take part and gather in the city centre. The other example is the funeral ceremony in the mosque or house, which is open to all people to attend. Other religious events which bind these religions include some religious celebrations such as 'Ramadan ceremonies', 'Eid Fetr' and 'Eid Ghorban'. Moreover, the national-cultural events such as 'Newruz' celebrations (Persian New Year), 'Sizdah-bedar' ceremonies and 'Yalda night' play an important role that gather both religious organisations regardless of any ethnicity or religion. In a smaller and private scale, Wedding ceremonies also provide a ground to gather people for social interactions. Such socio-cultural celebrations e.g. wedding, circumcision, etc traditionally have been held in a great manner gathering lots of people during several days; however, these occasions are now diminishing into a small event with fewer days due to the current economic and social situation. This does not promise an interactive social life in the future of the community.

2.5 Economic activities

Due to the location, the main local economic activity is mostly agriculture. These activities related to the land have been linked to the culture of this society as a part of their cultural identity since many years ago. The hot and humid climate, the quality of soil and the lack of water all have contributed to allow them have a noticeable development in the specific fields of agricultural activities. The huge gas resources, called

“Pars-e-Jonoubi” which is one of the largest energy sources around the world, have caused a vast social as well as physical change in this region. Some of the Pars-e-Jonoubi’s huge projects such as ‘Site 2’ or ‘Kangan Site’ and ‘Assaluyeh Site’, are located very close to the city. Furthermore, one of the most important cement factories called “Sarooj-E-Kangan” is located near the city. These industries around have positioned Banak in a situation to be rapidly transformed from an agriculture-based place into an industry-base place as well as an accommodation serving the industries around² In addition, the liberalisation trade policies in recent Iran along with the neighboured capital markets e.g. Dubai have resulted in influx of foreign products. All these have led to a possibility to change the position of the city into an economic-industrial place. However, regardless of huge gas industries called “Pars-e-Jonoubi” in national scale near the city, there are not considerable local industrial activities belonging to Banak. Although the Gypsum factory and the Kangan Cement Factory are the main important large industries related to the city, they function also nationally and not locally. For many years handicrafts have been prevalent in this region. A few small fascinating industries such as pottery can be still found in this city. Due to the importance of water in this region, making devices that can play a role in the cooling water or keeping it cool have been common since far past years. Their productions generally are water jar, jug Qelyan and pitcher.

2.6 Occupation

The main activities of these people consist of industrial activities, agriculture, sea trade (Jashouei in local term) and fishery. Although the city is highly influenced by the industrial activities around as well as the sea activities in Kangan port, people’s local productive activities basically depend on the agricultural lands. Such productive activities, which are facing a reducing rate, need to be developed in order to reinforce the community to be more self-sufficient and self-confident. In recent years, owing to the huge gas and petrochemical companies and industries, many people particularly young generations are displacing from productive activities into service activities related to those industries. Moreover, Since the majority of these people are low educated and low skilled related to the industries, these local forces are employed mostly as the labour forces in the companies;

While the high-position jobs are occupied by experts from large cities particularly Tehran. However, a group of inhabitants still undertake the professions related to their land i.e. agriculture and a small number are involved in governmental and official activities. Studies show that passive activities as well as consumerism activities meet an increasing growth, while productive activities such as agriculture, pottery and livestock have a reducing rate. In addition, according to the statistics, due to the young population rate, an increasing number of people enter the labour market each year. Since the cities such as Dubai and Abu Dhabi already are developed as the economic and business poles in the region, Banak - like other similar small cities around - is in a critical situation to provide labour forces as well as consumer forces for those capital poles.

This population travelled to the other regions beyond the Persian Gulf through the sea in the past more easily than they do today when they need visa. Recently, with development of the land transports along with their land transit situation, they are in a vast connection with their land neighbours inside the country.

Migration

In recent years, regarding the large industrial developments and employment prospects in national scales around the city, a number of groups have immigrated to this region from other places especially rural areas in order to find job, particularly in this recent economic recession. This, consequently, can cause the related socio-cultural effects on this habitat.

While the region is undergoing one of the worst droughts and economic crisis in its recent history, a number of agriculture-based families are under the danger of moving to other places where the Industrial activities as well as trade activities provide the alternative options. Therefore, the current draught and economic crisis in the country, causing a high rate of unemployment, which is intensified by the recent global economic recession, can be regarded as the main reasons for a large transformation. This migration is mostly caused by the people escaping poverty and draught in the hope of a better life.

On the other hand, many youth of Banak dream the life in the main advanced cities particularly Dubai or the big

cities inside the country such as Tehran and Shiraz. This passion drives a number of emigrations from this town to the big cities in the hope of a better life. In general, the people have a notable traffic with the large capital markets and economic centres across the Persian Gulf such as Dubai and are exposed to their effects. These face-to-face relations inevitably impact on the current conditions, as they constantly compare their conditions with 'others'.

Economic life

Although people have some economic activities such as bakery in their private houses, public activities are mostly concentrated in the town-centre or both sides of the main road. The rows of shops located in the main road have a regional function whilst the built bazaar shops in the central area mainly serve the local inhabitants. In addition, a periodic market called 'Monday Bazaar' taking place near the central market, has recently influenced on this central permanent bazaar. According to the people, the cheap and fresh goods of the vendors in the 'Monday Bazaar' bring a large number of local people weakly and consequently this has caused some of the shop owners to shut down their business. Since all these different activities, which are principally economic, have an important impact on the urban life in day time, their interplays need to be regarded in order to have a balanced development. These activities usually begin in the early morning and continue until noon when the weather gets warmer. The central bazaar with a shade-less corridor, which is shaped by a number of attached shops built by the materials such as steel and concrete, becomes really hot at midday. Due to the hot weather people go home and have a rest with their family during afternoon time so that everywhere is usually closed during that time.

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Social habits

Urban social activities restart again around 6 pm when the weather gets milder. These activities which have mostly a social nature usually take place dispersedly in the public, semi-public (front doors) and private spaces. In the evening when sun is gone, many people mostly elder ages go out to take a sit in front of their doorways with their families or neighbours to talk and smoke 'water pipe'. This is a very common informal gathering called 'Majles' which take place in local neighbourhoods.

Moreover, some other people mostly younger ages go even further to places particularly Kangan city for shopping, walking, refreshing and entertaining social activities. This can be attributed to the lack of usable social and public spaces in the town. Although, as Mr. Rashedi said, "there were a mass of date trees in the coastal areas of Banak and people used to go to those gardens for picnic and entertainment", it is nearly destroyed due to the recent draught.

With a significant background of collective home and lifestyle, expanded (large) families have been common in this region and children made their home in their family house beside other members after marriage. Houses were traditionally next together. Even neighbours lived so close to each other and they could go to the next house through roof space or over the narrow alleys. This collective system can create a powerful social structure in order to live collectively for interaction and communication as well as to keep privacy and identity of the families. Therefore, in addition to the environmental role to make shadows, the narrow alleys also reinforce the neighboured community in their social interactions by making a human-scaled urban space.

Lifestyle

With a quick look at their clothing style, it can be seen that how people have adapted environmentally, culturally and economically to the context with simple but useful techniques. The white colour, light materiality, soft texture as well as the specific shape which allow air circulate, all contributes to make a sufficient dress covering whole the body in such a hot and humid place which its people need to follow the Islamic dress code.

Their main food was traditionally made of bread and date. As a case in point, the 'Gamneh' is a traditional food which is made of wheat flour. This implies their dependence on their agricultural productions and their land rather than the sea; a positive potentiality which can be developed.

Social threats

This city has a young population seeking their expansive needs. Lacking in passion as well as facility for high education, the population enters the work market in early ages. As the entertaining facilities and the proper jobs are not sufficient, youth vastly are involved in passive activities; for example, they usually use motorcycling as a past time to cycle around the city for hobby in their leisure time. This can lead to consume a large amount of fuel along with make the environment more polluted. Therefore, employing the youth, as the future generation and motive force of the society, in the productive activities e.g. agriculture can be regarded as an important priority towards local sustainable development.

In addition, despite the closeness to the huge productive and industrial activities in 'Pars-E-Jonoubi', some of the vendors are involved in another passive activity which is the petrol sale or petrol smuggling.

In its hidden social layers, this small town has encountered some other social disorders such as drug addiction, particularly among the young generation. This cultural threat can make a passive condition which is intensified with lack of economic and socio-cultural activities as well as sport facilities.

Urban and public spaces

Although this society is more family-based as well as group-based because of its religious-traditional background, some specific social activities take place in urban spaces. These social activities mostly have an economic as well as religious nature. However, regardless of access roads, economic markets and religious buildings, the town lacks the urban public spaces as well as green spaces allocated to social-cultural interactions. Apart from a few small playground for children, the main social activity which is vividly visible, is an informal gathering called 'Majles' where locals and neighbours gather in front of their house in the evening to chat and smoke 'water pipe'. This traditional and prevalent social habit, which is in a family or neighbour scale but in a semi-public space, can demonstrate that how they use the urban space in terms of scale.

With the lack of public social spaces joining people, this city is undergoing a growing rate of wide streets separating people. Many waterways, which have become dry, are filled and reconstruct to make the streets wider. In addition to its threat for causing seasonal flood, this process is breaking the human-scale of the urban space. In such a small community, which is still based on human activities, it is not reasonable to prefer vehicle to people in the urban space as the habitat is mainly for the humans not vehicles. In addition to the environmental function to make shade and air circulation, the narrow pathways can play an important role in social interactions, neighbour relationships and urban live hood by creating human-scale spaces in public spaces.

Housing and architecture

Traditionally, the architectural elements e.g. courtyard, Kapar on roof, masonry materials, wide and tall walls etc have been the efficient techniques used to adapt to the context, culturally and environmentally. Regardless of wood which was imported, the technologies that were used mainly comprised the local materials responding to both climate and economic e.g. stone, adobe, mud and sarouj. In addition to their lifestyle, these physical patterns could also contribute to create more comfort inside the houses, using the cool air in the evening and the mild sun in the morning.

Today, most of the houses are self-built without an efficient supervision by the urban management. In fact, new residential areas are expanded rapidly with less regard to an architectural or urban master guidance and regulation specific to this context.

Lack of water resources has resulted in using some containers as water supply in the roof of the houses. This is a feature which visibly has impacted on the general image of the city. In addition, the vast usage of modern cooling

systems is another feature which has influenced the settlement environmentally, economically and physically.

A self-sufficient house

Between economic with social activities, the inhabitants' everyday life is closely mixed with agriculture, livestock, business, and entertainment. As a case in point, there is a house owned by Mr. Haj Abdollah Houshiar aged 70, which can exemplify a small self-sufficient settlement. This is a fascinating house consists of all those elements; a shop as its entrance, a water shaft, a small agricultural garden, a stable, a bakery, several private rooms and a courtyard in the centre. Hence, its inhabitants, who are an old man and old woman with no children, can satisfy most of their basic needs and even they sell their productions.

Water, wind and sun

As an agriculture-based community in a hot climate, water in fact is their main vital need for survival. Relying on underground water, the people used to build water shafts for providing water and also employ their livestock for watering the croplands. Despite the Kangan area having had water storage in the past, in Banak people used to bring water from the shafts by musk every day. However, with the arrival of machinery since some years ago, these activities have met a change. The inhabitants' life is gradually starting to become dependent on machinery more than human and place. With the climate change, the recent less rainfalls has resulted in a large draught in the region. The irregular rainfalls along with the physical intervention in the waterways have led to the overflows. Also, due to these seasonal floods, their connection with other regions sometimes has been cut and this has intensified the crisis. Regarding the water crisis in the area, water resources including rainfalls and underground waters need to be vastly applied in order to develop the water efficiency. Thus, physical as well as social programming for water self-sufficiency, including essential constructions and social habits, cab be regarded as the priority in the urban development agendas. As Mr. Ahmad Rashedi aged 74, an educated old man who was known as the Banak 'ealdorman', stated: "While we can use the water of free rainfalls they have been left useless to make flood and consequently draught. Water, which is our vital need for life, is scarce in this place and so valuable; but it is just wasted and neither have we drunk it nor use it for agriculture."

Unlike the scarcity of water, the abundance of wind energy is a potentiality to be developed. Although the storms and the severe dusty winds has caused some problems, the controlled wind energy, as a natural resource, can be an economic opportunity to provide the local, renewable and cheap energy needed for local activities. This abundance can be used also to improve the local scarcities. For example, in Banak there is an old simple windward, established on a water shaft, which was used to generate the necessary energy to pull up the water. Furthermore, this unused redundant energy can be applied, environmentally, to create more comfort either in urban or closed spaces by making ventilation. In addition, the abundance of solar energy is another local resource. As the alternative and renewable local energy, it has also the feasibility to be invested to reinforce the self-sufficiency of the community environmentally and economically.

Climate, comfort and physical development

In addition to what has already been discussed, there are a number of local environmental solutions in the architectural and urban scale, which can be developed by new technologies in order to reinforce the society towards a development related to the context:

Urban scale

1. Since open systems attract much solar heat and closed systems block air circulation and ventilation, semi-open urban spaces can be more suitable for this climate.
2. Regarding the physical limitations, urban physical developments do not need to follow the sea coastal line or main road. Instead, this agriculture-based community can continue its development into the Northern parts towards the foothills with upper levels where can provide a milder climate. However, this development needs to respect the croplands surrounding the city. Therefore, an urban space combined with agricultural lands and gardens can be a prospect for this town.
3. Since attached buildings can block the air circulation and detached building can increase the attracted solar heat, semi-detached buildings

are recommended as the best housing pattern.

4. The pathway height should be more than its width to provide shade as well as circulate the wind into desired directions. Also, narrow pathways can provide the ground for more social interactions in comparison to the wide streets.

5. Conclusion

Banak as a unique green area within a hot climate has a great potentiality to be managed towards a sustainable urban development. Due to the specific location and its agricultural base, Banak follows a physical development towards the North areas away from the sea coast towards the milder areas on the foothills. However, urban development is not merely limited to physical development since the quality of urban life can not always be assessed by two dimensional and quantative measures. According to the definition of 'sustainable development', all the factors of socio-cultural, economic as well as environmental sustainability are the main agendas which need to be considered in any balanced development.

Hence, it seems necessary to promote socio-cultural attitude such as the participation of the population, social sustainability, cultural identity, etc in addition to common technical and physical viewpoints in urban development in order to have a balanced view towards sustainability. Professor Jeremy Till, in his critic on Critical regionalism, says: "In order to develop an architecture that is particular to its condition, there are two imperatives- the environmental and the social - that do this".³ In addition, according to the statement of Earth Summit or UN Commission on Environment and Development (UNCED, 1987), which has a global approval; "sustainable development is the development that meets the needs of present without compromising the ability of future generations to meet their own needs".⁴

Accordingly, the issue is that sustainability is basically not a term only about the environment but also it is a multi-dimensional term which debates about quality of life in present and future. While present needs for 'quantity growth' of developing societies, such as Banak, is so noticeable that it remains less space for 'quality development'. But, regarding the recent global challenges (such as economical, socio-cultural and eco-environmental crisis) every local society should be responsible to contribute as much as its contribution. Since in globalisation conditions every innovation as well as every crisis is for all, any little neglect can be a threat for both the developing local community and developed global society. This highlights the role of urban management in such small societies for social justice and sustainable development in the future.

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Notes

¹ Banak municipality brochure

² Kangan municipality brochure

³ Till, Jeremy. (May 2008) "Ethical Imperatives", RIBA Journal,

⁴ Earth Summit or UN Commission on Environment and Development (UNCED, 1987)



Konarak Port, 2009



Kangan

A place in-between Sea Nature and Energy Industries

Reza Shafaei



1. Research brief

This research is an attempt to explore the notion of 'urban identity' in a local habitat towards 'sustainable development' within the current 'globalisation conditions'. This is a theme which is closely related to the climate as well as the culture and lifestyle of the people. The city which will be looked at is 'Kangan', one of the coastal cities near to the Persian Gulf in Southern Iran. Kangan is a small port half-way up the main coastal road which connects two major sea ports; Bandar Bushehr and Bandar Abbas.

Analysing the contemporary conditions in the city, this research offers a broad picture of urban, architectural and cultural identity in the region of this juncture in the spread of globalisation, in order to represent the actual conditions that are happening in the city as well as to depict a critical view to its future.

Addressing the urban development in private, public and global scale, the following essay explores the themes of cultural identity, climate and comfort as well as economic status in this specific context with respect to the global changes. This will be achieved through analysing the changes in socio-cultural environment as well as the physical environment.

2. Introduction to the context

2.1 Location and profile

Kangan is a small city located in the extreme South-East of Bushehr Province in southern Iran. The city is a port with a coastline onto the north side of the Persian Gulf. It is also the centre of the Kangan County, an old county which is one of the several province's counties: Bushehr, Dashti, Daylam, Kangan, Genaveh and Tangestan.¹

With a 210 kilometre distance from the capital city of Bushehr Province, the geographical location of Kangan is 51°48'-52°58'E and 27°17'-27°55'N. At an average altitude of 9 meters above sea level, the city lies on a low level. The general mild slope of the ground is

from the North-East (Zagros Mountains) towards the South-West (Persian Gulf). The area of this linear and coastal city, with a north-west to south-east orientation, is 1402 Sq-Km.³

The city is a port which is neighboured with the sky-blue waters of the Persian Gulf in the West, the Zagros Mountains and the city of Dashti in Fars Province in the East, the city of Banak in the North and Bandar-Abbas Province in the South.³ Banak is a very small town which is attached to Kangan and consequently these two cities profoundly interplay one another.

Located on the main East-West coastal road along the Persian Gulf, coupled with being a seaport in connection with the other Persian Gulf regions, the location has situated this city in a sort of cross-point where the city is used as a half-way place, housing people and products which come, stay and leave. This port has a usable harbour with nine meters depth, which makes it one of the most suitable places for the activities related to the sea within the region.² Although it is known as a sea port, large ships do not transit here and only fishing boats and small ships called 'Lenj', with a local function, traffic in this port.

2.2 Historical facts

Kangan County is known as an old and traditional settlement, although it has been recognised as a 'city' having municipality since 1953 i.e. approximately fifty years ago.² It is also one of the interesting places in the northern side of the Persian Gulf, due to its natural and cultural attractions. In fact, this small area "plays an important historical, economical and strategic role in the region".⁴

As Sani Al-doleh in his valid book "Merat Albaldan" writes, the historical background of this region is from 336 BD since Alexander the Great sent food supplies to the military through this port. Kangan Port, as Valara states, has started to develop after that Seiraf Port was destroyed in tenth century AD so that Kangan has a customhouse in 1916.⁶

The beautiful mountains in the North-East, in addition to the wonderful and fish-populated sea in the South-West are the main natural resources for the city. Also, the 'Mianloo Mineral Thermal Spring' in the North-East and the 'Mond River' in the South can be the most interesting natural attractions in this region. In addition, traditionally, man-made spaces such as architecture had interestingly adapted with this specific environment, climate and nature. "Nasoori Castle" in the old Siraf Port is one of the most fascinating architectural samples which have remained for hundreds of years.² The Port of Siraf or (Bandar-e-Siraf) (Bandar-e-Taheri) being one of its districts, was an important centre of trade and commerce in the 4th century AH in the Persian Gulf.⁴

2.3 Geography, nature and climate

The climate is hot and humid with very hot summers and mild winters. Statistics reports that the highest temperature reaches 52C while the lowest one is 0C.³ Due to the closeness to the sea, this sultry city has a high rate of humidity. In the summer season, a wind called 'Hundred and Twenty Days Wind' blows in this region. This dry and scathing wind, which is known as 'Tash Bad' which means 'Fire Wind' in the local term, sometimes impacts highly on the city life and its comfort. In addition, earthquakes and floods are two of the main natural events that should be considered when developing in this area.²

This region has a low rate of rainfall which mainly only occurs during the four months between December to March. Therefore, this place has always confronted with the lack of water resources.³ There is no surface water or permanent river flowing in the region but as it situated between mountains and the sea, there are a number of seasonal rivers passing through the city, but are most of the times completely dry. The irregular rainfall causes a seasonal overflowing of the riverbeds especially in recent years due to some physical interventions on the waterways. Moreover, due to the soil quality, there are not enough underground water resources with suitable quality to sustain the upsurge of water during these months.³

However, the agricultural productions are based on underground water resources. Although it is situated next to the sea, underground water resources are soft and usable, so people traditionally built water shafts to meet their needs.³ Due to the soil quality and the climate, the specific vegetation of the region naturally consists of short plants with rough leaves and surfaces.²

2.4 Population and Culture (gender, generation, ethnicity, religion)

According to the statistics in 1385 (2006), Kangan County, which comprises the city of Kangan and its rural areas, consists of 95,349 people i.e. 10 percent of the population of the Bushehr Province. In addition, statistics estimate that the city itself consists of 25,000 permanent inhabitants in average with 3035 family units.² A noticeable number (12,000) of this population are temporary inhabitants consisting of skilled and unskilled labour forces working in the industrial areas of Assaluyeh and Pars-e-Jonoubi. In Kangan County, statistics indicate that 52% of the population, which is nearly half of it, reside inside the urban areas whilst the remaining 48 percent reside in the rural areas.² In comparison to the other counties, this proportion shows that rural lifestyles have a significant role in the region. In addition to this, over 80% of the people (the majority of which are male) are basically educated. But, the lack of high-educated institutions has resulted in its dependence on the other cities as well as its failure to provide expert forces for near industries. The fact that 43.89% of the population has between 15 and 29 age shows that the Kangan County has a young population and comprises the highest rate of youth within the Province.³ This invites a proper action for responding to youth's needs including job, education, entertainment etc.

The population's language is mostly Farsi (Persian) with a local dialect. Due to the close economical relationships with the Arab countries on the other side of the Persian Gulf, a group of the people speak Arabic.² Experiencing a changing history, a diverse range of ethnic and religious groups has settled down in this settlement while they have already left their physical and cultural traces. For example, the old Jewish temple, which has been destroyed recently, is one of the visible traces of other cultures who have marked the place. This multi-cultural experience in the collective memory can provide the inhabitants to adapt the culture of the 'others' with less resistance. In his book, "Persian Gulf in Colonialism Age", Dr. D.R. Valara writes: "In 1911, two hundred and fifty family units settled in Kangan Port, while two hundred of them were Jewish and the rest were Arab or none-Arab (Fars)." ²

166 Today, however, the majority of people are Fars and there are no more Jews. In addition, the population following Muslim-Shia are in majority and the minority of the people follows Islam-Sunni.

The initial core of Kangan was traditionally composed of two main districts: 'Mahaleh Arabha' and 'Mahaleh Koozehgari' which means 'Arab Area' and 'Pottery Area'. Despite, having a peaceful relationship between religions, this urban division was apparently based on religious separation so that Arab Area was settled by Muslim-Sunni groups and the other one was in use by Muslim-Shia groups. According to the City Master Plan, as the old town has developed during the years, today the city of Kangan is divided into six districts, nine urban areas and one city centre.³

2.5 Economic activities

Due to the coast and port situation, the main local economic activity is mostly fishery and sea-trade in this city. Activities related to the sea have been integrated within the culture of this society as a part of their cultural identity since many years ago. The hot climate and salty soil do not allow them have noticeable development in agricultural activities.³

Industrial expansion in Bandar Kangan has already begun to meet major growth due to its close proximity with the largest gas and petrochemical industries in the country. The huge gas resources, called "Pars-e-Jonoubi" which is one of the largest energy sources around the world, have caused the vast social as well as physical changes and rapidly transformed this region from a sea-based place into one of the industrial poles of the country in recent years. Assaluyeh (Special Economic Zone Assaluyeh) is one of the industrial sites near Kangan. It is in fact the largest area of industrial functions in Bushehr Province.⁵ The 'Site 2' called 'Kangan Site', which is even two times bigger than Assaluyeh Site is located in 10 kilometres from the city. Furthermore, one of the most important cement factories called "Sarooj-E-Kangan" is situated in 12 kilometres from the city. This factory is involved in export activities to some European and Asian countries.² All these have led to attract the vast investment in different economic sections, which has changed the image of the place into an economic-industrial region. The liberalisation trade policies in the free trade zones recently have resulted in importing foreign products. In addition, the special economic zones (SEZ) have been established in order to encourage the transit of goods without being subjected to normal taxation duties.³ However, regardless of huge gas industries called "Pars-e-Jonoubi" in national scale near the city, there are not considerable local industrial

activities inside the city. Although Kangan Cement Factory is the main important large industry belonging to the city, it functions also nationally and not locally. For many years handicrafts have been prevalent in this region, particularly rural areas. A few small fascinating industries such as pottery can be still found in this city. Due to the importance of water in this region, making devices for the cooling or sustaining of cool water have been common since many years ago. Their productions generally are water jars, jugs, Ghelyan and pitcher.³

2.6 Occupation

The main occupations of these people consist of industrial activities, sea trade and fishery. Although the city is highly influenced by the national gas industries around, its local productive activities mainly depend on the sea, which need to be developed. In recent years, owing to the huge gas and petrochemical companies, nearly 50% of the people are involved in the service activities related to those industries. Since the majority of these people are low educated and low skilled related to the industries, these local forces are employed mostly as the labour forces in those companies; While the high-position jobs are occupied by experts from large cities particularly Tehran. Furthermore, 35% of inhabitants undertake the professions related to the sea such as fishery and sea trade, 10% has agricultural activities and the remaining 5% is involved in governmental and official activities.⁴ Research shows that passive activities as well as consumerism activities meet an increasing growth, while productive activities such as pottery, bakery and livestock have a reducing rate. A recent change in the economic conditions has caused many sea traders, despite being wealthy enough from their trades, to switch to property investment due to the high demand for properties in the area.

Kangan Port has a close sea relationship with the southern countries across the Persian Gulf, the Sultanate of Qatar and UAE. Since the cities such as Dubai and Abu Dhabi already are developed as the economic and business poles in the region, Bandar Kangan as well as other similar small cities is in a situation to be attracted to those power poles. On the other hand, according to the statistics, due to the young population rate, an increasing number of people enter the labour market each year, which can provide labour forces for those capital markets. Therefore, lacking of the self-production can lead such small communities to be merely a consumer market for those capital trade centres.

With the increasing development in the energy industries around the city, some companies have resorted to buying houses and properties from the inhabitants of rural areas to aid their growth. In some cases, they have even occupied an entire village to establish and develop their activities and have forced the people to displace.

Instead of creating the permanent jobs and sustainable conditions, they have paid people money or have provided them with new houses in new areas. The consequence of these actions have led to the inhabitants ending up in a job-less community cut from its real life and root, once their payouts have been spent. However, In general statistics indicate that the city not only has a low jobless rate in comparison to the other regions in the province, but also attracts immigrants and even house them to work in the industrial activities.

2.7 Migration

In recent years, regarding the large industrial developments in national scales around the city, a considerable number of various ethnic groups from all over the country and even near countries have immigrated to this region in order to find job, particularly in this recent economic recession.² This, consequently, can cause the related socio-cultural effects on this habitat. Moreover, due to these employment prospects which attract labour forces, the rural migrations from rural areas have resulted in slum areas in the city.

While the region is undergoing one of the worst droughts and economic crisis in its recent history, the numbers of agriculture-based communities are settling in Bandar Kangan where the Industrial activities as well as trade activities are the alternative options. Therefore, the current draught and current economic crisis in the country, causing a high rate of unemployment, which is intensified by the recent global economic recession, can be regarded as the main reasons for the growing numbers of those immigrants into Bandar Kangan. This migration is mostly caused by the influx of people escaping poverty and draught in the hope of a better life. Thus, apart from the permanent inhabitants, the city provides the short-term housing for labour immigrants as well as an interim stay for transiting people and goods. Therefore, this context nowadays has encountered the communities from different cultures and ethnicities who have not totally integrated with the host city and new houses.

On the other hand, many youth of Kangan dream the life in the main advanced cities particularly Dubai or the big cities inside the country such as Tehran and Shiraz. This passion drives a number of emigrations from this town to the large cities in the hope of a better life. In general, the people have a notable traffic with the large capital markets and economic centres across the Persian Gulf such as Dubai and are exposed to their effects. These face-to-face relations inevitably impact on the current conditions, as they constantly compare their conditions with 'others'. As a result, the industrial poles around along with the capital economic poles over the Persian Gulf, both can contribute to make a critical and tensional status in Kangan.

3. From culture to architecture

3.1 City life

The activity of the city typically begins at 3-4 am in early morning when fishers go to the sea to catch fish for the morning market held everyday around 9-10 am by the sea. When fishers come back from the sea, they usually sell their catch in an informal open bazaar near the coast. There is also a covered market allocated to fish trade near the coastal road. In addition to the vendors who sell their different types of goods to the local customers in the bazaar, a number of people from other regions come here to buy fresh fish. All these economic activities along with the other shops in the town usually close at noon and people return to their houses. However, some offices and companies which start their work usually at 7-8 am, continue to work until 2 pm by using the cooling facilities such as 'Air Conditioning'. In fact, due to the hot weather people go home and have a rest with their family when the sun is at its strongest peak. Then, urban social and economic activities restart again around 6 pm until 10-11 pm when the weather gets milder. In the evening when the sun sets, many people sit in front of their doorways with their families or neighbours to talk and smoke 'water pipe'. Moreover, some other people go even further to places for shopping and walking in the city centre, 'Vahdat Street', or go to the coastal park for refreshing and entertaining social activities. In addition to family interactions occurring during midday, this lifestyle can help to economise the energy spent to cool public spaces during the hot midday, as people use less energy when they rest at home in comparison to when they have activity during work. Furthermore, social and economic activities in public open spaces in the evening, when the mild weather in open spaces bring naturally more environmental comfort, accordingly create the suitable conditions for social life either in the local or urban scale.

Relying on the self- productions, the local foods such as fish, tomatoes and dates are some of the most important productions in this place. As Mr. Safaei, one of the inhabitants, said: "most of our dishes are made by fish and you can hardly find a food with no fish". However, this society is highly dependent on its neighbouring province, 'Fars', in other different sections including agricultural and constructional industries.

City fabric

The general urban organisation is a linear pattern along the sea. It is composed of a main boulevard along the coastal line, which was a suburban ring in the past. This East-West boulevard is branched to a number of local streets which cross it vertically with a North-East orientation in order to access the residential areas. Today, this extremely wide boulevard, which plays a role as a transit way to connect Bushehr to Bandar Abbas, passes through the heart of the growing city and divides it into two distinct separated parts.

Although the boulevard contains some economic activities, the main branched street called 'Vahdat Street', as the city centre, plays a main role in the social and economic life. While it is full of various shops on the both sides, this central street has a position to connect the separated areas in its both sides where settled by Sunnis and Shias. However, its narrow sidewalk without appropriate design for social interactions along with the wide car road has reduced its important role as a social space. Today due to the increasing transport traffic and the enlarged width, this role seems to be more colourless. Since the width and scale of the street have an important role in the organization of urban life, the increasing the street width is not always led to a sustainable development; but also it can destroy the valuable social urban structures. Such developments not only make the urban space out of human-scale, but also transform it from being under control by the human and in-

stead under control by vehicles. Moreover, with giving more respect and hierarchy to the vehicles rather than pedestrians, it encourages more vehicle traffic and therefore can lead to more pollution. Additionally, whilst being a transit way, these wide streets gradually lose their social role in the urban space. In general, the expanding wide roads in this urban area can be regarded to cause social, as well as environmental problems in this developing settlement.

Social public spaces

Regardless of educational and medical spaces, the main social spaces are generally concentrated in specific public areas with an economic nature. These areas, which include both sides of the main boulevard, city centre 'Vahdat Street', fish market, morning market, evening market as well as the coastal park, can play an important role in the social life of this habitat. These spaces, which contain mostly economic functions, not only bring and promote livelihood in everyday life of the city, but also provide the ground for social interactions during economic activities. Such spaces, which have been formed informally by the people, need to be developed and supported based on its social roots.

Due to the lack of shade in the urban and public spaces, the sellers and vendors have built creatively very interesting shelters and structures to protect themselves and their costumers. These informal self-structures, which have been built by the people, are the simple, light, temporary and flexible structures made by local materials.

Whilst the central market which is stationary, the traditional market is transferred from the coastal area in the morning to the side of the main boulevard in the evening. This can be because the morning market is more based on the fresh fish while the evening bazaar is more based on the people traffic. Although a formal and covered market space has been built by the municipality next to the self-built bazaar near the sea, it has not been used by the people at all for some social reasons. As another case, a market building, which is built away from the city for evening market, also has been left unused, while the vendors hold their evening market in an open space nearer to the Main Boulevard and city centre. These narratives can be the examples which approve the role of social studies and community participation in the physical planning and development.

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New public spaces

Apart from those traditional bazaars, there are several new markets expanding. These new commercial centres are mostly concentrated in the city centre or the main boulevard e.g. 'Pardis Trade Centre'. Because of the transit and port situation, the influx of foreign goods is flooded to these markets from the capital markets around such as Dubai and China. These markets can have a considerable influence on the consumerism lifestyle, the city image and the urban identity. In addition, in comparison to the traditional markets, their neglect to the environmental issues e.g. material, lighting and cooling can be regarded as a threat for the urban development.

Green public space

The main public green space in Bandar Kangan is the long linear coastal park positioned on the water front to the South-West of the city. This long green space, used mostly in the evening time, creates a vast space for a range of informal social activities and communications. The new long park provides sports grounds, pleasure facilities as well as the picnic areas which form the major features along the coastline. While this public space is mostly without enough shade and light, it is used by people going out for refreshing, picnicking, drinking tea, smoking the water pipe as well as using the exercise machines in the evening. This lifestyle can be a way to save domestic energy as people leave their house in the evening time, turn off their lighting and cooling systems in order to use the natural wind. Being outside with the mild evening breeze from the sea can create a pleasant environment after the overbearing heat during the day time which keeps everyone inside. However, as the gatherings are mainly based on family or friendship units, social communications and interactions form into clique's and prevent people to mix with other groups. Thus, this 'public space' still can not play a role as a 'social space' because there is not enough social activity in comparison to the bazaar spaces. In addition, the lack of green space has resulted in a dry and dusty image of the city. Therefore, in such a

climate, these public green spaces seem to be a social as well as environmental necessity for the urban life in Kangan.

Although the public green spaces for the urban scale are expanded, such spaces for the local scale are also crucial for the growing society in order to bind the neighbouring communities. Furthermore, the green public spaces can cause some mixture between different social groups such as old and new inhabitants, old and new generations as well as different classes, genders and ethnicities. However, since the public green spaces have been built mainly in an urban scale and situated on the waterfront away from the local residential areas, many communities lack a local public space for social interactions in the neighbourhood units.

In addition, some urban elements, which have been used in public spaces e.g. roundabouts or the city entrance, not only do not represent the local cultural identity but are also not related to this specific context. Such urban signs, which can play an important role to empower the collective identity, need to be carefully reviewed in urban development.

Transit tourism

Kangan's natural attractions along with its fresh fish market have made Kangan a suitable place for tourists to stay. In addition, transit tourism through Kangan has been increased, while providing an interim base for domestic tourists travelling towards their final destinations such as Bandar Abbas and Kish. As the city has not enough short-term accommodations, the travellers usually stay by the coastal park and use their self pitched tents to rest over night. However, due to the climate, the tourist season takes place only during the short winter time for three months when the weather is mild. Therefore, the noticeable areas particularly the sea-front public spaces, which are busy during the Nowruz national celebrations in March, remain almost unused in the rest of the year. These public areas that are full during the busy tourist season, need to be redefined to be under-used during the summer. Due to the hot weather during the summer, providing the sufficient shading and lighting in these spaces can pave the ground to pose them as a multi-purpose space for social activities.

Environment and energy

The relationship between people with local nature is mostly through sea, which is still partly alive in this coastal area. But, a large arrival of new machines and technologies in unrelated parts can change their life style from dependence on sea nature into dependence on unrelated machine and industry. Instead, it seems that employing the technologies related to their capabilities, culture and climate can empower more this community. For example, developing the industries and technologies related to fishing and sea-trade can be preferred to other sections.

In addition, while the sea productions are the main local strengths as well as the water is the most vital need, the water pollution is a real threat to this ecosystem. In this way, this developing society has been always under the danger of epidemic diseases related to water pollution. Moreover, lack of sufficient urban drains to direct the waste water away from residential areas has led to the polluted slums. Water pollution can be assessed due to several reasons including the industrial pollutants and the discarding of urban sewage into the sea along with global warming in the seas. Therefore, the phenomenon of water pollution raises a real threat to both ecological and social aspects of the region; either the communities dependent on sea or the eco-system based on water.

Furthermore, the small size of the city has resulted in dependence for the use of private cars and vehicles, as the public transport system is virtually non-existent. Moreover, due to the hot climate, people mostly prefer to travel with their private car with its cooling systems as opposed to walking to destinations, even for pleasure. The increasing use of single private vehicles for transportation in the city could reduce the opportunities for desired social interactions in the urban public spaces. This can also be regarded as another cause for environment pollution as well as wasting fuel.

Housing and Architecture

Most of the houses are self-built without any efficient supervision by the urban management. In fact, new residential areas are expanded

rapidly with less regard to an architectural or urban master guidance and regulation specific to this context. Hybrid architectural styles, which are principally the same as other cities around the country with different climate and culture, are being used in new urban areas. However, traditional styles in old areas are adopted to satisfy the new needs for new lifestyle. Hence, these urban changes hardly have resulted in proper relationships between local with new styles, promising a continuous urban identity.

For example, the courtyards in traditional houses played a main role in private houses; as a social space where family members gathered as well as an environmental element which circulated the air in the spaces. But, nowadays new architectural styles house people in the apartment units where completely are strange to this community, the local lifestyles and needs. Another example is building a light structure called a 'Kapar' on the roof of the house. 'Kapars' have been common devices to use wind against the hot weather. However, this simple but efficient solution has not been developed to adapt to the new constructions.

Materiality

Today, the material preferred to use for structure is mostly 'reinforced concrete structure' because of the humidity. The material used for foundations are usually stone from near mines in combination with 'Sarouje'; a traditional building material which is made of clay, limestone and goat hair. In addition, depending on the owner's wealth, the material used for the finishing facade ranges from stone plaque and brick to decorated cement. Affluent owners mostly make a use of stone plaque particularly the 'Neiriz' stone from the Fars Province, while middle classes employ mostly brick whereas other classes use cement to cover their house's facade. A glance at the city shows how the local materials such as stone, brick and wood are replaced by concrete, cement and steel. While the steel attracts a large amount of heat from sun and will be oxidised by humidity, increasing usage of steel instead of wood in different parts e.g. outer facade is a critical issue in such a hot and humid climate. A large quantity of using concrete and cement in finishing layers of buildings has not only represented a rough image of the city but also has caused a waste much in cooling energy. Moreover, inappropriate usage of glass particularly in facades with a large surface can result in wasting more energy for cooling due to the uncomfortable environment caused by 'Green House' conditions inside the buildings. A large usage of asphalt to pave the pathways, both walkways for pedestrians and roads for cars, has led to attract and keep a large amount of heat from the sun during the day time and then return it at night time. In addition, this material creates an unfavourable sense in public spaces particularly residential areas.

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Physical Development

Today, the city is composed of three main historical parts; old, current and new. Regardless of the old area located in the centre, physical development has mainly followed a linear development along the Main Boulevard and coastline with a noticeable growth towards the North-West direction. This can keep reinforcing the society's interplay with the sea. But, in recent years, due to the physical limitations, this growth has been mostly taken place in the areas away from the sea in the North. The new areas, situated mainly in the North-West away from the sea and towards the mountains, are represented by a grid organisation with wide roads, typical apartment blocks (3-4 floors), self-built houses and several tall buildings. This is an expanding area with less specific character related to the context, as it is almost similar to any places in the country.

Conclusion

Urban growth in Bandar Kangan is related to both increasing industrial developments and its current port activities such as fishing and the flourishing trade between Iran and Persian Gulf's countries. These two variables outline the factors affecting the current or future junctures of the urban life in Kangan. However, urban physical developments can be recommended to follow the coastal line to support their dependence on the sea as well as to enjoy the natural breeze blown from the sea. In all these developments, the factors of water optimization as well as wind energy efficiency and solar energy efficiency need to be regarded as priorities.

Due to the development of the gas industrial in Assaluyeh, as Mr. Reza Ahmadian the consultant of the 'Kangan Master Plan' states, the city has a high growth rate in housing the immigrants in recent years. However, the physical development of the city is more horizontal rather

than vertical. (3) It means the physical growth has taken place mainly on the outskirts of the city. While the energy installations in the region have created the large economic activities, it can be also regarded as a factor limiting the city and making some problems. In fact, its large and national power with no respect to the local areas surrounding it can destroy the small local powers. In addition, Flood conditions in time of rainfall and its potential danger for this city are one of the main threats to Kangan.

In conclusion, the seacoast areas, good land access to neighbour cities and peripheral port are the most significant capabilities of this city. Although urban spaces should be protected against the warm wind and hot sun, the urban development in this context needs to be based on three main factors including efficiency of 'solar energy', 'wind energy' as well as 'sea energy', with respect to all economic, socio-cultural and environmental aspects.

Notes

¹ Wikipedia. <http://en.wikipedia.org/wiki/Kangan_County>, viewed Jul 2009

² Kangan Municipality Brochure, 2009

³ Maab Consulting Engineers Co. 'Kangan Master Plan Studies',

⁴ Iran Tourism Organisation website. <<http://www.itto.org/city/?cityid=126&name=Kangan>>, viewed Aug 2009

⁵ <<http://www.yellowinfo.xagro.net/IranTourist/Iran/Boshehr.aspx>>, viewed Aug 2009

⁶ Sani Al-doleh "Merat Albaldan"

⁷ Giddens, A. (1991) 'Modernity and Self Identity', Cambridge



City Walk way, Sirik, Hormozgan





Nakhl- e - Taghi, Bushehr,2009



Bandar Abbas

Transit City

Laila Widari Bahrin



180 The geographical location of Bandar Abbas has been its defining character since its foundation pre- 600BC. However, as growth increases and proposals for expansion to the city draw more people from rural areas slums become rife as the city tries to deal with its quickly increasing population. The city is currently expanding towards the North creating more high-rise homes for its inhabitants to deal with its swelling population. To the South of the city its coastal developments are radically changing the Bandar Abbas skyline. With urbanisation and port activities rapidly driving change in a city what can be recognised as a coherent contemporary cultural identity for Bandar Abbas?

Bandar Abbas: An Introduction

Bandar Abbas lies on the Southern coast of Iran on the Straits of Hormoz. Due to its strategic location on the Persian Gulf, Bandar Abbas has been a major naval base (since naval headquarters moved here in 1977 from Khorramshahr) though serves as a major shipping point and has a long history of Intra Indian ocean trade with India and East Africa. To the Europeans who visited in the 1400s Bandar Abbas, then Hormuz, was a 'vast emporium of the world'; to the Chinese admiral Ma Huan it was the best managed port in the Indian Ocean and to Ibn Battuta ca. 1347 it was a fine and large city with busy markets¹. At an average altitude of 9 meters above sea level, the city lies mainly on level ground. Expansion to the city has been along the sea front resulting in a long and narrow city with major boulevards running in a East/Westerly direction. Nearby elevated areas are Mount Geno 17km to the North and Mount Pooladi 16km from the city. Recent development of the city has seen expansion toward the hilly Northern areas of the city. Here, modern multi-storey housing is rapidly being built closer toward the Shaheed Rajaei freeway. Further North, a natural pass through the Payeh Mountains 250km to the North of the City facilitates transport links between Bandar Abbas and the rest of Iran.

Currently, the factors that are affecting major building works in the city are its trade and port activities. The subsequent swelling of the urban population has resulted in the need to integrate communities through policy driven schemes. Major public spaces play a major part in the life of the community in Bandar Abbas and is shaping the way its inhabitants use and ultimately view the city. Still, its inhabitants are nostalgic for quieter times and glimpses of an identity inherently belonging to Bandar Abbas seem to appear in pockets around the city. The following section looks at the external factors affecting life and living in a city seeing the beginnings of an influx of people and rapid globalisation.

The Port of Bandar Abbas: Trade, Transport and Tourism

Economic growth in Bandar Abbas is reliant on its current port activities, the flourishing cross border trade between Iran and UAE, increasing transport links on land and tourism. This section outlines the factors affecting the current exigencies of city life in Bandar Abbas.

Transport. Having already established land connections into Central Asia, the 2005 draft agreement for the Trans Asia Railway² linking North Europe and South Asia through Bandar Abbas will provide yet better re-export potential. This new North/South corridor is set to compete with existing ship traffic thorough the Suez Canal.

Beyond Kish and Qeshm islands, 53km across the Persian Gulf is the Sultanate of Oman and the UAE. With Dubai and Abu Dhabi already established as well connected regional transport hubs, Bandar Abbas is in a position to provide cheap land and labour supplementing and expanding from growth from the other two cities. According to the 2007 International Monetary Fund Country Report on the Islamic Republic of Iran, an estimated 750,000 Iranians enter the labour market each year. With unskilled, skilled and foreman labour rates being up to half the rates compared to those in the Jebel Ali and Sharjah free zones, industrial expansion in Bandar Abbas has already begun to see major growth.

Trade. Kish and Qeshm islands both 17km and 22km from Bandar Abbas respectively, have played a major part as both points of entry from the Straits of Hormoz as well as tourist destinations. In September 2003 the Iranian Parliament approved the free trade zones (FTZ) act declaring Kish and Qeshm Islands free trade zones. Thus liberalising trade in Iran and attracting foreign investment. In addition to the free trade zones, special economic zones (SEZ) have been established with the sole purpose of promoting the transit and reexport of goods without being subjected to normal customs and taxation duties and regulations³.

Tourism. Kish island's unique coral features and Qeshm's natural attractions coupled with its historical architecture have made the islands off Bandar Abbas popular tourist destinations. Major growth in tourist facilities on the islands have made them more accessible and have become points of entry into Iran. As a result, tourist traffic through Bandar Abbas has increased, if only to provide a launching base for domestic tourists to travel to the islands by boat. However, due to the climate in the region, the tourist season occurs outside of the 9 month long summer.

With the natural features of the islands being the main attraction for eco-tourists into the area, water pollution in the Persian Gulf is a real threat to the tourist industry. Implications and possible causes for this is discussed in the section to follow.

Slums and Smuggling

A substantial channel of smuggling is currently going through Kish Island on the Persian Gulf where Export Processing Zone duty exemptions are available and used to cover imports going into the country. The estimated value of these imports vary from US\$3 to US\$8 billion a year. In addition to smuggling of goods, reports of illegal immigration into Oman and the UAE via Bandar Abbas are not uncommon. With the journey time between Bandar Abbas and Ras Al-Khaimah in the UAE being 2 hours by high speed boat illegal migration is not unexpected.⁴ This illegal trade and migration is further fuelled by the influx of people into the city trying to find work and instead finding themselves in poverty. As a result the city remains either a refuge where hopeful migrants go in hope of escaping poverty and drought or a transit point for people and goods to their final destinations. What remains are communities that have not fully integrated with the city living in hastily erected homes.

With busy factories and employment prospects in both skilled and unskilled labour forces, urban rural migration has resulted in slum areas around the city. Most remain poorly maintained although the municipality of Bandar Abbas have been responsible, and in parts successful in providing services to these areas. They are found in parts toward the South of the city by the sea front where inhabitants catch and sell fish to provide income for their families. They are also found toward the North of the main city centre where sanitation has been problematic. Outbreaks of illness related to contamination of the water supply have not been uncommon. However, large, open drains have been built in an attempt to facilitate the moving of waste water away from housing. This has not been without consequence as the untreated waste water is discharged directly into the sea causing raising concerns over water pollution in the area. The occurrence of red tide, a phenomenon whereby fresh water algae rapidly accumulates in the water column results in marine wildlife mortalities has been seen to occur in the waters off Bandar Abbas. The cause of red tide has been attributed to pollutants, the dumping of urban sewage into the open sea as well as systematic increases in sea water temperatures. As reported by the Iran Daily on August 5 2009, the Persian Gulf and Oman Sea Research Centre the condition is currently being monitored although it appears that the current concern is the removing of the effects of the red tide. The occurrence of the red tide poses a genuine threat to both the livelihood of the fishing communities in the city as well as to the eco-tourist trade of the islands.

Another reason for the growing numbers of those migrating into Bandar Abbas is the draught condition currently being experienced in Iran. Therefore the numbers of agriculture based communities are settling in Bandar Abbas where the buying and selling of imported food produce is a viable option.

Public space within the city

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Public space in Bandar Abbas is largely represented by the large green areas and walkways positioned on the water front to the South of the city. Used primarily in the evenings all year round, the green spaces provide ample space for a range of activities. The warm evening breeze from the sea is a welcome change from the sweltering heat of the busy bazaars during the day. The new Dowlat and Mellat Park, a 2km long park situated to the East of the city provides sports grounds and facilities as well as the covered picnic areas that are a common feature along the shore. As it is the largest park in Bandar Abbas and located further away from the city centre, a bus terminal facilitates transport to the park. Still, its location beyond walking distance from the main city centre mean that only locals living close to the park or larger groups arriving by car fully utilise the space. Smaller parks toward the city such as the Bustaneh Kish and Lavan Parks are more frequented regardless of their space constraints coupled with somewhat less picturesque surroundings and noise from the passing traffic. These smaller, brightly lit spaces are used equally by people out for evening walks, groups of people sat smoking the ghalyun water pipe on concrete plinths by the water as well as those utilising the purpose built exercise machines in the park. However, social interaction here remains minimal as the activities that take place here do not lend themselves to the mixing of different groups.

Users of these parks are a mix of local inhabitants, tourists as well as the homeless, all of whom have travelled a certain distance to use its facilities for different reasons. This mixed user base for the parks have resulted in an assortment of architectural typologies. For instance, for the tourist – there is an array of Iranian wind chimneys showing examples from the different provinces in Iran as well as a water cistern structure used as a restaurant. These are concentrated towards the new park to the East and provide backdrops for holiday snaps along the water. For the local – smaller, less conspicuous picnic huts and the large plinth seating areas are located on the outside of the brightly lit spaces. These, dotted closer down toward the water provide place for spectacle. Here the physical space of the plinths suggests a somewhat externalised version of the traditional home courtyard. First, barriers of light suggest a level of privacy exclusive to those perched on these small concrete islands. Secondly, as walkways are rarely built leading towards these plinths, intruders are made to walk either on sand or uneven rocky thresholds. To the local Bandar Abbas inhabitant, these areas are places to see and not to be seen.

Public space within the slums

Housing within the slum areas of Bandar Abbas constitute of winding roads around walled in homes. Homes are self built and expanded

without building permission and often with the large breeze blocks found on the larger construction sites. They are often grouped together by the township that its inhabitants originated from (for example the large Chahrestania community to the North of the city). Thus this has resulted in the migrant population remaining very much outsiders to the city they live in. Still, steps are being taken to help the situation as the Iranian Housing and Urban Development Organisation sponsored by the World Bank has undertaken physical building work to help integrate the migrant communities with the cities inhabitants. This includes the building of green spaces, schools, cultural centres and roads within the communities. However, while the large green spaces that have been built have allowed some intermingling between the old and new inhabitants many remain closer to their homes within their own communities. A possible reason for this may be because a majority of public green space is concentrated on the water front away from the main residential areas to the North.

These small areas in the built public space are reflective of the smaller pockets of spectacle located within the neighbourhoods. Often on street corners or under shade, inhabitants of these spaces are often those living in the area. Keen to watch over the comings and goings into their living space, people appear more receptive to idle chit chat amongst outsiders. One local, Mr. Ali Lashgari aged 72 years had a particularly nostalgic view of the city. Claiming most building work that had taken place in the last thirty years replaced the older, simpler huts that once defined their living space. During his time other public facilities like the Galledari bath were still being utilised. Now, the bath is a tourist attraction and exhibits the traditional bath heating system which appears novel and of a different time.

Smaller meeting places are wedged into the neighbourhood fabric. Characterised by their more traditional building materials that use porous sea stones called Saruuge held in place with a mixture of clay, limestone and goat hair. These are often lost in the newly built breeze block multi storey apartment buildings. However, an attempt to reclaim the lost space sees an introduction of multi-purpose sport courts that have been inserted into the residential areas. Sport, it seems, while allowing the younger generation to mingle and interact has left the older generation Bandaris to stay within their neighbourhoods.

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Bandar Abbas: Transit city

On its surface, Bandar Abbas represents a transit city. Architectural styles are imported and built along its water front for the purposes of economic growth, while traditional styles are adopted casually to satisfy the tourist need for cultural landmarks. While these represent current trends in the architectural cultural identity of the city, the segregation of certain public space and community has been an ongoing struggle in the city for many years. For example, the small Hindu temple in the city centre that features prominently in the tourist brochures and images, is a novel sight in the Islamic city amongst the azure blue mosque domes. However, it remains closed to the public and can usually only be seen from outside its gates where local fruit sellers have set up shop. Its large (100m²) and shaded grounds are cordoned off from the active bazaar that has spilled over to its pavements. The remains of a building that was once alive with activity in this gated off section of the city, much like other, smaller spaces that have now become confined to the tourist trade, represent the relics of a transient populous.

As we have seen, the current economic growth of Bandar Abbas has been in some ways detrimental to the communities living in the city. Problems with smuggling, slums, poor sanitation and water pollution pose a threat to not only their livelihoods through tourist trade and fishing but health. However, what the public spaces do provide is an oasis in the city away from the crowded streets and busy roads. Still, the major public spaces that have been built have been done so with the visitor in mind, leaving the local population marginalised, utilising the cavities of unused space bordering these areas. Taken further into the city reaching into the neighbourhoods these green spaces could help reinforce these communities that have been forcefully divided by economic factors. With this, comes the possibility of bringing new life into the urban centre of the city, improving living conditions for its inhabitants and revitalising the architectural character whilst building on the existing delicate multi-faceted cultural heritage of Bandar Abbas.

Over the years transient communities have made their home in Bandar Abbas leaving behind remnants of their inhabitation. The current

migration into the city due to its growing economic development, contributes to the already rich ethnological variety of people that make up the city's inhabitants. Therefore it is no surprise that the Bandaris are keen to assert an aesthetic, albeit to the visiting tourist, that has been adopted from its collective histories. Meanwhile the boundary between the fleeting visitors, tourists and those who have had slightly deeper roots within the city remain clearly delineated. Take for example the gated Hindu temple and the islands of spectacle in the park cloaked in darkness watching over the vast and brightly lit parks. The tourist attraction is kept at arms length, leaving those entering the city unable to penetrate or assimilate into the local fabric. What this could suggest is the keen awareness, or possibly a resistance to being colonised by 21st century globalisation.

Notes

¹ Dumper, M. + Stanley B., Cities of the Middle East and North Africa: A Historical Encyclopedia, California: ABC-CLIO, 2006, pp. 69

² 'About the Trans- Asian Railway' <http://www.unescap.org/tdw/index.asp?MenuName=TheTrans-AsianRailway> (United Nations Economic and Social Commission for Asia and the Pacific Website; assessed 1 September 2009)

³ Sassen, S., Global networks, Linked Cities, London: Routledge, 2002 pp. 196

⁴ 'Migrants cross strait of dreams' <http://www.thenational.ae/article/20081103/NATIONAL/336260425/1010/mcfc.co.uk> (The National Website; assessed 25 August 2009)





Kish

Paradise Found or Lost?

Tim Makover



First impressions

My first impression of Kish, as we come in to land, is of a dry plate of stone, sitting in the sea, undercut by the waves. Its baked surface is spotted with low lying shrubs. Having landed, as we head into the city, I can see that its urban design owes more to traffic engineers than to anyone else. Although trees are healthy, grass is green and roads are in good condition, the never-ending central reservations prevent intuitive movement, pedestrian crossings are few and far between and buildings step back from the street rather than stepping forward to greet me. Street edges are amorphous; there is no clear pattern or plan. What is clear is that this will not be an easy place in which to get my bearings. I cannot see the sea – there is no ‘corniche’ as at Doha or Cannes. It is clear that this is a tourist resort both from the zany holiday graphics and the host of hotels wherever I look but it is also clear that this is no ‘Earthly Paradise’.

The car moves from roundabout to roundabout, from manicured boulevard to desert scrubland, past lumpy new buildings and half finished steel and concrete frames. Eventually we arrive at our hotel. It is hot, painfully hot, mainly due to the extreme humidity, but nonetheless it seems that this is a place where some people do walk and bicycle, even at midday, even in August, unlike so many cities of the Persian Gulf. In fact the weather here is very pleasant for nine months of the year.

We are in the main part of the island; “it doesn’t really have a name, people just call it the city centre”, Mr Behzad Shahandeh, the Tourism Promotion Director tells me the next day. Kish is a low-lying island of coral rock, 90 sq.km in area. On a clear day you can see the mountains of Iran to the north. It is fairly flat but there is some distinctive topography with the highpoint at the centre of the island being 30m above sea level.

It is an ancient trading post, part of the silk route across the Persian Gulf, from Bombay to Basra, and is now one of Iran’s primary resorts. ‘City centre’ is a misnomer. Firstly, with a resident population of 24,000, Kish is a town not a city. However as I gradually discover the development potential here and realise how many large projects are currently underway and in the pipeline, I decide that ‘city centre’ is an appropriate working title for this part of town. Secondly, as Mr Shahandeh is the first to point out, “Kish doesn’t have a centre, it has no sense of orientation. It’s amorphous; it lacks the classical harmony we are used to in Iran”.

Ferdousi St is the main avenue of Kish, but in spite of its line of hotels, amusements and shopping malls, this is not a centre; it fails to give form to public space. Strangely, as far as I could discover, there is no mosque in the 'city centre'; "that's because no-one really lives there" say Majid Karimi, my companion and guide. There is the abandoned casino, shaped like a spiky crown, at the end of a major axis, backing onto the beach, but more of that later.

Facts

The main resort is on the east coast. It has a port in the northeast which currently handles over one million tonnes of cargo each year with a four-fold increase projected by 2025. Statistics show that Kish is booming. The airport in the centre of the island receives 1.2 million tourists each year, again a figure which has doubled since 2004 and is predicted to double again by 2025. The resident population is now 24,000. Since 2004 this figure has doubled and is predicted to double again by 2025. Of this several thousand are students and about 3000 are native to Kish. The vast majority are Iranian nationals but the percentage of foreigners is increasing at a rate some fifteen times faster than that of nationals.

There is a Strategic Masterplan in place for the island, published in 2005 and a Detailed Masterplan from 1998. A fortified house, a bath-house and the ancient port have been excavated and reconstructed, and the Seljuq mosque is now underway. A thousand years ago, Harireh was one of the Persian Gulf's most important centres of pearl diving, fishing and trading. Kish is managed by the Kish Free Zone Organisation which has commercial status, although it performs the functions of a municipality. It is tax free and visas are not required. Iran's attitude to women's dress, entertainment and art is more relaxed here than on the mainland.

The position Kish has held within the Persian Gulf for millennia as an international trading post and as a 'bridge' between Persia and Arabia accords with its 'freezone' status and is reflected in its eclectic architectural identity.

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In 1973 the Shah decided to create a royal resort at Kish and the long curving beach on the East coast was chosen as the best location. A family of fashionable modern buildings were built between Ferdousi St and the sea, including villas, palaces, hotels and a casino. The Kariz is a beautiful place, especially the tree-filled open cut where the tunnels meet and a sweeping ramp gives access to ground level. The enterprising owner of the Kariz has renovated the tunnels and made this into a tourist attraction with a café and small shop at the bottom.

There are two original settlements in Kish; the 'city centre' along the northern half of the East coast, and Safein at the Northwest corner. The map reveals that the west side of Safein is older than the rest. "Yes, that's where the locals live" says Ibrahim our driver. He tells us that the oldest houses there are forty five or maybe fifty years old.

The North Coast

Before bicycling around the island, before looking in detail at the city centre or the beach or the new residential neighbourhoods, we decide to look for the roots of Kish. Is there something which makes Kish uniquely the way it is, something which defines its identity? The ruins of Harireh, on the north coast, between Safein and the city centre, are mostly still un-excavated however there are some significant things to see. The fortified house is a gem; a small courtyard with simple pointed arcades is surrounded by a set of vaulted rooms. Its simplicity and solidity and the charm of its curved lines makes a lasting impression. The port is a memorable piece of engineering. Built hard against the 3m high cliff edge, a natural quayside is created. Vertical loading bays have been cut into the rock, allowing for goods to be lifted from smaller boats at the lower level, tucking in under the overhanging cliff.

We move on, past the historic walled garden of the Sezham, to the nearby Kariz, one of the most extraordinary ancient water systems in the world. A network of tunnels, three kilometres long, has been carved deep underground, over a thousand years ago. Sweet water was collected

from aquifers beneath the island, providing all the water the island needed for centuries (water is now piped from a desalination plant on a nearby island). However it is easy to imagine more use being made of this amazing place. It would make a unique venue for art exhibitions or markets – food for thought for those who want to raise the profile of Kish as an international tourist destination.

From the Kariz, I can see five badgirs or wind towers, rising above the trees. They serve to cool the Ab Ambar, a reconstruction of a traditional domed well with two huge water drums served by galleries and accessed by a long staircase cut into the ground. The badgir is one of the great inventions of Persian architecture and it is to be found all around the Persian Gulf. The cruciform flue catches the wind whatever its direction and the opposite flue creates negative pressure, sucking air naturally through the building. The projecting beams were used to hang wet sheets on, to cool the incoming air by evaporation.

A little further along the coast we arrive at Safein (pronounced 'safeen', from the Arabic word for ship). In spite of its Persian associations, this is a traditional Arab village. Its character is evidence that regional identity is as strong as local identity in the Persian Gulf. Although this village is poor, it is rich in the original thick-walled, mud-built, single storey houses which are to be found in varying forms all around the Persian Gulf. I quickly get the feeling that Ibrahim was wrong about these houses being only forty five years old.

"When they built New Safein, the eastern part of the village, they didn't explain why. In 1978, when it was ready, the people from Mashe moved there and nine months later the Revolution happened." I had not heard about Mashe until now and I learnt that this had been the main village of Kish, further along the coast.

"They were not happy to begin with; some of the families had been there for five hundred years. Many of them went elsewhere; to the mainland, to Kuwait or Dubai, but some came here."

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It is easy to imagine this place as a charming fishing village, well looked after and welcoming to tourists but currently it seems sadly unloved. As we explore the narrow lanes and courtyards, certain architectural motifs can be seen again and again. The slightly 'battered' or sloping walls with upturned corners, the massive conical 'posht band' or corner buttress, the recessed panels at high level, formerly slots for air and light, now blocked up, the projecting rain spouts, the elaborated doorways; all these are designed elements, the product of both technology and aesthetics, developed over generations to make the harsh environment of this region habitable. Does this offer clues to the local identity and the architectural heart and soul of Kish?

The old mosque at the edge of Safein is run down but it is being refurbished. It is a beautiful building, with an open arcade and huge buttresses on the seaward side. The crude refurbishment work involves cutting metal air conditioning boxes into the walls, immediately adjacent to the original natural vents. Between the sea and the mosque a large new park is being built. It is clear that money is being spent on Safein.

We are lucky enough to meet Mr Daryobar, the 'chief' of Safein. He is coming out of the mosque beside the parade of shops which he owns, amongst other properties here and a farm at Baghou, the only rural settlement on Kish. He invites us to his house that evening where we are regaled with stories. In the 'mihman khaneh' or majlis, we sit on floor cushions at the edge of the room and Mr Daryobar's son brings sliced water melon and fresh dates.

"There are houses in Old Safein which are three hundred years old. Just round the corner is Ali Ebrahimi's house. He died at eighty and his father, who was a hundred years old, said that his own grandfather had grown up in the same house." We are beginning to find out the true value of the buildings of Safein for Kish.

I ask Mr Daryobar if he is happy about the new park, even though it has moved the shoreline further away from Safein. He answers with a quote from the Koran:

“You can predict that events will turn out badly but you cannot know what the outcome would have been if they hadn’t happened.” He is happy about the park.

“The President came last year and we asked him to help us renew Safein. He listened and arranged that work should be done.” In a later discussion with Mr Shahandeh, I am shown the report New Ideas and Projects for Investment in Kish 2009 and I discover that transforming Safein into a tourist attraction is more than a vague possibility. With a predicted budget of \$45m, a construction period of three years and a period for capital return of five years, this is an ambitious plan which runs the danger of ‘sanitising’ some of the gritty authenticity of Safein today. However something has to be done to ensure its future and, provided the local people can stay, this project will hugely enrich Kish. The sprawling new neighbourhood of Mir Mohana adjoins Safein and will benefit from having a focal point of this sort.

They are building a new fishing port here too; “families have been fishing here for centuries, as well as pearl diving, trading and farming.” These other ancient sources of income have ceased to be part of community life – trading is now on an industrial scale and pearling stopped here in 1982 – but fishing is alive and well.

Mr Daryobar also is not opposed to change, “If a bird comes, it stays a while and then leaves, but it brings good things. Time moves on”. Most of the evening with him is spent hearing the story of how Kish was founded by Gheish, a man who was swept there by a great flood from the mountains of Persia. His descendants, living at Harireh about a thousand years ago, blinded a young female student whose eyesight was so good that she saw a man on a camel, on the mainland, holding honey in one hand and oil in the other. In retribution for this crime against the student, Allah destroyed Harireh and the island lay dormant for many centuries.

1973

The previous evening I had met another of Kish’s old-timers, Mohammad Alavi. Alavi is an architect who has been working in Kish since 1973. He is now refurbishing the low-rise Taban Hotel at the south end of Ferdousi St, just next to the twenty two storey ‘Twin Towers’ project which is half complete. He was involved from the inception of the Shah’s masterplan to make Kish into a resort. Working with the Californian designers EDAW, and Mercury Architects from Tehran, he shares responsibility for a part of Kish’s legacy which is as significant as, and far more visible than, its historic fabric.

One of the key points of the masterplan is its lack of long-term vision. It did not anticipate the new centre of Kish becoming the substantial town it now is and the city which it could be in the future. Ferdousi St is set out as a feeder road to hotels, villas and the casino, all backing onto the beach. This has contributed to the lack of urban identity and connection to the sea which the city centre suffers from, but it has its benefits too. The fact that there is no ‘urban corniche’ in Kish, is one of its great assets because it means those enjoying the sea can escape from the car. Meanwhile priority has been given to a remarkable bicycle track running around the entire island.

My visit to the archive of the Free Zone Organisation revealed the greatest shock of the trip. Looking at an aerial photograph of 1967 I realise that the village of Mashe was obliterated to create the new resort. For me this discovery showed the 1973 Masterplan to be one of the greatest acts of cultural vandalism I have known, and also one of the greatest mistakes in urban design and the commercial planning of a tourist resort. Mashe, according to Mr Daryobar, was the lovelier of the two ancient villages of Kish. Its destruction echoes Allah’s attitude to Harireh a thousand years before, but with no good reason. To have refurbished Mashe and made it the heart of the new resort is just what was needed to give the Shah’s creation scale, character, an appropriate urban grain and the identity which it lacks. It is ironic that if Kish’s main short-coming is a sense of ‘placelessness’, the retention of Mashe would have been the answer. It is not a new discovery that heritage has value, both human and economic.

As we found in the Free Zone Organisation archive, a crucial part of the masterplan, the ‘civic centre’, was never implemented; presumably because of the Revolution in 1979. The ‘civic centre’ was at the angle between Ferdousi St and Iran St. In the style of its day, it emphasised

a forty five degree angle and set up a strong connection to the 'prow' of the island at its northeast corner; a site which is now sitting vacant, waiting for the 'Flower of the East' project to take root – see below. The primary building of the 'civic centre', the mosque, was never built. Perhaps the lack of this public building and the emptiness of this important corner, accounts for some of the 'placelessness' of the city centre in its present form.

At the south end of the beach a steep outcrop of rock, now the site of the Dariush Grand Hotel marks the division between the world of tourists and that of the Shah's winter palace. It is significant to the character of Kish that there is no enclave for the 'super-rich' to develop mansions and that the shore is fully accessible to the public, except at this one point. The original Masterplan drawings reveal a 'James Bond' stylishness of buildings with tectonic concrete fins and sloping walls. Almost all walls are sloped, forwards or backwards, and as I get to know Kish I realise that, whether I like it or not, this is as much part of the island's 'vernacular' as are the traditional houses of Safein.

Mr Alavi, who was a young man in 1973, attributes many of the key buildings, including the casino, to David Hilliard of Mercury. Perhaps the slopes were a response to the sloped buttresses of Safein. To my eye however, they speak of fashion rather than timelessness. It is ironic in a way how buildings with this motif are still being designed in Kish today while the 'timeless' simplicity of traditional Persian Gulf architecture is being ignored. There are not too many buildings of glass and metal in Kish – I wonder if they can keep it that way.

One of Mr Alavi's projects was New Safein and although it is now as un-loved as Old Safein, I was very impressed with its urban design. If we compare the plan of Old Safein – an organic plan of soft 'nearly rectangular' geometries, highly typical of the Persian Gulf Region – with that of New Safein, they are very different. Mr Alavi's plan involves arranging purely rectangular blocks in a very irregular formation to achieve a remarkably similar effect. The buildings are so plain that one would hardly know how old they are and this is to the architect's credit. New Safein could be a very pleasant place when it has been renewed. The mosque of New Safein, also originally by Alavi, was remodelled after the Revolution to reflect the non-local architectural style of northern Iran and the Sunni, rather than the Shia form of Islam. It is at this point, as we bicycle towards the looming 'Twin Towers', that I realise that there is no going back for Kish. At this point, the only way to save it from becoming 'just another resort' of mediocre quality (or worse), and to enable it to realise its full potential, is development; high quality development. Meanwhile its greatest peril is that ongoing development of the wrong kind (the process which is currently underway) will ruin it forever.

The Bike Track

Mr Alavi lent us his bicycles so we were able to navigate the whole coastline without using a car. The eastern beach is pleasant but rather patchy – disconnected and unkempt. As we move south, passing the Dariush Hotel and the former Shah's palace, it is surprising how many derelict sites we find in this prime part of the island. It seems that it is more attractive for landowners to develop virgin sites on the periphery than to regenerate existing building stock. If this is the case, they are running the risk of spoiling the 'Kish experience'. The long open path of the south coast is a relief, even in the heat. Strangely the wind is in the opposite direction from the prevailing northwesterly so we are pushed along like sailing ships. Open scrubland with some trees is broken by industrial infrastructure such as the gas plant. The coastline is mostly of coral rock, undercut by the waves, interspersed with beaches; the home of rare sea turtles. The rock is clearly being eroded but no-one seems worried about this – it is happening very slowly.

There is nothing to be gained by regretting the loss of the 'unspoilt' natural environment in Kish. There is little point too in regretting the arrival of 'lumpy' high-rise developments which are sprouting around the island – they are here to stay. What is of value however is to look for the most positive possible future for new development in Kish; how buildings and importantly, public spaces - the spaces between buildings – can achieve an appropriate character and lasting quality.

South of the 'Twin Towers', there is currently not much development but again, the land is not unspoilt. The landscape here is scarred by derelict holiday villas and remains of local infrastructure, so the only realistic answer is to carry on riding the tide of investment in Kish and to redevelop with strategic emphasis on re-developing these sites which currently give the place an unfinished feel. We pass the Dolphin Park and the 'Coastal Village of the Persian Gulf', under construction; only the beginning of building up the southern edge of Kish; part of an unstoppable process.

We continue past a derelict hospital – a venture in private healthcare which seems to have folded within two years of opening - and move on towards Keshti Younanie (Greek Ship). Strangely, along with the beach and the shopping malls and the heritage sites, this is Kish's foremost tourist attraction. Most visitors to Kish take a taxi across the island to be photographed there at sunset. In 1966 a Greek ship (built in 1943 in Glasgow) ran aground and it has been here, gradually decaying, ever since. It is very memorable. Perhaps it is a clue to the eclectic spirit which is part of Kish's character and could inform how it develops its 'brand' for the future.

Our ride takes us on through Safein and past Harireh to Damoon. The latest phase of development at Damoon is another high-rise hulk, half finished. Together with the Twin Towers, it 'bookends' the current coastline of the city centre. From the hoardings, it looks as though these blocks could have been designed for any resort in the world and I wonder, with these huge forms emerging, whether the island is 'losing its shape'. After the port we arrive at the 200 hectare wasteland held in readiness for the 'Flower of the East' project. We are shown the design – now, thankfully put on hold for economic reasons - later that day. Its layout reflects the strong forty five degree accent of the original Masterplan but with a strong presence on the seafront, more vulgar and on a much larger scale.

As we finish our bike ride, on the site of the 'Flower of the East', we find the old mosque of Mashe; the only remnant of a community so sadly lost. It is a small and beautiful building and is now being restored but how can a project such as the 'Flower of the East' be designed to embrace this treasure in a meaningful and integrated way? The grandiose aspiration of this kind of proposal is not necessarily wrong; a bold development here could do a lot of good. However, making sure that the design is firstly of exceptional, international and lasting quality, and secondly is relevant and resonant for Kish – past, present and future - is essential for Kish to fulfil its potential. To achieve this with the current design will be impossible.

How can the project and the mosque be relevant to each other and, more importantly, how can the 'Flower of the East' make a relevant connection to Kish's past, and thereby make a positive contribution to its unique identity for the future?

1989 to 2005

So apart from Safein, and Damoon, where do the people of Kish live?

The 1998 masterplan laid out two new neighbourhoods; Mir Mohanna, adjoining Safein, and Sadaf which forms the western edge of the 'city centre'. These communities are now fully established, with about 10,000 homes between them; a mix of low to medium-rise houses and apartment buildings. Both have been developed, adhering to strict dimensional guidelines and although none of the architecture is better than mediocre, and the urban design fails to create a memorable or special environment, nonetheless they are coherent. What is lacking however is coherent connections to the city centre, to Safein and the wider road network. The new six lane inner ring road, just completed, will not help, but it will certainly speed further development all around the island.

Sadaf is part of an extension of the city centre which terminates in the site of the 'Flower of the East' and golf course, at the centre of which sits the recently completed Sadaf Tower. This new building is a signal for the demise of Kish over the next few decades unless the tide of poor design can be turned. Sadaf Tower is a beacon of what Kish must not do if it wants to fulfil its potential as a successful place of human habitation. If this building were on an ordinary site in Kish I would not remark on it; there are many as bad. However the problem is that this is one of the most significant landmark sites in the current topography of the island. It sits at a pivotal point between the city centre and the north coast and between the 'Flower of the East' and the airport. How could they have got it so wrong? The fact that it is ugly and character-

less is more than just a missed opportunity, it sets a general tone of blandness and will do lasting damage to the development of Kish until it is replaced or re-modelled. It also sets a very bad precedent for low grade design and fails to be the beacon for good design that it should have been.

Looking more broadly at the part the golf course plays within the urban plan, it is problematic. Connection, orientation and legibility seem to be what are most needed to 'stitch together' the various areas of development but the golf course forms more of a barrier than a connector. With this part of Kish unfinished, the outcome cannot be judged yet but, with the precedent of Sadaf Tower, I recommend that a serious review of the design is needed before work starts again. The 2004 Masterplan is branded 'Persian Garden of the Persian Gulf' and although its illustrative drawings are weak, the idea is profound. By making the connection between the Persian root of the word 'Paradise' and the man-made idea of the garden, the concept points towards the fact that the design quality of the man-made environment in buildings and landscape is the key to the future of Kish.

In 2004 Drees and Sommer, the German consultants, were commissioned to produce what Mr Shahande called a 'Destination Masterplan' – a study of existing economic, demographic and environmental conditions and opportunities for development. Residential growth is a major part of the study but the main emphasis is tourism. Given that growth of 200% is predicted from 2010 to 2025, with four times that figure for growth of the international market, the plan is not unreasonable in suggesting the continuation of development both in partially developed areas and in open sites around the perimeter, with breaks along the south coast to maintain some of its open character.

196 It appropriately suggests an enrichment of the 'tourist offer' including an emphasis on sport, conferences, nature and heritage. Strangely, neither Safein nor Mashe are mentioned in the Masterplan, nor is the Kariz, although opening the Shah's palace to the public, creating a pearl museum and eco-tourist ventures such as the transformation of Mr Daryobar's farm at Baghou into a tourist attraction are proposed. In the recently published 'New Ideas and Projects' document, an ambitious plan is described for the Great Museum of Natural History and Fars Civilisation. This is the most significant project of all for Kish to define its brand. Anything short of excellence, will damage its chances of becoming the exceptional place it could be in the future.

Only one page of the Masterplan touches in detail on the streetscape of Kish and how it could be improved. It correctly proposes the creation of stronger built edges along Ferdousi St. However, in order to ensure that an environment of lasting quality is delivered, a far more detailed Masterplan is needed. This should be a 'Quality Masterplan', both to define the relationships between buildings and public spaces and to promote an architectural vernacular for Kish, in search of harmony and identity.

What next ?

As I take stock of the speed at which Kish is changing and the degree to which it is currently undermining the best aspects of its own character, I wonder 'what would be needed to turn the tide without stopping its flow and, if that were possible, in which direction should it go?'

Let us assume, in simple terms, that lasting prosperity, based primarily on long term success in tourism, is the overriding priority for the future of Kish. Currently, as Kish is part of Iran, the financial model at work here - its catchment and influence - is more national than global. However, with the Free Zone's international orientation and its need to compete in order to avoid falling behind other holiday destinations around the Persian Gulf, its ambition must surely be to increase its global profile as well as its appeal within Iran.

Firstly, a strong, local cultural identity is needed, particularly in terms of architecture and landscape; a physical environment which is both quintessentially pleasant and harmonious while also being distinctive – more than just a copy of other successful resorts in the Region. To this end, a unique local vernacular – a common architectural language – should be identified and fostered. A 'base beat' of the built environ-

ment is needed; a cohesive backdrop to endow Kish with a strength of character which it currently lacks. There will be both technical and aesthetic aspects to creating this link between the past and the future. For example, the use of thick walls, shading structures and natural ventilation enhanced by wind-catchers, should all be re-assessed in the light of 21st Century technology. The proportions of traditional buildings, their massing and window openings, their special features such as entrances and screens, should be understood and reflected in contemporary design. The very simplicity of these traditional buildings lends itself well to timeless reinterpretation.

So what is the natural vernacular of Kish ? It is a combination of several themes; old and new, local and international. Reluctantly I acknowledge that a significant part of the local vernacular is the 'sloped wall' concrete style of 1973, originating from the United States. This is found all over Kish and, whether I like it or not, it is now part of its local identity. For a style which is so particular to the 1970's, it is extraordinary how many buildings, some still under construction, adopt it. Far more significant however are the traditional buildings of Safein, and formerly Mashe. These simple, solid structures have intrinsic value and should be treasured in their own right, but they also have great value as clues for achieving contemporary, contextual design of a unique and distinctive character and lasting relevance

A contemporary vernacular should reinterpret traditional forms, rather than simply mimicking them.. The traditional architecture of the Persian Gulf has evolved from structural and environmental challenges, and the availability of building materials. Universal solutions have been refined by particular local influences. To achieve an authentic vernacular, a refined technical design process is needed, learning from the past but looking to the future, in particular to deal with the increasing challenges of climate change.

While the traditions of Kish are both local and regional, its aspirations are increasingly international. Indeed its traditional architecture has much in common with other parts of the Persian Gulf, both Persian and Arabian. So how can a new vernacular be unique to Kish ? Firstly through a process of direct reference to distinctive details from the island – de-coded and assimilated in a contemporary way – and secondly through a process of consistent design guidance and ongoing dialogue between designers, developers and statutory authorities, universal responses can be made particular.

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The search for a strong vernacular is not a search for homogeneity. It is a search for a common language. As with a language, accents will differ and a pleasing level of diversity can be achieved. Design guidance to promote such a language would touch on topics such as form, composition, surface and detail. It may be also that as with Amman in Jordan or Muscat in Oman, tight controls should be imposed on the use of materials, to promote cohesion.

The second ingredient is 'public realm'; roads, pavements, landscape and importantly, building edges. A Detailed Masterplan is needed with architectural guidelines dictating how buildings, particularly within the city centre, should meet the street to achieve clarity, vitality and coherence and how they should prioritise giving positive form to the spaces between buildings. A trip up and down Ferdousi Street is enough to show how the pedestrian environment could be improved by the redevelopment and intensification of building plots. New lines could be set for building frontages, reducing street widths and introducing arcades, parking could be reallocated to the rear of buildings and a significant increase in density, value, environmental quality and urban character would be realised. The Masterplan should highlight every opportunity to develop existing, under-developed plots. Tax advantages should be offered to promote these. Kish could double its density without any virgin land being developed and, with excellence in design, it would be far better for it. The urban environment would be stronger in character, more coherent and more comfortable whilst the natural environment could be preserved.

As well as defining codes for new development sites - massing, street frontage, architectural character, connections and transport - the Detailed Masterplan should also make specific proposals for landscape treatment across the island, including ways of giving pedestrians and bicyclists priority and creating shade. Simple moves (such as resurfacing every road in a natural 'bound gravel', rather than black tarmac) would be powerful ways of enhancing the identity and feeling of Kish. If there is a financial cost to be born here, apart from the fact that it

will pay direct dividends in terms of attracting visitors, it would also be reasonable to tax each development with a requirement for a landscape contribution to pay for such physical enhancements, equivalent to a 'Section 106 agreement' in the UK.

The third ingredient is, over time, to adorn Kish with a series of exceptional landmark projects; focal points both to attract and delight people, and to define the identity of Kish for the future. Current projects of strategic importance to the island such as the 'Flower of the East' would need to be redesigned, to achieve international quality and a resonance with local tradition and culture. Projects in the pipeline such as the Great Museum at Harireh should be procured through international competition and should become the first in a new era of leading architectural patronage on the island. Kish should make itself world famous for exceptional design. Columbus, Indiana (USA) was made famous as the 'town of architecture' ever since Cummings Engines developed a policy of appointing renowned architects for every new building in the town. The chairman bore the additional architects' fees personally in exchange for the right to control the design and the town has reaped the benefits ever since. Kish should do the same.

Landmark projects in energy and environment are also needed such as a large-scale solar power plant in the centre of the island (potentially an attraction in its own right). Initiatives such as solar powered electric transport would follow and would become part of the positive identity of Kish as a place to live and a resort to remember. Landscape projects should also have landmark status – tree-planting on a grand scale, innovative approaches to irrigation, the creation of the 'Persian Garden of the Persian Gulf'. More local events such as monthly markets should also be established, meanwhile there is potential for raising the profile of leisure and sport related events as well as conferences. Mr Shahanade tells me that an 'All Nation Festival' is being planned for January 2010 but that this is only the beginning of their ambitions; 'we need to get the infrastructure in place first....'

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How can all this be achieved? A Design Council should be established, combining local and international expertise, to promote development in accordance with the Detailed Masterplan and to procure excellence in design. The Council would meet regularly to review and approve development proposals and to push forward strategic initiatives. The quality and continuity of this ongoing dialogue and shared vision between developers, designers and the Free Zone Authority would be, above all else, the key component in securing an authentic, coherent and characterful built environment for the long term future of Kish. Indeed Kish – with its free-zone status – could be a 'pilot project' for Iran to revive its global reputation as a leading centre of culture.

The fourth ingredient of the 'Earthly Paradise' is a programme of high-profile festivals and events which could set Kish apart from its competitors and create an annual cycle of activity across the island, potentially with links to the universities or other cultural institutions. Initiatives such as an international art fair, as at Kassel in Germany a film festival, as at Cannes or a regatta of historic sailing ships, as at Klaipėda in Lithuania would draw different visitors at different times of the year.

High profile names should be invited to lead festivals, for example such as Yo Yo Ma, the cellist, with his music ensemble the Silk Road Project, specialising in the fusion of eastern and western musical traditions, could establish an annual musical event.

Festivals of this sort could become part of the cultural mapping of the Island, with different events in different locations, such as the Kariz, Harireh, Greek Ship and Mashe. In this way a strategy for events could both influence and be influenced by an place-making strategy and could be integral to the Detailed Masterplan.

In conclusion, why should Kish want to be anything other than a high quality resort? Simply because tourism is the 'raison d'être' for Kish – as it has been for decades – and Kish needs to compete. Tourism thrives best both on good design and the creation of memories; memories that shine out from the ordinary; memories that last. To be memorable a place must be distinctive and, when one looks at the character of most resorts around the Persian Gulf, it is easy to see how Kish could set itself apart.



Lenge Port, Hormozgan



Laft , Qeshm



Traditional House, Lenge port, Hormozgan, 2009



Dargahan town Laft village

Jasper Startup



Introduction

It was hoped that a study of Dargahan town would provide a contrast to the study of Qeshm town, with the comparisons and analysis providing insight and detail of the different approaches to development.

However it was quite quickly clear that in many respects the two towns are very similar, Dargahan seeming to aspire to the same developments and urban identities as Qeshm. Dargahan town like Qeshm town is in its location due to fishing but does not have any strategic military importance as it faces the coast of Iran. Although it lies 20 km up the coast from Qeshm town its natural harbor has been a logical place for the landing of boats for centuries. Allied to this a river meets the sea here and as such provides a natural location for settlement.

Dargahan is in fact two towns, Dargahan and Holor. The two districts are separated by the river which runs to the Sea here. It was difficult to ascertain why two separate identities and towns developed here but this may be due to the natural division the river made before the building of bridges.

Dargahan has a current population of 8,000 people while Holor has a population of 6,000. New build housing in both areas is planned to more than double this amount, with housing for 20,000 people in the planning stage.

From my visit to the Mayor at the local municipality it is clear that much development is planned. I was surprised however that there were no statistics available regarding the population, not even percentages to do with employment. How the municipality will provide infrastructure for 20,000 new people is unclear. When asked about sewage outfall the municipalities engineer said plans were to use a multitude of lined drop wells, how this will affect ground water I think is of major concern. On a Journey to reach Dargehan we visited an old well system located inland. This system took advantage of natural cavities in the rock where rainwater would pool, some raised wall systems had been constructed to direct surface water into these natural systems. Later I found a strong contrast to this in the Dargehan town where local businesses used plastic pipes, funnels and cans to collect the waste water from their air conditioning units.

Architectural typology

Dargahan town is a strip town located between the coast and small mountains that lie just inland. Much of the old town has been built since the 1978 earthquake (7.7 on the richter scale) which did so much damage to the buildings in the area with a final fatality of 22,000 people. Earthquakes are a major factor in the way towns have developed on Qeshm island. A recent earthquake in November 2005 did a great deal of damage with a magnitude of 5 on the richter scale. Some of the lessons of these events seems not to have been learned with new multistoried developments of reinforced concrete the normal practice in the area.

This one geological fact has had an enormous affect on the character of the buildings and the peoples relationship with them. Issues of permanence and social history are hard to establish when the reality is your home may be temporary. Allied to this aspect is a number of small mountains located on the edge of the town. These rock structures look as if they

have burst through the earths crust only yesterday and provide a rather dramatic if unnerving vista to the town. Individual areas are identifiable if one is introduced to them. The old town has a similar feel and layout to that which is found in Qeshm town, although the street plan is more regular and grid like. Mr Said our driver actually now lives in Dargahan and he was able to give us a view of what lay behind the doors and the courtyards. One courtyard showed signs of a kind of seasonal migration in the space, where in the summer activity would centre around the south wall and its shade, while in the winter activity would move to the north wall to catch the weaker suns rays at that time of year. This practice is similar to what is found in mainland Iran, Yazd city in central eastern Iran has similar courtyards with seasonal changes. Yazd also has very impressive wind catchers which they call Badgir.

One area of Dargahan's old town was actually where all the sweets were made for the island. This was not apparent from walking down the street as the sweet bakeries looked like any other house in the area. But once through the door the whole inner courtyard was full of ovens and machinery for producing the local sweets. With no signs or advertising apparent the business relies on word of mouth, in a way a strong aspect of the oral tradition in communities such as these.

Another area of the old town rises immediately above the main street and its new shopping malls. here steep winding lanes reveal older larger houses, many berker's and an atmosphere almost of a mountain village. There is some evidence of the municipalities activity here in the planting of trees and pavement improvements. As you move out of the town from here housing is scattered amongst the small mountains on the start of the plateau which extends into the interior of the island. This area is characterized by the multitude of mosques here, perhaps 3 or 4 per square kilometer.

Further out of the town on the connecting roads retail outlets are located ribbon like to attract passing trade. One aspect of this trade which seemed particular to Dargehan is the multitude of businesses supplying construction activity. Due to the small scale of these businesses my impression was that they were there to supply the local community of the area with all the goods and services needed to repair, extend and construct housing.

Finally the area of most activity is the main shopping street directly on the coast. Here a massive new shopping centre is being built on land reclaimed from the sea by the dumping of hardcore in enormous quantities. This area is also planned to have tourist attractions and hotels. Further along the coast and just past where the river enters the sea another area is being reclaimed from the Sea with all sorts of building rubble and waste used to infill the land. A theme-park and children's playground is planned for this area.

Interestingly at this point on the coast where the river flows to the sea mangrove has been planted which looks well established and has the potential to thrive in the area.

In terms of material and construction the typology of this area is most probably similar to what is found throughout this region. Old buildings unless of some religious or architectural merit are not necessarily valued for what they are. When people live in these older buildings their lives and economic circumstance define how they are maintained and used.

Simple things like the rendering of old walls with concrete causes major degradation to the cohesive fabric of the structures. Additions or repairs are added in concrete block which never integrates properly with the original structure both in terms of structural integrity or aesthetic sensibilities. It is hard to be critical of this as this situation is about hard pressed people trying to maintain their lives with very little help. Broadly these material issues are very complex. On one hand you can see the economies of building using systems designed around concrete and its many forms (there is a concrete production plant on the island). On the other hand from this you see an ever increasing lack of local texture and identity in the built environment. Technical advances in materials and manufacturing are obviously to be used when appropriate to the local conditions and cultural context. But how will this effect the identity of the place?. One must remember that there is no guarantee that this area will not receive an earthquake of close to 9 on the richter scale. This is deeply worrying because there is some evidence of shoddy building practice in the multistoried shopping malls which are currently being built.

Public spaces

There was little evidence of dedicated public space in Dargahan. Some development of open space in the outlying residential areas was apparent with tree plantings and We are strongly determined to make this safe and beautiful spot for living, relaxation and enjoying life and also the most suitable place for all forms of investments and economical activities in Persian Gulf, May god help us.

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Mohammad Asghary,
The Chairman to the board of directors, Manager

This statement has much ambition and seeks to balance the pressures of development with those of safeguarding the natural environment. It also seeks to attract tourists from outside the country. It is tempting to view this statement as an ambition to compete with neighboring states such as Dubai. If this is the case there plan is overambitious and misguided as the amount of development necessary to achieve this would virtually ruin the island. Many of the websites related to Qeshm island are not complete so obtaining reliable data is difficult. However there was exhaustive data and historical description of the water supply on the island, describing the ever increasing plant and infrastructure needed to meet demand.

From my short visit I was able to ascertain that no specific data was available for the occupations of the residents of Dargahan. Due to the similar Architectural typology the probability is that occupational sectors are similar to that found in Qeshm town. Retail and business services would be the main employer with government employees and fishing industries lying second and third. Others are employed in a large variety of different occupations, sweet making being one which is particular to the area. The resources that these occupations and workers use are almost exclusively imported into the area. Some natural materials found locally are used in the construction industries and to a certain extent the fishing industry relies on natural resources. To serve the intended development of the area, namely tourism most resources are employed to provide something new or different to what the area is actually about.

The areas or neighborhoods are generally defined by there location and architectural typology. The older town which rises up from the coast is there because it has the best areas to build on, it is almost intuitive that this would be the area to settle first. Development has spread since then to less desirable areas to the situation where finally they are forced to reclaim land from the sea in order to build the shopping malls and tourist facilities.

The currant plans to expand the town by 20,000 people is very ambitious. The intended location for these developments extend into the plateau

and virtual desert that surrounds the town. The plan has quite detailed designations for particular sectors of the plan, yellow designates residential, red for shops/commercial, purple for industrial etc.

Laft village

Further west along the north coast of Qeshm lies the old village of Laft. Cut off from the major habitations and economic activity of the island this village remains very unspoiled and has not been overdeveloped. Situated at the eastern side of the extensive mangrove forest the town has relied on fishing and livestock husbandry for its economy. This was the only area in Qeshm island where I saw cattle being kept. Previously I had seen wandering herds of goats with a shepherd feeding mainly on Acacia. Acacia is a small tree very suited to the area which really should be cultivated more. The cattle rearing in Laft is possible as the farmers feed the cattle on cuttings from the mangrove forest. Unfortunately this is a current issue of some disagreement between local people and environmentalists who are trying to protect the forest. Hopefully a sustainable policy can be reached which safeguards both the forest and the farmers future.

The other main issue affecting Laft is the planned bridge to form a road link with the island. If this development goes ahead as it will undoubtedly will, Laft village will be transformed for ever. How this happens goes to the core of what sustainable development should be. Hopefully Laft can remain as a village reliant on its own natural economies, and not become overdeveloped with shopping malls or preserved in aspic as so many villages are in Europe.

Architectural Typology

The buildings in Laft are some of the oldest on the island. Some are reputed to be 150 years old which for this area is ancient. Although some of the older buildings are uninhabited this is the exception as older houses are maintained in a more traditional way with earth render and whitewash, perhaps an economic necessity. The village is contained by the low mountains that surround it and generally spreads out from this location towards the sea and the mangrove forests. There is an old Naderi fort which was later used by the Portuguese, illustrating how long this area has been inhabited. From most areas in the town there is a pleasant vista of the surrounding hills with the sea and mangrove forest stretching to the horizon.

From this vantage point the most noticeable characteristic of Laft village can be seen. This is the multitude of old wind towers which rise from the houses. These can be two stories high with fine architectural details and moldings cast or carved into them. Even wooden rods are still in evidence which are used to hang moistened cloth/s to cool the air. In some cases tanks of water would be located inside the houses at the bottom of the towers to also cool the air coming into the rooms.

Laft is typified by the small lanes and roads which meander through the village. The layout is far more organic and responds to the environment in how it progresses. Through the town it is hard to find any buildings which reach above two stories. The newer concrete structures are quite modest and lack some of the more ostentatious detailing of the larger towns on Qeshm. Perhaps the simplicity of these structures helps them to merge well with the older buildings. Throughout Laft there is a lack of advertising, western brand names are not in evidence and the impression of a quite domestic environment prevails.

Public Space

It is quite clear in Laft where the centre of the village lies due to a large open square where the village meets the sea. Here is located the market, local authority building and main Mosque. From this point pavements and walkways have been built out along the coast with small

discreet restaurants along the walkway. tree plantings are in evidence as well as the ubiquitous bench and rubbish bin as always included in these developments. Also located here is a sunken ship whose mast is still working. The villagers use this to perform an annual ritual ceremony related to their relationship with the sea. This location for the main public space makes sense for it is best positioned to take advantage of cooling breezes which come of the sea. other open areas are located further up the hill on the outskirts of the town where also sea breezes are best felt.

Human Habitation

People in Laft have for many years used the sea and the mangrove forest to support their lives and this situation is still much in evidence. How long this situation can survive is unclear, with pressures on both of these natural resources increasingly evident. Laft is also the location of three pilgrimage sites, Sayed Hassan Mansour, Sheikh Moosa and Sheikh Andar!ie. This brings people to the village and contributes to the economy.

Laft has the distinction of employing more people in agriculture and fishing than in commerce. Shops are very few, with only one bank in evidence. Many goods such as dates and melons are sold on the streets by local people to local people. Perhaps Laft gives the impression of being a more cohesive and pleasant place to live because of its scale. There is really just one neighborhood the village itself.

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If I have a major criticism of the effects of development on the island it is to do with the scale of things and how very little consideration of detail, texture and micro socio-economic issues is apparent in the planning decision. The built environment suffers greatly from the results of this lack of attention to detail. The situation could be greatly improved if attention was focused on preserving and improving what is already there rather than trying to develop places by just building new buildings.



Qeshm



AnyScanner

Qeshm Island

Jasper Startup



Introduction

When visiting any place your first impression is formed by the journey to where you are going and the actual experience of your arrival. Today many people travel to islands by plane. Because of this situation the gradual experience of arriving by boat is lost, and the true identity of an island is less apparent. This arrival by plane often happens at night so your experience is contained by what you can actually see close at hand and does not include the potential of extended vistas. When you arrive your senses are alert to information as you try to understand the identity of the place you have arrived at.

The effects of globalization are sometimes subtle. the speed of travel and change impairs the quality of experience and the space for reflection.

I was greeted by this view the morning after my arrival. A United Arab Emirates oil drilling platform had broken loose the previous year and had ended up grounded off the coast of Qeshm, opposite my hotel and its beach. The irony of this was appreciated. In Muslim culture many things are put down to Gods will, in this case for me Fate had led me to this location. The view seemed a pertinent reminder of how the whole situation was possible. As the days progressed and my understanding of the island grew, my sense of unease increased about the future of the island.

As there is very little ground water the population of Qeshm is supplied with water by desalination plants. These plants are only viable because of the low cost of energy, i.e. locally produced oil. The long term existence of the island and its people are totally dependent on the production of oil unless an alternative energy source can be used.

Background

Qeshm Island is located just off the southern coast of Iran in the Persian sea. It has a location which is very strategic as it lies on the strait of

Hormuz, with the Clarence straight separating it from the mainland. The Island is 135 km long and at its widest point 40 km wide. The Island is situated just opposite the major southern port towns of Bandar Abbas and Bandar Khamir with Qeshm town directly opposite Bandar Abbas. At its closest point the island is only 2 km from the mainland. The population is roughly 100,000 people for the whole island located in 59 towns and villages. The ethnic mix of the island is primarily Qeshmi, Minabi, Kumzari, and Bandari Persian speaking Iranians, with a minority of Iranian Arabs. Qeshm island has been nominated as a UNESCO world heritage site with protection granted for the extensive mangrove forests situated on the island.

Economic activity has mainly been centered around fishing and its related industries. Large fishing boats are still constructed on the island although the majority of fishing now takes place on small fiberglass motorboats with often family based crews. Salt is also mined on the southeastern coast. The growing of dates and melons has also been a traditional economic activity. In recent years with the reduction in rainfall much of the agriculture has ceased with the Island relying on food imports from Bandar Abbas. There is increasing activity related to the large gas and oil fields situated on the Island with large scale refining and pumping plants located at points on the Island. This access to cheap energy has made possible much of the development of the island. In 1990 the island was declared a free enterprise zone, giving the island some independence from the government in Tehran and substantial tax breaks for companies and individual consumers.

Qeshm town

Located at the extreme south east of the Island Qeshm town is the capital of the island. Its location originated as a point of military surveillance of the straits of Hormuz and as such the entrance to the Persian Gulf. The Portuguese built a fort at Qeshm city in 1507 and its ruins are still accessible today. Over the centuries the city has been regularly attacked because of its location, the most recent invaders being the British. The effects of trade and migration were an early aspect of globalization and this is reflected in the population which numbers some 30,000 people, 70% of which are under the age of 25.

Architectural Typology

The old city is mainly located to the west of the coastline with newer developments such as the port, new housing etc to the south and far west. The buildings of the old town are almost exclusively of a single story type built close together with narrow lanes dividing the space. Many share common walls or in many cases internal courtyards. Various homes will cluster around these courtyards which provide a communal space with often a palm tree to provide shade. These courtyards also provide a buffer zone between dwelling and street. The construction of the older houses is based on stone and earth walls where a earth based mortar is used. Roofs are of a timber structure with infill of palm leaves and earth mortar. Many of the houses have been added to or repaired in an ad hoc manner with materials such as corrugated cement based roofing material, concrete blocks and render, and various plastic sheet and containers.

When viewing this urban landscape the impression is of a very private domestic world with little indication or evidence of what life takes place behind these walls. Some of this is to do with climate and the need to keep these buildings cool, with large windows or open spaces being detrimental to this.

One of the major visual impacts of the town is the detail and character of the front doors. These doors were still in some cases of the traditional jointed timber with steel fittings. In recent years these have been replaced by steel doors with a variety of applied metal decorations. Perhaps this change of material but no change in iconography gives the built environment its unique character, and although the construction is often crude the identity of these elements locates this particular culture at its point in time. The overriding impression from the built structures is one of economic necessity with little evidence of extra money being spent to signal higher status. Simple steel structures with locally made concrete blocks being the cost effective way to repair or extend your property.

Many problems exist with the older buildings where concrete is used to repair the old stone and earth walls. Because of the incompatibility of concrete and earth mortar the repairs often break away or cause a worsening of the condition of the wall. Another material issue for the whole of the built structures in Qeshm is the very high rate of humidity. this can reach at certain times of the year 90%. These extreme conditions could have a very big impact on some of the newer buildings especially where steel reinforced concrete is used and the steel is not properly protected from corrosion. Added to this is the preference for smooth plaster finishes which when cooled by air conditioning attract condensation and mold growth.

Traditionally the use of timber was limited. Timber was imported from India and as such was expensive. In recent years most timber has come from the United Arab Emirates who import all timber themselves. With the slow but steady addition of particle boards and veneered boards the nature and quality of much of the interior fittings/furniture has changed to a more western model with less carving and more neutral surfaces. The loss of traditional joinery has greatly affected the visual nature of these older buildings, this was demonstrated by a visit to a local joiner whose work now mostly consisted of interior fittings.

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Other strong formal characteristics in the old city include urban squares where a well would have once operated, now the major activity centers around the bakers shop in these squares. Also on many houses old cooling towers are still standing which are structures to collect and guide cool breezes from the sea into peoples homes. These towers are constructed in the traditional way of earth mortar and timber structure. Sometimes if the building was of some size and quality there would be an extensive glazing element above the doorway which is used to bring light into the building. The glass in these structures often coloured for decoration. These glazing structures are mainly made from aluminum extrusions and colored glass. but there was some evidence of these originally being elaborate wooden structures. Here again western materials and processes were being used to continue local form and custom. when this happens unexpected details emerge as materials intended for a certain objects, process and context are forced to meet the demands of different forms, processes and contexts.

shopping. Throughout the town shopping malls have been built to support this activity. In fact the old bazar in the centre of the town pre-dates the formation of the free trade zone. The old bazar is a single story complex of passages with an overhanging open roof. This makes it quite cool and comfortable to visit. Recent malls have followed the western model of multistoried air conditioned palaces to consumerism with escalators, shiny high spec finishes and lots of lighting. These new malls are predominately stocked with cheap goods from the far-east which you can find on any high street in the world.

I found it difficult to find products made locally or even made in Iran. People joked that even the local handicrafts were made in China. Most of the manufacturing that takes place on the island is related to construction and fishing with local areas specializing in the production of certain goods.

One of the most important future developments on the island is the proposed bridge with the mainland. This is to be located where the island is closest to the mainland at the top of the mangrove forests some 60k from Qeshm town. This development will change the nature of the island irreversibly and remove much of the trade from the streets of Qeshm town.

public space

The period when I visited Qeshm was the holy month of Ramadan, this will have affected my understanding of public city life. Because of the fast between sunrise and sunset peoples normal life pattern is disrupted. Most social activity occurs around the mosques and in the shopping malls particularly at night. Public leisure spaces such as children's playgrounds are I imagine less popular because of the heat and during my visit were very often empty. These playgrounds were located along the road which divides the old from the new town, in this same area lies the disused airfield which is planned to become a sports facility for the town. Predominately Public space is often expressed in symbols of civic pride such as grass lawns, elaborate roundabouts or public seating. Palm trees were shipped in from down the coast to create

plantings down the middle of the highways with grass in-between.

This all contrasts sharply with the lived in quite shabby feel of the squares in the old town. Here my impression is of authenticity and real life. Some investment in these areas could transform the priorities of the town. During my meeting with the Major I was asked if I thought it was worth preserving the old town, I was surprised the question even needed asking.

The contrast one sees in these two different areas does not express the complex nature of public/private space. Qeshm town receives daily 1000 visa immigrants from the United Arab Emirates per day although this has reduced to 300 visits recently.

These low paid workers normally stay a few days to obtain a renewal of their visa before returning to the U.A.E. These people stay in accommodation originally built to house workers involved in the free trade zone. The accommodation is a gated complex with inhabitants forbidden to leave.

In contrast many years ago Princes from the U.A.E came to Qeshm to hunt deer. If the legend is true and Qeshm was the mythical Garden of Eden things have not improved. For Qeshm public space is defined by the shifting winds of the world around it.

Apart from the building of children's playgrounds and the landscaping of areas around road improvements there is little public space which is specific to the social life of the town. Major gatherings of people around the mosques quickly disperse to smaller more private groupings moving away from the immediate area of the mosque. With the amount of land available it is surprising that there are not more town squares to orientate the centre of the town and signal a meeting area. Currently the spaces used for social gatherings are the pavements and seating of the main mall shopping road.

countries. Generally one has an impression of not enough connections being made between different planning and development decisions, and that the quality and nature of public space has been badly affected by this. I understand that at the New Year the area is flooded by holiday makers and perhaps some of the public areas become more relevant. If this is the case more work is needed to integrate these areas for the local resident community.

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Human Habitation

The main occupation of the inhabitants of Qeshm town is now mainly in the commercial sector with 50% of the population working in retailing, business support and services. 20% of the population works directly for the government in schools, hospitals, public services etc. A further 20% work in other miscellaneous professions with only 10% still working in the fishing industry. The fishing industry was the first employment of this area and historically the reason for many generations to live in the area. In recent years there has been a decline in the size of the catch which is put down to pollution from local shipping and large increases in plankton in the local waters. The problem of plankton increase has subsided recently due to unusual tidal effects and this is seen as the hand of God. There is still money to be made from fishing in the area and much of the catch is exported to central Asia. Recent developments have seen a rise in poachers raiding the nets as they are located by a floating buoy on the water. This has forced the fishermen to invest in Global Positioning System transmitters attached to the nets so they can locate them without obvious visual signs of where they are.

Traditionally people working in the fishing industry would have lived in the old town neighborhood but this is not necessarily the case now. Clusters of small fishing huts have appeared at other locations along the coast creating new habitation around the industry.

Also with the increase in personal mobility many workers travel into the town to work in the industry. The predominant method of fishing is to use nets either in permanent structures along the coastline or to place these nets on the sea bed in certain locations. The nets would have originally been constructed from natural materials but are now made from plastic pipe and steel wire. Similarly their boats were originally of timber construction and powered by sail and oar, now they are almost exclusively glass-fiber motor boats.

Other traditional industries such as agriculture have been on a steady decline. Problems caused by lack of rainfall and the ground water drying up has made the growing of fruit and vegetables very difficult. Of course this whole region is close to being a desert and natural resources are very optimized to cope with these conditions. There are plans to start new agriculture based on desalinated water, the idea being that the sale of the produce will pay for the cost of the water. With a tomato plant taking on average 50 litres of water to reach maturity this does not sound very economic.

As with many areas of the world the steady increase in the rate of economic change and its affect on working populations has undermined the creation of neighborhoods. Today the predominant feature of individuals locality is defined by the mosque that you attend. There is a sense of neighborhood in the older areas of the town but this has taken many years to establish and has more to do with personnel relations between inhabitants than occupations.

If we try to understand why different neighborhoods have different identities it is tempting to define this by the visual characteristics of the buildings there. This is to miss the main generator of identity and that is human activity. The shopping areas are open, busy and lively as this is part of that activity. Whereas the housing in the old town is quiet, enclosed and private as domesticity prevails.

During my stay our driver and guide Mr Said talked openly about the people of his town and their activities. He was the father of eight children and had lived in Qeshm town most of his life, seeing many changes during this time. He talked of how he remembers drinking water from the Burkas and that these structures were so important to the life of the area. Traditionally a different burka was used on each day so as not to contaminate the water.

Today even though these structures still stand and contain water they are polluted and full of plastic packaging. This again is an example of how changing climate and investment decisions have fundamentally changed the nature of local neighborhoods in the town. This process is unavoidable but can be managed to make these changes positive for the local inhabitants.

If one is looking for a symbol to label the character of the area one could not use a cliché such as a camel or palm tree even though there are many in the area. My impression is that it is the image of a palm tree inclosed in a courtyard that is clearly about Human Habitation, and has been developed over centuries to deal with the environment these people are living in. If this typology has existed for so long is it not a near perfect paradigm, and why are these systems being forgotten and discarded?.



Kish



A new residential complex, Asalouye, Bushehr

Abudabi

Synchronicity of Thresholds

Evolution of a Living Tradition into a Global City

Olivia Duncan & Sonny Tomic



Introduction

The land where the United Arab Emirates lays today is contained in a geographical location which contributes to its high temperatures, its challenging desert climate as well as its inhospitable and desolate terrain. At the same time, the very same location provides for abundant petroleum and natural gas reservoirs which have been blessing the country and more specifically, its capital, with means to provide for a better future for its country, people and future generations.

A society burdened by such harsh climate and sterile land developed sophisticated survival skills through its ephemeral architecture and its connection to the water. The nomadic nature of the Bedouins and the need to deal with the extreme heat and high humidity levels informed a specific quality of shelter, one that ought to deal with controlling its micro-climate while serving the community's needs. Western descriptions from early and late twentieth century illustrate the natural setting in which the early settlers had to deal with: 'The coast of the Persian Gulf presents remarkable peculiarity in possessing from one end to the other a series of creeks, lagoons and backwaters without which its barren and desolate terrain would barely have been habitable.'

'In less than one lifetime, the Persian Gulf has transformed from one of the most disengaged parts of the world to a strategic fracture point of globalization in a regional context.' Despite its physical constraints, challenging climate and scarce natural resources, Abu Dhabi is becoming a fascinating amalgam of thresholds. Successive tensions between its historic, economic, political, cultural, social and technological thresholds in the last 50 years of evolution created the ever evolving experience of the city. This evolution was carefully shaped by inspired political leadership who channeled large sums of investment into culture and building infrastructure while embracing globalization as means to modify cultural traditions in a non-threatening way and sharing newly found wealth across the society.

Informal coastal settlements and traditional Persian Gulf architecture, composed of vernacular use of temporary available materials, were not able to provide for the new demands of a modernizing city and currently, globalizing city. Hence, fascination for progress and development on a barren land is not only understandable but also predictable. This dramatic shift affected the city's urban design and architecture: New Urbanism influenced the introduction of a rigid street grid with oversized boulevards and superblocks; imported Modernism demanded building design to carry 'brutalist' characteristics, expressed in modest sized concrete blocks. The 1980s and 1990s brought Islamic ornamentation to the concrete boxes as well as the glass curtain facades. The twenty first century embraced gargantuan architectural and urban scales and

introduced the currently accepted 'hyper-modernism' direction to the built form.

This essay investigates the particularities and ways in which these dynamic inter-relationships, possible thresholds, influenced the city's physical evolution. The authors were particularly interested in discovering how forces of globalism influenced changes in traditional delineation of social space, the private versus the public, introduction of pseudo traditional Islamic urban design and architecture principles.

Historical Background

The bleakness of the land compelled the Bedouin tribesmen to explore the sea and its resources. The (Abu Dhabi) Island served essentially as an ephemeral site for shelter supporting the fishing and pearling activities performed by the nomadic people travelling from the mainland. 'For centuries they had to fight against the privations of a land that barely provided the means of subsistence, and their lives revolved around the presence or absence of water.' Then, according to Bedouin tradition, a tribe's leader found a spring of fresh water after crossing to the island and hunting a particular gazelle. Evidence of history of the early settlement in the island was most likely kept alive by oral traditions and legends among local population. As described by the Centre for Documentation and Research [current NCDR], Sheikh Dhiyab founded the coastal settlement but he remained in the areas between the islands and the oases of Liwa and Buraimi, leading the Al Bu Falah section of the Beni Yas tribe.

According to Trench, the early inhabitants of the Abu Dhabi settlement relied almost entirely on pearl diving and fishing as there were no traces of ordinary crop cultivation and very few dates. His notes also indicated that even after foreign presence, development was uncommon, '... the anchorage for large vessels is totally unsheltered and lies more than two miles from the shore.' Furthermore, 'these creeks, which were deep enough to take in the sailing boats of the Persian Gulf, gave rise to small ports on spits of land formed by the backwater and the sea. Most of these towns – consisting of a fort and a few cadjan huts or palm-frond barastis clustered around the water's edge – were the only centres of population on the coast.'

The need for each tribe to control and cater for its water supply and livestock perpetuated the erection of watch towers and forts. 'It is presumed that the round tower, which still exists today, is probably the remnant of the earliest-known structure built by the Al Bu Falah Sheikh during the first settlement of Abu Dhabi.' Within an approximate period of two years, this settlement expanded to 400 barastis and its population continued to increase gradually. Abu Dhabi's pearl market was destroyed by the marketing of Japanese cultured pearls at a fraction of the cost of the Persian Gulf pearl. This situation combined to the worldwide 1930s economic depression had disastrous effects on the town and its commercial existence. However, a turnaround for Abu Dhabi was the discovery of a more precious resource: petroleum. 'The discovery of oil and the signing of concession agreements initiated a process that would transform what was in essence a provincial backwater, a collection of mud huts, into a recognisable urban entity.'

Qasr al Hosn was most likely erected at the end of eighteenth century, period when the Beni Yas recognised the Island as its tribe's capital. In its early days, the fort stood 'among a few crumbling houses built of coral and a hundred or so palm frond huts.' Abu Dhabi was described by the English as: 'A coastal town of about 6,000 inhabitants. There is a fort, and the houses are mostly built of date matting though some are of masonry. There is a small bazaar, and a poor anchorage. The water supply is from pits and wells, and is not very good. The supplies are particularly nil. There is usually no cultivation, and there are very few dates. Small quantities of cloth, rice, coffee and sugar are imported. There are about 750 camels and 65 horses.'

In 1953, Abu Dhabi Marine Areas Ltd (ADMA) obtained offshore oil concessions resulting in royalty payments. Subsequent to Abu Dhabi's first oil exports in 1962 Sheikh Shakhboub, who was the leader of the Abu Dhabi area, started developing the tribal society's conditions progressively. A municipality department was established with the responsibility to improve living conditions and ensure provision of potable water supplies and accessible public health. In the same year, Halcrow & Co (a well recognised British consultant and today known as Halcrow Group Ltd) was commissioned to produce a master plan for the city's urban transformation. As described by Yasser Elsheshtawy, the master plan included north facing buildings, a road network and the provision for raising the existing ground level through dredging and reclamation. The plan also proposed the demolition of all existing buildings except for Qasr al Hosn; two water distillation plants, few schools and a power station. Nonetheless, regardless of all the large-scale proposals, it was known that the Sheikh was resistant to becoming a modern state and was still in favour to preserving a traditional lifestyle. He refused, for example, 'to generate electricity, with the exception

of the palace which was lit using a portable electrical generator.’

Throughout the nineteenth century, the Bedouin tribe of the desert continuously enjoyed access to the rich pearl beds of the Persian Gulf Coast and its first settlement gradually evolved into Abu Dhabi coastal town. Parallel to the flourishing of the city’s primitive beginnings was the British presence. Britain had an imperial interest in India and it was also in her interest to protect the maritime area of Persian Gulf region and peace was necessary for business. As highlighted by Muhammad Abdullah, ‘Abu Dhabi’s economic interests laid mainly in the date groves at Liwa and in the pearl fisheries around Dalma Island, far from the navigation channel of the Persian Gulf, therefore the Beni Yas had no conflict with the British at sea.’ The tiny sheikhdoms sparsely inhabited the southern shores of the Persian Gulf Coast and were long known as the Trucial Coast due to its maritime truce between them and the British. ‘Abu Dhabi developed around the Qasr al Hosn and local construction material was used to build the surrounding housing areas. His leadership brought political tranquillity and pride to the new nation to be. ‘Sheikh Zayed’s known achievements in Abu Dhabi, his generosity to the other emirates, together with his outstanding personal qualities, made him a popular figure and an obvious leader.’ Mohammed Al-Fahim further described the leader: ‘Sheikh Zayed’s name was known by everyone, his reputation as a fair and generous man was equally widespread. He was a fiercely patriotic man who loved his country and its people above all else.’ In addition, ‘Sheikh Zayed believed strongly that the revenues that were being generated as a result of the oil royalties should be used to develop Abu Dhabi.’

In 1968, during the internal political transitions and rapid development of the city, the Persian Gulf States experienced the withdrawal of the British due to economic pressures in Britain. ‘British withdrawal from the Trucial States meant the latter would be left without the umbrella of protection that had guarded the coastal area against external aggressors since 1892.’ Concerned about possible conflicts with neighbouring states, Sheikh Zayed was convinced of the advantages of pursuing the unification of the surrounding sheikhdoms. The leader had to overcome natural resistance and scepticalness from the other ruling sheikhs. Ultimately, in 1971 the formation of the political union of the United Arab Emirates unfolded. It was made possible due to Sheikh Zayed’s vision for a unified country combined with encouragement from the British Empire. The city of Abu Dhabi, established as the capital of the United Arab Emirates, expanded within the isosceles triangle island situated just off the coast at 24° 00 North, 54° 00 East. Its urban palette continued to extend towards the mainland and its surrounding islands (usually reclaimed geometrical pieces of land). Thus, the Abu Dhabi Emirate is the largest of the seven Emirates, as it includes the Abu Dhabi Island and numerous surrounding smaller islands, as well as both Western and Eastern Regions, consisting of 87% of the country’s total land area.

The logic and planning behind the city which is still recognisable today, demonstrates strong imported western modernist planning principles. The city’s wide grid-pattern streets, emphasis on vehicle connectivity, methodical building orientation, and high-density tower blocks are manifestations of what was believed to be the solution for the urban development necessity. The need to maximize accessibility for vehicles undermined the original organic way to travel across the island. The human-scale yielded to vehicle-scale and informal narrower alleys gave way to wide roads. ‘While the streets in the traditional patterns reflected residents needs such as climatic comfort, privacy and security, the streets in the modern patterns disregard these aspects.’

Concomitantly, Abu Dhabi was undergoing its major urban transformation: the local inhabitants were asked to move from their traditional housing to newly constructed homes. The early settlement was demolished (as recommended by the initial planning), re-zoned to give space for modernity. Government compensation was given to those families who had to be relocated and the money each family was paid to abandon its old dwelling was sufficient to build a new abode as well as the establishment of businesses with the remaining funds. Al-Fahim describes moments of his childhood in the city: ‘In five years the metamorphosis of Abu Dhabi occurred at lightning speed... ; While it took most countries decades to develop communications and transportation systems for example, we did so in a very short time. We had electricity by 1967, mobile phones in 1972. Wherever we turned to, something was under construction – government buildings, homes, roads, telephone lines.’

In the same year, Egyptian engineer Dr Abdul Rahman Makhoul was invited by the Sheikh to continue the plan proposed by Halcrow & Co. Dr Makhoul was appointed Director of Town Planning Department of the emirate from 1968 to 1976 and was responsible for the planning of both cities of Abu Dhabi and Al Ain. As described by Elsheshtawy, ‘the house consisted of a large one-storey structure of concrete blocks with open and closed spaces suited to the Bedouin traditions. Each had two bedrooms, a kitchen, bathroom, garden, courtyard and other open

spaces and a wall to hide the women's quarters.' There was also a particular concern to build mosques and souqs (markets) located at walking distances from the major residential clusters.

As the population increased, the building heights became not only a building design choice but an urban design necessity. The need to accommodate both rising commercial and trading activities as well as housing needs pushed the building density up. Together with a new architectural solution for the modern Bedouin city, with its imported greenery and 'technological' infrastructure, arrived the air conditioning system.

In order for the city to expand accordingly to its leadership vision and provide for the demand for developable area, the 1970s and 1980s brought extensive land reclamation and waterfront development which increased the size of the island from originally 60 km² to 94 km² in 1994. The population was also growing exponentially: Abu Dhabi population in 1966 was 17,000; it then increased to 70,000 in 1972 following the country's unification. 'The current urban form of the city was strongly influenced by this policy since plots handed out were small, resulting in the construction of towers which are particularly evident in the city's centre. Some 95 per cent of plots in Abu Dhabi range between approximately 25m x 15m to 30m x 30m, and were occupied by multi-storey buildings with an average height of twenty storeys.' This particular building endeavour produced a rather repetitive 'canyon-type' of urban character, with an intense repetition of high-rise buildings close to each other.

'In anticipation of reaching more advanced achievements in the 21st century and continuation of progress and development, the Executive Council decided on the preparation of a Master Plan for Abu Dhabi. In 1988, the Abu Dhabi Town Planning Department - in collaboration with UNDP and international consultancy - proposed the Abu Dhabi Comprehensive Development Master Plan. While planning for the future, the government informed the population of new levels of acceptable and unacceptable urban lifestyle. This entailed that National families who tethered camels and other animals outside their residences were forbidden of doing so. The planning agency in charge justified the new measures: 'The decision aims at preserving the urban outlook of the city, where under current modernization programme, gardens are springing up everywhere, including residential areas.' Thus, traditional customs were not in accordance with the implementation of 'disciplined' compound walls and the high-rise areas (where foreigners live).

Another aspect of the new city was the introduction of new building materials, such as concrete, steel and glass. Such construction materials supporting the relevant technology made the rising of floor levels feasible. This technology, however, relied heavily on central air-conditioning systems which introduced an entire different relationship of people with their environment. Another undesirable result was the visual impact of air-conditioning units as well as (more recent) satellite dishes, which continuously riddle the city's roofline and facades. The presence of immigrant's of skilled or unskilled background was increasingly proportional to the amount of development that took place and still happens in the city of Abu Dhabi. Together with the new architecture and the new modern lifestyle freshly imposed on the people, new social dynamics arose from the introduction of strangers who were vital for the delivering of the leadership vision.

'Religion is embedded in most social relationships in the Persian Gulf, including the practice of capitalism. Only a small part of Persian Gulf society sees capitalism as antithetical to the strong community values of Islam and have spawned anti-globalism political movements. The leadership constantly strives to show how tolerant Islam is as a religion so that globalization development may contribute bereft of indigenous reactions.' In addition, the city took the strategic decision to emerge as a major international-quality tourism destination and the commissioning of bold architectural projects initiated. Large projects such as the Grand Mosque set a desire to portray bold architecture which reflects the country's Islamic religion at the same time revealing a symbolic and desirable institutional power to both the royal family and the U.A.E. Nationals.

As explained by John Fox, the effects of globalization were and still are, rendered differently in the Persian Gulf if compared with different parts of the world. Regardless of the continuous external forces being introduced in the country, the nation's strong traditional familial structure 'developed receptive ways of synchronizing localism with globalism within the area.' Even though the economy and several aspects of society are currently being opened, the 'traditional social structure persists to direct the changes, and serves to filter what is acceptable - working as a sort of indigenous conservatism.' Within the Persian Gulf, however, there are significant disparities between the cities' evolution. If compared to Dubai's rapid urban phenomenon, Abu Dhabi had a more conservative approach to its urban expansion. While 'louder' Dubai developed an economy based on international commerce, opening its city to a more intensified foreign urban and architectural reso-

lution, Abu Dhabi (backed by Sheikh Zayed's vision) stood closer to Persian Gulf /Arab tradition with an added tolerance and interest in modernization, cultural infusion of new people, ideas and technology.

The global 'instant' city

The phenomenon of globalization and its origins are not necessarily of the 20th century and the concept of 'being global' seems to be constantly mutating. As presented in 2000, authors such as Clark, Norris, Keohane and Bye explained the concept as being 'the process of creating network of connections among entities at multi-continental distances, mediated through a variety of flows including people, information and ideas, capital and goods. Hence, globalization is conceptualized as a process that erodes national boundaries, integrates national economies, cultures, technologies and governance and produces complex relations of mutual interdependence.'

'Oil-generated growth has literally demolished mud-walled small seaports and villages. In less than fifty years Abu Dhabi has transformed into a commercial capital with its sprawling suburbs integrated within the global economy and culture.' The new century has brought even further transformation, hundreds of low rise buildings from the early 1970s are currently being demolished and replaced by high rise buildings. According to the Abu Dhabi Municipality, Abu Dhabi has, since its inception, been going through an extensive forestation process including the planting of evergreens, tree lines boulevards and millions of palms. Municipality's 2003 statistics show that there are around 80 million trees in the contemporary city of Abu Dhabi.

Despite the current economic recession, which has been hitting the global economy in several levels, Abu Dhabi continues to move ahead with its high expectations as the current total value of announced projects in Abu Dhabi is close to the Dh1, 835 billion. According to the country's 2009 yearbook, Abu Dhabi's status as an emerging market is being highlighted by large investment poured into real estate, tourism and leisure. Developments such as Masdar City, Capital District, Saadiyat Island, Yas Island, Al Suwwah Island, Al Reem Island and Al Raha Beach represent the city's ambition to become a capital not only for its country but also for culture, education and research within the Persian Gulf. It is setting new standards in building, urban planning, design and cultural development.

In 2007, Abu Dhabi government announced a modified masterplan, an urban structure framework which would plan the future of the city during its rapid urban evolution and showcase its vision as world class leader in innovative sustainable Arab capital. As described on the document itself, the 'Plan Abu Dhabi 2030' delineates the official framework for the substantial proposal of development across the Abu Dhabi metropolitan area, providing guidelines for all new projects. There are five central principles which inform the plan's guidelines and policies: the imperative goal for Abu Dhabi to be a 'contemporary expression of an Arab city' with its inhabitants thriving in the supportive and healthy community which Abu Dhabi will ultimately become. In addition, another key element lies on the importance for Abu Dhabi to continue practicing measured growth reflecting a sustainable economy. Furthermore, the significance of environmental sustainability and respect to the city's sensitive coastal and desert ecologies. It advocates for Abu Dhabi to manifest its role as a capital city and its responsibility in offering an urban fabric and infrastructure in which the Arab community will thrive in its values and culture.

As described earlier, Abu Dhabi has a particular real estate allocation system in which land ownership is granted exclusively to every male head of an Emirati family. Following this process, it became imperative to provide adequate housing for the evolving needs of Persian Gulf National population and to reduce the waiting time by increasing the availability of Emirati housing. The Plan Abu Dhabi 2030 addresses the concern for a more coherent matching of built form and social functional needs. It portrays descriptive guidelines for building blocks and plots designed around specific needs of Emiratis. 'These include the fareej – modelled on a set of villas around a central courtyard, reflecting an extended Emirati family structure – as well as island and desert eco-villages. The villages are based on traditional Emirati ways of life, and the aim is to ensure these environments are provided across the emirate in a way that reflects local customs. Sustainability initiatives such as solar and wind power will also make these communities more self-reliant in the future.'

Empirical Data

The U.A.E. population increased by 74.8 per cent between 1995 and 2005 - the country's Ministry of Economy expects this number to increase even more with a total population of 5.06 million by the end of 2009. The difference between nationals and non-nationals is high: 'a breakdown of the 2007 figures indicates that there were 864,000 U.A.E. nationals and 3.62 million expatriates in the country in 2007.' Key factors influencing growth in the economy were (based on U.A.E. Central Bank statistics) increases in the construction and building sector (25.6 per cent), along with the significant growth in manufacturing and industry (19.8 per cent); real estate (16.9 per cent); the financial sector (11.5 per cent); transportation and communications (8.3 per cent); and tourism, which continued its steady growth at a rate of 6.4 per cent. Abu Dhabi was the most populated emirate in the U.A.E. at the end of 2007, with a total of 1.493 million people. The population in Abu Dhabi divided by gender, in the same period was: Males 982,000 and Females 511,000. This difference between genders is high due to the numbers of male immigrants outnumbering females. According to the Department of Economic Development (DED) the average monthly income of Emirati households in Abu Dhabi for the year of 2008 was Dh47,066. The average monthly income for the same year for expatriate households was Dh15,000. The country's per capita income increased: from around Dh76,600 in 2006 to Dh162,000 in 2007 due to the increase in the gross domestic product increase from Dh624 billion to Dh729 billion in the same period.

Analysis – Threshold Matrix

By addressing the impact of globalism from all different levels, such as physical [urban design (gated communities) - to architecture (gated villas and high-rises), and virtual, which refers to the symbolic notion of the wall and gate. This analysis focus shall be on subjects of the 'wall', 'privacy' and 'gate'.

The systematization of a 3D Threshold Matrix provides for consistency throughout the analysis of the city's urban design and architecture. Thus, the Matrix consists of a three dimensional model with three axes (x,y,z) which consequently forms eight planes that could be juxtaposed in two and/or three dimensions. The analysis was limited to the following three parameters: a. Architectural Expression (Contemporary and Traditional); b. Economy (Global vs. Local/ Regional); c. Arabic Cultural Traditions & Interfaces (Open/Inclusive vs. Closed/Exclusive). It therefore, produced four typical strands for the Abu Dhabi urban realm: 1. Alienated Hyper-Modernism, 2. Contextual Globalism, 3. Fairytale Traditionalism, 4. Eco-minded Contemporary Traditionalism.

By following the 'Global side' on the Economy 'Y' axis (Societies open to external influences) and the 'Architecture' on the 'X' axis (Contemporary and Traditional) on the first layer of the matrix, we were able to address an apparent pattern of current and future architectural trends responding to two major attitudes towards globalism. Hence, the next concepts are as follows:

1. Alienated Hyper-Modernism (Timeline: mid-2000 to date.)

This concept is characterized by hyper-dense master planning with building heights ranging from forty to eighty storeys high. Its street pattern tends to be of a previously modified grid, catering for vehicles, with usually disconnected public realm. As a consequence, the scale of buildings and treatment of podiums (multi-storey parking garages) do not create comfortable and enjoyable pedestrian realm. In most cases, individual sites have fully or partially controlled access to their amenity/ park areas, or waterfront. The Abu Dhabi Urban Planning Council is currently addressing the issues with this type of proposals to ensure connectivity and enhance the city's public realm.

Most of the proposed buildings, which fall under this subcategory, will consist of reinforced concrete structural frame clad with a glass curtain wall. In the city's context, this architectural solution seems not to consider basic principles of building massing or improved vertical / horizontal articulation. Harsh microclimate and building physics (sun exposure mitigation, sand accumulation, extreme temperature fluctuations, and energy preservation) tend to challenge any architectural proposition. In addition, this typical hyper-modern architecture usually ignores its context, particularly its ground level; creating human isolation and denying desirable human scale in the city's public realm. Arabic motives are rarely incorporated in the design process, and when the Arabic identity is addressed, it is usually expressed in a simplistic interpretation of the Mashrabiya form. Occasionally, complex, sophisticated and innovative architectural forms appear under this subcat-

egory. With the aid of complex computer generated geometries, the building pushes the boundaries of human imagination and credit should be given for its risk-taking and innovation/paradigm shift. Examples of this typology are represented on emerging developments on Suwwah and Reem Islands, and individually, the new ADNEC (Abu Dhabi National Exhibition Centre) tower.

2. Contextual Globalism (Timeline: mid 80's-mid 2000)

On a master-plan level, this concept is characterized by mid to high density buildings with maximum height of twenty five storeys. The building grid is likely to be tight, as it is the case for the Central Business District superblocks. Urban design patterns are clearly modernist, more specifically 'tower in the park' typology. Such patterns are usually based on three layers of developments: higher individual towers forming perimeter block, mid-height towers filling the first row of inner block, and two storey villas or four-storey multi-complexes filling the core of the block. Street patterns are disjointed, typically confusing, and every inch of public space is populated by parking lots. Absence of coherent pedestrian realm and severe accessibility challenges are distinctive of this typology.

Architecturally, building lines are clear, façades present minimal articulation. The use of glass curtain wall tends to be pervasive, with superficial application of generic ornamentation without proper referencing of high quality Arabic arts and crafts traditions. Late 90's and early 2000's brought few sophisticated examples of balanced modernism with strong references of regional Arabic architecture. This typology is particularly represented in Abu Dhabi's CBD, but also in newer suburban neighbourhoods. New exciting contemporary courtyard housing proposals seem to be able to modify this tendency by applying further architectural sophistication of this typology. After identifying these four trends, the analysis continued towards the 'Z' axis – Arabic Cultural Traditions & Interfaces (Open/Inclusive vs. Closed/Exclusive). The prime interest lied on the investigation of the extent of influence on urban and architectural scales due to 40+ years of global exposure.

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Under 'Y' Local/regional mode, two following trends emerged:

3. Fairy Tale Traditionalism (Timeline: 90's – to date)

This typology is the result of two major forces: first, reluctant clients who deny the embracing of global modernism and are typically inclined towards popular regional architectural expressions; and secondly, local architects and engineers carrying inadequate professional training. These professionals lack the sensitivity towards stylistic sophistication and a deep architectural understanding. As a consequence, their architectural work favours Arabic geometric forms, and its formal expressions. In this typology, the building showcases an inaccurate artificial style, if not a kitsch version of otherwise refined traditional Arabic architecture. Therefore, the kind of architecture produced does not represent the original aspirations of Arabic architecture. This typology has spread all over Abu Dhabi in the form of typical villa housing or other more exuberant building typologies such as hotels. (Emirates Palace as a high end, sophisticated expression of this type). The subject of "threshold" or interfaces between private and public realms is of fundamental cultural and spiritual importance to the Emirati population, as well as to the present expatriate Muslim populous. There are social, spiritual, psychological, cultural and physical (architectural) interpretations of the meaning of 'the wall' and 'the gate' in the context of Arabic culture.

4. Eco-Minded Contemporary Traditionalism (Timeline: current)

This typology represents a critical and quite intriguing threshold in the urban evolution of Abu Dhabi. It reflects the elevated confidence of the visionary leadership and evolving sophistication of planning and architectural thinking of Abu Dhabi Government which is becoming a world leader in sustainable city-building. This shift towards sustainability prioritizes an interest in traditional and compact Arabic urban relationships (pedestrian oriented streets), contemporary interpretation of fareej (as a social urban component, neighbourhood acting as a playground for the traditional Emirati extended family) and finally in courtyard housing concepts (privacy, contemplation and safety). Micro-climate issues, consisting of the basic elements of survival in such a harsh desert climate, in conjunction, with energy availability are identified as driving forces for this concept. Energy conservation and on-site energy production are currently being addressed across the globe. Emphasis on public transport availability and human-scale are being brought back to forefront of this typology. The architectural component accentuates modernity and tradition through contemporary interpretation of Arabic architectural forms and elements. At the same time, it provides a functional solution to the sustainability agenda. This typology is well represented by the Masdar City Initiative.

The notion of privacy was studied through the following elements: urban design (neighbourhood, urban block) and architecture (the outer wall, the gate/entry, and building wall). The importance of this classification lies in the fact that traditional Arabic house had limited exposure to outer 'world', or street. Traditionally, houses were opened towards a courtyard, and not the street. They were 'windowless' or with a very limited number of carefully sized and located apertures which served other functions. Rapid globalization introduced dramatic social changes and changes in architectural morphology as Yassine Bada explains: '... In both types of transformations, windows appear on the external facades, which were originally windowless. These windows are not only used for their prime role of lighting and ventilation, but are also a medium for people to appear on the social scene as modern and progressive. Windows are often the first sign of the beginning of individualization and reorientation of the house to the public space, and a symbol of rejection of deep-rooted cultural/religious imperatives. It is also the result of a new urban organization where the houses are not clustered in the traditional way...'.
Notions of interface between private and public realms are much more complex nowadays. They vary greatly in scale and morphology .

Conclusion

Urban Planning and Architecture played important roles throughout this evolution. As a result of continuous change and aspiration for improvement, the city embraced several foreign design promotions which were, over time, counterpointed and blended with regional, Arabic local design condition. This fusion of avant-garde international modernism and Arabic traditionalism produced profound change in attitude towards the housing and public realm design, in particular with issues of privacy levels. Our analysis demonstrates that despite dramatic shifts in formal planning, architectural paradigms, creation of new building forms and thresholds between public and private realms; society continues to find ways to adjust to contemporary demands while celebrating Emirati and Arabic culture. Compressed timeline of Abu Dhabi's urban evolution was, and continues to be challenged by its harsh climate and insistent globalization forces. Political, economic, social and cultural evolution contributed for Abu Dhabi's cautious, but informed leadership in all those fields. Wise conservatism ensured continuity of a strong national identity, and reinforced the image of the city as the capital of a progressive Arabic Society.
Under visionary political leadership, and maturing planning, architectural and development industries, Abu Dhabi is on the brink to becoming a world leader in the creation of the most sustainable living urban environments through initiatives such as Masdar. Masdar synthesizes international technology and local wisdom with a deep understanding of local climate, Emirati culture and symbolizes Abu Dhabi's newest threshold to the future.

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Dubai

Life After the Death of the City

Nicholas Jewell



While Dubai's mercantile origins occupy a longer timeline and different physical landscape to today's modern metropolis, this essay focuses on the compressed historical-spatial dialectic that imprints Dubai within the collective global consciousness. Situated chronologically, the infrastructural initiatives¹ which established modern Dubai's trajectory were broadly coincident with the rumblings of dissatisfaction that beset the modernist movement in the early 1960's, most notably voiced in Jane Jacobs polemic, 'The Death and Life of Great American Cities'. Of greatest significance here was Jacobs fascination with the processes and structural configuration necessary to sustain a vital urbanity, observed within her native New York, contrasted against deterministic principles of a regimented visual order in modernist town planning that, in her analysis, assumed the "dishonest mask of pretended order, achieved by ignoring or suppressing the real order that is struggling to exist and to be served."

Dubai is a long way from New York, and the extent to which its large scale urban grain differs from the focus on more intricate patterns of city life advocated by Jacobs is immediately noticeable. Dubai has flourished by employing the characteristics Jacobs believed a successful urban realm should avoid at all costs. On deeper reflection this may not be such a surprise. Jacobs analysis observes an established cityscape and mild climate, suitable for an active life on the city street all year round. Dubai, conversely, is in the desert with temperatures almost twice those of New York (or its European counterparts) at any given time of the year, and has grown from a sleepy port to an internationally recognized metropolis in less than fifty years. Rather, I would argue, these types of statement indicate a reading of the city that, despite its relevance to a Euro/American context, may have reached its limits in an environment whose compressed history and climactic challenges ask a wholly different set of questions. Through an analysis of the shopping mall hybridized in this context, we will explore its relevance to the making of modern Dubai and the nature of the urban space that results. First we must qualify the relevance of the building typology in this context a little further.

Dubai's "status as the lower Persian Gulf's economic capital", borne of its free trade oriented infrastructural gambles, namely the expansion of Port Rashid and later the opening of Port Jebel Ali³, is one that has proved difficult to sustain. Without the self-sustaining financial security of its neighbour, Dubai's ruling al-Maktoum family instead made a "commitment to invest in their own domestic infrastructure so

that Dubai would be able to support and enhance its existing re-export and commercial sector while also facilitating broader diversification away from oil in the future.” Oil and natural gas account for less than 6% of Dubai’s economic activity⁴. Rather speculative real estate/construction, trade/re-export, financial services and luxury tourism (attracting circa 5 million visitors per year) now dominate. Dubai’s financial security is thus dependant on an openness to foreign investment necessitating a commensurate visibility to the outside world.

While this openness can be represented statistically – approximately 80% of the city’s 1.7 million population are expatriates – it is most explicit in the provenance of architectural forms that represent the modern city. Displayed here is the strategic intersection of capital and skyline commensurate with “the infrastructure and the servicing that produce a capability for global control”. However, it is hardly sufficient, within this representation of place image, to reproduce the generic cityscape of elsewhere. Captured within Davis’ distillation of the Dubai skyline are the characteristics that have more pervasively displayed themselves within the globalized field of architecture since Jacobs polemic emerged half a century ago. It is a process recognized by David Harvey of “relation between capitalist development and the state... as mutually determining”⁶, one whose top down vision, although obfuscated by a visual language of spectacle borne from Jacobs theories (albeit that this was far from her intention)⁷, typically serves to reinforce the hegemony of capital at the expense of the micro level processes from which its supporting rhetoric is drawn. A third order in this equation, capital has harnessed streams of critical thought that undermine the socially progressive aspirations of the modernist project, simultaneously limiting the potential of any new order contemporary theory may produce. Mike Davis observes, that “the same phantasmagoric but generic Lego blocks, of course, can be found in dozens of aspiring cities these days (including Dubai’s envious neighbours, the wealthy oil oases of Doha and Bahrain), but al-Maktoum has a distinctive and inviolable criterion: everything must be ‘world class’ by which he means number one in the Guinness book of Records. Thus Dubai is building the world’s largest theme-park, the biggest mall (and within it, the largest aquarium), the tallest building, the largest international airport, the biggest artificial island, the first sunken hotel, and so on. (...) Having ‘learned from Las Vegas’, al-Maktoum understands that if Dubai wants to become the luxury-consumer paradise of the Middle East and South Asia (its officially defined ‘home market’ of 1.6 billion people), it must ceaselessly strive for visual and environmental excess.”

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At a global level, the shopping mall is a building typology central to the penetration of capital into all facets of modern life under the democratizing auspices of populism. It is a scenario Kim Dovey describes as “a collective dream world of mass culture, ... at once captur[ing] and invert[ing] the urban. It is a realm of relative shelter, safety, order and predictability which is semantically and structurally severed from the city.” Whether the city represents the threat implied by the mall, and whether the mall can deliver a genuine alternative to the collective anxiety it fosters, remain highly questionable⁸. Founded on the generic building block of a spatial formula christened ‘the dumbbell’ (brainchild of the godfather of the shopping mall, Victor Gruen) that persists due to its devastating financial success⁹, the internal environment of the mall differentiates itself within a consumer market via a language of surface tailored to a target demographic. Asserting itself as a more desirable alternative to a given lifestyle, the mall, in its native West, typically takes the form of a pastoral alternative to the perceived ills of urbanity – a self-contained complex accessed by car and predicated on familial values of safety and togetherness.

Transposed to Dubai however, this strategy of opposition finds a more tangible target – climate itself. A climactically controlled internal environment provides Dubai’s expatriate population and tourists, many of whom are unused to the fierce heat of the desert, with a comfortably inhabitable public space conferred a deeper significance than the inferred civic benefits within the mall’s western context. Onto this scenario Dubai has grafted one of its most prominent civic events, The Dubai Shopping Festival, which takes place during February each year in its shopping malls, attracting 3 million visitors to the city. Rem Koolhaas, in his study of the city spaces of Singapore, a context whose climate parallels the challenge of Dubai, describes “the city as a system of interconnected urban chambers. The climate, which traditionally limits street life, makes the interior the privileged domain for the urban encounter. Shopping in this idealized context is not just the status-driven compulsion it has become “here” but an amalgam of sometimes microscopic, infinitely varied functional constellations in which each stall is a “functoid” of the overall programmatic mosaic that constitutes urban life.”¹⁰ While undoubtedly a commercially driven stimulation of tourism based revenue, it is also indicative of the spatiality within which much of the city’s social life takes place and the principle activities it offers.

The implication is a transcendence of the consumption based values that undermine the perception of the western shopping mall, though questions remain – what are the civic qualities of the urban space it produces and to what extent are cultural processes hybridized by the transplantation of the mall into this context.

Our journey begins as the grain of historic Dubai bleeds into its modern skyline, stewarded since the early 1990's by Sheikh Mohammad bin Rashid Al Maktoum. Located at the commencement of Sheikh Zayed Road, the axis linking Dubai to Abu Dhabi, the Bur Juman centre, unlike many structures that define the modern emirate's brand image, uniquely displays its own limited history. One of Dubai's first shopping malls, opened in 1991 by the Al Ghurair Group, the centre was soon forced to compete with newer, more sophisticated malls as expatriates, tourists, and their money, flowed in. Accordingly the Bur Juman Centre underwent a facelift and was re-launched in 2005 as a high-end mall aimed at a luxury market.

Naming his practice 'Civic Arts' and referring to the project as 'Bur Juman Gardens', Kuhne clearly wishes to be perceived as a socially and contextually conscious architect, above the morass of commercial architecture where the mall more traditionally sits. In his own words, "Bur Juman Gardens celebrates the diversity of science, arts, and letters that the Arabic World has contributed to civilization."¹¹ So what does this vision deliver?

240 Climatic necessity aside, the need to understand the civic space the mall offers is given further credence by its assumption of a less visible role as part of the generalized apparatus of globalization within a skyline contrived to attract foreign capital. The shopping mall can thus be understood as assuming, for the foreign bodies drawn to Dubai, a means by which the inhabitation of a largely alien context is naturalized through more familiar symbols and spatial practice. Mitigating the effects of cultural dislocation inherent in the expatriate lifestyle, geographical space and time are compressed as a "response to desire for fixity and for security of identity in the middle of all the movement and change. A 'sense of place', of rootedness, can provide (...) stability and a sense of unproblematical identity."

The extension avoids the outright pastiche of image and form that undermine so many shopping malls, instead favouring abstract contextual motifs subsumed into a cohesive architectural whole. This assumes a pseudo hi-tech series of glu-lam timber and glass roof structures whose references to Michael Hopkins et al are robbed of integrity by the overbearing sheen of marble and fussy decorative details that adorn many of the mall's surfaces. While a certain Arabian flavor in the more decorative details lends a limited authenticity over and above more conventional expectations of shopping mall interiors, the result is far from the didactic historical message implied by Kuhne's rhetoric.

However, the tension between the visual trace of history and the mall's need for a totalizing brand image is most problematic here. Spatially connected in a seamless, internalized figure of eight configuration, the visual contrast between the shiny new Bur Juman and its older relative, could not be greater. The resultant disjuncture reveals the buildings underlying plan form as the key determinant of its spatiality – a point on which we must elaborate.

As the scale of global mall developments has grown, this generic formula has developed a number of variants to counteract the fatigue its instrumental axiality can produce.¹² More than many, Kuhne has realized the importance of balancing perpetual movement with manageable chunks of visual information is key to subtle manipulations of this formula. The figure of eight stimulates an effortless, repetitive cycle of movement, unlike the more rigid axial qualities of its predecessors, and uses its curved malls to break the consumers line of site – a means of diverting attention onto the immediate, while the promise of further riches, just out of view, stimulates further exploration. While its form may have changed, it is clear at Bur Juman that the coercive structure underpinning the mall has been rendered as strongly as ever. A far cry from Kuhne's empty rhetoric it would appear that his real talent is to eke a little more life from this deadly equation between plan and profit. In this sense he is a worthy successor to Gruen, even if the latter was not quite so aware of the Faustian pact he was making with this spatial formula when it first left his drawing board.

Unfortunately for Kuhne the success of this spatial formula is dependant on the concealment of the manipulative processes taking place at a structural level by a totalizing, immersive surface language that brands the mall experience for its target demographic. The 'authenticity' of any surface language here, however, is undermined by the aforementioned disjuncture between old and new. It is a moment that reveals the mall's ephemeral qualities all too clearly and unravels the processes of internalized consumption based fantasy to ask some difficult questions of the pseudo-urbanity its underlying physical structure has to offer. A symbolic marker at the point where the historic city structure breaks down to reveal Dubai 2.0, the defensive, larger scaled block of Bur Juman neither integrates itself into the grain of the historic city, nor, in its inward looking manipulation of the urban realm, does it offer a credible alternative. Rather, the tired, bland appearance of the original Bur Juman is a depressing reminder of the compressed sense of time from which the branded interior of the mall suffers and the willfully contradictory dialectic between form and function that defines the ever present tension inherent in its built form. Bur Juman may mark the start of the new city's journey, but is also a cautionary tale of the limits to which a branded modernity, constantly required to re-invent itself, is subjected.

An instrumental plan form driving the spatiality of the shopping mall is not a particularly new concept. Victor Gruen's 'dumbbell' layout has, since the early days of the typology, exerted an almost unbreakable hegemony over the design process. Comprising a linear route flanked by smaller retail outlets, terminated at either end by larger 'anchor' stores, this spatial formula understands the "exposure of all individual stores to the maximum amount of foot traffic is the best assurance of high sales volume." Ostensibly functioning as magnets the anchor stores draw consumers through the entire range of curiosities and temptations that the mall has to offer, heightening the psychological stimulation to engage in acts of consumption. Coupling coerced perpetual movement to its wholly internalized plan form, the mall creates an introverted journey of consumption freed from the unplanned distractions and encounters which may occur in a more conventional urban scenario. The atomization its inhabitants forms the bedrock of the sustained consumption led fantasy on which the malls financial success depends. The resultant urban structure is defined visually by a continuous procession of towers which line the edge of the road, falling almost instantaneously to a low rise carpet of residential and luxury hotel accommodation terminated on one side by the Persian Gulf and on the other by the desert. While it is the symbolic capital infused within the skyline that is meant to be seen, it is arguable that the more significant urban characteristic is the road itself. Following the line of the coast, the combination of road and desert ensure the new city is a long, narrow affair (little greater than 4 kilometers in width), a linearity rendered even more intense by the impassable barrier of the road itself, almost perfectly bi-secting the strip it has created. Moreover, the resultant stretched out, car-oriented scenario explicitly abandons the fluid relational pedestrian networks more commonly associated with a Western conception of the 'ideal' city. The realm of the pedestrian becomes a series of nodes spread out along this immense strip and accessible only by car. We must attempt to understand the nature of these nodes evolving beyond the fault line between history and modernity on which our previous precedent sits.

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Situated at the base of the world's tallest tower, the 800 meter plus Burj Dubai, the Dubai Mall follows the lead of its totemic marker by asserting itself as "the largest shopping space in the world"¹³. The title of 'world's largest shopping mall' is subject to a high degree of competition between emergent global economic hubs all of whom vie to outdo one another in the race to supersede the pre-eminence of the United States within the capitalist framework it both defines and, at least for now, spearheads. Accordingly, the means by which these title are measured can be rather nebulous. In total area, the Dubai Mall is the world's largest by 2.5 million square feet, but in terms of gross leasable area it sits in seventh place, the top spot going to the New South China Mall in Dongguan, China. By any standards, however, the Dubai Mall is immense. Designed by Singapore based mall specialists, DP Architects PTE Ltd., the Dubai Mall comprises 12.1 million square feet of accommodation over four levels, contains 1200 shops, an aquarium and underwater zoo, a 2000 person capacity ice rink, a 22 screen cinema, 120 restaurants and cafes, 14,000 car parking spaces and attracts more than 750,000 visitors per week. It is the nature of the schism between old and new, aided by the disconnected linear strips of city beyond it, that it is rendered as brief as possible. Left behind all too quickly, it is to the image of Dubai as a burgeoning globalized metropolis that we are directed. Nowhere is this message encoded stronger than our next precedent. Similarly the Dubai Mall's designers state "it is sine qua non that the mall be conceived and planned as a microcosm of a metropolis, a City within a City, to ensure that the desired qualities of live [sic], work and play are perpetuated." The question we must address

is the nature of the physical structure upon which the city within a city is founded.

As at Bur Juman, the Dubai Mall eschews the traditional dumbbell genotype in favour of a triangular configuration of curving malls. The origins of this configuration lie with Bur Juman's designer Eric Kuhne, echoing the 'innovative' centripetal arrangement of the Bluewater shopping centre which he built just outside London, in the UK, a decade ago. Its Dubai offspring has simply super-sized the concept. In essence, "the arduous intermediate stages of commercial evolution have been telescoped or short-circuited to embrace the "perfected" synthesis of shopping, entertainment, and architectural spectacle on the most pharonic scale." Again this configuration stimulates perpetual movement, linking three dumbbells at acute angles signified by an event – an anchor store, or in one case a baffling public art installation. Motion is broken only at carefully choreographed moments where one is able to inhabit a man-made lake served by terraces connected to the mall's many restaurants in the colossal shadow of the Burj Dubai tower. Well concealed exits lead only to the city's impassable road structure, rendered psychologically distant by the relative comfort and amenity of the mall.

It would seem that the globally biased conjunction of plan and profit has prevailed again. This, however, assumes that the inhabitants of the mall are reduced to wholly passive bodies capable only of a rigid adherence to the social contract it defines. To do so "leads to an overestimation of the efficacy of disciplinary power and to an impoverished understanding of the individual which cannot account for experiences that fall outside the realm of the "docile" body." It is thus imperative to acknowledge, but also move beyond, the generic building blocks of physical structure to see the "relation of subject to discursive formations as an articulation"¹⁵ inscribed within a more complex field of global/local tension.

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Most interesting, however, is the way in which this scenario plays out tensions that exists between the indigenous local population and an expatriate diaspora within the constraints of the malls structure. Many malls deliberately blur the boundaries of their acknowledgement of Ramadan and other culturally specific practices through subtle manipulations of their pseudo-public status. It has become common practice for many restaurants to obscure views in and out during daylight hours. For this period they exist as a 'private' entity that exploits a loophole tacitly accepted by the indigenous population, allowing foreign visitors to (not quite obviously) follow their own cultural patterns. Both sides engage in an uneasy complicity that serves an overarching process of capital accumulation.

Nonetheless the question of appropriate dress and behaviour on the part of Dubai's expatriate population, has led to the launch of an anti-indecency campaign within the cities malls. From an Emirati perspective, the scenario is one whereby the native population does not "want to generalize and say that all expats behave in an appropriate way. However, many expats who come to our country are either not aware of our cultural norms or are just not respectful of them and choose to behave any way they want to." Conversely, in the eyes of the expatriate, "I respect Dubai, its religion, culture and people, I come here frequently for business and pleasure, and I was never asked to cover my shoulders or knees until recently (...) besides I don't have long or covered outfits, and most importantly I didn't do something bad to Dubai or its people." If the shopping mall serves to bring Dubai's global entrepot together, it nonetheless appears that it has some way to go to breach (and in some cases it actively undermines) a divide between cultural practices that, on this reading, appear to exist in spheres of relative autonomy. In one sense, this represents a minor triumph of indigenous cultural practice over the relentless pursuit of profit embodied in the global mall machine. In another it is one that temporarily shrinks the 'turf' of the mall and in doing so reveals further its programmatic limitations. In the case of the Dubai Mall the response is to simply excise its lower restaurant level during these hours, effectively making the mall a three storey affair. The acknowledgment of cultural practice in the process of strategic design leads, in this case, to a ruthless zoning of internal activities that denies the diversity of street-scene and programme integral to Jacob's conception of a successful city.

Within the Dubai Mall, a more explicit attempt to integrate a sense of cultural authenticity does exist. Occupying the central point of its plan form, created by the void between its interlinked malls, the Dubai Mall provides a beating heart in the form of a gold souk. Predictably it is also the world's largest. The malls designers clearly hoped for an explicit place specific didactic message to be imparted here, via a "sym-

bolic integration of Arabic culture” into its fabric. At the extreme end of the scale is the scarcely believable indoor ski slope whose prosthetic form emerges from the previous holder of the title of ‘largest mall in Dubai’ – The Mall of the Emirates. Unfortunately, this part of the mall is all too easily bypassed, zoned off the beaten track, rather than integral to the linear thrust of the buildings principle spaces. One is left with an impression derived from the shiny newness of the malls themselves, whose aesthetic errs toward a generic representation of the space in which luxury brand consumption takes place, rather than the more nuanced culturally hybrid experience that the souk, in theory, offers. It is this lack of differentiation in its principle spatiality that is most problematic here. As a destination within an autonomous block of cityscape differentiated by a collection of the world’s current biggest things, it offers little more than the narrow definition of ‘world class’ toward which it aspires. It is a moment of being that will all too soon be superseded by the competition – and what then? Perhaps an alternative set of differential criteria are required to navigate the destinations within this landscape of consumption.

One is reminded of Rem Koolhaas description of airports as “a concentrate of the hyper-local and hyper-global in the sense that you can get goods there that are not available even in the city, hyper-local in the sense you can get things there that you get nowhere else.”¹⁶ It is a statement as easily applicable to the shopping mall, and in this case forms a direct linkage with the juxtaposition of globalized imagery against the desert to project a unique identity within a wider field of consumption. Although clearly successful – the Mall of the Emirates was as busy as any visited during my field research – there is a hefty environmental price tag required to sustain this fantasy. While the relatively small size of the Emirate positions it behind behemoths such as the United States and China in terms of overall carbon footprint, it nonetheless holds the unenviable distinction of “having the highest ecological footprint per capita” anywhere on the planet. Viewed within an overall picture of sustainability that understands the nature of the economic processes (albeit that the credit bubble on which Dubai’s speculative property boom is founded has well and truly burst¹⁷) necessary to underpin the creation of Dubai’s cityscape, it is difficult to imagine a volte-face whereby a Dubai of the future could exist without the climactically controlled environments that make the desert habitable for its large expatriate population. Nonetheless, the environmental excess attached to strategies of differentiation such as the above is simply unsustainable in the long term. It is surely more fruitful to engage with forms and spaces that display a demonstrable appropriateness to patterns of human habitation in this specific context.

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Bounded by Dubai’s impassable road structure, the development understands that it does not need to depend on the forced movement of the dumbbell to stimulate a captive audience into acts of consumption. Rather, this faithful re-construction of the spatiality of the souk evokes Bernard Tschumi’s analysis of the design of the garden as a space of leisure, merging “the sensual pleasure of space with the pleasure of reason, in a most useless manner.”¹⁸ A refreshing structural change, though one we must investigate further if we are to avoid the trappings of post-structuralist awe that often blight meaningful critiques of the mall.

It is in the things that are absent – the heat, the smell, the mess, the hustle and bustle, the trappings of unplanned habitation – that the superficial conceit of this language makes itself felt. Here, the muted presence of globalized brand imagery brings itself to the fore. The realization that stalls offer not the informal, bottom-up spaces of consumption defined by local traders within Dubai’s genuine Souk’s, but instead a cleverly disguised version of the usual suspects inhabiting the generic space of the shopping mall the world over is one that questions the authenticity of the ‘reality’ with which we are faced here. Our next precedent promises a more nuanced blend of global and local ingredients. Conceived as a re-creation of “life as it used to be for residents along Dubai Creek, complete with waterways, abras, wind towers and a bustling souk” the Madinat Jumeirah development, opened in 2003 by architect/developer Mirage Mile, borrows its imagery heavily from the remnants of the old city preserved in the Bastakiyah quarter. On first entering the ‘souk’ that forms the centerpiece of this luxury resort, the faithfulness with which these fragments are re-assembled compresses, in psychogeographic terms, the distance that separates the two sites. The dumbbell is abandoned in favour of “meandering paths [that] lead visitors through a bazaar-like atmosphere in which open fronted shops and intimate galleries spill onto the paved walkways.” This question is reinforced by the re-creation of Bastakiyah’s wind towers around the mall’s exterior. Surely a legitimate way to investigate a sustainable means of climactically controlling its internal spaces, their existence in form but not function brings any higher sense of aspiration quickly down to earth. It is a representation, as Homi Bhabha notes, undermined

by the problematic production of a “recognizable Other, as a subject of a difference that is almost the same, but not quite.”

For its almost exclusively white, wealthy, western clientele it becomes a legitimate substitute – a well heeled gentleman was enthusiastically introducing his equally well heeled girlfriend to the experience of a ‘real’ Arabian Souk during my visit. Its nature is one that provides a representation of cultural authenticity for a market that wants to believe it engages with its locality, but ultimately wants to be able to eat English fish and chips rather than get their hands dirty. Once again a field of difference is opened between an indigenous and expatriate sense of what the nature of Dubai truly is. The nature of this reification is one that inherently limits a more engaged sense of cultural hybridity and any deeper sense of social capital implicit in its structure.

The final stop on our tour favours historical narrative to evoke a sense of cultural legitimation. The Ibn Battuta mall constructs a story based on the travels of the 14th Century Muslim scholar of the same name. Loosely structured around a dumbbell layout, the linear thrust of the mall is separated into six ‘events’, each themed to represent a particular stop in Ibn Battuta’s travels. Thus under one roof it is possible to visit Andalusia, China, Egypt, India, Persia and Tunisia. Unlike our previous precedent, the mall makes little attempt at an authentic, robust representation of culture. It is an environment that is unashamedly artificial, reveling in the loose narrative that defines its fantasy. It is a stark reminder of an image of global inclusiveness built on the exploitation of an immigrant underclass whose existence is rendered invisible by the inward looking autonomous structures they create. This inward, capitalistically defined, urbanity falls into that most post-modern of traps – a static sense of being, inherently limited in transformative potential by the nature of its built form. The question is, from these seemingly limited circumstances, what might Dubai become?

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Situated toward the limits of new Dubai, some 30 kilometers from its historic core, the Ibn Battuta mall displays little in the way of architectural merit, but in other ways encapsulates a number of characteristics of the Emirate from which I will hypothesize a conclusion. More than any of the more self-consciously designed environments we have considered, the mall’s spaces convey some sense of the freewheeling entrepot implicit in Dubai’s external promise. Conversely, the inward, autonomous nature of its structure, visibly keeping the threatening site of the Jebel Ali power plant and unfiltered desert at bay convey a more problematic schism between the city as a whole and its internal spaces characterized by the mall. This unease is enhanced by the site of distant migrant workers, labouring in the ferocity of the desert heat to realize newer larger projects, which they will never be allowed to inhabit¹⁹.

Conclusions

George Katodrytis describes Dubai as a “prototype of the new post-global city, which creates appetites rather than solves problems. It is represented as consumable, replaceable, disposable and short-lived (...) Dubai may be considered the emerging prototype for the 21st century: prosthetic and nomadic oases presented as isolated cities that extend out over the land and sea.” While this essay illuminates certain characteristics of the geo-political framework and emergent spatiality that go hand-in-hand with this vision of Dubai, it remains the case that these characteristics display a young city whose urban qualities feel, in a number of respects, wanting. As Christopher Davidson observes, “Dubai’s remarkable development strategies will never reach their full potential unless (...) a civil society exists.” Yet, in concept at least, Dubai defines itself as a culturally hybrid entrepot, striding ahead of the more conservative ideals of its neighbouring Emirates.

The shopping mall’s we have visited over the course of this study embody this paradox. While each displays characteristics and innovations borne of its locality, it is also the nature of the typology to exhibit its worst traits when allowed to exist in a state of relative insularity. It would be all too easy to fall back on conventional, Western, urban discourse to imagine an inherently weak, divisive urban structure in constant denial of its own history (such as the case of Bur Juman) that leaves successive developments behind in pursuit of an insatiable appetite for bigger, better and more. Rather, I would posit, a different type of urban space, which Dubai clearly is, demands a different (or at least updated) set of urban theories, which may be gleaned from investing in a deeper understanding of its existing, fundamental characteristics. The

need to engage in such a process is given greater prescience as Dubai is forced to re-evaluate its building stock, both in the wake of the recent global recession which has, for the time being, halted its explosive building boom, and by the opening of its metro system which threatens to liberate much of the stretched out city for a much larger portion of the populace. To elaborate, the fundamental obstacles perceived here are the relatively separate spheres of existence defined by a patrimonial Emirati ruling class, a moneyed class of expatriate workers and tourists and a relatively invisible underclass of migrant workers. Accordingly it is in understanding the shopping mall less as a 'despotic signifier' of identity and more as a field of interaction within a wider urban structure, that one productive understanding of what Dubai might be could be pursued. It is, on the face of it, a highly striated class structure whose lack of genuine interaction is exacerbated by the stretched out, island-ed autonomy that defines much of its urban condition.

It would be folly to believe that this alone will imply a fundamental and overall shift in terms to what Dubai ultimately is. Both moves do however imply a shift in balance from Dubai's present, striation toward a 'smoother' space, "identified with movement and instability through which stable territories are erased and new identities and spatial practices become possible." Far from the death of the city, it may yet be that the things we do in shopping centres are capable of producing their own culturally hybrid histories and in doing so can transcend the apparent limitations of the format.

Notes

¹ See: Davidson, Christopher M – Dubai: The Vulnerability of Success (Hurst & Company; London, 2008) p. 91-98

² Ibid p. 92-93

³ See 'Jebel Ali' – (Wikipedia, the free encyclopedia) http://en.wikipedia.org/wiki/Jebel_Ali - accessed October 2009

⁴ See 'Dubai' – (Wikipedia, the free encyclopedia) <http://en.wikipedia.org/wiki/Dubai> - accessed October 2009

⁵ See 'Dubai' – (Wikipedia, the free encyclopedia) <http://en.wikipedia.org/wiki/Dubai> - accessed October 2009

⁶ Harvey, David – The Condition of Postmodernity: An Enquiry Into the Origins of Cultural Change (Blackwell Publishing; Oxford, 1990) p. 109

⁷ Ibid – see p. 67-98

⁸ See: Jewell, Nicholas – The Fall and Rise of the British Mall (p.317 – 378, The Journal Of Architecture, Volume 6, Winter 2001; Taylor and Francis; London, 2001)

⁹ See: Gruen, Victor – Shopping Towns USA (Van Nostrand Reinhold Company; New York, 1960)

¹⁰ Koolhaas, Rem – S, M, L, XL (010 Publishers/Monacelli, Rotterdam/New York, 1995) p. 1073

¹¹ See 'Burjuman Gardens' – (Civic Arts, Eric R. Kuhne and Associates) <http://www.civcart.com/bur-juman-gardens.php> - accessed October 2009

¹² See: Jewell, Nicholas – The Fall and Rise of the British Mall (p.317 – 378, The Journal Of Architecture, Volume 6, Winter 2001; Taylor and Francis; London, 2001)

¹³ See 'Burj Dubai (Dubai Tower) and Dubai Mall, United Arab Emirates' – (designbuild-network) <http://www.designbuild-network.com/projects/burj/> - accessed October 2009

¹⁴ Hall, Stuart – Who Needs Identity? From Hall, Stuart; du Gay, Paul (eds.) – Questions of Cultural Identity (Sage Publications; London, 1996) p. 12

¹⁵ Ibid p. 14

¹⁶ Koolhaas, Rem – S, M, L, XL, 010 Publishers/Monacelli, Rotterdam/New York, 1995, p. 1251.

¹⁷ "Shares Hit by Dubai Debt Problems" (BBC News, November 26th 2009) <http://news.bbc.co.uk/1/hi/business/8381258.stm> - accessed November 2009

¹⁸ Tschumi, Bernard – Architecture and Disjunction, MIT Press, Massachusetts/London, 1996, p. 86.

¹⁹ See: Davis, Mike – Sand, Fear and Money in Dubai from Davis, Mike; Monk, Daniel Bertrand (eds.) – Evil Paradises: Dreamworlds of Neoliberalism (The New Press; New York, 2007) p. 48 – 68

²⁰ Dovey, Kim – Becoming Places: Urbanism/Architecture/Identity/Power (Routledge; London, 2009) p. 22



United Arab Emirates



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Kuwait



AnyScanner

Dubai

Kevin Mitchel



In just over a century, the city of Dubai has grown from a small coastal village to the largest urban areas in the Persian Gulf. According to latest statistics issued by the Government of Dubai the emirate has a population of approximately 1.6 million people, with over 75% (1.2 million) of residents being male. Low wages among a significant part of the expatriate population has contributed to extraordinary economic growth that supported expansion of the built environment during the first decade of the twenty-first century. Data gathered by the Dubai Statistics Center in 2005 indicates that the majority of the emirate's expatriate males were employed in construction (47%) and trading and repairing services (17%), while the majority of female expatriates were employed as housemaids (37%). Only 2% of the total expatriate population was involved in either education or health and social work. An extra 70 kilometers could be provided by the aptly titled "Waterfront", which was purportedly designed for 1.5 million inhabitants. While it is unclear how the late-2008 global financial crisis will ultimately affect the project, the Waterfront's developers have claimed that it "... is on track to becoming the exemplar sustainable city founded on resource efficiency, social equity, and economic prosperity." Perhaps anticipating criticisms of the project, the developer's statement succinctly addressed some of the negative effects of Dubai's rapid growth while maintaining the promise of economic prosperity that could potentially attract 1.5 million people to the proposed development.

From the mid-1990s onward, press releases heralded ever-larger projects presented through life-like renderings promising soft light, sea views and serenity. The renderings were necessary for indicating what a building was intended to become, but more importantly they represented the potential for exceptional returns in a real-estate market fueled by off-plan sales and purchasing with the aim of re-selling prior to project completion. Man-made islands created a new coastline and almost instantly increased the supply of waterfront property. Palm Jumeirah developers claim that this project alone expanded Dubai's waterfront by 100% with the addition of 78 kilometers of coastline. This essay takes the claims made by the Waterfront's developers as a point of departure to discuss the complex interplay between political structure, economic conditions and architecture in Dubai. After providing a brief overview of the governance structure of the emirate, the essay considers how political and economic forces have contributed to shaping the built environment, focusing specifically on sustainability-related measures and the complex issue of "identity".

Governance Structure and the Foundations for Prosperity

Dubai's system of governance is autocratic; however, scholars often point to the neopatrimonial aspects of the system that result in a hybrid web of bureaucratic state structures that are intermeshed with patronage networks. Gero Erdmann and Ulf Engel have described neopatrimonialism as "...a mix of two types of political domination. It is a conjunction of patrimonial and legal-rational bureaucratic domination. Furthermore, and as a corollary to this, it is assumed that the greater economic power of the private sector in relation to the ruler (the ruler – merchant power balance) the more influence the private sector will have in regard to decision-making." The exercise of power in neopatrimonial regimes is erratic and incalculable, as opposed to the calculable and embedded exercise of power in universal rules (or, in Weber's terms, *abstrakter Regelmäßigkeit*). Public norms under neopatrimonialism are formal and rational, but their social practice is often personal and informal.

Another important aspect of Dubai's governance structure is the complex relationship between the public and private sectors. In "Governance in Dubai: The Emergence of Political and Economic Ties between the Public and Private Sector", Martin Hvidt has analyzed the public-private ties as manifested in the autocratic and neopatrimonial setting of Dubai. In autocratic and neopatrimonial systems decision-making remains centered on the ruler. However, in spite of the fact that the private sector does not have a formal means of participating in governance, it is not necessarily excluded from decision-making and influencing policy formulation. In the case of Dubai, Hvidt maintains that "...that the more the development strategy relies on the activities of the private sector, the more influence the actors of this sector will have in relation to policy formulation and decision-making.

During the latter half of the twentieth century a number of Persian Gulf states depended on oil revenues to increase prosperity. In contrast, Dubai's limited natural resources required that the emirate concentrate on exploiting its established position within an interdependent trade network that extended across the Persian Gulf and beyond. Throughout the rise and decline of the pearling industry and the increasing dependence on trade activity, Dubai relied heavily on foreign merchants. Michael Herb has argued that "The merchants did not translate their economic power into institutions through which they could exert political control over the state. The merchants [...] did not have a parliament through which they could bargain with rulers over the raising and spending of taxes. Instead rulers levied the taxes and deputed their bodyguards to collect them; the merchants most effective tactic against the rulers' exactions was that of capital anywhere—the threat of flight. Merchant bargaining power lay in the mobility of their trade (and of pearling) which allowed them to flee to a different shaykhdom if the rulers' exactions grew too heavy. The position of a ruler, at least in the smaller Persian Gulf state shaykhdoms, could not easily withstand a wholesale alienation of the merchant community, and rulers in any case had an interest in the prosperity of the merchant class." But, because power must be legitimated, it results in what has been termed a "soft" autocracy. Within democratic governance structures the private sector relies on formal channels of interaction through state bureaucracies, whereas in autocratic and neopatrimonial systems the ruler is the sole decision maker and exerts a significant influence over the private sector through patronage networks.

Strategic measures such as abolishing import and export tariffs to create a duty-free port at the turn of the twentieth century, dredging the creek in the 1950s to accommodate larger trading vessels, and the construction of container ports from the late 1960s onward have made Dubai a primary hub for regional and global trade activity. And according to a recent report from the fDi Intelligence division of the Financial Times Ltd., "...Dubai became the top destination city by number of FDI projects and capital investment, growing by an impressive 59% and 122%, respectively, between 2007 and 2008 and racing past Shanghai and London to take the top spot." Autocratic rule, neopatrimonial tendencies, and the intense reliance on the private sector have presented challenges, but these conditions have also contributed to Dubai's success. Maintaining the delicate balance between public authorities and the private sector and ensuring that FDI flows in (instead of out) to support growth in the emirate influences decision-making, policy formulation and, as discussed below, the design and construction of the built environment.

Measures taken throughout the twentieth century formed the foundation for diversification that ultimately contributed to attracting the sig-

nificant foreign direct investment (FDI) to support the expansion of the built environment during the 10-year period from 1998 to 2008. The most recent data compiled by the Dubai Statistics Center indicates that FDI in Dubai totalled 42.5 billion dirham (approximately 11.6 billion USD) in 2006, which represented a 13.4% increase over 2005. The sectors benefitting most were construction and financial intermediation/insurance (each accounting for approximately 35% of the total FDI in 2006). European and Non-Arab Asian countries combined were responsible for the largest share of FDI in Dubai in 2005 (82.7%) and 2006 (86.2%).

While the impressive inflow of FDI into Dubai resulted in rapid economic development and funded projects that may serve the city well in the future, the built environment has suffered from the lack of planning control and the myopic focus on short-term returns on investment in real estate. At the height of the speculative frenzy that drove development investors brought and sold off-plan projects at an alarming rate, pushing prices to levels considerably higher than the initial cost of the property. Although those attracted by immediate gain were keen to believe claims that Dubai was immune to boom/bust cycles, the late-2008 global financial crisis proved otherwise. After mid-August 2009, The Wall Street Journal reported that a number of distressed funds were preparing to purchase Dubai real estate after values dropped 50% in less than 12 months. In spite of the significant drop in values there has not yet been a rush of potential buyers willing to invest in Dubai property; however, analysts suggest that if concrete actions are taken to improve transparency after the 2008 collapse then capital may once again settle in Dubai due to liberal economic policies and progress made in providing infrastructure and an urban rail system.

Challenges to Sustainability

The desire to project an image of a “modern” city complete with shimmering glass facades and grass-filled parks has significantly impacted the natural environment. The World Wide Fund for Nature (WWF) Living Planet Report has focused attention to the excessive use of resources in the UAE. There has been increasing recognition of the ecological challenges associated with architecture and planning in an environment characterized by intense climatic conditions and freshwater scarcity. In 2007 a resolution decreed that all residential and commercial buildings in Dubai must comply with a set of “green building” specifications that would be effective from January 2008. No legislation had been enacted by the beginning of 2008 and in mid-August the Dubai Municipality held a conference in which it announced the municipality and the Dubai Electricity and Water Authority (DEWA) would be developing an integrated green building system for Dubai. No regulations had appeared by the end of 2008 and, on 24 January 2009, an article reported that green building regulations would not be unveiled “for some time”. The article stated that the delays could potentially be attributed to the financial crisis and the economic difficulties faced by Dubai property developers.

The delays in developing comprehensive legislation that would result in sustainable approaches to building design and construction illustrate the complex nature of public-private relations in Dubai. While the governmental decree mentioned above recognizes that the long-term environmental impact of present practices cannot be sustained, the stringent measures necessary to regulate the building industry would almost certainly adversely affect short-term profit margins and may jeopardize a reputation built upon neoliberal economic policies and laissez faire capitalism. Dubai’s reliance on FDI to fund real estate and construction projects ultimately empowers the private sector and results in concessions that have a significant influence on the built environment. Michael Herb has pointed out that the early twentieth century merchants possessed bargaining power resulting from their ability to transfer their operations to a different shaykhdom if the rulers’ demands were deemed to be unfair. In the early twenty-first century, capital is infinitely more mobile and advanced communication technology ensures that funds can be easily transferred across the globe in minutes. In neopatrimonial systems the mobility of capital has significant consequences that fundamentally affect the power balance between public and private entities and, because of the influence that can be exerted in areas such as the development of sustainability measures, it ultimately shapes the built environment.

Dubai authorities have initiated series of initiatives to reduce energy and water usage, including the introduction of a revised tariff structure known as the slab system in March 2008. This system charges users for electricity and water using a sliding scale: the greater the consump-

tion, the higher the tariff. According to news reports after the first year those who failed to implement energy- and water-saving measures would have seen cost increases of up to 66%. Perhaps this was due to the fact that the tariff affected only those with high consumption levels and the system was structured to ensure that 80% of consumers would not be subject to increased costs. In addition the homes and farms owned by UAE citizens were exempted from the slab system.

Although preliminary measures have been taken, costs remain low and there is little incentive for fundamental change in building design and construction. While one may argue that laissez faire economic policies and ecological sustainability are not mutually exclusive, the current situation in Dubai indicates that direct intervention may be required to balance the desire for profit with the urgent need to reduce the consumption of resources and environmental degradation. Long-term sustainability will depend on comprehensive measures and widespread implementation. The “green building” legislation and the slab system cases illustrate the tensions associated with implementing stringent sustainability measures within a neopatrimonial system. In both cases the concessions made to private sector interests and the expatriate community ensured that the costs of doing business remain low, which encourages existing investment to remain and attracts new FDI. While Durkheim’s work concentrates on the cultural construction of reality, later social constructionist approaches have rejected essentializing tendencies, maintaining instead that those aspects that characterize a collective group are socially constructed through the interaction and agreement of individuals. Post-structuralist thinkers have insisted on the relative nature of the notion of identity, emphasizing its multiple, shifting, and fragmented character and arguing processes of identity formation are ambiguous and unstable.

Additionally, measures like excluding residential and farm properties of citizens from the slab system can serve to legitimize the government through benefaction that bestows favor upon the citizen population. Architects and planners may possess the knowledge to address issues related to sustainability, but design strategies and construction technology may prove less important than political solutions that seek to balance private interests and the “public” good. In a recent essay entitled “In What Style Should Dubai Build?”, I considered how the speed, scale and variety of architectural production induced anxiety of the sort that motivated nineteenth-century German architect Heinrich Hübsch to pose the question In What Style Should We Build?

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The Identity Debate

It is difficult to specifically define what is meant by “identity”. Marxist conceptions of “class consciousness”, Émile Durkheim’s notion of “collective consciousness” and Ferdinand Tönnies’ category “Gemeinschaft” provided the foundations for thinking about collective identity and focused on what are believed to be “essential” characteristics of a unified social experience that binds individuals together through commonalities. The question of identity in the built environment is equally complex, although it is often reduced to issues related to the visual appearance of a building or urban area. Some argue that new urban areas in Dubai cannot distinguished from those found in other rapidly developing cities throughout the world. Answering Hübsch’s question within the context of Dubai presents challenges because it begins with the use of “we”, implying communality and the potential for consensus regarding a singular “style” of buildings that would reflect and respond to the diverse population in the emirate. Although marketing material produced by Dubai-based developers claim the creation of “communities”, it is questionable whether shared norms and values will emerge and lead to the development of public institutions within an autocratic system.

Currently UAE citizens comprise less than 20% of the population, and some projections made prior to the late-2008 financial crisis indicated that the number could shrink to 5%. The tensions resulting from an increasing expatriate population are summarized in a quote appearing in a 2007 Persian Gulf News article: «The issue is we are losing our identity. The national identity is about to get lost because of foreigners [...] If we focus on westernization we will lose everything.» Presumably in response to the growing concern over this issue, the UAE Ministry of Culture, Youth and Community Development organized a “National Identity” conference in April 2008 to consider the consequences of the demographic imbalance between citizens and an extremely diverse expatriate population. And in a recent debate regarding appropriate dress within Dubai’s shopping malls, a UAE citizen was quoted in the Persian Gulf News as saying «I don’t want to generalise and say that all

expats behave in that inappropriate way. However, certainly many expats who come to our country are either not aware of our cultural norms or are just not respectful of them and choose to behave any way they want to." Maintaining a balance between a relatively small group of citizens, an expatriate population and transient tourists compound the difficulties associated with defining the role of identity. In addition, the right of residency is based on employability and the right to work (and therefore the right to remain in the country) is not extended to expatriates past the age of 70.

An expatriate from another country bordering the Persian Gulf presented an alternative viewpoint: "I love Dubai and I like its style. But the way I dress is completely a personal matter and I don't allow anybody to educate me on what to wear and what not to wear." While the few individuals interviewed for the article may not necessarily be representative of the opinions and attitudes of the larger population, the views expressed are indicative of the tensions that exist.

The fact that the site within which the tensions between Dubai's diverse population become manifest is a shopping mall warrants further consideration. Dubai's larger shopping malls are typologically equivalent to those of a similar scale found elsewhere throughout the world. Hypermarkets from Europe and Asia, jewelry stores selling Swiss watches, electronics stores offering the latest in mobile phones, and food courts with restaurants serving everything from *fatoosh* to french fries reveal the increasing standardization of global consumption patterns. The architecture of the shopping malls provides little more than superficial nods to the context; however, by observing the variety of clothing worn by shoppers, one can perhaps deduce that they are in one of the Persian Gulf states where those who outwardly express a sense of modesty mingle among others who appear to be dressed for a day at the beach. In the case of recommended dress codes for shoppers, the privatized space of the mall becomes the site within which the public tests the limits of tolerance and contests the imposition of context-specific norms.

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Although developers have marketed residential projects based on the fact that a life-long visa would come with a freehold purchase, in mid-2008 the Dubai Real Estate Regulatory Agency stated unequivocally «There is no direct link between property ownership and residence visas. Developers should not lure investors to property sector with a promise of residence visa.» And in 2009 the Dubai Naturalisation and Residency Department issued a statement saying that residents who own property in the UAE but are not employed will be required to leave the country every 6 months and their visa would be renewed as they re-entered Dubai at the airport. The house sits clumsily in its plot exposed on all four sides to the elements, with a garden that is no garden at all for it consists of the "corridor" set-backs from every boundary of the lot." The legal constraints on establishing residency without employment and ultimately seeking citizenship will continue to have an effect on the built environment. Although the late-2008 financial crisis may curb off-plan sales and lead to legislation that restricts the practice, architects will still not be designing with end users in mind because this would not be established at the time of design and construction.

Faced with such uncertainty, many architects have either imported pre-existing models from elsewhere, resorted to reproducing "traditional" architecture, or concentrated on developing an iconic form language. Perhaps the most ubiquitous case of imported models has been the transplantation of North American suburban settlement patterns, resulting in houses designed as detached free-standing dwellings located in the center of relatively large plots of land. S. George Shiber described the situation in Kuwait in the 1960s, which was repeated in residential neighborhoods throughout Dubai as well: "...the modern house or "villa" plunked on a uniform and non-descript plot which, with several hundred similar plots constitute the inorganic and uneconomic new neighborhoods of Kuwait, is often a caricature house in a caricature setting obeying a caricature philosophy of architecture and urban form that could have only emanated from caricature architectural concepts.

The Madinat Jumeirah represents one of the prime examples of reproducing what is believed to be the past. The following statement made by the architects reveals that the basis for the design was not necessarily actual architecture but the result of imagining might have been: "What if in ancient UAE or ancient Oman they had the money we have now and the technology we have now? What would they have built? That's how we came up with Madinat Jumeriah. We built what they might have built with the resources available to us." The resort complex

is described by its owners as "... a magnificent tribute to Dubai's heritage and is styled to resemble an ancient Arabian citadel." It is unclear which "Arabian citadels" informed the design of the complex and there is little beyond the façade treatment and windtowers that makes reference to "Dubai's heritage". While the intention was to re-imagine the "ancient", it is curious that the windtowers introduced to Dubai in the early twentieth century became the defining feature of the development.

While developments like the Madinat Jumeirah have been constructed as an assemblage of iconic elements derived from an imagined past, others have treated buildings as singular iconic statements. This trend is projected to continue for at least the next five years as the remaining planned 7 free trade zones move from the planning stages into realisation and more opportunity is created in Dubai for international companies from around the world." A survey of twentieth-century architecture in Dubai reveals a steady progression toward the iconic. This has had a significant effect on the built environment and resulted in an emphasis on singular buildings. Projects like the Palm Jumeirah and The World are massive manifestations of the iconic at the urban scale. The speculation that supports growth in the real estate and construction industries demands investors, which, in turn, requires visually arresting icons that attract attention. In Dubai and neighbouring emirates, many real-estate transactions were based on little more than visual representations in sales brochures and elaborate models. The material reality has been less important than the reality constructed by photorealistic images; the craft of making often absent in the building itself was replaced by the artifice of highly skilled CAD technicians.

While the speculative real estate market supported economic growth, it also raises questions of a political nature as the aim is to sell residential buildings that owners will ultimately expect to inhabit. Statistics provided by Dubai's Real Estate Regulatory Agency indicate that, since 1973, Indian nationals have been the largest group of expatriates involved in land transactions in Dubai (AED 18.7 billion); this has been followed by citizens of the United Kingdom (AED 17.3 billion), Pakistan (AED 10.4 billion), Iran (AED 8.4 billion), Saudi Arabia (AED 7.8 billion) and the Russian Federation (AED 5.5 billion). At least prior to the financial crisis of 2008 the majority of buyers were foreign investors – some saw this as an advantage and liberally interpreted statistics to market their properties: "In Dubai the majority of the population herald from abroad, up to 94% of the entire population are expatriates and the number of those coming to the emirate grows substantially on a weekly basis as up to 20 new companies establish themselves in the emirate each week.

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If one maintains that the built environment should respond to and reflect its inhabitants, then the situation in Dubai presents complex challenges. Ultimately citizens who form part of a shrinking minority and the expatriate population comprising the majority may have substantially different needs and competing interests. Diversity within the citizen population and among the various expatriate groups further compounds the challenges. To say that architecture and planning should serve all could result in universalizing tendencies that may deny cultural differences present within the heterogeneous population that has enriched and made substantial contributions to growth of Dubai. And, as the debate regarding appropriate dress within Dubai's shopping malls proves, the negation of difference would certainly prove problematic. Attracting FDI after the 2008 global recession will require that vaguely defined property ownership legislation be clarified. Residency rules that did not force departure every 6 months may foster a sense of belonging and encourage a long-term vested interest that would encourage the substantial expatriate population to identify with and contribute to improving the built environment. However, as the long delays and contradictory messages that have characterized the process of developing clear rules indicate, the desire to attract investment is tempered by the need for recognizing the concerns of the citizen population by imposing restrictive visa regulations for expatriates who purchase property. But if non-citizens do not view Dubai as home, it is likely that buildings will continue to be treated as mere commodities that are considered as investments with no value beyond the market price.

Until late 2008 rapid inflows of FDI were hastily converted into new urban quarters and iconic architectural statements. Announcements of cancelled projects were quickly followed by statements claiming that a respite from the rush to build would result in more considered approaches to the built environment. However, as the case of sustainability legislation discussed above indicates, the influence of the private sector and the necessity to ensure that capital does not flow outward may hinder efforts to implement measures that would im-

prove the quality of design and construction.

Concluding Remarks

The Dubai Strategic Plan 2015 states that future initiatives will be guided by adoption of free market economy principles; a unique relationship and partnership with the private sector; the protection of the national identity, culture and way of life; an openness to the world while maintaining uniqueness; provisioning of world-class infrastructure to suit the requirements of all users; and preserving the environment in line with international standards. These principles serve to reflect some of the neopatrimonial aspects of Dubai's governance structure.

Balancing free market principles and the informal power of the private sector with protecting "national identity" and preserving the environment may prove incredibly difficult, even within an autocratic system. Dubai's built environment grows out of the tensions resulting from embracing free market principles, balancing the demands of a minority citizen population while attracting foreign investment (as well as a foreign labor force to translate it into real estate, goods and services), and managing a web of bureaucratic structures intermeshed with patronage networks. These tensions make Dubai what it is and will continue playing a role in determining what it will become.

As discussed above, the specific political and economic forces that have developed and transformed over time continue to condition Dubai's built environment. Trade activity and the emirate's increasing reliance on merchants during the twentieth century resulted in private sector influence on policy formulation and decision-making. And this influence seems to have increased with efforts to attract FDI and measures taken to ensure that investors remain confident in Dubai's ability to manage the substantial debt that was amassed to fund a decade-long building boom. Critics that cry "Dubai has no identity" tend toward superficial pronouncements that focus solely on the fascination with iconic form and the isolated enclaves created from an emphasis on infrastructure.

City of Sharjah

Dismantling An Urban Puzzle

Hassan Radoine



Introduction

Sharjah city is the result of a complex interaction of a set of environmental, economic, political, and cultural factors throughout successive periods of time that shaped a peculiar physical form with a typical social composition. Decisions made under multiple fast changing economic and political factors affected the city planning of Sharjah. The most prominent of these factors are the economic boom and the population growth.

After the discovery of oil in the Sixties, economic prosperity allowed rapid urban change. Oil became the major source of income for the country. The introduction of modern technology accompanying oil excavations and fast exchange with the rest of the world made the means of modern life available to its citizens. Sharjah was one of the cities eager to follow the Western model of modernization and urban development. As a consequence, the urban environment changed to meet the new local ambitions to modernize fast the city. Foreign work force was subsequently invited to participate in the urban development process of the country. The continuous economic prosperity and the need for workforce attracted large number of foreigners to work in Sharjah. That led to a dramatic growth in the population where the ratio between citizens and foreigners has reached around 80% in recent years. Before the discovery of oil in the 1950s, Sharjah was under the protection of the British. There were approximately 1000 people living on the coastline of Sharjah that is currently known as the heritage area. Economic resources were limited, mainly dependent on fishing, pearl collection and trade. The British produced a primary typical plan for Sharjah, which formed the basis for today's urban form of Sharjah. However, revisiting the formation of Sharjah's current urban form, it proves that was built without regulations and on an individual level without considering the overall urban layout. Due to the availability of land and low population, the city had never been challenged as today with problems such as traffic jam, lack of parking spaces, urban sprawl, and the dysfunction of urban infrastructure. This increase caused daunting population problems that would have spectacular consequences on the urban planning level with serious disruption of the existing and historic urban fabric.

1. Sharjah Genesis and Urban Change

The city of Sharjah has known several changes that can be traced through the following trends:

- The conservative and the adaptation of the old;
- The rectilinear and gridiron;
- The suburban and peripheral;
- The genesis of a new city center.

1.1 The conservative and the adaptation of the old

1.1.1 The Traditional Conservative Arabic Town, 1820

The powerful tribe Qawassim had first settled in the most strategic border of the Persian Gulf, from Ras al-Khayma to Sharjah. The ruling family of Qawassim appeared in 1720. The Qawassim made Sharjah their urban hub where first settlers survived on diving, fishing, and trading. Sharjah was a typical Arabic and Islamic walled town. Although its urban pattern may show some regional influences, the ideals and forms of an Islamic city were predominant. In 1820, a general treaty with the British military caused the collapse of Qawassim maritime activity, and divided the Qassimi kingdom into smaller sheikhdoms. The internal conflicts between its members resulted in an independence of Sharjah and Ras Al-Khayma as separate emirates in 1914. A first map of Sharjah that was drawn by the British military in 1820 shows several important features of a typical Islamic city, some of which are:

- **Al-Sour (defensive city fence/wall):** Sharjah sour was built by Sheikh Sultan I Ibn Saqr Al-Qassimi (1804-1819) to protect the small town from invaders. It had three main entrances for the Bedouins to enter with their camels and goats to be sold in al-Arsa souk (market). By 1886, no parts of the sour remained due to the expansion of the town.
- **Palmary area:** it was located outside the sour next to water sources.
- **Al-Layya area:** a small fishing village located on the other side of the creek. The sour was constructed out of local materials such as stone reefs and sand stone brought from Sharjah's coast and Abu Musa Island. The sour was 2.75m high and 0.5m thick.
- **Al-Jubail area:** it was located outside the sour in a high area (30-40ft): cemetery.
- **The Coastal souk (market):** located along the coast of the creek within the sour. The market was of fish, gold and different goods.
- **Al-Husn:** it was not built yet and was located outside the wall.

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The early development of Sharjah shows that the city consisted of several types of architectural and urban elements. The notable houses had a clear Persian and Indian influences, and the general fabric was of a primitive nature, 'arish. However, the Islamic community was established through several dense residential neighborhoods. The genesis of sharjah in the 19th century, a period of major changes and external influences, did not allow the city to reach its urban maturity as in the case of key Islamic capitals. Therefore, the nascent Sharjah did not resist the pressure of the beginning of 20th century changes.

1.1.2 Modernization of the Walled Town

In 1930, Sharjah witnessed the birth of its first airport, which changed its urban morphology from the traditional to the modern. The airport was constructed by the British military as a transit point between India and UK. This brought a new financial income to the city when its pearl trading declined, and a new gate to the old town that was connected only through land and sea. This significant infrastructure underlined Sharjah strategic geographical position, and brought a new technology and new urbanism.

The airport was created in a small military urban district that contained more than 1200 air-conditioned housing units, power station, water reservoirs, and a hospital. This district was protected with a wall. The construction of the airport and its district influenced the whole traditional setting with the appearance of major sandy roads. Al-Uruba road was its first landing path, and currently is used by trucks. In 1938, this

modernization of the infrastructure of Sharjah was boosted by the new financial input when the local government made contract privileges for oil companies to explore oil.

1.2 The rectilinear and gridiron

The gridiron and rectilinear trend was stressed by the 1968 plan and showed its impact by 1980. The old town was stretched to espouse the linearity of an ordered urban pattern. Consequently, the historic hub was confined to a series of heritage spots in the map.

In 1968, the British military was preparing to leave the Emirates after 150 years of Protectorate status. Sharjah expanded to include new districts such as Maysaloon, Al-Falaj, Al-Sharq and Al-Majarra. A plan was made to divide Sharjah into a grid. The city started to have new paved roads, roundabouts and a bridge that connected Al-Majarra to Al-Leyya. In addition, with the creek that started drying up (creek deposition), the urban form of Sharjah had shifted significantly from the local model to the modern urbanism archetype. After 1972 (Independence year), the local municipality did not tamper with the existing urban layout and continued to lay the streets and divide the city into districts following the traffic. New paved and sandy roads were established, and new green areas like Al-Zahraa Square appeared. Sharjah government decided to change the shape and the entrance of the creek, which affected the commercial activities.

In 1977, more houses began to spread in the southern neighborhood and sky-scrappers began to appear. The city started changing to a new modern form with paved roads, urban blocks, roundabouts, green squares and landmarks (schools, hospitals, fire stations ... etc). However, the city consisted of eclectic urban parts within a rigid traffic infrastructure. The gridiron layout dictated linearity and confined the old shajah to a historic hub. The plan shows the emphasis laid on roads at the expense of well-defined zones. It gives priority to the main avenues in red at the first stage, the projected ones in yellow at the second stage, and the roads outside the periphery in white were projected at the first and second stages. The extension of roads enlarged the body of the city, and created a stretched urban territory. The old city started shrinking under the vehicular pressure and large road infrastructure.

1.3 The suburban and peripheral

The suburban and peripheral trend was generated by the plan of 1980 that imposed on the city an absolute traffic map. While the city was not fully developed, this plan allowed the spread of construction in the peripheral areas where roads were projected. Since 1980, this trend generated a sort of urban suburbia, and impacted on the relevance of a city center or the old Sharjah as a point of reference. The old Sharjah in this map became totally subdivided within the traffic grid and its zone envisaged to be completely commercial. No regard was given to the city's heritage or its cultural centre. The civic and public rubric was referred to with very few buildings in the map that cannot be at all sufficient for the giant urban projection. The industrial district that that was supposed to be projected in the periphery was given strategic area adjacent to the lagoons, and invaded longitudinally the body of the city. This plan continued to be implemented up to the year 2000 without any rectification and without questioning its relevance. Although urban heritage concern was a great issue in the Arab region since 1975 with UNESCO and other heritage organizations, it appears that authorities in Sharjah government was not equipped as yet to review the city's past. Only minor restoration works on some selected buildings were undertaken. On the other hand, the development with this plan was at its full gear, which had a great impact on the current shape of the city:

The historic Sharjah became a piecemeal heritage spots with the Bank Street crossing its main zone. Since 2000, more traffic plans have been generated without consideration of the continuous disorder in the heritage area. Moreover, despite the fact that this area has been very active, and still preserves some traditional social and commercial activities, focus still remains on the historic theme park aspect.

1.4 The birth of a new city center

The genesis of a new city center trend was prompted by the loss of the magnet of the old town and lack of a civic dimension in the city. The disconnected old and new centers generate an urban antagonism. On one hand, an active traditional harbor is still a vibrant naval front with partially still used heritage remnants along with dynamic multi-ethnic commercial activities. On the other hand, an artificial aquatic front of the lakes represents the contemporary image of Sharjah with a mixed function. This antagonism ought to be resolved to merge the two centers into one or create a bipolar Sharjah center that balances between its contemporary and historic urban images.

The establishment of the three lagoons as an attractive natural zone, and the competition with Dubai's tourist and entertainment resources, has created the need for a new urban magnet in Sharjah. Currently, the area of the lagoons becomes noticeable with high-rise buildings and the continuous efforts to design the surrounding landscape of the lagoons so as to create a simile of Dubai. However, this new city center cannot fully replace the magnetism of the historic hub of Sharjah.

The area of the lagoons is currently driven by a competitive and random urban development market, and no master plan is set to face the dilemma of infrastructure, cultural, and environmental sustainability. Tracing the urban changes and trends of the city of Sharjah will thus allow us to understand the inner weaknesses and strengths so as to position its case within a wider professional lens. Al Qasba resource is the only macro project that reflects a cultural and environmental package worthy of consideration in the middle of dispersed government and private buildings. These buildings are constructed first without a clear vision on the macro urban layout of the whole area. Therefore, the new transportation plan that is drawn by Halcrow international is again a posteriori resolution of the city issues and not based on a holistic vision for urban planning and future of the city of Sharjah.

2. Environment and Water in Sharjah

The history of the city of Sharjah is woven around its water fronts as well as about its three artificial lagoons: Khalid, Al-Khan and al Qasbaa canal. In order to gain a deeper understanding of the urban fabric of this city, it is crucial to present status quo of its water infrastructure that makes unique and its wastewater crisis that constrains its proper development. These are key to comprehend the environmental issues in Sharjah.

2.1 The Lagoons

• Khalid lagoon

Khalid lagoon is one of the most important features of the City of Sharjah and its socio-economic environment. The lagoon is located at the heart of the city and is surrounded by high rise buildings, markets, recreational parks, entertainment and cultural centers, and busy commercial districts. The area surrounding the lagoon is widely used by Sharjah residents for recreation and socializing and the lagoon itself is used for recreational sports, boating and commercial activity. The lagoon is connected to the Persian Gulf by a narrow channel (Al Khour) through which water is exchanged between the lagoon and the Persian Gulf. The Al Khour channel is heavily used by commercial boats and ships, and the land use surrounding Al Khour channel is predominantly commercial.

• Al Khan Lagoon:

Similar to Khalid lagoon, the nearby Al Khan lagoon is also connected to the Persian Gulf through a channel. Al Khan lagoon is used for recreational fishing and boating and the area surrounding the lagoon is less developed than the area surrounding Khalid lagoon, but development is increasing rapidly.

Al Khan lagoon is the smaller of the two with a total surface area of approximately 1.5 million m² and a depth of approximately 5*7 m. The surface area of the Khalid lagoon is about 3 million m² with a depth of 3*7 m.

- Al Qasbaa Canal:

In addition to fulfilling many social and economic benefits, the Government of Sharjah invested in building Al Qasbaa Canal connecting the two lagoons in part to help improve the flushing characteristics in the two lagoons, and consequently improve water quality. The canal is about 1 km long, 5 m deep and 30 meters wide. The canal was commissioned on 8 November 2000. A gate was provided on the Khalid end of Canal. Operation of the gate was planned mainly to allow water flow in one direction, from Al□Khan lagoon into the Khalid lagoon but not in the opposite direction.

2.2 Water Infrastructure of Sharjah

The environmental and economic impact of urban water and wastewater is important in the making of the city of Sharjah. The shortage of water supply and poor wastewater management that is still reliant in majority on septic systems are major issues in this city. Without an immediate municipal legislation and a strategic water planning and management, Sharjah will face tremendous environmental challenges as to rapid urbanization. The steady increase in population, industrialized zones, touristic activities, high rise buildings, and public facilities has increased exponentially the use of both potable and sewer water. Such heavy use is not managed properly, which makes the urban authorities under challenge to cope with the growing needs in terms of providing potable waters and managing used waters.

3. Urban Planning and Governance in Current Sharjah

The history of planning in the city of Sharjah is related widely to the grid shape, which main focus was the automobile per se. Since the emergence of the Aruba Road in 1968 which stretches from the southern border with Dubai to the northern border with Ras al Khaimah, Sharjah went through major urban and geographical transformations such as, Corniche road, Port Khalid, and the three artificial lagoons. The first Master Plan of Sharjah drawn by William Halcrow was a sheer traffic engineering schemata that impacted on the image of the city and dedicated its destiny with chaos and disorder up till now. Although Halcrow & Partners claimed to pioneer the growth of the city, facts prove that their plan was mediocre vis-à-vis what was achieved internationally in terms of urban planning.

These municipalities needed time to mature and become in tandem with the complex nature of contemporary Islamic cities. However, in most cases they are still not fully competent to run the planning and management of their urban spaces. This clash between the two styles of city management resulted in the destruction of the old Sharjah which potential was not perceived or rather was ignored. The local heritage was seen as primitive and not developed. Therefore, major destructions were undertaken to insert boulevards in the body of the old town. No effort of conservation was made, and no concern about cultural resources was shown. In addition to this unsuccessful Master Plan, the city suffered acutely from the institutional structure qualified enough to execute and follow-up its guidelines. As in most Arabic and Islamic countries, the first municipalities imported by colonialists or protectionists were rather useless and clashed with the traditional system of management (Hisba, Qadha', Guilds, etc.). While progressive urbanism worldwide was questioning the validity of centralization and imposition of city form and concept on inhabitants, Halcrow & Partners were having their day in a region where criticism is scarce and fascination with modern forms blinded all the patrons involved in the process.

However, this restoration today seems not to meet the planning pressures of the whole city. The ruler's office is keen to undertake this task, and thus a sound planning is required to underscore the value of heritage in the future Sharjah as a cultural anchor in UAE. To counter the destructive process of the heritage and memory of Sharjah, His Highness Dr. Sheikh Sultan, with a foresight of cultural renaissance of Sharjah, initiated a long restoration program that has saved the most strategic part of the city from eradication. This planning process should take into consideration the following effective elements:

- Integration: the heritage sites and monument should be an integral part of planning.
- Continuity: the establishment of a new Master plan that guarantees the historic and cultural continuity of Sharjah.
- Diversity: the preservation of heritage means not only a partial approach but also a holistic one that considers all past or present cultural differences.
- Identity: the planning process should protect the sense of identity and sense of belonging of Sharjah while being cosmopolitan and

modern.

- Profit: Investing in culture is not to make a city an absolute museum; it is to rejuvenate its history to remain a sustainable center of commerce, trade and business.
- Development: the planning process assures the preservation of the existing heritage and increases its resources to produce new cultural experiences or even new value heritage for the future.
- Community: heritage sustains communities and forges their memories of place. Thus, heritage in planning signifies empowering a community to define itself, and creating a social and cultural attachment to its living space.
- Environment: heritage includes also natural and ecological resources that augment the experience of architectural and urban heritage. Sustaining environment through planning enables Sharjah to balance between its modern development and preserving its ecological dimension.
- Density: the fast growing population of Sharjah should be managed to avoid the state of social chaos found in other Arab cities. For a city to prosper, its planning ought to project its carrying capacity so as to retain a reasonable population density for maintaining the quality of its civic life.
- Traffic: it is meant to be a means and not an end as it is today in planning. Sharjah should not remain a transit point through its central body, but should take all disturbing vehicular influxes outside its urban territory.

In order to reach these ends in planning, Sharjah cannot rely only on its current human and technical resources that are not at the level of expectation for this optimistic endeavor. Therefore, constructive criticism is seen more as a threat rather than a constructive means to shape a better future of Sharjah. Its planning authorities are below standard, and the wild real estate development hinders its planning process. In absence of a clear planning vision, and lack of technical expertise, the planning authorities are not challenged. Everyone is polishing the façade, and no audacious initiatives are launched to halt this continuous destruction.

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4. Conclusion

The rapid change in both the economic and population growth led to the following consequences:

- The proposed last master plan which included the infrastructure, the facilities and urban zones is not fully applicable and it is not guided by a clear urban law.
- Lack of sound urban zoning is clearly a constraint toward shaping a functional urban agglomeration for the lack of accessibility, public facilities, urban boundaries, excessive mixed-use areas, and housing sprawl.
- Traffic, parking problems and lack of directionality is a major urban issue due to the improper planning of transportation and circulation network that is under continuous rehabilitation and change.
- Increments in the constructed areas in comparison with the vacant lands are commonplace due to the lack of strict rules and regulations in land market.
- Sharjah has grown following the demographic increase and was not a result of an effective urban planning. It has been designed as parts (the Architectural level) and not as a whole (the urban level).
- Unidirectional urban extension of Sharjah because of confining boundaries with Dubai, Ajman and the Persian Gulf puts pressure on the city center to grow vertically through the increase of high-rise buildings.
- The high-rise buildings are the result of land speculation without an urban infrastructure appropriate to such type of buildings.
- The heritage area is under threat to disappear from the map of the city through continuous efforts to preserve some of its scattered remaining historic buildings.

In addition, due to this critical urban status quo, the city spends a colossal municipal budget to survive for there is no adequate planning that envisions tasks and tailors their expenditures accordingly. The foreign private consulting companies are still in control and are not willing to empower the municipal and planning authorities or enhance their skills. If one wants to conduct a study on the urban crisis of Sharjah, most government documents are in custody of foreign companies, which is very risky as they may leave any time without prior notice.

For a proper planning process to be established, the following measures are very vital:

- Development of leadership and administrative capacities.
- Building a sound data base on the city (socio-economic, geographical, heritage resources, traffic, etc.)
- Establishment of Institutional communication and negotiation.
- Management of stakeholders and decision makers.
- Development of human resources and qualified professionals.
- Management of private projects.
- Establishment of a sound legal urban law.
- Encouragement of public participation in the process of planning.

City of Kuwait

City of Kuwait: Contemporary Conditions

Yasser Mahgoub



Introduction: The Moment and the Momentum

Money does not make architecture; human effort does.

The first decade of the 21st century has almost passed and the city state of Kuwait is still in a state of lull. After the collapse of Saddam Husain's regime in the northern neighbour Iraq on March 2003, Kuwait was expected to rise quickly and regain its lost prestigious status as the "Jewel of the Persian Gulf" that it enjoyed during the 1970's and 1980's of the 20th century. It is feared that the falter Kuwait is currently experiencing would last for an extended period of time. Many big projects are delayed, re-bid or cancelled due to political and financial circumstances. Repeated parliament elections and government resignations are distracting the attention and effort away from development and construction. The global economic crisis has affected the ability of developers and contractors to receive cash flow from banks and financial institutions to complete their projects. Many tower cranes are stopped and many workers dismissed due to the global economic crisis. The downfall of oil prices and huge losses of financial investments in world stock markets has resulted in a freeze of the financial cycle.

The built environment found in Kuwait today is a product of decisions made during its early stages of planning and construction as well as subsequent decisions made during its development and evolution. Major impact of world events illustrate this entanglement with world affairs including its invasion by Iraq and the determination to liberate it by the world community during the Second Persian Gulf War and its "involuntary" involvement in the Third Persian Gulf War on Iraq.

Deconstructing the Past

Following its liberation on the 26th of February 1991, Kuwait started a reconstruction process of its badly damaged infrastructure and utilities. Most of its economic resources were utilized to improve its security and military capabilities. The continuous existence of the hostile regime of Saddam Hussain in Iraq prevented the country from diverting its attention away from security and military priorities. This coincided with major world economic shifts that other cities in the region, especially Dubai, benefited from tremendously. The economic development coupled with a construction boom in the Persian Gulf region during the 1990's was witnessed with envy by Kuwait. Dubai acquired a world

status by attracting world investments through the implementation of free market trade and open economy strategies. The period between the invasion of Kuwait in 1990 and end of Saddam's regime in Iraq in 2003 witnessed slow development, focus on safety and security and the loss of Kuwait's reputation as the leader of development and modernization in the region.

The economic crisis was followed by the invasion of Kuwait by Iraq on the 2nd of August 1990. During their retreat, the Iraqi Armed Forces practiced a scorched earth policy by setting fire to the Kuwaiti oil wells. The fires took over nine months to fully extinguish, and the cost of repair of oil infrastructure exceeded \$5 billion. During the 1970's, Kuwait has reached the climax of its maturity as a newly established state built with oil revenues according to state-of-the-art urban planning and architecture design. The 1973 Middle East War caused a sharp increase in oil prices and as a result more income for Kuwait, which initiated a second phase of development and modernization. While Kuwait was not directly affected by the war, it benefited from the increase in oil prices that followed the oil embargo to finance its construction plans. Kuwait was the main point of entry of modernization to other Persian Gulf countries; such as Dubai, Bahrain, Qatar and Abu Dhabi. It was the Persian Gulf idol for other emerging countries and participated in shaping their modernization and development. The downfall of Kuwait's prestigious status started during the 1980s with the stock market collapse and the decline of oil prices that slowed down the process of development and construction. The 8-year First Persian Gulf War between Iran and Iraq during 1980s threatened the security of the whole Persian Gulf region and diverted the attention towards safety and security. Kuwait had to bear the financial burdens of supporting Iraq during the war.

International architects were invited to design landmark buildings in Kuwait. They included: Kenzo Tange, Jorn Utzon, Reima Pietila, Arne Jacobsen, Michel Ecochard and Lindstorm, Egnell and Bjorn. For example, the design of The Parliament Building by Jorn Utzon started in 1978 and was completed in 1985. The building resembles an Arabian tent, as a symbol of hospitality, open to all visitors oriented towards the Persian Gulf to catch the cool sea breeze. The architects developed an innovative solution providing a stylistic progression from the traditional to the post-modern forms. They respected the height and style of the existing traditional building and used a soft, yellow colour of indigenous housing for the exterior walls. They applied several climatic solutions to provide shaded exterior spaces while admitting air to the interior space. Kuwait Towers by Malene Bjorn, the most important landmark on the Persian Gulf Road in Kuwait, was inaugurated on February 26, 1977. Water is contained in a sculptural form that imitates the traditional Arabian perfume containers. The project is composed of three towers; two towers are used as water containers and the third is a lighting pole.

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The fact that most public buildings in Kuwait were designed by foreign architects and firms was a result of absence of qualified local architects and firms that could handle projects of that size. There were not many native architects nor workers to handle this massive amount of work. Many architects and construction workers were brought from different parts of the world. They were asked to design and construct all new buildings and projects needed at that time. They utilized their knowledge and expertise in design, construction and materials to produce designs that address the needs and aspirations of their Kuwaiti clients. The tallest is 180 meters high and contains 4,500 m³ water reservoir, a 90-guest restaurant, and a rotating observatory. The First Master Plan for Kuwait was developed in 1952 by the British firm Minoprio, Spence and Macfarlane. The spheres are covered with enamelled plates of steel painted in colour scheme of blues, greens and greys. The integration of traditional elements into modern design was intended to relate it to a particular locality and region.

The need to develop these landmark projects was realised after the implementation of the 1st Master Plan during the Sixties, the period of rapid construction and development following Kuwait's independence from Britain in 1961. Demolition of the traditional houses and the replacement of the defensive wall by the 1st Ring road was part of the implementation of the 1st Master Plan, a vision of a modern capital city made of wide roads, governmental and public buildings while modern residential neighbourhoods were being constructed outside the wall. The city continued to expand, more neighbourhoods were added, and the roads were widened. Ring roads were constructed to annex more desert land to the urban area. An industrial area was established in Shuwaikh in the west and a shopping and entertainment area was established in Salmiyah in the east. The city stretched along the coastal strip limited by the water of the Persian Gulf to the north and east and oil

fields to the south and west. The neighbourhoods of private housing lacked entertainment activities during the evening, while the commercial neighbourhoods of Salmiyah, Farwaniya and Hawalli, which contain shopping and housing for expatriates, are more lively and full of activities during the evening.

The planners' main objectives were to illustrate and describe the improvements which they considered necessary for the development of Kuwait in accordance with the highest standards of "modern town planning." The matters which the consultants regarded as being of primary importance in the re-planning of the town were: (a) the provision of a modern road system appropriate to the traffic conditions in Kuwait, (b) the location of suitable zones for public buildings, industry, commerce, schools, and other purposes, (c) the choice of zones for new houses and other buildings needed in residential areas, both inside and outside the town wall, (d) the selection of sites for parks, sports ground, school playing fields and other open spaces, (e) the creation of a beautiful and dignified town centre, (f) the planting of trees and shrubs along the principal roads and at other important points in the town, and (g) the provision of improved main roads linking Kuwait with the adjoining towns and villages. The Plan called for the demolition of the old houses inside the old wall to give way for new roads and public buildings. Modern residential neighbourhoods were built outside the old wall. Only a few historic monuments have been preserved, few mosques have been saved from demolition, and many traditional houses have been replaced with modern structures.

After the discovery of oil during the 1940s, Kuwait entered an unprecedented phase of development and construction. Kuwait utilized its oil wealth to construct a modern city to replace its old traditional settlement. The economic prosperity permitted the introduction of modernization through master planning. The short history of the modern state of Kuwait is an example of the early impact of globalization that was followed on other Persian Gulf countries during the second half of the 20th century. While some countries were positively influenced by shifts in world economies and dependency on oil; i.e. Dubai, and enjoyed rapid development and world attentions, others; i.e. Kuwait, were negatively influenced by global conflicts and economic dependency. Kuwait will remain at the centre of global conflicts with remaining tensions between Iran and the West that is likely to escalate as Iran insists on developing its nuclear capabilities that threatens the whole region. It is unclear whether this condition will result in a more balanced condition or another global conflict that will ignite yet another regional conflict.

Contemporary Environment in Kuwait

Urban development in Kuwait is confined to a narrow strip of land along the Persian Gulf coast covering no more than 8% of its small 17,820 sq km territory. The mighty Burgan oil field and Kuwait's international airport are obstructing possibilities for developing further west into the desert, and security conditions prevent development in the northern region. The Persian Gulf Road is the major attraction for all residents of Kuwait. Its landscaped areas, restaurants, marinas, landmarks, and shopping malls attract citizens and residents away from the monotonous residential areas. It extends south to oil port of Shuaiba and north to the commercial port of Shuwaikh, where it ends with the Oil Sectors Complex designed by the late renowned architect Arthur Erickson. At "Ras Elard" in Slamiya, the state-of-the-art Scientific Centre design by C7A, hosting one of the best aquariums in the world, is located. It provides another example of incorporating modern functions with a local expression. Before the discovery of oil, Kuwait was a vernacular settlement located on the southern shore of the Kuwait creek north of the Persian Gulf composed of courtyard houses built using mud brick along narrow alleys. The city was surrounded from the south by a semi-circular defensive wall with several gates. The wall was the third in a series of concentric walls that were built during different periods of history to defend the city from tribal attacks. The first wall was built in 1760 with an approximate length of 750 metres when the town area was about 11.275 hectares. The second wall was built in 1811 and was approximately 2300 metres long and the town area was about 72.4 hectares. Finally, the third wall was built in 1921 and was approximately 6400 metres and had five gates. The town area was then about 750 hectares.

The building hosts sophisticated technologies within spaces and forms derived from Arab and Islamic architecture; solid walls from the outside with the broken axis and the tent covering the entrance. Along the Persian Gulf road many fast food and stand-alone restaurants provide

a “collage” of architectural styles and characters. They include: Hard Rock Café, Le Notre, KFC, Burj Al Hamam, Fridays, McDonalds, Chilies, and others. The names and images of these restaurants provide a good window looking onto the globalization of Kuwait. However, the Persian Gulf Road suffers traffic congestion and crowdedness, especially during the weekends and rush hours. Further south, beyond Shuaiba oil port, informal construction of private chalets covers the coast all the way to the borders of Saudi Arabia.

The latest national census conducted in 2005 indicated that the population of Kuwait was 2,866,888, including 1,893,602 (66%) non-Kuwaiti. 98% of the population reside in urban areas that occupy only 8% of the total area of the country. The non-Kuwaiti workforce, estimated to be 1,332,629 individuals, is composed of 36% Arabs, 63% Asian and 1% from other countries. The high income promotes a life style only paralleled in other Persian Gulf countries. Kuwaitis enjoy such high income from the governmental jobs and subsidies for food, housing, medical care, education, etc. Non-Kuwaiti workforce enjoy high income compared to what they can earn in their own countries. Their interest is to support their families back home, improve their living conditions and secure their future when they return to their countries. Due to the bylaws, they are not allowed to purchase assets in Kuwait, so they divert most of their income to their home countries and accept basic or average living conditions in Kuwait.

The harsh extreme hot weather, reaching more than 50 degrees centigrade, frequent dust storms and humidity during the long summer months force individuals to retreat to large enclosed shopping malls for socialization more than for actual shopping. The traditional shopping/socialization experience in the downtown Mubarkiya area, composed of connected shaded marketplaces, was replaced by a modern shopping/socialization experience inside enclosed air conditioned state-of-the-art shopping malls. The old Mubarkiya area remains a shopping destination that provides a traditional shopping experience along with Souq Al Zul Wa Al Bshut, designed by the Kuwaiti architectural firm Bonyan as a traditional souq composed of shops selling traditional clothes and Persian rugs, and the renovated Souq Al Tujaar. The shopping experience in the Mubarkiya area relates the shopping experience to the history of old Kuwait across from Safat square, which was the heart of old Kuwait city.

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The first modern shopping experience was introduced through the arcaded walkways along new downtown streets such as Fahd Al Salem street. Buildings were composed of four or five floors with shops in the ground floor along an arcade covering pedestrian walkways. Office and residential accommodations were provided in the upper floors. This type was also introduced in the Salmiya area along west of Salim Al Mubarak Street. It was followed by the introduction of large multi-floors complexes that contained shopping malls in the basement, ground and mezzanine floors, with offices and residential units in the upper floors. The first exclusive shopping mall was constructed in Salmiya area along east of Salim Al Mubarak Street. They attract citizens and expatriates to an exclusive shopping experience close to their place of residence. The malls are constructed side by side along the street providing an open street and closed mall experiences at the same time. The success of these shopping centres promoted the construction of more exclusive shopping malls along the same street that contained coffee shops, restaurants and cinemas.

The first decade of the 21st century witnessed the opening of mega shopping malls that incorporated in addition to shopping, restaurants and cinemas, large departmental stores and fast food outlets, marinas, hotels and hyper markets. Souq Sharq was the first shopping mall to create a major attraction along the Persian Gulf, designed by the renowned architect Nader Ardalan of the KEO. The Mall applies strategies of post modern architecture by utilizing traditional elements from Kuwaiti architecture in a modern language. The longitudinal interconnected 2-floor pathways host shops and restaurants. It transformed the traditional wind captures (badjirs) into mechanical rooms for air-conditioning units. The design is criticized for locating the main view of the mall towards the city and the marina while locating the parking lots towards the Persian Gulf. The badjirs were also criticized as “unauthentic” to Kuwaiti traditional architecture.

Located on the waterfront in the exclusive shopping district of Salmiya, is Marina World, a major shopping and entertainment development that crosses the Persian Gulf Road. It is composed of a shopping mall, restaurants’ complex, hotel and marina for yachts. The Avenues is

the largest shopping mall in Kuwait. It became the shopping heaven for all residents of Kuwait since the opening of its first phase in April 2007. It is located in the Al-Rai industrial area, along the Fifth Ring Road. It is the second largest shopping and entertainment complex to open in Kuwait. It opened its first phase in 2002, the second phase in 2004, and the third and final phase towards the end of 2005. Marina World contains many restaurants, shops, a convention hall, promenade areas, and a five-star hotel. It is the hot spot for teenagers and youth in Kuwait. Marina Mall is designed in a neo-classical Spanish design style. The mall's exterior façade is characterized by its distinct red, blue, and beige paint, and red roof tiles. The circular Central Plaza is surrounded by restaurants and cafes. The Plaza's centrepiece is a large, spectacular glass fountain, and the area is topped with a large glass dome, equipped with a sail that moves automatically with the direction of the sun. The Marina Crescent, located directly across the highway from Marina Mall, is composed entirely of restaurants and gift shops. It is directly linked to the Mall by a panoramic, 100-meter long, air-conditioned bridge. The Waterfront of Marina World features the five-star deluxe Marina Hotel, a large marina, three-kilometre long walking paths, basketball courts, a skate park, the Salwa Sabah Al-Ahmad Theatre & Hall, and Hard Rock Cafe. Marina Waves is the latest features of Marina World. It includes services like spa, saloon, gym and as well as some coffee shops.

The project contains four phases: phase 1 contains over 150 lifestyle shops, restaurants, cineplex, Carrefour hypermarket and an IKEA showroom, phase 2 is an extension of phase 1 opened in 2008 adding 100 higher-end shops, a large food court, a large entertainment complex, an outdoor fountain and outdoor dining venues, phase 3/4 are a much larger expansion of the mall which will add to it a traditional Arabian souk, a European-themed Grand Mall, a luxury mall housing top-end brands, a shaded garden with water features (dubbed 'The Oasis'), two hotels, showrooms and a conference hall. The mall is expected to have over 900,000 square meters of usable space upon completion in 2011.

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In the Fahaheel area, south of Kuwait city, Al Kut shopping mall, designed by the renowned Jordanian architect Rasem Badran, represents a trend to utilize traditional architecture vocabulary in contemporary buildings. The latest shopping mall to open in Kuwait is the 360 Mall. It opened its doors to customers for the first time in July 5, 2009. It provides a new shopping experience accompanied by cultural events. The shape of the mall, as the name implies, is a full circle containing shops, galleries, departmental stores, cinemas, a hypermarket, restaurants and cafés. The mall is composed of two wings surrounding an artificial lake overlooking the Persian Gulf. One wing hosts fashion stores, cinemas and a food court while the other hosts a traditional vegetables and fish market. Terraces around the central lake provide an excellent relaxing place.

It is connected to a multi-storey car park that provides ambient parking spaces for customers. The mall is divided into two paths; one representing the "Day" experience and the other representing the "Night" experience. The two paths meet at a three story grand atrium (courtyard). The circular exterior wall of the mall is covered with stone cladding and glass. An interior vertical garden is located along the south façade providing a unique experience for dining and sitting. Due to financial conditions many shops are not leased yet but the mall owners decided to open the mall on time. The mall contains fitness, sports, entertainment, cultural and shopping amenities that are available for the first time in a shopping mall in Kuwait.

According to the 1st master Plan of Kuwait, residential neighbourhoods were constructed outside the traditional city wall. Typical neighbourhoods were designed to reflect the ideal image of the modern life style of the middle 20th century. They were composed of wide streets for automobiles leading to individual plots of land. At the centre of the neighbourhood, a shopping centre, clinic, police station and high schools were located. Between the residential blocks, mosques, public gardens, nursery and elementary schools were located. The plots of land were used to construct villas according to western styles. Building codes and regulations were developed to guide the construction activities of the houses. Setbacks, floor area ratio and number of floors were all devised to produce western style villas.

Several changes aiming at increasing the size of building volume and floor area ratio negatively affected the quality of life within the residential neighbourhoods. The increasing use of lot area resulted in the lack of space to permit cars inside the lot area and as a result, the in-

ability to provide indoor parking garages. This situation forced parking cars on the sidewalks, causing them to occupy the space assigned for pedestrian. Due to the harsh summer weather and the need to provide car sheds, many owners cover the side walks with different types and styles of car sheds according to their standards and economic ability. Some are made of steel corrugated sheets or fabric canopies and take any shape or color according to the wishes of the owner. The resulting environment in neighbourhoods is very hostile to pedestrian. It is not possible for pedestrian to use the sidewalks, they have to use the street for walking, hence, exposing themselves to the dangers of automobiles and service vehicles. The reduction of setbacks to a mere 1.5m produces building volumes that are no more than 3 meters apart. This distance is not appropriate to maintain acceptable levels of privacy. Windows facing each other allowed visual intrusion into neighboring houses. The absence of any guidelines addressing style and character of buildings resulted in a mixture of styles adjacent to each other. The occupation of sidewalks by cars reduced the chances of neighbors meeting or kids playing in the streets that are not safe for them. The new neighborhood environment encourages isolation and separation of families and neighbors. Neighbourhoods are getting more crowded with members of the new generations, more automobiles and expatriates residing in the once exclusive citizens' neighbourhoods.

Challenges and Opportunities

Crowdedness, traffic congestions, insufficient car parking, informal construction of buildings, annexation of vacant lands, energy shortages are some of the challenges facing the future of Kuwait's development. Since 2004, studies forecasted shortage in electric and water supply as well as traffic congestions to occur in the year 2006. "Tarsheed", or conserve, is a campaign to conserve energy during the summer months' peak hours because demand reaches dangerous levels regardless of the insufficient supply of electric power. Future developments will require at least twice the currently produced energy but no clear plans on how this energy will be produced are in place! A slow decision-making process, due to bureaucratic and managerial problems, is slowing the implementation of projects and development plans. Building regulations did not provide any guidelines to enforce the provision of green areas nor vegetation within or around buildings. Leftover spaces are very small neither to be developed as landscape areas nor to be used in any useful way. They are either overtaken by the closest house as private gardens and parking areas or used as storage area for boats, cars and other house items. The community feeling, characteristic of the traditional neighborhood, is not maintained due to the lack of social contact opportunities or spaces. As indicated by research studies, the most important managerial problems are: the primacy of personal relationships over work relationships, favouritism and personal loyalty at work, subjectivity in evaluation and promotion, unwillingness to shoulder responsibilities, multiplicity of rules and regulations, rigid and obsolete administrative systems and policies, and influence of cliques in the workplace. Among the approximately three-million inhabitants population of Kuwait, 35% are Kuwaitis, 22% Arabs, 39% Non-Arabs and 4% stateless Arabs; called Bedoun. House servants, porters and drivers compose the majority of foreign workers come from South-East Asian countries; Indonesia, Philippine and Indian continent. It is estimated that 700,000 foreign workers are employed as house servants. Non-Kuwait population is composed of workers from South East Asian and Arab manual workers in addition to professionals from Arab, European, North American, and other countries. Recent changes to Build-Operate-Transfer (BOT) bylaws discouraged investors from participating in the construction of new projects in Kuwait. Several projects were cancelled and others were put on hold.

One of the major challenges facing Kuwait's development is its population composition. Intense dependency on foreign workers has increased the number of expatriates living in Kuwait tremendously. Construction workers and shop vendors are mainly from Arab countries and Iran. This dependency on foreign workers to perform manual work and lower jobs will impact the future growth of Kuwait. For each Kuwaiti citizen 2 foreign workers are needed; approximately 1 for domestic service and 1 for other activities. The KMP3R1 predicts that the population of Kuwait will reach 5.4 million by the year 2030. This includes approximately 3 million expats serving the remaining 1.5 million Kuwaitis! The expatriates living conditions is another challenge facing Kuwait. While Kuwaitis depend mainly on foreign workers to perform all manual work, they are never provided with adequate living conditions or housing. Until the middle of the current decade, thousands of low-income, expatriate manual workers, including some 60,000 Egyptian Saiidis – the villagers of Upper Egypt – resided in the southern neighbourhood of Khetan. The inhabitants live in crowded living conditions in converted old courtyard houses that host 20 to 25 workers in

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each house. The room rent varies between 15 to 45 KD per person depending on the size, location and number of tenants in the room. Most rooms are shared by more than five persons making the rent from each house very profitable for the owner. The living conditions of this marginalized group have deteriorated rapidly, especially since the Second Persian Gulf War. The same condition was found in Benaid Al Qar and Murqab areas. The government developed plans to clear the area and move the inhabitants to a new location, but implementation of this plan is very slow. Another area accommodating middle class expatriates is called Farwaniya. With the start of the demolition of deteriorated houses of Khetan, many of its residents moved to Farwaniya creating furthermore crowded and congested conditions. Higher class expatriates choose Salmaia and the Persian Gulf Road as their favourite place for residence or they reside among Kuwaitis in their residential neighbourhoods. They are considered illegal residents that fled from neighbouring countries, hiding their original nationalities in order to benefit from services provided to Kuwaiti citizens. While there are attempts to recognize those who fought for Kuwait during the invasion or served the country by granting them citizenship and services, the problem of their living conditions in shanty towns is receiving little attention from the government. This constitutes a source of internal insecurity as it did in other countries.

The growing number of tall buildings under construction in downtown Kuwait city is alarming. Their impact on the human, natural and built environment is not carefully assessed. The sustainability of tall buildings and mega-projects should be guaranteed in order to avoid creating degraded and congested urban environments. Absence of explicit laws or regulations regarding the implementation of sustainability in Kuwait's building codes limits the application of sustainability strategy to the personal interests of the owner or developer.¹ Also, buildings can never be completely sustainable and green if they were not placed in a sustainable context. On the other hand, traditional architecture examples are vanishing quickly from Kuwait. The handful old buildings along the Persian Gulf road are disappearing amidst the new Traditional Village Development. Other deteriorating traditional buildings are vanishing quickly and are in desperate need for renovation and preservation.

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Conclusions

Forces of globalization were most evident in the case of Kuwait during the Second Persian Gulf War when the country continued to exist economically and politically as a virtual country outside its physical borders and was brought back to existence due to a global intervention by the world community. This dramatic experience of invasion and occupation for a brief period of time awakened the Kuwaitis sense of belonging and identity. This was reflected on the architecture being produced in Kuwait by local and Kuwaiti architects in their attempts to recognize and acknowledge the heritage of traditional Kuwaiti architecture during the 1990's. While state-of-the-art glass-box office buildings and classic style villa represent influence of globalization, other examples illustrate attempts to incorporate globalization and localization in their design and construction. The efforts range from copying and pasting elements and forms from indigenous architecture to sophisticated design that incorporate state-of-the-art technologies with local expressions. A documentary titled "Kuwaiti Architecture: A Lost Identity" depicts the development of architecture in Kuwait and points to the importance of developing a Kuwaiti identity in architecture from the point of view of a dozen Kuwaiti architects. Why did the need to express a local identity by blending modernity and tradition arise? Is it a real "need" or a "selling" strategy of new real-estate? During the fifties, when Kuwait was transforming from a vernacular settlement into a modern planned city, there was no requirement to blend tradition and modernity in the planning of the new city.² The ambition was to join the modern world and break all linkages with the past; including the traditional environment that was associated with poverty and primitive living conditions. Today, the identity expressed through the use of the traditional style is viewed as a defence mechanism against the domination of the sweeping identity of globalization.

Kuwait is experiencing, as in other developing countries, the tension between the forces of globalization and localization. On one hand, people are eager to enjoy the luxuries of modern life that they can afford to have while at the same time retaining a cultural identity and satisfying special social requirements. The clash of styles that exists in the built environment in Kuwait is a product of the rapid process of globalization that swept the country since the middle of the 20th century. A dichotomy between cultural forces of globalization and localiza-

tion is shaping today's built environment, i.e. modern-traditional, Islamic-Western, local-global.³ While some architects employ fashionable styles of architecture in order to integrate the local architecture into global trends, others are trying to revive the traditional architectural style as a mean to enforce the local identity and heritage.^{4 5 6 7} The resulting built-environment lacks a shared identity and the sense of place. Buildings alone are not sufficient to convey the cultural identity, the context of the architecture provides an important background against which architecture is understood. The traditional city spaces provides an important dimension to the experience and a meaningful reading of traditional architectural buildings. Identity is always pluralistic, fluid and unstable and that it is continuously constructed and reproduced by the collective imagination of the community.

Buildings constructed during different periods of the development of Kuwait illustrate the state and priorities of cultural identities at that time. For example, during the Sixties and Seventies the interest of the country was to join the modernized world utilizing the financial capabilities allowed for by the revenues of oil sales. Buildings constructed during that period were designed according to modern and international style approaches. During the Eighties the economic crisis of the stock market reduced the financial capabilities of the country and the individuals, and produced buildings with basic structural and technological features. The security crisis of the Nineties, due to the invasion and liberation experience that Kuwait has passed through, promoted the renewed interest in expressing a "genuine" cultural identity. The source of this genuine cultural identity was thought to be found in traditional buildings and lifestyle. Meanwhile, globalization is facilitating contact with other culture and lifestyles, through ease of travel and communication, is adding to the paradox of defining a "proper" cultural identity. While cultures change rapidly their architectural products remain unchanged expressing moments of cultural change and development.

Notes

- ¹ Mahgoub, Y. and Al Omair, A., 'Tall Identity ... Lost Sustainability', Viewpoints Special Edition: Architecture and Urbanism in the Middle East, Middle East Institute, Washington, DC, 2008, pp 37-40.
- ² Mahgoub, Y., 'Architecture and the Expression of Cultural Identity in Kuwait', The Journal of Architecture, vol. 12 no. 2, 2007, pp. 165-182.
- ³ Castells, M., 'The Relationship between Globalization and Cultural Identity in the early 21st Century', Forum Barcelona, Spain, 2004.
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United Arab Emirates



Saudi Arabia



Dammam

Dammam Metropolitan: A Story of Development

Mashary A. Al-Naim



Introduction

Dammam metropolitan located on the eastern Saudi Arabia along the sea shore of the Persian Gulf. It comprises a number of cities including Dammam, Khobar, Dhahran and Qatif as well as a number of smaller towns and villages. Historically Dammam was formed when a group of AlDawaser Tribe decided to move from Bahrain to the region, when King Abdualziz allow them to settle. They split into two groups and created fishing Villages in Dammam and Khobar. These two villages continued in a slow development till 1938 when Saudi Arabia started exporting oil in commercial quantities.

Two decades ago, the cities and towns in the region were scattered and the sense of urban connectivity was not exist. However, the area witnessed continuous urban growth in the second half of the twentieth century but it was not enough to brought all urban structures together. The term "Dammam Metropolitan" was emerged due to the huge developments took place in the 1990s specially when the municipality decided to built a unifies sea front for the whole shore. Now it is difficult for anyone to identify the boundaries of the city, they become one huge urban mass connected through major highways and huge real estate projects which made them look as one big city.

The urban structure of the area can be considered young, this is because all cities excluding Qatif and some old villages were built in the fourth and fifth decades of the twentieth century. It is possible to say that this early intervention has had a deep but not immediate effect on the native people. It made them question what they know and how they should behave. In the other words, this early change can be seen as the first motive for the social resistance to the new forms and images in the contemporary Saudi built environment. We should mention here the impact of the railway which was constructed in 1951 to connect Dammam with Riyadh through Al-Hassa. The impact of this project was crucial because it encouraged many people from central Arabia to move to the region and built their business.

The significant impact of this experience presented itself in conflicts between old and new in local society. The threat from interfering outside elements to the social and physical identity created for the first time a social reaction towards physical environment. The conflict between traditional cultural values and the introduced western physical images was very limited at the beginning of modernisation; the native peo-

ple followed what they knew and tried to implement it in their daily lives, including their homes. However, the contrast between traditional images and the new images in the minds of local people can be considered the beginning of physical and social changes in the Saudi built environment.

This paper aims to tell the story of development of this part of Saudi Arabia. The main goal here is to investigate how urban identity of the region was in transition and how this influenced the “use” of urban structure? The paper concentrates on people’s lifestyle within their home environment by studying the transformation of urban structure. For this purpose, the researcher conducted a fieldwork study to trace urban changes and how people responded. Social, economic and political changes were used as major factors in our analysis of impact of urban change on cultural identity.

Formation of Dammam Metropolitan

The first indication of a conflict between the local culture and western culture can be ascribed to Solon T. Kimball, who visited Aramco headquarters in 1956. He described how the senior staff (American) camp in Dhahran was completely imported from United States. He said:

‘No one westerner would have difficulty in identifying the senior staff “camp” as a settlement built by Americans in our southwestern tradition of town planning. It is an area of single-story dwellings for employees and their families. Each house is surrounded by a small grassed yard usually enclosed by a hedge.’¹

This American camp, which introduced new spatial concepts, contrasted strongly with the surrounding home environments in the old cities in the region, Hofuf and Qatif. He added that ‘these settlements represent the attempt by Arabs to establish a type of community life with which they are familiar. Here the employees, mostly Saudis ...’. Kimball recognised the insistence of the native people on their own identity through his description of the Saudi camp as ‘an emerging indigenous community life’².

We need to mention here that in the first two decades of change several alterations appeared in local people’s attitudes towards the home. What Kimball described is the position of native people from the first direct contact with western culture. People, at this stage, refused the change and stuck with what they knew. This is not to say that the new images had not influenced people; however, they were in the process of developing a new attitude towards their homes. This attitude was not yet fully formed to reflect how deeply the new images broke the old idea of home.

The government and Aramco were not happy with the growth of these traditional settlements.³ Therefore, by 1947, the government had asked Aramco, who employed American engineers and surveyors, to control the growth around the oil areas. This created the first planned cities in Saudi Arabia, which followed a gridiron pattern, Dammam and Khobar.⁴ The spatial concepts and building images that were introduced into these two cities accelerated the impact of modern architecture on the local people, not only in these two new developments, but also in surrounding old cities.

The main urban characteristics of the new development based on grid-iron land subdivision. The new cities were divided into a number of blocks surrounded by streets (domino planning). The new streets and blocks that been introduced to the region was completely new and shocked the local people but at the same time it started a new urban era. This led by time to a complete urban and social change. We should mention that the government some entire blocks for some family who later moved the new cities and build new neighbourhoods within the planned urban structure. It is really difficult to track how the social urban identity of the new developments but what happened is that a mix of old and new values and lifestyles formed the new areas. In general we can attribute the urban identity of Dammam metropolitan to this early formation of modern fabric in the late 1940 and 1950’s.

A New Urban Identity for Dammam

Individuals always surround themselves with specific objects to communicate with other members of the community. The need to express a common meaning in the home environment encouraged the villa type to become the device which enabled the Saudi family to express its new social status. The impact of external forms on people's image is a result of the strong connection between what the eye sees and the perceived environment. People tend to evaluate the visual quality of the surrounding environment according to their past experiences. In that sense, the sentimental reaction towards the traditional images in Saudi Arabia can be attributed to the sadness and emptiness felt by people at the loss of these images rather than an expression of their actual identity.

One important issue that is: the planned cities of 1947 passed through huge transformation that changed forms, height and styles of buildings. Many blocks also passed through ownership change, they divided into smaller parcels. This shows that two streams of urban identity working side to side in Dammam. One search for historical image, the other tend to reinforce modern urban identity. What happened in the region in the last two decades increased this cultural and architectural conflict.

As we discussed earlier, this new type of house, which later became known as a villa, was imported originally in the 1930s, but it was developed in the 1950s when the Aramco Home Ownership Program forced people to submit a design for their houses in order to qualify for a loan. People relied upon Aramco architects and engineers to design their new houses, because there were few architects in Saudi Arabia at that time.⁶ In order to speed up the process, Aramco architects and engineers developed several design alternatives for their employees to choose from. However, all these designs adopted a style known as the 'international Mediterranean' detached house.⁷

286 The hybrid form existed also in the two new cities in the eastern region, Dammam and Khobar,⁸ especially in those neighbourhoods which constituted the original settlements. For example, Al-Said studied the growth of the original settlement in Dammam, Al-Dawaser neighbourhood.⁹ He found that, between 1930 and 1970, this neighbourhood grew from 56 to 250 residential units 'mostly typical courtyard residential units as a result of contentious house subdivision and room addition'¹⁰. The situation was similar in Khobar, where the house style was influenced by the prevailing traditional styles in the region. It is important to note here that most Saudi Arabians still had a strong connection with their social, physical and aesthetic traditions, all of which were strongly reflected in their home environment.

The new buildings image that spread in the new developments was mainly a concrete buildings with neat facades and balconies. Three, four, and five story buildings were appeared on main streets (such as King Khlaid street in Khobar and King Saud Street in Dammam) in 1950 and 60s. The new image was very striking to local people compared to what they used to in the old cities. Between 1960 and 1980 a king of abstract buildings forms were developed in the whole region. The purpose of those buildings was very commercial. The urban and architectural developments occurred at that time caused the crisis of architectural identity which was one of the main issues among Saudi intellectuals in the 1980's.

Spread of Modern Built Environment

The desire to create a modern country in a short period brought about total physical change to most Saudi cities.¹¹ This circular as Al-Said mentions, is

'the turning point in [the] Saudi Arabian contemporary built environment physical pattern and regulations. It require [d] planning of the land, subdivision with cement poles, obtaining an approval for this from the municipality, prohibited further land subdivision, controlled the height of the buildings, the square ratio of the built [are] require set backs ...'¹²

Still, these regulations took fifteen years until they regularly applied in all Saudi cities. This is clearly traced from the confirmation of the master plans that were initiated for all Saudi regions between 1968 and 1978.¹³ For example, the first master plan was executed by Doxiadis for Riyadh between 1968 and 1973.¹⁴ This plan confirmed the setback regulations and applied planning system similar to what had been

used in Khobar. It presented the grid as the most desirable pattern to be followed in the planning of Riyadh as well as in other cities of the country. Despite the fact that the Saudi built environment witnessed building regulations from the beginning of the change, however, their impact on the built environment at first influenced neither house form nor the surrounding spaces.

We can say that the step taken by the government to control the urban spread of the new cities (Dammam and Khobar) in the 1975 led to commission the Candilis, Metra International which led to reinforcing the grid-iron pattern and sent a message to the people of surrounding old cities (Hofuf and Qatif) that Dammam is the “free place” for a new lifestyle and modern urban image. This led many of them to move to the new areas to establish their own lives away from the complicated traditional social values and ties. We should say that between 1975 and 2000 migrants from the surrounding cities and different parts of Saudi Arabia formed the mega urban structure of recent Dammam.

It is important at this stage to consider the position of the people in relation to the rapid developments in the built environment. The home style that was imposed by Aramco’s programme in the 1950s continued to have a powerful impact until the 1970s, especially since the building regulations supported and encouraged it. This could be seen very clearly when owning a new detached house (villa) in Saudi Arabia became a social symbol of personal and social identity.¹⁵

Table. 1: Construction Materials Used by Aramco’s Employees (1962 and 1968)

Type of material	1962	1968
Cement block	70.8	84.3
Mud brick	15.0	9.1
Barasti (palm leaves)	5.1	3.4
Tent	1.2	-
Furush (sea rocks)	0.8	1.7
Company portable	0.4	-
Other (mostly wood)	6.7	1.5

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Source: Shea, T. W. (1972) ‘Measuring the Changing Family Consumption Patterns of Aramco’s Saudi Arab Employees - 1962 and 1968’ In D. Hopwood (ed) *The Arabian Peninsula: Society and Politics*, London, George Allen and Unwin Ltd, p. 249.¹⁶

We can attribute the emergence of a symbolic role for the villa-type house to the appearance of a middle class in the 1950s. This class included a mixed group of people from all over the kingdom, but mostly employees of Aramco and the government. Due to their contact with the other cultures, the members of the middle class were strongly influenced by the villa type housing that spread throughout the Middle East in the colonial era and which was associated with people at high levels of administration.¹⁷

The recent developments in the region led to an urban expansion. Plenty of new neighbourhoods were constructed in the last two decades to fulfil the population growth and new migrants from other region (table. 2). Compared to the old surrounding cities, especially Qatif, urban and social identity was under transition in Dammam. Different cultural background of the new comers to the area as well as the huge number of expatriate labours contributed to the crisis of identity. For example, it is rarely we find local people walk in the centres of cities, mainly Asian workers collected in huge numbers which give different impression to any visitors to Dammam or Khobar. What is really interesting is that old cities were transformed from urban perspectives but they maintained their social structure, which end up with clear visual contradictions.¹⁸ People were insisted to express their values even if they end up with transforming their houses.

Table 2: Some statistics about the region (2007). Source: Based on data from central office of statistics and fieldwork

city	Population	Saudi	Non Saudi	No. Of Workers	No. Of Houses
Dammam	314,051	Varied	Varied	70,065	129,891
Qatif	474,573	Varied	Varied	51,826	68,553
Khobar	455,541	Varied	Varied	45,126	88,751
Total	1,244,165	736,929	507,236	167,017	287,195

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Urban projects in the last two decades, including seafront and major freeways created different lifestyles from the 1980s. Although urban development was expedite due to oil prices but it was controlled and opened for exaggeration. This helped the region to absorb the crisis which was reflected in the urban activities. No one project was cancelled or delayed, and new projects were commissioned. Real estate projects were continued and people still believe in investing in properties. The villa represented modernity and the people's attitude was based on 'the stylistic association that "modern", as expressed in the modern villa style, is "good", by virtue of being modern'.¹⁹ The villa's ability to present individual identity and originality through uniqueness of design may also have led to its rise in popularity since the conformist of the traditional society was beginning to be seen as 'backward' and individualism as 'modern' and therefore intrinsically 'good'. Jomah notes the sense of individualism that distinguished house design in the cities of Makkah, Jeddah, and Madina in the middle of this century. He considers these styles to be representative of a shift from a 'tradition-directed' to a 'self-directed' pattern of social organisation.²⁰ For him 'the concept of home was ... reduced from the traditional spiritual home to the modern physical and spatial one'.²¹

Conclusion

Dammam metropolitan considered the main gate of Saudi Arabia to the Persian Gulf. It is also, the base of oil industry, which gave it an important role in Saudi and international economy. This part in the Persian Gulf is considered new and its history not exceeding seven decades. This was reflected in the absorption of new ideas and forms. A new urban identity was formed, however, a crisis of cultural and architectural identity was felt by local people but it was not as harsh as what was felt in old cities. Rapid urban growth clearly contributed in what we can call "image instability" which weakened the city memory. This led to continuous tension between historical collective memory and persistence of modern image.

The relatively young age of the urban structure of Dammam made it possible for the inhabitants to accept new images and changes who showed very low resistance. This can be seen as a positive dimension that allows the city to lead urban modernization in Saudi Arabia. What really happened in the past few years showed how Dammam can go along with new images. This was because its urban structure a result of modern planning and land subdivision. The ability of Dammam to renew its urban identity within time can be considered an important hidden potentiality of its urban structure. Since the new structure was introduced in the 1947 the city passed through many changes and every time it extends its urban fabric without any difficulties. New towers grew easily with the original and new urban structure. However, some visual contradictions appeared especially in residential neighbourhoods. This is because of the cultural backgrounds of its residents who came from different parts of Saudi Arabia and world.

Notes

- ¹ Kimball, Solon T. "American Culture in Saudi Arabia", *Transaction of the New York Academy of Sciences*, Ser. II, Vol. 18, No. 5, 1956, p. 472.
- ² Kimball, S., *Op. Cit.* 1956, p.472.
- ³ *Ibid.*, p. 473.
- ⁴ Shiber. He describes the plan of Al-Khobar as: 'It covered only about one quarter square mile North of the company pier head storage yard. The blocks averaged 130 by 200 feet with separating streets of 40 and 60 foot widths.' Moreover, he indicated how the new plan ignored the existing Saudi settlements. He states 'Here again, the gridiron pattern was oriented north-south. No consideration was given to the mushroom growth of temporary structures and those were demolished to open the new streets.' *Op. Cit.* 1967, P. 430. Also, Al-Hathloul, *Op. Cit.* 1981, p. 146.
- ⁵ Lebikicher, R. et al. (1960), *Op. Cit.*, pp. 212-16; Shiber, S. (1967), *Op. Cit.*, P. 431; Al-Hathloul, S. *Op. Cit.* 1981, p. 167.
- ⁶ Al-Hathloul, S., *Op. Cit.* 1981, p. 167.
- ⁷ Al Al-Hathloul, Saleh & Anis-ur-Rahmaam, 'The Evolution of Urban and Regional Planning in Saudi Arabia', *Ekistics*, Vol. 52, No. 312 (May / June), 1985, pp. 206-212).
- ⁸ In the 1920's, two small fishing settlements were established in Dammam and Khobar occupied by Al-Dawaser tribe. Al-Said, F. *Territorial Behaviour and the Built Environment. The Case of Arab-Muslim Towns, Saudi Arabia*, Unpublished PhD. Thesis, Glasgow, University of Glasgow, 1992, p. 217. 289
- ⁹ The original settlement was described by MOMRA (Ministry of Municipal and Rural Affairs) in 1981 thus: 'The dwelling unit and clusters were added onto or joined to one another according to needs of the inhabitants. Neither the open space nor circulation pattern were predetermined. They resulted from the accidental disposition of dwelling units and the definition of family territorial holdings.' (cited in *Ibid.*, p. 225).
- ¹⁰ *Ibid.*, p. 234.
- ¹¹ This phenomenon is found in most Arab countries which tried to achieve modernity rapidly.
- ¹² Al-Said, F., *Op. Cit.* 1992, pp. 258-9.
- ¹³ Al-Hathloul, S. & Anis-Ur-Rahmaan, *Op. Cit.* 1985, pp. 208-11. This can be seen from the master plans that were launched in all regions in Saudi Arabia between 1968 and 1978. These master plans were as follows: Western Region by Robert Matthew, Johnson-Marshall & Partners in 1973; Central and Northern regions by Doxiadis and Ekistics, completed in 1975; Eastern Region by Candilis, Metra International Consultants (France) in 1975-76; Southern Region by Kenzo Tange & UTREC in 1977-78.
- ¹⁴ Al-Hathloul, *Op. Cit.* 1981, p. 174.
- ¹⁵ Al-Saati, A. J., *Op. Cit.* 1989, pp. 33-41.
- ¹⁶ Shea, T. W. (1972) 'Measuring the Changing Family Consumption Patterns of Aramco's Saudi Arab Employees -1962 and 1968' In D. Hopwood (ed) *The Arabian Peninsula: Society and Politics*, London, George Allen and Unwin Ltd, p. 249.
- ¹⁷ Boon, J. 'The Modern Saudi Villa: Its Cause and Effect', *American Journal for Science and Engineering*, Vol. 7, No. 2, 1982 pp. 132-143.
- ¹⁸ Al-Naim, Mashary, *The Home Environment in Saudi Arabia and Persian Gulf States* (Vol. 1) *Growth of Identity Crises and Origin of Identity*. (Vol. 2) *The Dilemma of Cultural Resistance, Identity in Transition*. CRISMA Working Paper N.7, Milan., Italy, Pubblicazioni dell'I.S.U. Università Cattolica, 2006.
- ¹⁹ *Ibid.*, p. 140.
- ²⁰ Jomah, H. S. *The Traditional Process of Producing A House in Arabia During the 18th and 19th Centuries: A Case of Hedjaz*, Unpublished PhD. Thesis, Edinburgh, University of Edinburgh, 1992, pp. 327-28.
- ²¹ Jomah, H. S. *Op. Cit.* 1992, p. 328.

Doha

Robert Adam



Modern Doha, capital of the small but fabulously wealthy Persian Gulf state of Qatar, is built on the very substance that made modernity possible - oil. The city is a mirror of the economy that created it. Expansion began as the world moved from Empire to free trade and exploded as the free market globalised western-style modernity. The impact of global capital is not, however, the same wherever it falls and Doha has translated its meteoric projection into modernity in its own particular way.

First impressions, nonetheless, seem to confirm the view that globalisation produces identical products wherever you go. On the way from the international airport (already bursting at the seams with its bigger and better replacement under construction next door), you pass by suburban houses on the American model and quickly reach a centre dominated by international style buildings. As you take the Corniche Road, a six-lane motorway curving round the bay, you pass by modernist cultural and government buildings and look over at West Bay, a forest of glass-walled and wonderfully shaped offices, apartment buildings and hotels. When you reach your internationally-branded hotel all is either reassuringly or disturbingly familiar, depending on your point of view.

Above all, you are aware of the newness of it all. But there must be a story beyond the glitz and the signs of relentless construction. As so much of the city is so clearly modern, the condition and culture of the people in the recent past will have had a major influence on what we see now. We need to start by looking at how it all came about.

Qatar is a north-pointing finger of desert sticking out into the Persian Gulf of some 11,500 square kilometres. Narrower at its base, it is a distinct geographic entity. It fell under the influence or control of different Empires: Persia, Portugal, Turkey and finally Britain. It was recognised internationally as a distinct political entity led by the Al Thani sheikhs in 1868. It was occupied by the Ottoman Empire in 1872 but, following a successful armed revolt, they finally left during the First World War. In 1916 Sheikh Abdulla bin Jassim Al Thani signed a protection treaty with Britain that guaranteed Qatar's defence from the sea and support in the event of land attack.

At that time Qatar was poor with no significant agriculture or major sources of water. A few small towns around the coast were supported by fishing and pearl fishing was its major source of foreign income. The principal town and home of the ruling family was Al Bida, founded in 1825, which became known as ad-Dawha (the big tree) or Doha. The population of Qatar was a mix of settled sea-board Arabs and traders of Persian and Arabic origin in the coastal towns and nomadic Bedouin inland. The total estimated population was about 15,000 in 1920. Even this small population was driven to poverty, starvation and emigration when the Japanese developed cultured pearls in the 1920s and the impact of the Great Depression crippled the small cash economy. This was the first major global event of many to affect Qatar.

Later global economic developments were much more benign. Worldwide demand for oil increased and the Middle East was identified as a major source. In 1934 Britain entered into a treaty granting further protection in return for granting a concession to the Anglo-Persian Oil Company. Oil was discovered in 1939 but exploitation was delayed until after the Second World War. In 1949 oil exports and payments for offshore rights and the transformation of Qatar began.

Under a 1952 agreement with Shell, Qatar took 50% of all oil revenues. This dramatic increase in wealth, social change and unrest in the Arab world following the Suez war led to domestic unrest and pressures on the Al Thani family and the elderly ruler abdicated in favour of his eldest son, Sheikh Ali bin Abdullah Allah. Relying on British support, an embryonic government bureaucracy (staffed by foreigners) and a police force were created. In the 1950s modern facilities were gradually introduced into Doha, including the first hospital, school, an air strip and a telephone exchange. Another Qatari, from one of the major families, pointed out that his grandfather always went to bed with a loaded shotgun. This history, from starvation to unimagined wealth in living memory, is essential for an understanding of the political reality behind the new institutions, the identity of the people, the pervasive Anglo-Saxon influence (first British and then American) and the interface between a tribal desert culture and global modernity. All of these things have and continue to leave their permanent mark on the city of Doha, home to 80% of the population of Qatar.

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From the time of the first oil revenues to independence the town expanded. By recent standards the expansion was modest but it established a pattern of development that would be repeated in the following decades.

The first major land reclamation project began in the early 50s, moving the waterfront in the city centre out by 100 metres and creating a series of new urban blocks. This was followed by the Corniche Road in the early 60s, following the direction of the most recent urban expansion and in front of long-established water-frontage merchant's houses. The loss of waterfront rights could be justified by the insanitary conditions that had developed in the shallow waters along the water's edge. The Corniche Road remains as one of the defining features of the city.

Both the new city waterfront and the Corniche Road were constructed by first building the roads in the sea and then backfilling the space behind them, creating new real estate. This delivered high-value state-owned building land free from claims of historic land rights. Government House was built on the city centre reclamation and some ministries and government buildings were constructed on new land behind the Corniche Road. Land reclamation became and continues to be a strategy for the creation of new high-status city districts.

Roads were generally modernised and, in accordance with the prevailing British typology, by-passes or ring roads were constructed. These were named, successively and prosaically, "A Ring Road" and "B Ring Road" and so on. A Ring Road joined the two ancient routes branching out to Saudi Arabia and the centre of the peninsula and encompassed much of the 1950s town. B Ring Road contained the 1960s urban expansion. By 1970 C Ring Road was under construction to contain further sporadic growth.

A new civic centre was created to the west of the old town in the 1950s. The Grand Mosque and Diwan al Amiri, or Royal Palace, were built around a ceremonial square centred on a landmark clock tower. Otherwise the architecture of the growing town was of no particular type or standard, often designed on an ad-hoc basis by Egyptian or Indian draftsmen. Low rise concrete apartments and shops were mixed with traditional houses along and between the new roads. Much of this remains as a dense, active and lively urban area but in a poor state of repair, with no resident Qataris and let to expatriate workers. The use of the standard American and North European suburban type, with the house in the centre of a plot, was also dictated by the introduction of boundary set-back regulations. Still in force today, these regulations made the construction of new houses in the Qatari tradition, with rooms built on the perimeter of walled courtyards, impossible. Villas and residential compounds for foreign workers were built on open desert outside the town in a haphazard fashion, setting the pattern for the later development of a huge suburban hinterland.

With the creation of the independent sovereign state of Qatar the capital was planned. In 1972 the British urban designers, Llewellyn-Davis, were called in to study the possibilities for future expansion. Their plan built on the ring road system and Corniche Road adding a further Ring Road, D, and created a loose grid behind the Corniche Road and south towards the airport to allow for future structured growth. They also proposed some further land reclamation to the east and to the north to tidy up the coastline.

Shortly afterwards in 1975, the Emir called in the, now largely forgotten, Los Angeles star architect William Pereira as an advisor. He proposed a much larger area of land reclamation to the north - this is now called West Bay - turned the straight northern coastline round to form a bay and created a destination for the Corniche Road. It has had a major impact on the image of the town and was to be a model development area. It included a Diplomatic District on the new shoreline and one of Pereira's trademark concrete pyramids as a Sheraton Hotel on the new promontory. This hotel was to be both a landmark viewed across the bay from the old town and a symbol of modernity. The Sheraton Hotel became part of a grand urban scheme which included a projected (but never executed) water spout on a new island in the bay and an axial boulevard, Grand Hamad Street, which was cut through the souks to focus on a pier-end lighthouse and the Sheraton Pyramid. Grand Hamad Street, now lined with modern bank buildings and featuring a crossed-scimitar ceremonial gate, remains as an uncomfortable insertion into the small-scale streets and alleys of the old town.

By the mid 1980s Doha had become a fully-functioning capital with new ministry buildings, a National Theatre, a National Museum and a National Bank. By 1985 the population had tripled from its 1970 level to 320,000. After nearly two decades of world-class wealth, however, in the mid 1980s the global economic tide turned. Oil prices dropped to nearly one quarter of their 1980 price in 1986 and, along with other OPEC countries, Qatar's rapid financial growth stalled. GDP remained static or dropped for twelve years from 1982 and expenditure was cut on public projects.

In 1992 the Emir, Sheikh Khalifa bin Hamad, made his Sandhurst-and-Cambridge-educated son, Sheikh Hamad bin Khalifa, regent and retired to Cannes. In 1995 Sheikh Hamad deposed his father. The following year the economy received a substantial boost as Qatar began to ship Liquefied Natural Gas (LNG) to Japan. LNG had been discovered in 1971 and Qatar's gas fields constitute the world's largest single gas reservoir in the world and Qatar holds the world's third largest reserves. At present levels of extraction there are 200 years of supply. In 1995 Qatar's GDP began a steady rise that continues to this day.

The accession of Sheikh Hamad bin Khalifa corresponds to the start of the new global age. In 1993 the Russian and Indian markets liber-

alised and in 1994 China reformed its exchange and trade laws. Sheikh Hamad, aware of the emerging changes in the world order, set in motion what can only be called a revolution in the social and political order of Qatar. In his own words, "We have simply got to modernise ourselves. We're living in a modern age. ... You cannot isolate yourself in today's world."¹

The steps taken to modernise Qatar in the last ten years are impressive. The Ministry of Information was disbanded and censorship abolished. Women were given the right to vote and stand for office. A "Qatar Permanent Constitution" was approved by referendum in 2003 which, amongst other principles stipulates that there will be "no discrimination on account of sex, origin, language or religion" and establishes an elected legislative Advisory Council. The Emir's second of three wives, Sheikha Mozah, has been taken a high profile in the promotion of women's rights and in the advancement of education generally. On the world stage, Qatar hosted the "Doha Round" of the World Trade Organisation in 2001 and the 15th Asian Games in 2006. Qatar will bid for the 2016 Olympics. The global significance of the Emir's support for Al-Jazeera, the only uncensored Arab satellite television news channel and based in Doha, cannot be underestimated.

The city of Doha today has grown to a population of an estimated 900,000, only 20% of which are Qataris. This form of modernity began in the North Atlantic nations and its manifestations bear their stamp. The phenomenon is called globalisation and where it impacts on previously unaffected societies it sets in motion a dialogue between the global and the local or the modern and the traditional. This is a worldwide process but its manifestations are always local. The combination of rapid change and huge wealth in Qatar throw this dialogue into sharp focus.

The development of Doha is bound to give expression to the friction between the global and local but it may not be immediately evident. While by far the larger portion of the population is from elsewhere (in a short visit I met people from other Arab countries, Lebanon, India, the Philippines, Nigeria, Australia, Canada, the USA, Japan, and Russia), I was told more than once that expatriates feel that "you're always a foreigner here" and naturalisation is not an option. The city belongs to the minority native population and the way they identify with their rapidly changing capital city is relevant.

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In discussion with Qataris about their personal identity, the response was consistent. Identity was the family, the tribe and lineage. The nation was occasionally mentioned but so was the larger Persian Gulf Arab community. Even when pressed on the place of the city, it did not have any significance in the individual's perception of themselves in their society. Comments included: "the identity of the Qatari is inside himself, not the exterior;" and "there probably never was a Qatari identity and if there was it was never linked to the physical aspects of the place;" and "when you come home from abroad you look for the manners of the people, not so much the place."

At the same time there is a consciousness of the need to maintain or create a physical identity and the dangers of outside influence. The Curator of the National Museum said, "We have a tangible heritage in Qatar, our archaeology and our history, but we are in danger of submerging the old city." One Qatari told me that there is a "tension between traditional and modern design, we are now moving to a change in the culture and custom of Qatar from heritage to modern" and another that "the foreigners we choose are not the right ones." A young Qatari woman said that "we are copying international things but trying our best to maintain our identity." And yet another told me that "in reality we don't have much physical heritage", but Ibrahim Al Jaida, a leading architect in the city, said, "I dream that we can turn this identity into something of our own."

The most obvious expression of the new global North-Atlantic modernity is West Bay. On the land behind the landmark Sheraton Hotel, in the early 90s Sheikh Hamad, in the words of the Manager of Urban Development, "decided to change the masterplan so we can have a modern city" and lifted the old ground-floor-plus-ten height limit. The outcome is a group of high-rise buildings, centred on the other global type

– a huge shopping mall. This totally eclipsed the landmark status of Pereira's Sheraton hotel. The start-up stimulus to this on-going development has been provided by a take-up of space by government departments. Most of the designs are the global standard glass-walled tower, some extravagantly modelled and some by star architects. Soon to join them is a 550 metre high tower (with a design seemingly re-cycled from the failed Grollo Tower in Melbourne, Australia) built by Qatari Diar, the state development company. This will act as a landmark for a huge convention centre, reinforcing Doha's aspirations to be a high-status international conference venue. On closer examination, however, amongst the shiny towers are clear attempts to introduce a regional design type, mostly similar to American post-modern towers but with Arabian detailing. Some, such a version of the Jean Nouvelle Barcelona tower under construction, add abstracted Arabian details to familiar high-modernist types. On the entry to this area from the Corniche is the Barzan Tower with a traditional base and a glass-walled top - a surprisingly eloquent expression of the unresolved global-to-local dilemma.

At the other end of the scale, the city is surrounded by vast suburbs of villas and gated 'compounds' complete with roadside strip malls, like the worst American suburban sprawl. The villas are often an American suburban type with illiterate versions of something traditional from the region or classical Europe. But quite unlike the North Atlantic suburb, these villas are all surrounded by high walls. While Qataris were keen to exchange their small courtyard houses for villas, they would not sacrifice their culturally-rooted standards of family privacy. In between these walled enclosures there are large and small areas of undeveloped land, dusty and uncared-for. While the narrow lanes or sikkats between the old houses had been cared for by adjacent properties, this tradition did not carry through to the wide left-over spaces in the new suburbs with unfortunate consequences.

Out in the suburbs are two quite different but explicit representations of North-Atlantic culture: the Villaggio Shopping Mall and Education City.

The popular and huge American-style Villaggio Mall is made up of a half-digested pastiche themed on renaissance Italy and incongruously attached to the modernist Asian Games "Aspire Tower". In the midst of a large car park, the Mall has a cartoon collection of bits and pieces from Italian cities disguising the blank outside walls and a Disney-style interior of what is meant to pass for Italian street facades under a painted cloudy blue sky. In the centre is a canal with Gondolas and at one end a skating rink open to the Mall.

At the opposite intellectual extreme but still culturally contiguous is Education City, a campus of outposts exclusively from American universities brought together by the Qatar Foundation, chaired by Sheika Mozah. Cornell University, Carnegie Mellon University, Georgetown University, Texas A&M University, Virginia Commonwealth University and Northwest University are represented. While the institutions are universally American, the list of architects reads like a global Who's Who: Pelli, Koolhaas, HOK, Atkins, Legorreta and others. The key buildings are by Arata Isozaki including, nearing completion, one of the most extraordinary attempts at synthesising international modernism and Qatari identity, the Education Convention Centre. This is a big dumb glass box fronted by a vast ground-to-eaves representation of the trunk of the Sida Tree – the logo of the Qatar Foundation and the symbol of the knowledge of the Divine from the Koran.

In the city centre, the struggle to navigate between Qatari identity and global modernity is more complex. Government buildings are often just low-rise variants of the universal glass box but two major buildings stand as visible symbols, not so much of local identity as of a global mission "to diffuse the culture, ethical values and principles of Islam to mankind."²

The Museum of Islamic Art was opened with a great fanfare last year. It sits on its own man-made island and is approached down a grand avenue from the city centre. Its nonagenarian American star architect, I.M. Pei, was looking for "the essence of Islamic architecture" and found it in the 13th-century CE fountain pavilion in the 9th-century Mosque of Ahmad Ibn Tulun in Cairo. Here Pei drew on "an almost Cubist expression of geometric progression from the octagon to the square and the square to the circle," and a "severe and simple" Islamic tradition that has a satisfactory affinity with the abstract principles of international Modernism. This building is, however, much more than

a display of its fabulous collection and must be seen in relation to the objectives of a nearby institution, the Qatar Centre for the Presentation of Islam or Fanar (the beacon), which also opened last year. This proselytising organisation is housed in a prominent building at the end of the Grand Hamad Street designed by a little-known Egyptian architect, Husam Al-Ahmadi. It uses more literal traditional Islamic decoration and has at its centre a tall spiral landmark minaret said to be derived from the famous ninth-century CE minaret in Samarra, Iraq, but is in fact closer to a 13th-century Egyptian version in the same Ibn Tulun Mosque that inspired I.M. Pei, so symbolically but possibly fortuitously reinforcing the relationship between the underlying agenda for both of these buildings.

While these landmark structures look to world Islam in mission and design, two city-centre urban projects represent different approaches to maintaining a local built identity with a minimal built heritage.

The Souk Waqif is locally famous as a complete recreation of the original historic souk alongside the old waterway, or wadi, which led down to the port. The project was initiated in 2004 by Sheikh Hamad out of a concern that all evidence of the old town would be lost. Instead of a restoration, the souk is in fact a complete reconstruction of its pre-1950s state based on evidence from what remained, photographic records, personal recollection and a fair bit of imagination, all put together by the Ohio-educated Qatari architect, Mohammed Ali Abdullah. The result has the basic form and appearance of an old souk but the character of something new: surrounded by car parking, all of the same age, and all of the same deliberately coarse cement render with ubiquitous projecting mangrove poles. In discussion, reactions varied from enthusiasm to "sadness" but a young woman was typically more concerned with the way of life of the people than the architecture, telling me that, "the old souk may not be real buildings but the way people use it, the opening and closing of the shops, the patterns of use are all the same."

Taking a different direction, the Qatar Foundation has purchased an adjacent urban district and commissioned the American international urban planners and landscape architects, EDAW with the British multi-disciplinary firm Arups, to completely re-plan the area based on an almost total demolition of the largely mid-twentieth-century small shops, businesses and apartments. The tidied-up comprehensive redevelopment, called "Heart of Doha", is based on a tight pattern of traditional narrow sikkats and courtyard urban blocks, retaining only a few old houses and the routes of two historic streets. It is hoped that a smarter and cleaner precinct will encourage Qataris to re-inhabit the centre. A design competition for the three key government buildings and the design coding of the future development was won by the established UK firm, Allies and Morrison. At this early stage, while the street planning follows the now widely-accepted principles of traditional urban design by drawing on local precedents, anything local in the architecture seems to be so abstracted that the European and even London origin of the architects shines through.

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Moving from literal re-creation in Souk Wafiq to modern contextual abstraction in "Heart of Doha" is but the next stage in the 50 year struggle to find a balance between the powerful culture of globalised architecture and urbanism and fragile local traditions. The success or otherwise of the creation of a Qatari character in the Heart of Doha project will not be evident for some years to come. It might, nonetheless, stand up well against other ongoing projects.

To the north, a large new resort-style waterfront development called The Pearl is under construction for 50,000 inhabitants. Advertised with illustrations of Venice and an attractive girl in a hijab, the only relationship with Venice is the presence of water and the standardised designs are decorated with Arabian details. With petrol at \$0.22 (£0.14) a litre, huge and sprawling suburbs and the ubiquity of four-wheel-drive vehicles, a public transport system would most likely be used predominantly by the poorer expatriate population. With summer temperatures at 45°C, life in Qatar is made tolerable for all sectors of the population by air-conditioning in buildings and vehicles and in 2004 the UN ranked the country as the highest per capita carbon emitter. The reality of environmental sustainability will take a long time to catch up with the rhetoric – if it ever does.

As Qatar looks to the future, how will Doha change? In 2005 the Urban Planning and Development Authority launched an invited competition for a new national masterplan to take the country through to 2025. This was won by the Japanese firm Oriental Consultants who are currently developing their proposals. It remains to be seen if this plan fares better than the still-current 1994 plan by the American firm Louis Berger (also intended to last 25 years) which set up zoning standards, development policies and design guidelines as well as a Planning Council to administer the plan. I was told that as “unexpected political and economic changes” overtook the plan only 50% of its proposals have survived. Whatever formal systems and orderly processes are set up by foreign firms, familiar with committee-based regulatory systems, these are always vulnerable to revision through the long-established family and hierarchical patronage (or majlis) system exclusive to the Qatari community.

In “Heart of Doha” the introduction of traditional urbanism may herald the start of a move from big-scale anonymous urban design to vernacular planning. Much will depend on whether Oriental Consultants have caught up with this new direction in urbanism. The global-to-local or modern-to-traditional architectural dialogue, however, shows no sign of resolution. There are regular official statements aspiring to a combination of modernity and tradition which fail to recognise that imported and globalised North-Atlantic architectural modernity was developed precisely as an antithesis to tradition. This must be seen, complete with its democratic underpinning, not as a westernising reform but rather as a modernising and formalising of traditional Muslim and Arab governance. Alongside the new constitution is a policy for the “Qatarization” of society – the re-assertion of Qatari institutional leadership. If Qataris can use their (often foreign) education as a springboard for a rediscovery of their cultural heritage instead of a mimicry of global culture, then a quite different and unique kind of architectural modernisation can take place that develops those built traditions that help to define Qatari culture.

Konarak, Sistan va Balouchestan





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Ahvaz, Khuzestan



AnyScanner

Doha

Kelly Hutzell & Rami el Samahy



Introduction

With the third largest reserves of natural gas and the highest GDP in the world, Qatar is now witnessing a crucial phase in its history. As its capital and economic center Doha represents an exemplary case of a growing city. In 1950, the population of the entire country was 25,000.¹ Today, the population of Doha numbers close to 800,000, while the greater metropolitan area is estimated at over 1.2 million citizens. With an economic growth rate of over 15% in a year where most economies shrank, it remains one of the fastest emerging cities in the world. The revenue from its vast reserves of natural gas promises a continuation of this trend. While essential infrastructure is needed to export gas globally, and investments in water, power, roadways, airports and hospitals are a necessity, these efforts are complemented by a strong focus on education, sports, and culture. There is no doubt that Doha is undergoing a sea-change with regard to its socio-economic status on the world stage; as it begins to flex its political, economic and social muscle. However, inevitable tensions arise, manifested in part as acute anxiety regarding its identity. Issues of identity notwithstanding, it is on the quality of daily city living that the impact of the growth is most felt: at the level of the home, the work environment, and in the city's public spaces.

Physical Context

Qatar is a small body of land (just 11,586 km² with 563 km of coastline)² that projects like a thumb out from the Arabian peninsula into the Persian Gulf. Doha radiates from a bay in the middle of the eastern edge of the country. The capital sits in a low-lying slightly undulating hot desert area with an annual rainfall of less than 90 mm. The temperature in Doha varies greatly throughout the year. Temperatures from October to May are mild and pleasant, whereas the summer temperatures from June to September are extremely hot and humid. Doha enjoys almost year round sunshine. What little rainfall exists usually occurs during the months of December until April. In the hottest months of the year (July through September), the prevailing breezes come from the northeast, while the northwest breeze prevails during the rest of the year.

According to Dr. Renee Richer:

the high temperature, strong winds, low rainfall and low nutrient availability of the soil mean that recovery of the terrestrial ecosystems from disturbance is very slow. This makes the Arabian peninsula and Qatar in particular one of the most hostile environments on earth, and one of the most fragile.³

Defined as a sub-tropical desert, or an ASHRAE (American Society for Heating, Refrigerant and Air-conditioning Engineers) Zone 1: hot and humid, summers are extreme. Unlike a typical desert climate, Qatar is typically too hot or humid for traditional evaporative cooling to work. Historical analysis shows that vernacular architectural and urban techniques helped mitigate the extremities of the hottest period of the year, employing strategies at an array of scales, from mashribaya to loggia to courtyard to sikka. However, the pace of life was far more in keeping with the climate at the time. While passive cooling strategies can help offset energy use, it is virtually impossible to achieve thermal comfort in the hottest months today without employing active cooling strategies. Typical of Persian Gulf desert regions, vegetation in Qatar is generally sparse. Nevertheless, there are over 300 species of flora in the country. The main landforms are sandy dunes, depressions and wadis, and coastal saline flats. A relatively flat country, Qatar's highest peak above sea level is only 90 meters above sea level.

History of the city

To understand just how profound is the city's present, one must begin by looking to its past. The history of Doha can be divided into three eras, each defined in part by the prevailing economic driver of the day: pearls (before 1950), oil (1950-1995), and gas (1995-present).⁴

A. Pearls (before 1950)

Doha starts its life as the fishing village of al Bidda, a settlement on the outskirts of the Ottoman fort of al Koot, in the 19th century, later to be renamed Doha. According to Khaled Adham, the name is derived from the Arabic dawh or tadweeh, meaning circle-ness or to encircle, and most likely refers to the rounded shape of the bay on which it lay. It is interesting to note that even then, a substantial proportion of the population was not considered indigenous; while the majority were bedouin tribes who had settled along the coast, about a third came from either Persia or from the East Africa, the former as merchants along the Persian Gulf trade routes, and the latter as slaves in the employ of the local pearl diving boats.

In the 1930s, the collapse of the pearl trade with the development of Japanese cultured pearls, coupled with the worldwide economic depression, led to a shrinking of the town. While oil is discovered in the 1930s, the Second World War retards development of the new resource until after the conclusion of hostilities. A census in 1949 records that the population has dwindled to 16,000.⁶ Aerial photographs from this period show a small village clustered along the coast and along the wadi which flowed through its center perpendicular to the coast line. Chief elements of the town include the al Koot Fort, the Souq, and the cemetery.

As evinced in photographs and the few remaining structures, the majority of Doha's built fabric was once comprised of one and two-story structures, with relatively tall ground floors. It is worth noting that while there were few, if any, wind towers (although often attributed to Qatar, wind towers are more prevalent in other areas of the Persian Gulf, particularly on the Iranian side), the upper story of most buildings had rooms facing the sea in order to benefit from the morning on-shore breezes. Courtyards provided shading, ventilation and privacy. Many courtyards also had vegetation in the form of a large acacia tree, to provide further shading and cooling. Deep loggias were located on the inside of the courtyard for further shading of the rooms facing the courtyard. Connective narrow passageways led into areas of town, providing shade to pedestrians, thereby serving to minimize pedestrian exposure to the sun. Awnings and covered walkways provided shade in exterior public spaces. By the 1950s Doha starts to recover as the oil money begins to trickle in. By the end of the decade the city has grown threefold in area. A power station is built, and, along a street closely echoing the course of the old wadi, street lights are introduced for the first time.⁷ New developments emerge, noted as patches of a grid pattern unlike the narrow path system of the pre-oil settlement patterns. The coastline

also changes: infill expands the town seaward, while new jetties reflect the growth of merchant families relative influence and allowing direct connection between the merchant houses along the shore and the souq behind them.

B. Oil (1950 - 1995)

With independence in 1972, Doha changes dramatically. The new emir, Sheikh Khalifa bin Hamad al Thani commissions the first master plan for Doha, led by the British firm Llewelyn-Davies. While this project had widespread consequences for the city, two bear mention here. First, the plan proposed that the government consolidate ownership of the central area to clear it of the old neighborhoods for redesign and development as a denser, and more publicly-owned zone. This triggered a widespread exodus of Qataris eager to sell their land in the city at very generous prices and to move to the "modern" areas being developed at the city's periphery, while simultaneously increasing the number of non-Qataris, especially low-income South Asian laborers, moving into the central area. As a result, the center of the city became almost entirely populated by non-nationals, a condition that persists to this day. These new residents live in low- to mid-rise (typically four to eight stories) buildings construction from the 1970s.

The growth of the town continues at this accelerated pace throughout the 1960s. Settlement expands to the south and the west, while the eastern expansion is somewhat restrained by the development of the airstrip (soon to be airport). Significantly, one of the contemporary city's most unique characteristics begins to emerge during this time: the ring roads that arc in concentric circles emanating from Doha Bay start to appear, though they are not formally articulated as such until the early 1970s. In fact up until this point, the development is project-based, with little thought as to the larger organization of the town. John Lockerbie, a British architect and urban designer active in Doha during this time period has the following recollections of the era:

Professional advice was given based on some understanding of traditions, but the pace of development was so immediate, and the desire to leave their old houses so pressing, that there was no desire to delay any new development – quite the contrary; there was an insistence on knocking down their old houses as soon as practicable. My own experience is that people, seeing me looking at old houses, came to ask me to ensure that a road was taken through their property so that they could benefit in various ways.⁸

No official census information exists for the 1950s and 1960s. However, a 1970 census indicates that the population is 111,000, of whom 45,000 are nationals.⁹ This suggests two things: the population grew rapidly, almost ten fold in 30 years since the nadir of 1949; and, foreigners played a large role in that growth: as early as two years before independence, sixty percent of the city's residents were non-citizens. However, after the government paid well above market rates for central Doha properties -- some have argued that this was seen as a way to redistribute oil wealth to its citizens and to buy support for the new plan -- large swathes of the newly acquired land were not developed. Explanations for this condition are twofold: following the payout to its citizens, the government was left with little funding to develop areas where real estate prices were inadvertently overinflated and as the city grows outward, priorities for development changed. A foreign-born, long-time resident of the city, who once rented an apartment in a central neighborhood, remarked with disappointment upon driving by recently: "We left the house we lived in for ten years, where my boys grew up, and what has been done with the land since then? Nothing."¹⁰ That view is echoed by Qataris, who, although they recognize that they have benefited from the moves, feel a certain alienation from the city center, a feeling that is only being rectified today.

Although they were begun soon after independence, neither of these projects reached completion before the late 1980s. Adham notes that this first growth spurt coincided with the meteoric rise in oil prices throughout the 1970s.¹¹ It is no surprise then, that the pace slows down dramatically in the 1980s as prices for oil drop. In fact, by the end of the eighties, both massive infrastructure projects are completed, but the expected development fails to follow. The edges of the C and D ring roads remain undeveloped, and the Sheraton sits alone on the edge of Dafna for over a decade.

The second major transformation resulting from the Llewelyn-Davies plan is the formalization of the ring roads, as well as the iconic cres-

cent shape of the corniche. The former was achieved by connecting and widening existing roads to form the A and B ring roads and building from scratch the C and D ring roads to accommodate future growth. These ring roads were to be connected by a series of radial boulevards, such as Grand Hamad Street, which cut a direct line from the southwest toward the sea.¹² To shape the corniche, the government began an ambitious effort of fill in a brackish shallow area northwest of the city. Known as Dafna to the locals (dafn being Arabic for buried) and West Bay to the expatriates, this area would eventually represent the arrival of Doha as a global city, with gleaming skyscrapers visible from the old downtown.

David Chaddock, a longtime resident of Doha, recalls that "Not 10 years ago the West Bay was still salt flats and subkha. The first tower block had yet to be completed. The grand gas projects were still in their infancy. The smart place to shop was still The Centre next to the Ramada."¹³ At the same time, however, the population of the city continues to grow more than threefold in this period: a 1986 census shows a population of 369,000 and a 1990 estimate raised this to 371,000, of whom 70,000 were nationals.

C. Gas (1995 - Present)

These projects can be divided into five categories: infrastructural, cultural, educational, athletic/recreational, and mega-scale mixed-use projects. They are located across the city, and result in both the densification of certain areas and the increased expansion (sometimes sprawl) of the city. At the same time, the plans of the previous era begin to reach fruition; an examination of the city from the mid-1990s to present-day shows greater settlement in both the West Bay and along the outer ring roads. In a recent article, the Economist noted that "when it [the world's biggest known gasfield] was discovered in 1971, Qataris were dismayed. However, by the time the current emir, Sheikh Hamad bin Khalifa al Thani, succeeds to the throne in June 1995, the Qatari leadership recognizes the potential that natural gas offers. In short order, the grand projects of the new ruler begin, coinciding with the unprecedented global growth (and the associated appetite for energy) of the late 1990s and the 2000s.

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Speculation of the city's future based on current projects underway suggest an uninterrupted conurbation that stretches north from the town of al Khor south to al Wakra, in effect connecting the gas plants of Ras Laffan with the oil industry of Mesaeid. At the same time the population continues to grow in leaps and bounds: in 1997, the population measures 522,000; in 2004 it has reached 743,000; by 2009 it is estimated at 1,553,000, with 228,000 Qatari citizens (i.e. 15% of the total population)¹⁴. All of these developments have an effect on the identity of the city, and, most important to its denizens, everyday habitation, as they affect people's homes, work places and public life.

Infrastructural Projects

The New Doha International airport is Qatar's largest project, both financially and physically. Work on the US \$11 billion dollar project began in 2004 and is expected to continue until 2015. It is also Qatar's most ambitious project, as while there is no scarcity of unbuilt desert, the new airport is built just south of the city, on reclaimed land, both from the sea and from an enormous waste dump. When complete it should be among the ten largest airports in the world, and is designed to handle 50 million passengers and 2 million tons of cargo a year. Importantly, it will also allow the redirection of flight patterns away from their current path across West Bay, thereby allowing for greater height limitations for the city's skyscrapers. Currently, at least two towers under construction, RMJM's Dubai Tower and Murphy/Jahn's Convention Center Tower (at 97 and 107 stories tall), have not been issued their final building permits until the new airport is complete. There is no shortage of infrastructural projects in progress or on the books in Qatar today, from the upgrades to the state highway system, to the planned underground subway system, to the proposed passenger and freight lines from Ras Laffan to Mesaeid, to the suggested relocation of the Doha port. Of the numerous infrastructural projects under way in and around Doha, three deserve special mention: the new airport, the planned

causeways, and the construction of Ras Laffan Industrial City. All three are intended to connect the city to the global economy.

While the new airport will further connect Doha through the skies, the planned causeways will serve to link Doha with other GCC cities across land and sea. The Qatar – Bahrain Friendship Bridge will extend for 40 km between the Ras Ashairij area, just south of the town of al Zubara in Qatar (an hour drive from downtown Doha) and Askar, Bahrain. A number of bridges, combined with causeways, will form the link and provide for both automobiles and a rail line for public transportation. Construction is expected to commence in late 2009, and be completed within four years. The roadway will be an extension of the King Fahd Causeway that links Bahrain to Dammam and Dhahran in Saudi Arabia, thus serving as a link to the greater region. The Qatar – U.A.E. causeway, a proposed system of bridges and causeways extending for 65 kilometers, will connect from Umm Said in Qatar to the most northwestern portion of the Abu Dhabi province in the U.A.E. When and if completed, these two connections will allow for greater land traffic between three of the region's economic powerhouses; future daily commutes are not inconceivable.

Living on site does alleviate the mostly South Asian, mostly male workers from the long commutes of many of their compatriots on other job sites. Bussed in from camps far from the city sprawl, most workers form long lines, waiting for the shade and shelter of the de-commissioned American yellow school buses that take them to and from long 6-day a week shifts. That Doha is an emerging regional economic powerhouse is due to the fact that the leadership has invested in Ras Laffan Industrial City, an enormous secure zone 80 km north of Doha. Known informally as Qatar's "Money Machine," Ras Laffan already produces a quarter of the world's liquefied natural gas (LNG), with Qatar set to be the world's largest liquid gas exporter by 2012. As a result, Qatar's 2008 hydrocarbon revenue per citizen amounted to \$90,000. Exxon-Mobil, Shell, Qatargas, RasGas and Dolphin Energy all have a stake in Ras Laffan's extraction facilities and infrastructure.¹⁵

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140,000 workers are temporarily housed in Ras Laffan to build the gas infrastructure, making it Qatar's de facto second city. While these workers live on site, in regimented camps built to standards researched and enacted by the oil and gas companies and others, they face intense isolation. In fact, these 'outpost' camps in the north are perhaps not that unlike those of the American military in the south of Qatar at the largest military base in the Middle East region.

Educational Projects

Qatar is unabashedly attempting to establish itself as a "knowledge-based society." In fact, the entire educational system, from grade school to university, is undergoing reform. Fifteen years ago, the only choice for higher education locally was Qatar University, the state university established by the previous emir. Today, a number of choices exist, offering a range of degrees in various languages. The most distinguished of these is Education City, the flagship of Qatar Foundation, a private entity founded in 1995 by the Emir Sheikh Hamad, and presided over by his wife, Sheikha Mozah Bint Nasser al Missned.

Billed as the world's first multi-versity, Education City is a collection of top rated academic and research institutions, including Carnegie Mellon, Cornell, Georgetown, Northwestern, Texas A&M, Virginia Commonwealth University and the Faculty of Islamic Sciences. These are supported by a number of large programs, including the Qatar Science & Technology Park, Education City Convention Center, and the Central Library, as well as smaller institutions and centers. Currently, scores of tower cranes are coralled in this desert enclave 9 km west of the Doha Corniche.

The original master plan, designed by Isozaki, called for low-lying buildings (14 meter maximum height) with mammoth footprints and even larger spaces between them, a condition that is less than conducive to encouraging interaction amongst the various universities. The signature and singular cohesive design element is the green spine, a formal promenade, which runs north-south, and serves to visually link both

north and south portions of the campus (physically, it is interrupted by a 30 meter highway that runs east-west across the country). The spine is Education City's nexus, serving to organize buildings by allowing them to face each other, with iconic public buildings sited at either end of its main axis (the Ceremonial Court to the south, the Convention Center to the north, both designed by the master planner). Literally a green lawn of grass, it functions not unlike Jefferson's campus design of the University of Virginia, but at an entirely different scale.

Despite this fact, the campus remains a series of object buildings, at best a field of large architectural jewels rather than a cohesive campus. To their credit, Qatar Foundation has recognized the problem and has hired landscape architects EDAW to address the issue in a revised master plan that is specifically tasked to address issues of connectivity, pedestrianization and usable outdoor spaces. As part of their efforts to create an environmentally sustainable campus (a cause championed by Sheikha Mozah), it is QF's intention to have a car-free institution within ten years, through the introduction of an people mover system, and large peripheral parking structures. As ambitious a goal as this is, for Doha remains very much a car-culture, it still does not address the fact that all students, faculty and staff will likely continue to drive to the campus. Several of the world's best-known architecture firms have designed buildings for the campus, including Rem Koolhaas' OMA (Central Library, QF headquarters, Rand Policy Institute), Legoretta y Legoretta (Carnegie Mellon, Texas A&M, Georgetown, and the Student Center), Pelli Clarke Pelli and Ellerbe Becket (Sidra Teaching Hospital) and Arata Isozaki (Cornell, Liberal Arts and Sciences building, the Ceremonial Court and the Convention Center). Other buildings have been designed by smaller international or local architects: Burns and McDonnell (new dormitories) and Woods Bagot (QSTP), Arab Engineering Bureau (Original QF Headquarters) and Mimar (VCU).

Other efforts to "go green" include LEED platinum rating for all new construction and the use of native and adaptive plant materials for all new campus landscapes. The latter has been implemented easily, creating unique and distinctive landscapes using local or appropriate ground cover and grasses rather than the imported, water intensive efforts seen in other places in the city. The former is proving more difficult, however, as the LEED rating system, originally designed for the American northeast and northwest, is not easily transferable to a desert climate with few local building materials.

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Despite these and other challenges, Education City is an undeniably impressive effort. In just over a decade, Qatar Foundation has realized an ambitious program. It has also demonstrated an ability to learn from its mistakes and those of others, to become a flexible and versatile institution, losing neither its determination nor its drive. Inspired by geometries at Egypt's ibn Tulun mosque, the museum's bold platonic forms stack in a twisting fashion as they rise, Pei's modernist resolution to the ancient problem of placing a circle above a square. Only on the interior is the circle revealed, as a grand circular stair case rises below a dome that only registers from the inside.

Cultural Projects

In December of 2008, the Qatar Museum of Islamic Art opened to critical and popular acclaim. The opening party guest list read like a who's who of the art world, including artists Jeff Koons and Damien Hirst. Nicolai Ouroussoff, the architecture critic for The New York Times, noted that "the building's austere, almost primitive forms and the dazzling collections it houses underscore the seriousness of the country's cultural ambition."¹⁶

This is the first project of the Qatar Museum Authority, the agency overseeing the country's new museums. This ambitious cultural endeavor is headed by Sheikha Al Mayassa bint Hamad bin Khalifa al-Thani, the Emir's daughter. Indeed, Doha's cultural master plan is already being hailed as a 21st-century model. "The government is taking a quiet leadership role in building understanding among religions and nations," said Roger Mandle, the executive director of the QMA.

The galleries, designed by French architecture firm Wilmot, are masterful and the artifacts exquisite, among the finest collections in the

world. Also noteworthy is the quality of the construction, which is superb, and unfortunately, a rarity. Too often buildings in the GCC are ambitiously designed and fit out with lavish materials, but are placed with little precision by low skilled construction crews whose life experiences are far removed from the buildings that they are assembling.

The museum is not without controversy, centering mainly on the selection of the architect, the selection of the location, and the time it took to open. Following an international design competition, Jordanian architect Rasem Badran was selected as the winner. However, following the announcement, the commission was quietly withdrawn and later given to I.M. Pei, who was coaxed out of retirement to design the project. After accepting the commission, Pei was able to convince the authorities to site the building on an artificial island, just offshore of the corniche, so it would never be obfuscated by the encroaching city. For two years, the project sat, for all appearances complete, but with its doors closed. Finally, 11 years after the initial competition, the museum was opened to great fanfare.

The delays associated with the opening of the MIA reflect the general caution on the part of the decision-makers of Doha's cultural project. While the Museum of Islamic Art may be Pei's last, it is only the first of several world-class museums for Doha. The French architect Jean Nouvel is already at work on the next iconic building: the revamped National Museum of Qatar. Few details of this huge project have been made public. Other projects, including a museum for modern Arab art and a museum of orientalist art, have been announced but are still under wraps. According to Mandle, Qatar is "building a Smithsonian from the sand up."¹⁷

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Athletic/Recreational Projects

Home to first rate facilities, including a stadium with a retractable roof, an olympic-sized swimming pool, a women-only gymnasium, and a state-of-the-art sports therapy facility, Khalifa Sports Complex is Doha's most visible foray onto the stage of world athletic events. And because every landmark complex needs a landmark building as signifier, Khalifa Sports Complex has Aspire Tower. Rising 318 meters, this distinctive tower was the tallest structure in town when completed, just in time for the Doha Asian Games 2006. A visitor to those games wrote of it thus:

Such structures will not only help to reshape Qatar, but the visitor's perception of the place. Already, the sellout crowds at the Asian Games had a taste of what is to come in Aspire Tower.... Aspire stands out, and not just in this desert kingdom. Entirely wrapped in metal wire that provides a bird-nest appearance, the smokestack-shaped tower is the tallest in the world to receive the treatment.... The wires were fitted with LED lights to create dazzling light shows during the games. It will become a hotel and upscale mall.¹⁹

The lengths to which Doha went for 2006 demonstrate the seriousness of the city's athletic project. Khalifa Sports Complex is merely the jewel in the crown of Doha's sports project. Each neighborhood has an athletic club with well-appointed facilities. The Khalifa Tennis Stadium (a separate entity, not to be confused with the Sports Complex) has recently been expanded and has played host to tier I women's events and to the first men's open of the season. The Doha Golf Club holds an event each winter that draws most of the top names in the sport. Last fall, the city learned that it was passed over for the 2016 Olympics, in large part over concerns about the weather: US television markets

insist that the Olympics take place over the summer: a slow television season, but an unbearable time of the year in Doha for most visitors. The Qatar Olympic Committee had recommended that the events take place in October, but even Doha cannot compete with the power of American television. Nevertheless, Doha remains undaunted; it recently announced its intention to make a bid for the 2022 World Cup, promising the first all-indoor football tournament. Two years before the opening of the Museum of Islamic Art, Doha hosted the 15th Asian Games. In December of 2006, thousands of athletes and spectators descended upon the city. This two-week extravaganza can be regarded as Doha's coming out party: building projects were put on super-fast track, roads rerouted, cruise liners chartered to house guests as the hotels were filled to capacity, and an entire world-class sports facility was built, the Khalifa Sports Complex.

Mega-Projects Qatar's Global Mega Projects

As impressive in scale as these educational, cultural, and athletic projects might be, they pale in comparison to the size of the mega-projects underway: the United Development Company's Pearl, Qatari Diar's Lusail, Barwa's al Baraha, and DohaLand's Heart of Doha. Each of these projects has a different ownership system and a distinct focus, but collectively, they represent an expansion of the city outward, and simultaneously, a densification of certain areas. In total, these mixed-use mega-projects will offer housing for an additional 350,000 residents - a 25% addition to greater Doha's current population. It should be noted that while the following list of mega-projects is by no means exhaustive, it is representative of the variety of mega-projects in progress. "Venice is now in Qatar," states the UDC marketing slogan. Residential districts, themed with such names as Porto Arabia, Costa Malaz and Viva Bahriya, lend a foreign flair to the free-hold development. On a tour of the showroom, the Oyster (exquisitely designed by Italian architect Giampiero Peia), the salesman explained that the names were carefully chosen to reflect both the mediterranean aspirations and the Arab identity. With the possibility of free-hold ownership and the relaxation of Qatar's restrictions on alcohol consumption (e.g. restaurants not attached to hotels will be able to serve alcohol), the Pearl is clearly being marketed to foreigners. These jet-setters will have the option of an alternative mode of transportation - a proposed water taxi service- from the new airport to their front door.

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The Pearl is an off-shore man-made island located to the north of Doha Bay. Designed to house some "41,000 international residents" in a multi-cultural residential community, replete with new districts, marinas, hotels, luxury retail, recreation and restaurant space.²⁰ For all intents and circumstances, the Pearl is Doha's version of the Palm. Developed by the private company, United Development Company, the Pearl is an artificial island, designed to look like not one but three oysters with a long tail. The oysters form two circular coves oriented south toward the view of Doha, and one looking north towards the Ritz-Carlton and Lusail. These coves house marinas, and are fronted with boardwalks, luxury stores and cafes, with variations-on-a-theme towers of housing as the backdrop. On the rest of the island, low-density luxury residences exist alongside amenities such as mosques and churches. The tail of the Pearl functions as a string of private islands, each for a VVIP (a distinctively GCC designation, a Very Very Important Person).

The entire island is connected to the main land by a single umbilical cord consisting of a 10-lane highway. Recently marketed as "the world's smartest island," one is tempted to wonder in which way it is meant. Perhaps it is the trash collection system, by which every garbage can is connected via vacuum suction to a collection point, where all refuse is compacted and disposed of collectively. Phase I of the development is now complete, and is open for visitors; this consists of the commercial program along one segment of an arc of the first cove. With only a few high-end stores and a smattering of cafes open, the boardwalk is nevertheless immensely popular. Whether this speaks to a desire to experience this luxury lifestyle, natural curiosity about the much-advertised project, or simply the limited range of things to do in Doha remains an open debate.

To the north of the Pearl lies Lusail City, a 3,500 hectare brand-new coastal city currently under construction, with an expected completion date for the initial infrastructure of 2011. Planned for a linear area stretching along the coastline, the multi-district area is expected to house

200,000 people, catering to professionals in the oil and gas industries who want to live and work in proximity to Ras Laffan.²¹ Unlike the Pearl, Lusail is a city built on barren desert, with added complexity to its waterfront created by a subtraction of land, rather than an addition of earth.

Praised for being a meticulously planned extension to the capital city of Doha, Lusail is in fact an instant city, with its own corniche, public transportation, water desalinization plant and services, and themed districts, with specific high-profile commissions going to the usual coterie of international starchitects. Residents will be able to stroll down a boulevard based on Paris's Champs Elysses, though access to the waterfront corniche appears to be privatized, limited to the guest of the hotels and the residents of the apartments that line the littoral.

The project is being led by Qatari Diar, the real investment arm of the government. As the master-developer, Qatari Diar is responsible for all major infrastructure, and supervises sub-developers completing districts such as Energy City. Smart and green, Energy City is to Qatar what Masdar City is to Abu Dhabi. It is described as a city with a brain for oil and gas executives. The consortium spearheading the project includes investors from the entire Persian Gulf region, with the full backing of the Emir. While Masdar hails that it is carbon-neutral, Energy City prides itself on its digital connectivity, and communication systems (not to be outdone by its Abu Dhabi counterpart with regards to sustainability, the project is seeking LEED Platinum). On the other side of the metropolis -- and at the other end of the spectrum -- sits Barwa al Baraha, a 9,000-unit city to house some 50,000 low-income workers. Consisting of sleeping quarters and amenities, Al Baraha is located in the industrial area south east of the city center. In addition to accommodations, the development will feature sports facilities, places of worship and retail. A report states that "with family visitors in mind," a motel has been incorporated into the plan. Also part of the plan: an enormous truck park with a capacity for 4,200 trucks.²²

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Energy City 1 is comprised of low-rise office space hosting 20,000 people, and master planned as a spiral composition based on fractal geometry. At the heart of the spiral is the brain of the project -- a building where the IMEX (International Mercantile Exchange -- the Middle East's energy trading platform) will debut. Energy City 2 is a luxury residential component for 10,000 people. As with any speculative instant project, a marketing theme is essential, and in this case, it centers on the four elements of the universe: Earth, Water, Fire and Air. Much is written about the Energy City's ordered geometry, low density, balance of technology and nature, and optimum security. A web portal, called eCity, will provide access to all voice, data, security and building automation systems, which will be hardwired into every office and every home.²³

Like Qatari Diar, Barwa is another state-owned entity. The vast majority of Qatari Diar's projects, however, are outside the country, while Barwa's are, to date, exclusive within Qatar. Another difference between the two companies is the type of development the real estate companies take on. Diar's projects are always high-end, lifestyle driven developments while Barwa's seem to be much more varied. Although Barwa is involved in some very high-end real estate efforts, such as Urjuan in al Khor, their portfolio is much more varied, and includes low-income worker's housing and a middle income township. In fact, Barwa is the only major developer in Doha that concentrates on anything but the upper end of the real estate market.²⁴

In March of 2009, a new company, DohaLand, a subsidiary of the Qatar Foundation, was unveiled. It is interesting to note the chosen venue for the announcement: the Middle East Economic Digest conference on Qatar Green Building. Two months later, and coinciding with the fourth Qatar Real Estate and Investment Exhibition (Q-Rex) at the Doha Exhibition Center, DohaLand organized a symposium and exhibition unveiling its first project, the Heart of Doha.

In his introduction, CEO Issa al Mohanadi stated that "DohaLand has been set up with a mandate to create leading edge urban living concepts that build on traditional Arabian architecture and design."²⁵ The Heart of Doha project aims to regenerate Qatar's social and economic vitality in the restored center of the congested city center. The mixed used project, with a proposed \$5.5 billion budget, is a balance of hous-

ing and amenities that will house 27,600 and is expected to be complete in 2016.²⁶ With new underground utilities and connections to the proposed subway system, the emphasis is on the creation of an urban project that is culturally and environmentally sustainable.

Master planned by EDAW and articulated through a series of detailed architectural guidelines by Allies and Morrison, the project is well into the design phase at this stage, with a number of architects, including Allies and Morrison, David Adjaye, Mossesian and Partners, Dar al Omran, John McAslam and Partners, and Burns McDonnell assigned to specific buildings or sectors. The drawings and models unveiled at Q-Rex reveal a great deal of thought on the part of the client and the designers, and reflect a refined approach to urban building, exemplified by the sophisticated palette of materials detailed and displayed at the exhibition.

While laudable, the project can be read as a struggle for the identity of the city center, both in demographic and aesthetic terms. The Heart of Doha is to be built in a recently razed area in the center of the city. Those who are leaving are mainly low- and middle-income expatriates (who have been given opportunity to live in a recently completed Barwa project closer to the airport). Those to whom the new project will appeal will be upper middle class foreigners, and possibly, nationals who are interested in reclaiming the city center that their parents abandoned in the 1970s. The project reaches back to a distant past at the expense of the more immediate past of the 1970s. Similar to contemporary urban projects around the world, there is a tendency to write off the urban renewal projects of the twentieth century as unmitigated disasters, and attempt to erase any trace of them. In doing so, we run the risk of repeating the mistakes of those projects. In fact there is a rich history within those much-maligned modernist buildings of 1970s Doha, with modest attempts to understand climatic factors through inventive brise-soleil and screens. Just as Doha was once so eager to demolish its adobe houses, now it seems ready to remove all memory of what replaced it.

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Identity

The notion of memory is intimately intertwined with the issues of identity, which is after all, another way of asking: to whom does the city belong? In a city where the native population constitutes less than a fifth of the total population, this question is particularly acute. On one hand, there is a profound (and understandable) sense of siege on the part of the local population who remain ambivalent about the rapid change that has occurred. By and large a conservative society, and now a clear minority, Qataris are no doubt concerned about the huge influx of (mostly male) foreigners in their capital. On the other hand, those foreigners who have come to Doha have been invited to do so, and do not wish to feel like second-class residents of the city. Many have raised families there, and feel a sense of pride and belonging in Doha, though they also feel that they will never fully belong. A bumper sticker often seen in the city reads Kulina Qatar, Arabic for “we are all Qatar.” One wonders what this means to each group.

Interestingly, the renewed Souq Waqif has come to signify a part of the city's identity upon which both Qataris and expatriates can agree. Loved by tourists and residents alike for its flavor of authenticity, the new old Souq Waqif has been reinvented and is constantly expanding to incorporate more restaurants, cafes and retail space and to accommodate more pedestrians arriving by car. A favorite among locals and foreigners, the souq is among the most ethnically diverse public places in all of Doha, and is heavily populated late into the evening. It does not however, appear to be economically diverse; except for those employed as waitstaff, low-income laborers may not enter beyond a certain point – either by design or by unspoken rules of territorial division.

The architecture of the souq does have a degree of authenticity; in fact, the original souq never fully disappeared, even while the areas around it were demolished for more modern shopping centers. Through research into old photographs and oral histories, the rest is being painstakingly revived by Mohamed Ali of the Private Engineering Office, a company initiated by the Emir for the expressed purpose of restoring Qatari architecture. To date, it is the only part of Doha that has an urban morphology that evokes a pre-modern past.

Another architect who strives to design with respect to Qatar's context and history, while acknowledging new materials and technologies, is Ibrahim Jaidah. An interesting phenomenon, which could only occur in this place and time, is the increased westernization of the souq. Near the main open public space, where sword dancing and local music performances are held, a Cinnabon, Dunkin Donuts and Baskin Robbins have recently settled in. Further down the cobbled lane, you can treat yourself to Haagan Daaz ice cream after dining at a restaurant serving Qatari, Omani, or Iranian cuisine. The only Qatari-born architect to have established a large successful firm, Jaidah leads the Arab Engineering Bureau as Managing Director. A genial and open personality, Jaidah believes that Qatar needs to absorb the best of globalization, and is optimistic about his country's ability to do so without losing its culture. He has noted on more than one occasion that Doha has always been a place that absorbs foreigners and foreign ideas. Jokingly, he cites an example of cultural adaptability: "Arabs took Barbie and made Fula [a sharia-compliant, more ethnically relevant counterpoint]."²⁷

His forthcoming book charts the evolution of Qatari architecture. In it, he provides in-depth analysis of the way in which vernacular architecture mitigated the effects of the harsh climate. He speaks longingly of the old fareej, or neighborhood, a walkable dense community, and its housh, or traditional courtyard houses, with perimeter buildings and northeast orientation. Interestingly, Jaidah is also a proponent of saving those few remaining buildings from the fifties and sixties, the first exuberant post-oil attempts at working with new construction techniques in Doha, a style he has dubbed "Arabian Deco."

Until recently, Jaidah was perhaps best known for his Barzan Tower, a building that mixes old with new, literally: a glass curtain-wall tower emerges from a stucco-skinned version of a traditional Qatari fortress. Much loved, especially by foreign residents, this building is often cited as an example of location-appropriate architecture. However, Jaidah himself will tell you that this was an early attempt; he is far more interested in his more recent work.

Jaidah is responsible for the design of many of Qatar's new embassies, including those in Yemen, Sudan, Turkey, Saudi Arabia and Dubai. In this sense, he is Qatar's hand for establishing the physical embodiment of his culture's presence abroad. One recently completed work is the Doha al Sharq resort and spa, which is laid out according to many of the principles from Jaidah's research into vernacular architecture. The effect is evocative of a traditional Qatari village; rooms are clustered around courtyards and the paths between clusters are narrow, providing shade for pedestrians. As delightful as the compound is, the notion of five star heritage is problematic for a slew of reasons that go beyond the scope of the architect.

It is worth noting that discussions of architecture's role in forming identity almost always remain debates about facade treatments, and rarely about other possible aspects: for instance, the program, the urban morphology, or logical passive responses to a harsh environment. To what extent this is a failure on the part of architects to convey their intent, or on the part of the public to grasp it remains open for discussion. While the variety of living situations in Doha may be broad, a major complaint heard from residents in the past few years has been the cost of housing. This has abated somewhat in the last year, as the world economy has collapsed, and a plethora of new apartments and villas have come online. In fact, it is estimated that this year housing prices will drop by over a third.

Everyday Habitation

On a typical day, however, the residents of Doha concern themselves less with issues of identity and more with the quality of three basic spaces: the home, the work place, and the public realm. In Doha, a great variety of all three categories exist, but the choices available to a resident of the city are far more limited than that heterogeneity would suggest.

The Home

As in most contemporary cities, where (and in what) you live, has much to do with your economic status, which, in Doha, is often, but not always, tied to one's ethnicity. At the top of pile are the wealthiest Qataris, members of the royal family and the big merchant families, who often own multiple estates. These palaces tend to have more than one building on the grounds, and reflect the important division between the public reception areas and the private family areas. At this level, it is quite common for Qataris to have a majlis (literally, a place of seating) as a separate building. This is where the man of the house meets guests, extended family and petitioners (there are women's majalis as well; sometimes these are formalized structures or rooms within buildings, sometimes they are more informal appropriations of spaces within the house).

These divisions between public and private, the family and the outside world, can be traced back to the days in which bedouins lived in tents, and the resulting etiquette that developed over generations (it should be noted that many elder Qataris alive today grew up in tents, so this is hardly far in the past). It should come as no surprise then, that a similar separation is carried through Qatari homes regardless of socio-economic background.

The typical Qatari house today is a large single family home on a roughly 600m² plot of land. The building regulations, established by westerners or those educated in the west, allow for 2-3 stories height limitations, but specify setbacks from all lot lines (about 3 meters from each side and 6m from the front). At the same time, Qatari houses tend to be large: extended families and live-in servants are the norm. In keeping with the intense need for privacy, the traditional house was introverted, with openings from rooms turned inwards, and the rooms themselves forming thick walls. In contrast, contemporary Qatari houses are walled at the perimeter, with the house occupying the center of the lot. By complying with both building regulations and social mores, the remaining open space becomes merely an exterior perimeter corridor, and not truly usable outdoor space. The designs represent a wide variety of architectural languages in their facades, gates and walls: neo-classical, neo-islamic, modern, post-modern, deconstructionist, even the odd blob. However, the architecture is literally skin deep, as most Qatari homes have similar, if not, identical layouts.

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Upper management foreigners (predominantly Europeans, Americans and Australians) tend to live in sumptuous villas in compounds or in the well appointed new skyscrapers in West Bay. Those westerners a little further down the pay scale will live in similar but less glamorous versions of one of these choices. Both the compound and the tower can be read as islands in the city. Indeed, gated communities with names such as Beverly Hills (now I, II, and III) or the Riviera, are purposefully non-descript places that could be anywhere, perfectly pleasant spaces for a transient community. In fairness, this placelessness is not unique to Doha; if anything these compounds are being built not just to contain foreigners, but to make them feel comfortable: familiar, safe and at home. Although it has avoided the kind of criticism that Dubai received for its housing conditions, Doha is not without its challenges. There are state regulations that govern the minimum space requirements for sleeping, eating, recreational space, etc. At the same time, several of the large megaprojects have taken special care to ensure that their subcontractors adhere to even more rigorous standards. However, as all projects in Qatar are under intense time pressure, it is easy to imagine that these good intentions can fall to the wayside as deadlines loom.

With their views of a city under construction, a small communal swimming pool and gymnasium, the apartment tower plays the same role for a more urban foreigner who likely does not have children. In fact, children are a rare sight in the towers, save for the occasional infant of a young couple who have not yet moved into a villa. Similarly, very few Qataris live in apartment buildings. Occasionally, a wealthy Qatari might own an apartment as a pied à terre, but will rarely choose to live in it for any length of time. When asked why he did not live in a tower, a Qatari once responded "why would I want to live off the ground?" Middle income (largely Arab or South Asian) expatriates tend to live in the mid-rise apartment housing to the south and east of the city center, in neighborhoods like Montazah and Mansourah. Typically five to eight stories in height, these apartment buildings have little setback for open space or even space between buildings. These areas are far more dense, as rising housing prices apartments in the last decade has caused this wage bracket to accept subdivided apartments or flat shar-

ing among several parties to make rent affordable.

The Workplace

For many residents of Doha, the construction site is a place of work. A 2008 survey conducted by XXXX found that of the 1,168,081 people constituting the Qatari workforce, 544,644 -- 47% of the country's workforce -- are engaged in the construction sector. Given the amount of construction in the country this should be unsurprising, but it remains a staggering statistic that literally half the working population is building the country.

As a place of work, construction sites across the world are tough places. This is certainly exacerbated by a climate in which summer temperatures can rise well above 45 degrees centigrade, an accelerated schedule (fast track is the norm), a largely low- to unskilled labor force, and a mix of ethnicities (and languages). Signs abound in numerous languages: Safety First! Don't Forget to Drink Water! Wear Your Safety Glass! Safety Harness Required! Heat Can Kill! Do Not Urinate Here!

For most of those who are not engaged on a construction site, work occurs in air conditioning: in an office tower or office park, or if one works in the service economy, in a mall of some form. Typically clad in mirrored glass with a large central lobby or atrium, they are pleasant, if characterless, newly constructed places of employment. There is never enough parking for the office workers or those coming for business. This is especially true in West Bay, where the original master plan had accommodated for residential towers, not commercial -- the ratios for the two being quite different. Each is designed to be an iconic building, with little regard for the way in which it relates its surroundings.

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The towers also tend to be very energy intensive, as there has been little thought to the orientation of the buildings with regard to the sun: the solar gain on the north side of a tower is nothing like that on the west side. Due to the undifferentiated facade treatments, the towers compensated for this design deficiency exclusively through the mechanical cooling system. This phenomenon is changing however, due in part to increased pressure on architects to design in an environmentally responsible fashion, and to the imposition of new requirements for Doha's towers. Green building design is being advocated for strongly by Issa al Mohanadi, the CEO of DohaLand, who also heads the Qatar Green Building Council. RMJM, GHD and Jean Nouvel have all designed new office towers in Doha that are addressing issues of orientation in a more logical manner. The hierarchy of a construction site is manifested visually, in the color of the clothing, the hard hat, and the skin. Western architects or engineers check in periodically clad in suits or khakis, while the day to day site management is usually handled by Lebanese or Egyptians, wearing jeans, collared shirts and white hard hats. The laborers (typically Indian, Pakistani, Indonesian, Nepali, or Philippino) wear company-issued blue coveralls and typically don yellow hardhats. Often, their faces and necks are covered with a scarf and their eyes covered with dark sunglasses for dust protection. The sheer number of identically clad workers often presents a surreal landscape.

The Nouvel tower on the corniche is particularly compelling. In form, it is oddly similar (if not identical) to the Agbar Tower in Barcelona, but the skin is entirely new. Sheathed in a series of screens that are a nod to the Islamic geometric patterns at nested scales, each side of the building is given two, three, or four layers depending on its orientation (north has the fewest, and west the most). The overall result is a diaphanous, shimmering new icon along the Doha's curving boulevard by the bay.

Often businesses and stores are closed midday, between the hours of one and four p.m. to allow employees to rest, eat or pray during the hottest hours of the day. As a result, there are two sets of rush hours in Doha: the early morning and evening rush hour pattern familiar to a westerner, and the noon and afternoon rush hour associated with the three hour lunch time break.

This added stress of the city's roads exacerbates growing traffic problems on a system already under pressure due to the increased population and increased construction (of yet more office towers and parks). In the past few years, traffic jams have become a normal daily occurrence,

something unheard of just a few years ago. Consequently roundabouts give way to roundabouts with traffic signals, then to traffic interchanges in an effort to exert greater control.

Driving in Doha can be dangerous: traffic accidents are the second largest cause of death in Qatar, after cardiovascular disease. Cars are powerful, and the roads quite good; when there is no traffic, cars tend to be driven quickly. The US State department describes driving in Qatar thus:

Safety regulations in Qatar are improving, thanks to a more stringent traffic law adopted in October 2007 and a country-wide traffic safety campaign. However, informal rules of the road and the combination of local and third-country-national driving customs often prove frustrating for first-time drivers in Qatar. The combination of Qatar's extensive use of roundabouts, many road construction projects and the high speeds at which drivers may travel can prove challenging.

Public Space

With a few exceptions, Doha is not a pedestrian-friendly city. Certainly there are areas in which one can walk, but these require a car to get to. A new public bus system exists, but is used almost exclusively by those who do not own cars. Side walks don't always exist, and are rarely shaded, making walking a serious burden in the warmer months. A combination of the car-centric culture, climatic limitations, and a generally conservative society combine to create public spaces unique to this part of the world. Indeed the whole notion of public space, as defined by western thinking, can be challenged here.

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Before delving into those challenges, one must first acknowledge those moments that could be considered conventional urban spaces. By far the most successful of these is the corniche, a seven and a half-kilometer promenade that stretches along Doha Bay. It owes its success to its accessibility and porous character, the availability of cool breezes that come in off the coast, and the abundance of usable green space, all of which allow for a diversity of functions: walking circuit, picnic ground, playground, and large scale event space. Most significantly, it is free, it is not based on consumption, and it is available to all residents of the city.

Other such spaces exist, including the nearby al Bidda park or the park around the Khalifa Sports Stadium, but none are as successful (or as accessible) as the corniche. There are a number of parks for women and children only, at a variety of scales, the largest of which is al Muntazah Park, a 13 hectare green space in what is otherwise a very dense part of town. The park has been "closed for renovations" for years now, and there is some speculation that the land is slated for development. Most of these outdoor areas are smaller, operating at the scale of the neighborhood park, offering an open space for young children and mothers to use during the day. Indeed, usable outdoor space is at a premium in Doha.

More typical of the GCC experience is that quasi-public space, the mall. While Qatar can't boast of indoor ski slopes or aquariums, their more modest malls function for large segments of the population as public spaces. Hyatt Center and Centerpoint malls are relatively small and shopping focused, attracting a mostly Qatari population. Fridays at the mall, the one day that workers have off each week, finds rings of laborers around the enjoying dual free pleasures: the spectacle of children on ice, and air conditioning.

Each of these malls has a "family day," during which you are not meant to enter if you are a single male. In a city where men outnumber women 3 to 1, this sort of segregation seems somewhat understandable. In actuality, however, the (usually South Asian) guards at the entrances are reluctant to stop single Qatari or Western men, for fear of angering the wrong person, whereas there is no similar hesitation in stopping Asian men who clearly appear to be of working class. As a result, "family day" sometime merely serves as barrier to entry for the expatriate laborer.

Perhaps the most fascinating urban public space is the most seemingly banal, yet unique, condition of the long linear strip malls and slip roads coursing along the majority of Qatar's main streets. They form a distant yet uniform street edge condition, replete with regimented marching storefront bays and associated signage. This condition makes it different from an American strip mall, where the object is to quickly disassociate oneself from a soulless street (or highway). In the Qatari counterpart, the street life is not diluted: the car and the pedestrian intermingle as cars pull up to venues and honk their horns for service.

Many of these strip malls, which can unfurl for the entire length of a road, contain shops offering the same goods and services. Along al Luqta Street, no less than twenty car washes exist alongside detailing and car upholstery shops, effectively creating a car wash 'souk.' This area is not to be confused with the automotive repair souk, which exists in the center of Doha. Both areas, somewhat worn and dilapidated, yet vibrant and bustling with business, are slated for demolition.

A variation on this theme is the petrol station that is flanked by a strip bent to a L shape. Often consisting of practical programs (pharmacy, laundry, fast food restaurants, a fruit and vegetable market, bakery, an ATM, and a small grocery), these tend to serve a neighborhood, or sub district of the city. They are especially prevalent in the newer parts of town, where other basic services have not yet arrived to support the existing housing. Like the linear strip mall, these petrol station shopping centers are vibrant local quasi public spaces. In keeping with the character of this particular city, they are very much tied into the culture of the automobile.

318 One of the few public places that almost anyone in the city can walk to is the local mosque. In virtually every part of town, a local mosque is just a few minutes away. Certainly these are less accessible (or desirable) as public spaces to non-Muslims, and the mosque is subject to gender separation. Nonetheless, in a city that is overwhelmingly Muslim and outwardly devout, the mosque plays an important civic as well as religious role for locals and the expatriate Muslims alike. It is telling that West Bay is perhaps the only part of town in which the call to prayer is not easily heard (unless at City Center Mall).

Another interesting, unusual, and unique area not typically considered a public space is the desert that surrounds Doha. Qataris are attached to the desert in a complex relationship that is partially nostalgic for a simpler past and partly an exciting form of recreation, much in the same way as urban Americans might spend the weekend camping in a forest. The Qatari camping season extends from mid-November to mid-March. During that time, families will apply for permits for areas with particular coordinates. There they will set up a series of tents for the season, with enough space and (power) to house the family for the weekend. From that spot, the males of the family will dune bash -- the children will ride their ATVs, the teenagers and young men their Land cruisers.

While young Qatari males pride themselves on their knowledge of the desert and their skill in negotiating through it, the camping season is not all hardship. Most camps are equipped with air conditioning, satellite, large screen plasma televisions, video games, and now, internet. A study found that, on average, a camp requires 600 kg of equipment to be transported to the desert. Although in some ways reminiscent of the bedouin days gone by, this is clearly not roughing it. In fact, only caretakers usually sleep in the camps, as the city is close enough for the drive home at night.²⁹

Like the desert itself, group dynamics of public space seem to operate within the laws of fluid mechanics; like water, crowds will move along the path of least resistance. When moved away from a certain area, throngs of workers will find other spaces. Some things continue to passively resist central planning. The informal nature of public spaces seems to rear its head despite attempts to expunge it. If a cricket pitch gives way to a new development, a new one is erected elsewhere. On the last segment of waterfront not yet privatized, a few hundred meters from the Pearl construction site, sits a "public" beach. It exists because people continued to return to it and use it as such. Today, as if understanding the needs of its denizens, the municipality added garbage cans on the beach and buoys in the water.

As the city sprawls, the location of Doha's center is a contested subject: is it in fact the bustling area surrounding the souq, or the recreational area of the Corniche, or even the privatized interior of City Center Mall? In her master thesis, Ameenah al Ahmadi explores the perceived urban core of Doha. Three potential urban centers are defined: the Souq, the Corniche, and City Center Mall. Each represents an era of Doha's history, and each signify different meanings dependent to various groups of city dwellers. "Even though many elements of the old core of the city are still perceived to be the centre by most respondents, other elements which stretch beyond the old centre are also seen as characteristic of the city."³⁰ The desert is used for more than camping and dune bashing. The expatriate community hold an annual "Dune Stock" party a 45 minute ride from downtown Doha. At areas of intense density and activity (the point at which the paved road ends after Messeid, for example), camel rides and other amusements can be found. On a stretch of land just outside the Doha Golf Club, an elaborate race track has been built for remote control car racing, complete with hairpin turns, steep ramps, and even a two story viewing platform. Nearby, the cricket mad South Asian community have established a series of pitches, which are full on Fridays from early morning to late in the afternoon. All of these activities are informal in nature.

As the metropolitan area grows, perhaps doubling in size in the next two decades, more centers will emerge. It is likely that continuous settlement will extend from Ras Laffan in the North to Messeid in the south (at the very least from al Khor to al Wakra) by 2030. To prepare for their future, the Qatari leadership has produced The Qatar National Vision 2030 Plan.

The document states that "by 2030, Qatar aims to be an advanced society capable of sustaining its development and providing a high standard of living for all of its people." It outlines five challenges faced by the country: 1) Modernization and preservation of traditions; 2) Needs of this generations and the needs of future generations; 3) Managed growth and uncontrolled expansion; 4) Size and quality of the expatriate labor force and the selected path of development; and 5) Economic growth, social development and environmental management. It articulates a strategy to address these issues through four "pillars" of development: "Human, Social, Economic and Environmental Development."

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In a recent report as part of its World Winning Cities Global Foresight Series, the global real estate services firm Jones Lang LaSalle single out Doha, stating:

Doha has been following its own distinctive agenda of both city and nation building, which is likely to attract increased international attention in the future.... Doha stands out from its neighbours in a number of important dimensions and offers a favourable combination of ingredients revolving around an economy that offers substantial opportunities for long term growth through gas driven wealth, massive infrastructure investment, a clearly articulated long term vision and strong leadership.

Assuming that Doha can manage the expectations of both its national population and the massive influx of expatriates, by providing a metropolitan experience that will foster connectivity, encourage creativity, enrich the quality of life, and enhance both environmental and cultural sustainability for its residents, there is reason to believe that it may be indeed become a world winning city.

Notes

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