#### The Lure of the West:

Analyzing the Domination of Western Firms in the Gulf Region

By

Mais Mithqal Sartawi

Bachelor of Architecture, Rhode Island School of Design (2008)

Submitted to the Department of Architecture on May 20, 2010

in partial fulfillment of the requirements for the Degree of

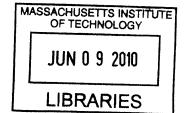
**ARCHIVES** 

Master of Science in Architecture Studies

At the

Massachusetts Institute of Technology

June 2010



©2010 Massachusetts Institute of Technology. All rights reserved

The Author hereby grants M.I.T permission to reproduce and to distribute publicly paper and electronic copies of this thesis document in whole or in part in any medium now known or hereafter created

Signature of Aut	thor:	
<i>b</i>		Department of Architecture
		- May 20,2010
Certified by	. 1 mm / - 1	[ VISTUS]
, <u>, , , , , , , , , , , , , , , , , , </u>		Nasser O. Rabbat
	_ / _ ′ ′	Aga khan Professor of the History of Architecture
	·	Thesis Supervisor
	•	1
Accepted by		
		Julian Beinart
		Professor of Architecture
	•	Chairman Committee on Graduate Students

#### THESIS COMMITTEE

Thesis Supervisor:
Nasser O. Rabbat
Aga Khan Professor of Islamic Architecture
Massachusetts Institute of Technology

Thesis Reader:
Rahul Mehrotra
Professor at the School of Architecture and Planning
Massachusetts Institute of Technology

Thesis Reader: Yasser Mahgoub Professor at the School of Architecture Kuwait University

# The Lure of the West: Analyzing the Domination of Western Firms in the Gulf Region

#### By

#### Mais Mithqal Sartawi

Submitted to the Department of Architecture on May 20, 2010 in partial fulfillment of the requirements for the Degree of Master of Science in Architecture Studies

#### **ABSTRACT**

For the past three decades, architecture in the gulf region has undergone a wide ranging-amount of transformations. The discovery of oil during the mid  $20^{th}$  century transformed countries with in the region from small, significantly poor cities that depended merely on pearling and trade as a source of income, to being marked today as the wealthiest countries in the world. The increase of oil revenues allowed cities within the region to become a playground for the rich, including local figures of authority. Their visions have turned each country to a laboratory for architects to use their creativity in testing new heights of modernization, which turned the interest and attention of major Western firms and star architects. As the pace and magnitude of construction increased, it brought along with it a new architecture trend of Large-scale projects, dominating the urban fabric of each city. Moreover, the Gulf region finally found its place on the world map. One would expect local professionals and architects to take part in these new transformations. Surprisingly enough, Local architects have been, and still are, absent from their own architecture scene.

This thesis aims at not only highlighting some of the reasons that have allowed for the strong presence of Western firms in the gulf region, but more importantly, why local architects have not participated in the growing market.

Thesis Supervisor: Nasser O. Rabbat Aga Khan Professor of Islamic Architecture Massachusetts Institute of Technology

#### **ACKNOWLEDGMENTS**

This thesis was truly a group effort. It could not have been done with the help of amazing professors, colleagues, family, and friends. Therefore, It is to these people that I dedicate my work and effort.

The 3 people I would like to mention first are my advisor and readers. Without their help, guidance, and encouragement, this thesis would not have taken the direction that it did. First and far most, Professor Nasser Rabbat, who was always enthusiastic and supportive of my ideas. He picked me up at some very low points through my writing and duration of my degree here at M.I.T. Professor Nasser constantly challenged me to think critically, and pushed me in order to improve my writing skills. Professor Rahul Mehrotra, and Professor Yasser Mahgoub, my readers, their advice was always extremely helpful, and very much appreciated. Their positive attitude and excitement on the topic always motivated me to work on exceeding my limits in order to produce a good thesis. These three individuals have shaped my thought process and my life in multiple ways; their inspiration to me intellectually and professionally has no bounds.

Fieldwork was done in the Gulf region, Kuwait, Qatar, Bahrain, Dubai, and Saudi Arabia, to be more precise, both the summer of 2009 and winter of 2010. The information and data could not have been gathered without the help and patience of great architects namely, Ali Shuaibi, Mohammed al-Ibrahim, Ibrahim Jaidah, Ahmed Cheika, Ahmed al-Rostomani, Saleh al-Mutawa, Saleh al-Qallaf, Futooh al-Asfoor, Ahmed Joudar, Ahmed Juhayim, Simon Crsipe, and Aslihan Demirtas. They have taken a lot of their own time to help me with my thesis, providing me with their thoughts, points of views, and necessary information.

May parents, and Fiancé, without their love, help, support, and most importantly, patience, I might have never been able to push my self through the tough times while working on my thesis. Of course, my siblings who always found a way to put a smile on my face, my two sisters Mai and Maha, and my two brothers Mohammed and Muthana. The love and support of my family has been invaluable to me throughout the course of my program here, and always.

My two dearest friends lulu al-Omani and Maryam Eskenderi, who pointed me in times of doubt and despair to see the light at the end of the tunnel. Whether it was through the phone, facebook, or late nights of laughter while ordering in Asian food, constantly being there for me truly defines the meaning of friendship

Finally my peers at M.I.T. who helped me formulate my thoughts just as my professors did. Mohammed Chakaki, Christian Hedrick, Azra Dawood, and Laura Lee Shmidt who spent hours with me cheering my up and sharing their critical insight. It is because of them that I will look back at my days here with the utmost fondness.

#### **BIOGRAPHY**

Mais M. Sartawi received her Bachelor of architecture from the Rhode Island School of Design in June 2008. As an S. M. Arch.S candidate in the Aga Khan Program for Islamic Architecture at MIT, she turned her focus towards studying the affect the strong presence of Western firms have on the local architecture profession of the Gulf region. Upon graduating from MIT, Mais will start the next chapter of her life as a practicing architect at a corporate firm, designing projects in the Gulf region, at New York City in order to understand how corporate firms operate, and the ways in which large-scale projects in the Gulf region are handled.

### **CONTENTS**

INTRODUCTION	7
CHAPTER I	12
Importance of architecture in city-states	15
Testing Hypothesis 1	17
1. Competency of deliverables	17
Testing Hypothesis 2	22
2. Stylistic approach	22
Conclusion	26
Figures and Tables 1-17	29
CHAPTER II	49
History of the political system in the Kuwait, Qatar, Bahrain and the UAE	50
The transformation of the political system after the discovery of oil	52
Patronage system	53
Testing hypothesis 3	55
3. The Role of the client	55
CONCLUSION	75
Figures 18-30	79
BIBLIOGRAPHY	91

#### INTRODUCTION

"The Gulf is not just reconfiguring itself; it's reconfiguring the world. The gulf's entrepreneurs are reaching places that modernity has not reached before... Perhaps the most compelling reason to take the Gulf seriously is that its emerging model of the city is being multiplied in a vast zone of reduced architectural visibility from Morocco in the West, the via Turkey and Azrebaijan to China in the East."

Rem Koolhaas

Countries of the Gulf Cooperation Council (GCC)<sup>2</sup> have consistently ranked among the richest in the world. This prosperity has resulted largely from the growth of the oil industry, which has made the combined economy of the GCC countries the largest in the world.

Over the past two decades, the annual Gross national income per Capita in GCC countries has grown by 70%<sup>3</sup>, compelling many investors to invest their surplus money in real estate development. This influx of capital stimulated the region's architectural growth by boosting the pace and magnitude of construction projects. According to AME, a Middle Eastern business resource, there are currently 2,837 projects under construction with a total projected cost of \$2.4 trillion in GCC countries<sup>4</sup>, making GCC countries' real estate market "the fastest-growing real estate

<sup>&</sup>lt;sup>1</sup>Ole Bouman, Mitra Khoubrou, and Rem Koolhaas. "Last Chance" *Al manakh*. Volume, Special issue. (2007): 7

<sup>&</sup>lt;sup>2</sup> Gulf Cooperation Council includes Saudi Arabia, Qatar, UAE, Oman, Bahrain, and Kuwait. It was first established n 1981. Malcolm C. Peck discusses the formation of the GCC countries in Malcolm C. Peck. *Historical Dictionary of the Gulf Arab States: Asian historical dictionaries*, no.21 (Lanham, Md: Scarecrow Press, 1997)

<sup>&</sup>lt;sup>3</sup> According to World Data Bank, the average gross national income per capita from 1985 to 2005 has increased from \$8,700 dollars to \$14,700. This shows approximately a 70% increase in 20 years.

<sup>&</sup>lt;sup>4</sup> Lara Lynn Golden. "Construction Boom Tops \$2.4 Trillion in Gulf Region." *AME info* (November 25, 2009), <a href="http://www.ameinfo.com">http://www.ameinfo.com</a> (accessed April 10, 2010)

market in the world."<sup>5</sup> As the demand for new construction has risen, there has also been an increased presence in the region by western architecture firms.

For the past three decades, western firms have dominated the architectural scene of the gulf region. According to the Ministry of Economy in Dubai, "Dubai itself has on average five overseas companies registering each day." Belhasa Engineering and Construction Company points out that "85% of design and construction contracts are awarded to foreign companies" who have regularly won contracts to build large-scale projects ranging from airports and university campuses to megaurban cities, with total costs upwards of \$1 billion. Meanwhile, local architects have remained active in the region, but have been confined to smaller-scale projects such as residences and less significant commercial buildings.

Through this thesis, I have chosen to focus mainly on large scale, significant projects built in the region, since they dominate the urban fabric of each state within the region. In addition, they attract most state funding. I believe they are perhaps the most representative of the major contemporary architectural trends in the region. I have surveyed 100 large-scale projects with costs exceeding \$50 million dollars that were built within the GCC countries for the past three decades. Most of these projects were built in Saudi Arabia, United Arab Emirates, Qatar, Kuwait, and Bahrain. By researching each project, I have gathered data on the architects, clients, scale of projects, and durations. (See table 1 for the listing of major architecture projects in the Gulf Region).

<sup>&</sup>lt;sup>5</sup> Lara Lynn Golden. "Fatsest Growing Real Estate Market in the World." *AME info* (March 24, 2007), <a href="http://www.ameinfo.com">http://www.ameinfo.com</a> (accessed April 5, 2010)

<sup>&</sup>lt;sup>6</sup> "Registration of Foreign companies Rise in UAE." *Ministry of Economy, UAE* (December 31, 2009) http://www.government.ae (accessed April 10, 2010)

<sup>&</sup>lt;sup>7</sup> "Building Blocks" Al-Shindagh <a href="http://www.alshindagh.com">http://www.alshindagh.com</a> (accessed April 1, 2010)

<sup>&</sup>lt;sup>8</sup> Table 1 proves the domination of western firms in the region, and the scale of projects they have been building.

<sup>&</sup>lt;sup>9</sup> The implications of choosing to focus only on large scale projects will allow me to focus on a limited type of western firms, leaving some of the smaller western firms that are working on less significant projects and infrastructure in the Gulf region behind.

The data demonstrates that Western firms have built 88 of the 100 large-scale projects, leaving only 12 such projects built by local architects.

Western firms Atkins Architects, Skidmore Owings Merrill (SOM), and Hellmuth, Obata, and Kassabaum (HOK), have designed some of the most iconic projects within the Gulf Region since the mid 1980s. These projects have ranged in size from \$500 million to more than \$7 billion, spanning commercial office buildings, civic projects, and urban cities. These projects include Burj Khalifa by SOM, with a cost of \$1.5 billion, Marina West in Bahrain by Akins architects for \$700 million, and the City of Silk (Madinat al Hareer) in Kuwait by HOK for \$132 billion dollars. However no project built by local firms exceeded the \$500 million dollar mark, with Al Fardan twin towers in Qatar by Architecture Engineering Bureau (AEB) representing the largest locally run project at \$500 million dollars.

Based on these observations, my principal aim for this thesis is not only to understand why western firms are dominating the architectural scene of the region, but more importantly, why local architects have not participated in this growing market. I select a few case studies in order to test a few hypotheses to why this has taken place.

In these case studies, I have specifically focused on Qatar, Kuwait, Bahrain and Dubai, for they all function as city-states where the compactness of the urban fabric means that the physicality of architecture plays an important role. Figures of authority use it to their advantage as a way to convey their desired image to their citizens and the world. These figures of authority have mainly been political rulers and occasionally business elites, and the interconnections between political power and financial wealth in these city-states has driven my decision to focus upon them in testing my hypotheses.

<sup>&</sup>lt;sup>10</sup> Costs and projects mentioned are all taken from table 1

I have chosen to focus on three main hypotheses, two of which are architectural in nature, and one, which is more socio-political:

- Competency of deliverables<sup>11</sup>: I mainly explored the skills and services provided by architecture firms. To do this, I have:
  - a. Surveyed the architecture scene by comparing major western firms to major local firms. The three western firms have been selected from table one due to the fact that they have the highest number of projects built in the region. However, major local architecture practices were chosen after doing research on licensed architects from the society of engineers of the studied city-states. My aim is to understand whether having or not having enough architecture skills, services, and enough expertise is one of the reasons why local architecture practices are not being hired.

#### 2) Stylistic Approach:

a. I interviewed seven local architects that have practiced within the GCC countries for the past three decades. They either have architecture practices that are considered to be some of the major practices in the Gulf region today, or have stood out at some point in their careers from other local architects of the region. My goal through these interviews

Qatar: official site of Urban Planning and development authority, http://www.up.org.qa. (accessed August 5, 2009)

Bahrain: Committee for Organizing Engineering Professional Practice official site http://www.coepp.com (accessed August 2,2009)

<sup>&</sup>lt;sup>11</sup> I have decided to focus on Competency of deliverables due to the number of times the issue was brought up when interviewing western firms on specific projects that they have designed. Simon Crispe of Atkins Architects, Aslihan Demirtas of I.M. Pei, and Ahmed Hantoush of Turner International have mentioned the role the lack of competency plays when comparing their firms to local architecture practices

<sup>&</sup>lt;sup>12</sup> Kuwait: *Kuwait Engineering Office and Consultant Houses Guide 2008-2009* (Kuwait: Admire 4c Group, 2008)

UAE's society of engineers registered local architecture practices.

is to understand how local architects' approach to design differs from Western firms that have designed projects in the four studied city-states. <sup>13</sup>

- 3) The role and authority the client has while directing a project. After studying the history of how the role of the ruler has resulted in autocratic power, I focused on exploring three case studies of the most iconic buildings designed by western firms in the Gulf region:
  - b. Burj al Arab, Dubai, UAE
  - c. Islamic Museum of Qatar, Doha, QATAR
  - d. Al-Hamra Tower, Kuwait

Through these case studies, I have focused mainly on understanding the social, political, and economic systems of networking that drive the decision making processes, which have resulted in the disproportionate selection of Western architects, which have led to the absence of local architects.

Although I was initially interested in questioning only the domination of western firms in the architectural design market of Qatar, Kuwait, Bahrain, and Dubai, my findings from surveying major projects in the Gulf region turned my interests to an even more important question; the absence of local architects from the architectural scene. This thesis aims to highlight the reasons of why these state of affairs are taking place.

 $<sup>^{13}</sup>$  Information on the architects is further discussed in detail in Chapter 1

#### **CHAPTER I**

I begin this chapter by revealing the importance of architecture in city-states. I then test my first two hypotheses, which deal mostly with architecture and the profession. These hypotheses are:

- 1. Competency of deliverables has been examined from four different angles: (Refer to Table 2)
  - 1.1 Year of Establishment
  - 1.2 Size of firm
  - 1.3 Quality of services provided

By interviewing local architects, it also examines:

1.4 whether these architects believe that the issue of competency of deliverables plays a role in their absence. Furthermore, it examines how it has affected their practices.

#### 2. Stylistic approach

The seven local architects that I have interviewed in order to understand the local point of view in designing are:

Ahmad al-Rostomani<sup>14</sup>, United Arab Emirates

Ahmad al-Rostomani is one of the first native practicing architects of the UAE. After receiving his bachelor's of architecture degree from the Al-Riyadh University in 1976, Rostomani worked at the design department of the Ministry of Public Works and Housing in Dubai. In 1981, he founded Al-Turath Engineering Consultants, one of the largest local architecture firms today. He has designed commercial and residential projects around the UAE, and was recently recognized by The Organization of Arab Cities as the local architect of the year. One of his more notable projects is al-Nahda towers in Dubai, UAE.

<sup>&</sup>lt;sup>14</sup> Ahmed. Al-Rostomani. Personal interview. Tape recording. Dubai, UAE, August 7, 2009.

Saleh al Qallaf<sup>15</sup>, Kuwait

Saleh al Qallaf received his bachelor of architecture from the University of North Carolina and later completed his Masters degree in Architecture from the Massachusetts Institute of Technology. He founded Dar Saleh al Qallaf Engineering Consultants of Kuwait in 1996. His practice stands out today for its ability to build projects not only in the Gulf Region but throughout the Middle East and South Asia, such as the Maldives.

Ibrahim Jaidah<sup>16</sup>, Qatar

Ibrahim Jaidah graduated from the University of Oklahoma in 1988. He later worked at Qatar's ministry of Municipal Affairs & Agriculture as Head of the Architectural Section before acquiring Arab Engineering Bureau (AEB) in 1991. He was the driving force behind the rapid rise of AEB from only seven employees and a single office in Qatar to 400 employees operating from offices in Qatar, Abu Dhabi, Manila, and Kuala Lumpur. Ibrahim Jaidah stands out today as one of the most active architects of the region, a four-time Arab City award winner, a winner of the Islamic City Award, and a two-time nominee for an Aga khan Award.

Ahmad Cheicka,<sup>17</sup> Qatar

Ahmad Cheicka founded the first architecture firm in Qatar in 1967 after receiving his bachelor's and master's degrees in Architecture from Germany. CICO Consulting Architects consultants later became one of the top architectural consultancy firms in Qatar, with

<sup>&</sup>lt;sup>15</sup> Saleh. Al-Qallaf. Personal interview. Tape Recording, Kuwait, August 1, 2009 Information also found on Saleh al-Qallaf Consultants Official Website http://www.salehalqallaf.com

<sup>&</sup>lt;sup>16</sup> Ibrahim Jaidah. Personal Interview. Tape recording. Doha, Qatar, August 5, 2009 Official website: http://www.aeb-qatar.com

<sup>&</sup>lt;sup>17</sup> Ahmad Cheicka. Personal Interview. Tape recording. Doha. Qatar, August 5, 2009 CICO official website: http://www.cicoconsultants.com

14

branches in Lebanon, UAE, Egypt, and Oman. The practice is renowned for its work as the leading architect of the Tornado tower in Qatar, which has earned worldwide recognition

for its sophisticated design approach.

Saleh al-Mutawa<sup>18</sup>, Kuwait

Saleh al-Mutawa received his bachelor's and master's degrees in architecture from the

University of Miami in 1982. He later worked for the municipality of Kuwait before opening

his own practice in 1987. His Saleh Al-Mutawa Consultant and Engineering Bureau became

famous in the region due to his distinctive style of residential and commercial buildings.

Futooh Al-Asfoor<sup>19</sup>, Kuwait

The first female architect to open an architectural firm in Kuwait, Futooh al-Asfoor received

her bachelor's of architecture degree from the University of Wyoming. She later continued

her studies in London, where she took courses in interior design and project management.

After working in the private sector of Kuwait for eight years, she launched her own

architectural firm in 1998, known today as FACE.

Ahmed Joudar<sup>20</sup>, Bahrain

Ahmad Joudar received his bachelor's degree in architecture from Al-Riyadh University in

1972. After working in the public sector for nine years, Joudar began performing freelance

projects, designing several residential houses in Bahrain, including his own house in 1984,

<sup>18</sup> Saleh.al-Mutawa. Personal Interview. Tape recording. Kuwait, July 20, 2009

<sup>19</sup> Futooh al-asfoor. Personal Interview, Tape recording. Kuwait, July 21, 2009

FACE official website: www.futoh-alasfoor.com

<sup>20</sup> Ahmed Joudar. Personal Interview. Tape recording. Bahrain, August 4, 2009

which earned him recognition in the architectural community. A few years later, Ahmed al-Joudar received the Aga Khan award for his unique design.

This chapter focuses on how these architects have responded to in tackling the strong presence of Western firma, and absence of local architects.

#### Importance of architecture in city-states

Small size and closely held governmental power has led Kuwait, Qatar, and Bahrain to be perceived as city-states, like the Emirate of Dubai (hereafter Dubai), rather than as countries. Established in the early 19th century, they are the smallest city-states of the gulf region; Kuwait, the largest of the four, is approximately the size of the state of New Jersey. The compactness of these city-states urban footprint allows architecture's physicality the power to reflect the image that figures of authority wish to project. As a result, I have chosen to focus specifically on these four city-states while testing my hypotheses.

"Between 1890 and 1940 a new culture (the machine age) selected Manhattan as a laboratory: a mythical island where the invention and testing of a metropolitan lifestyle and its attendant architecture could be pursued as a collective experiment in which the entire city became a factory of man-made experience, where the real and the natural ceased to exist."<sup>22</sup>

<sup>&</sup>lt;sup>21</sup> Meanwhile, Bahrain, the smallest out of the four city states is 3.5 times Washington D.C

<sup>&</sup>lt;sup>22</sup> Rem Koolhaas. *Delirious New York: A Retroactive Manifesto for Manhattan* (New York: Monacelli Press, 1994) 11-12

In recent years, Kuwait, Qatar, Bahrain, and Dubai have become the new 'Manhattans' of the Gulf region. Figures of authority have selected the urban fabric of their cities as playgrounds in which they can use architecture to convey their desired messages to their own citizens and the world.<sup>23</sup> Typically these figures of authority are political elites, particularly the ruler himself, or may also be elite business professionals. Monarchies oversee these four studied city-states, with specific ruling families that can potentially exercise full control over governance and urban planning decision-making. In the cases of Qatar, Bahrain, and Dubai, the power and influence of the monarchy extends to autocracy and full control, with the ruler possessing unlimited power to influence the state's laws.<sup>24</sup> However, Kuwait's parliamentary system acts as a check on the power of the executive, making it an exception to its peers. <sup>25</sup>

With the help of mostly Western architects, political and business elites have used the city as a space to experiment and test the new heights that modernization can reach. Artificial island projects like the 67-hectare pearl islands in Qatar, or The Palms in Dubai are being completed within a 5-year span [Fig. 1,2]. Similarly, Burj Khalifa in Dubai, the tallest building in the world (828m high), was also built within the same time span [Fig.3].<sup>26</sup> In Qatar, the concept of a university campus has been developed to a 2,500-acre educational city [Fig.4].<sup>27</sup> Skyscrapers connected to each other by sky bridges and wind turbines have become a common sight in the region [Fig.5].<sup>28</sup> These mega-scale projects – built by western firms – have dominated the compacted urban fabric,

\_

<sup>&</sup>lt;sup>23</sup> Ahmed Kana and Aran Keshavarzian. "The UAE's Space Race: sheikhs and starchitects envision the future" Middle East Report (2006): 36. The authors discuss the role of the client in the Gulf Region on development projects

Muhammed Sadik and Willian Snavely. Barhain, Qatar, and the United Emirates: colonial past, present problems, and future prospects (Lexington, Mass: Lexington Books, 1972) 113-138
 Chapter 2 focuses with greater detail on the political system and the role of the ruler in GCC countries.

 $<sup>^{26}</sup>$  Information on time and Duration both projects were built is gathered from table 1

<sup>&</sup>lt;sup>27</sup> Qatar foundation official website, <a href="http://www.qf.org.qa">http://www.qf.org.qa</a> (accessed March15, 2010)

<sup>&</sup>lt;sup>28</sup> Referring to Bahrain World trade center built by Atkins Architects.

obscuring the populace's view of smaller scale commercial and residential projects built by local firms. I ask again, why aren't local architects building these mega scale projects?

#### Testing Hypothesis 1

#### 1. Competency of deliverables

#### Year of establishment

While comparing major western firms to major local firms, table 2 clearly indicates an almost a 30-year gap between the times Western firms were established in relation to local firms. While western firms were launched in the 1930s, local architectural practices were not developed until the 1960s, begging the question of why such a gap exists between both sides.

Before the 1930s, Kuwait, Qatar, Bahrain, and Dubai had lagging economies that centered on the extraction and trading of pearls. Architecture was seen as a basic necessity rather than as an art form, as people built their own houses while they moved around the city.<sup>29</sup> However, the prosperity of the oil boom changed attitudes towards development, as rulers exhibited newfound interest in the development of their own countries. Although oil was discovered in the early 1930s, the impact of World War II postponed its first effects until the 1950s.<sup>30</sup> Given the absence of a local architecture profession at the time, rulers turned to western firms in order to design construction

<sup>&</sup>lt;sup>29</sup> Alvin Cottrell. *The Persian Gulf States: a general survey* (Baltimore: John Hopkins University Press, 1980) 345-409

<sup>&</sup>lt;sup>30</sup> Yasser Elsheshtawy. *The Evolving Arab City: Tradition, Modernity and Urban Development* (London: Routledge, 2008) 218-224

projects in GCC countries. Local architecture practices did not emerge until the mid 1960s, due to the time lag it took for local architects to educate themselves and build up local practices.<sup>31</sup>

In the meantime, Atkins Architects, SOM (Skidmore Owings Merrill), and HOK (Hellmut, Obata, & Kassabaum) emerged at a time when local competition did not exist in these four city-states, so architecture has been more rooted in western countries than in the Gulf region. These Western firms have had more time to build their client bases, their variety of experience, and their global portfolios. Atkins Architects, HOK, and SOM have had the chance to design projects on six continents, while local architecture firms have only designed projects in the Gulf region. Some practices – such as Kuwait Engineering Office and Arab Engineering Bureau – started designing small projects in Southeast Asia, but they have not yet designed a broader range of projects like their western competitors.<sup>32</sup> Local firms' lack of experience and shorter track record may begin to answer why they have failed to win large-scale projects such as airports or mega-cities, but it ignores the question of the quality of their services. The question remains unanswered as to whether they have the capacity to operate a project from beginning to end at the same level of quality as their western competitors.

#### Size/integrity of services offered

The number of employees working at a firm is closely correlated to its ability to execute a project from beginning to end. The higher the number of employees, the more manpower the firm has at its disposal, making it more capable of providing a high quality of service.

<sup>31</sup> Rosmerie Said Zahlan. The creation of Qatar (London: Croom Helm Ltd, 1980)

<sup>&</sup>lt;sup>32</sup> Kuwait Engineering Office official website http://www.keoic.com Arab Engineering Bureau official website http://www.aeb-qatar.com

Table 2 demonstrates that major western firms have significantly more employees than major local practices within the studied city-states. Unlike Atkins Architects, which consists of 18,000 employees, local practices rarely employ more than 1,000 people, with only a very few employing as many as 1,750, as does KEO.33,34 Western firms have historically had more manpower to provide services and execute projects on a level that local practices could not provide. Though both local and western firms provide the standard services offered by architectural firms - architecture, master planning, urban design, and landscape architecture, for example -local firms such as Saleh Al-Qallaf Consultants tend to focus only on providing the project's conceptual designs and master planning, as it did for the Kuwait handball stadium [Fig.6].35 When it comes to designing the infrastructure and structural details, they are forced to hire an engineering company with the proper expertise. Similarly, when CICO consultants designed the Tornado tower in Qatar, they were asked to collaborate with SIAT Architects and Stroh + Emst structural engineers to resolve the project's structural problems [Fig.7].<sup>36</sup> In order to accomplish the client's vision, the local firm must often collaborate with various western companies in order to provide the services that would allow the project to reach its completion. Meanwhile, with the employment of 18,000 professionals, Atkins architects' services have the integrity of taking a project from beginning to end. In designing Burj al-Arab [Fig.19], Atkins architects served as both the architects and engineering consultants for the project.<sup>37</sup> They offered the most important services such as architectural design, engineering design, master planning, and site supervision to make sure that the project reached completion as planned.

\_

<sup>&</sup>lt;sup>33</sup> Looking back at Table 2, out of the 15 major local firms, 12 of them have less than 1000 employees

<sup>&</sup>lt;sup>34</sup> Kuwait Engineering office- KEO official site and PR.com official website

<sup>&</sup>lt;sup>35</sup> Dar Saleh A-Qallaf Engineering Consultants official Site <a href="http://www.salehalqallaf.com">http://www.salehalqallaf.com</a> (accessed March 15, 2010)

<sup>&</sup>lt;sup>36</sup> "2009 Best Tall Building Middle East & Africa." Council on Tall building and Urban Habitat. http://www.ctbuh.org (accesses February 9, 2010)

<sup>&</sup>lt;sup>37</sup> Information on Atkins services, and scale is taken from Atkins Architects Official Site.

The tremendously fast pace of large-scale construction projects in the Gulf region may exacerbate this, for firms frequently need vast resources in order to implement a project on deadline. This need for scale and speed makes it difficult for a local practice of 400 employees to compete for large-scale projects against much larger western competitors.

A longer track record in the architecture field and more manpower begins to explain why western architects have won business over local firms. However, these explanations do not justify why small western firms like Jean Nouvel or Zaha Hadid architects - practices of 150 to 200 employees – have won smaller scale projects such as museums, cultural centers, and opera houses. Like local firms, they lack the manpower to provide a turnkey suite of services from conception to implementation, but they continue to win business from political and business elites.<sup>38</sup> Therefore, the following observations have shown that my first hypotheses have failed to answer my main question. Before testing my second hypothesis, I would like to point out a few issues on whether local architects believe that the issue of competency has affected their architectural practices.

#### Local architects' points of view on competency of deliverables

In addressing the issue of competency in terms of expertise and deliverables in my interviews, Ahmed al Rostomani admits, "Yes, local architects lack the competency in designing and taking charge of large-scale projects. They do not have the skills and manpower to take on major developments."<sup>39</sup> Ibrahim Jaidah points out that the private sector in the Gulf region is a competitive field, in which local architects are not willing to put forth the necessary effort [to compete for new business/to complete such large projects]. In his practice of 400 employees, only

<sup>&</sup>lt;sup>38</sup> For instance, Zaha Hadid is currently designing the Museum of Contemporary Art in Bahrain and Dubal Opera House. Similarly Jean Nouvel is designing National Museum of Qatar in Qatar and The Louvre Museum in Abu Dhabi

<sup>&</sup>lt;sup>39</sup> Ahmed Al-Rostomani. Personal Interview. Tape recording. Dubai, UAE, August 7,2009

four are from the local Qatari population, with the vast majority coming from either India or the Philippines. Most local architects prefer working for the government, which provides a significantly more comfortable lifestyle. In addition to working on minor projects that mostly deal with small-scale office spaces and renovations, government employees receive a higher starting salary than any architectural practice within the private sector.<sup>40</sup>

Due to the absence of local architects from the private sector, Jaidah was one of the first people to push for the hiring of Western firms in Qatar. When Qatar was ready for an architectural boom, local architects were not available in order to make it happen. According to the architect, "If these Western firms did not affect the architecture of Qatar, no one would care about the city."<sup>41</sup>

The absence of local architects have led business and political elites to grow accustomed to hiring western firms instead. <sup>42</sup> They feel more secure handing a project to large western practices with significant experience, rather than risking a project by handing it to a local firm that has never once worked on a project of that scale. <sup>43</sup> According to Saleh al Qallaf, when the number of local architects started increasing in the private sector, these local architects had to become consultants to their western competitors in order to stay in business. Building laws and regulations in some city-states such as Kuwait, Bahrain, and parts of Dubai, require the presence of a local consultant in order for western firms to have their projects and designs implemented. <sup>44</sup> Therefore, "most local architects

<sup>&</sup>lt;sup>40</sup> Ibrahim Jaidah. Personal Interview. Tape recording. Doha, Qatar, August 5, 2009.

Employment at the public sector in the Gulf states is further discussed by Nadey Ali Mohammed. *Population and development of the Arab Gulf states* (Hampshire, UK: Ashgate, 2003)

<sup>&</sup>lt;sup>41</sup> Jaidah, Ibrahim. Personal Interview 5 Aug. 2010

 $<sup>^{42}</sup>$  This issue was brought up at an interview with a Saudi local Architect who was not added to the list of interviewed architects due to my focus on the 4 studied city-states

Ali Shuaibi. Personal Interview. Tape recording. Riyadh, Saudi Arabia, August 2, 2009

<sup>&</sup>lt;sup>43</sup> Referring to local practices

<sup>&</sup>lt;sup>44</sup> Information on building laws and regulations found in Kuwait: *Kuwait Engineering Office and Consultant Houses Guide 2008-2009 (*Kuwait: Admire 4c Group, 2008)

UAE's society of engineers registered local architecture practices.

Qatar: official site of Urban Planning and development authority, http://www.up.org.qa. (accessed August 5, 2009)

have shifted a major part of their practices to consultancy, since that is where the law takes their input into consideration and sees them as most valuable to the architectural scene."<sup>45</sup> These points brought up by local architects are of extreme importance and will be adequately addressed in the following chapter.

#### Testing Hypothesis 2

#### 2. Stylistic approach

Architects like Saleh al Mutawa, Ahmed al Rostomani, Ibrahim Jaidah, Ahmed Joudar, and futooh al-Asfour have drawn influence from what some have called "traditional Gulf architecture." <sup>46</sup> Despite varied educational backgrounds, they have all focused on exploring the architecture of the region after finishing their undergraduate or graduate degrees. Whether these architects have done it through travel like Saleh al Mutawa and Ahmad al-Rostomani, or by collecting images historical building around the Gulf region like Ibrahim Jaidah, they have all tried to find a vernacular style that relates to the whole Gulf region. <sup>47</sup> [Jaidah] points out:

\_\_\_\_

Bahrain: Committee for Organizing Engineering Professional Practice official site

http://www.coepp.com (accessed August 2,2009)

<sup>&</sup>lt;sup>45</sup> Saleh. Al-Qallaf. Personal interview. Tape Recording, Kuwait, August 1, 2009

However, local practices have not forgotten entirely about design. They have shifted their interest to designing smaller- scale projects such as residential, commercial, and sometimes civic, which is seen when exploring the stylistic approach oh local architects.

<sup>&</sup>lt;sup>46</sup> Saleh A. Al-Mutawa *History of Architecture in Old Kuwait City, and the Influence of its Elements on the Architects* (Hawalli, Kuwait: S. Al-Mutawa, 1994): 15

Also found in "Building a Future" Middle East Architect Magazine (May 2009): 25-28.

And Ahmed al-Rostomani Gulf and its Architectural Heritage (January 2009): 286

<sup>&</sup>lt;sup>47</sup> Ibrahim Jaidah. Personal Interview. Tape recording. Doha, Qatar, August 5, 2009

"The vernacular in the Arabian Gulf Region has been influenced by Najd, Basra, Indian, Persian, and Omani architecture. Putting all these styles together has created what we believe to be local Gulf architecture." 48

Looking at some of the projects that local architects have designed in the past thirty years help one understand what they mean by "traditional gulf architecture," 49 and how they have used that vernacular style in their designs.

For instance, Saleh al Mutawa is famous in Kuwait for designing and building residential complexes and villas. He sees his design concepts as "a revival of the traditional elements found in different parts of the gulf region." One example of these elements commonly exhibited by his apartment complexes is the inner courtyards for air circulation with a "liwan" 1, a passage that separated the rooms from the courtyard providing shading for the interior spaces [Fig. 8]. Additionally, he has used wooden beams of different lengths in constructing the ceilings of his buildings. These "Jandals" 2 are usually apparent from the exterior walls of the building [Fig. 9]. He often uses triangular openings that he claims to have borrowed from other parts of the region as openings for ventilation. He also applies them on the outer walls at eye level, which creates a visual porosity between the exterior and interior courtyards [Fig. 10]. Finally, he emphasizes the traditional use of hand crafting by creating windows and doors of different shapes and sizes. [Fig. 11]

<sup>48</sup> Ibid

<sup>&</sup>lt;sup>49</sup> Saleh A. Al-Mutawa *History of Architecture in Old Kuwait City, and the Influence of its Elements on the Architects* (Hawalli, Kuwait: S. Al-Mutawa, 1994): 15

Also found in "Building a Future" Middle East Architect Magazine (May 2009): 25-28.

And Ahmed al-Rostomani Gulf and its Architectural Heritage (January 2009)

<sup>&</sup>lt;sup>50</sup>Saleh.al-Mutawa. Personal Interview. Tape recording. Kuwait, July 20, 2009

<sup>&</sup>lt;sup>51</sup> Iwan is defined as an Arabic word that means a vaulted hall or space, walled on three sides, with one end entirely open

<sup>&</sup>lt;sup>52</sup> Saleh A. Al-Mutawa *History of Architecture in Old Kuwait City, and the Influence of its Elements on the Architects* (Hawalli, Kuwait: S. Al-Mutawa, 1994): 25

<sup>&</sup>lt;sup>53</sup> Ibid, Pg.26

Similarly, Ibrahim Jaidah applies some of the same elements in his designs, such as liwan, jandal, and inner courtyards [Fig 12]. "The traditional décor used is highly inspired by the life and culture of ancient Qatari tribes,"<sup>54</sup> Jaidah explained in discussing his design of the Al Sharq village and spa resort in Qatar. "I was influenced by the close-knit communities of fisherman, pearl divers, and merchants that shaped Qatar's vibrant history."<sup>55</sup>

The influence of "traditional Gulf architecture" can be seen not only through the work of these local architects, but also through the books that they have published on the topic. Saleh al-Mutawa published *History of Architecture In Old Kuwait City*56, which details some of the traditional architecture that he has found in the region, and the way it has influenced the residential and commercial buildings that he has designed. Similarly, Ibrahim Jaidah and Ahmed al-Rostomani published *The History of Qatari Architecture*57 and *Gulf and its Architectural Heritage*58, respectively, which contain precedents that have highly influenced their design concepts. Due to the commonality between the styles of local architects in the Gulf region, Jaidah has suggested holding a conference for all regional architects of the Arabian Gulf, which would focus on studying the vernacular of the region in the hopes of "finding a local style knows as Contemporary Gulf architecture" that all local architects agree on following. 59

This revival of tradition can be seen not only through the work of local architects, but also through the large-scale projects financed by business and political elites. For the past two decades, Western firms have incorporated elements such as Islamic patterning, or the use of an inner courtyard that,

<sup>&</sup>lt;sup>54</sup> Ibrahim Jaidah. Personal Interview. Tape recording. Doha, Qatar, August 5, 2009

<sup>&</sup>lt;sup>55</sup> Ibrahim Jaidah. Personal Interview. Tape recording. Doha, Qatar, August 5, 2009. In addition to that, he uses modern facilities and amenities to meet the requirements of international leisure and business travelers.

<sup>&</sup>lt;sup>56</sup> Saleh A. Al-Mutawa *History of Architecture in Old Kuwait City, and the Influence of its Elements on the Architects* (Hawalli, Kuwait: S. Al-Mutawa, 1994)

<sup>&</sup>lt;sup>57</sup> Ibrahim Jaidah, and Malika Bourennane. *The History of Qatari Architecture.* (Milan: Skira, 2009.)

<sup>&</sup>lt;sup>58</sup> Ahmed al-Rostomani *Gulf and its Architectural Heritage* (January 2009)

<sup>&</sup>lt;sup>59</sup> Ibrahim Jaidah. Personal Interview. Tape recording. Doha, Qatar, August 5, 2009

mimicking traditional housing models of the Islamic world, have become some of the ways for Western firms to sell their concepts and designs to major clients of the GCC Countries. 60 Business and political elites have been asking asked Western architects to focus mainly on the "revival of tradition."61 For instance, when the urban design project Heart of Doha in Qatar was launched62 [Fig. 13], Sheikha Mozah made it clear that the main requirements and goal of the design is to that the design should create "a rising homeland that confidently embraces modernization and proudly follows tradition."63 She later added, that "Qatar has a wonderful architectural history and we are delighted to be able to revive it and share it with the world."64 Similarly, when I.M. Pei was asked to design the Islamic museum of Qatar, Sheikha Al-Mayassa, the daughter of the ruler of Qatar, insisted that it would demonstrate influences from "Islamic architecture." 65In both cases, major patrons of the GCC countries appear to believe that Western firms have the vision to revive the tradition of the Gulf region in a way that local architects do not. However, when one looks at the work of the interviewed local architects believes this opinion, as one sees that the direction their designs are taking have produced very similar results to those that major business and political elites are asking Western firms to achieve through their designs. As a result, it seems unlikely that local firms' the stylistic approach cannot be one of the reasons why local architects are left behind has prevented them from winning their share of large projects.

\_

<sup>&</sup>lt;sup>60</sup> Yasser Elsheshtawy. *The Evolving Arab City: Tradition, Modernity and Urban Development* (London: Routledge, 2008): 225-230

<sup>61</sup> Ibid

<sup>62</sup> an urban design project in which a number of start architects have been involved

<sup>63</sup> Gyanendra Keshri. "Heart of Doha Project Stone to Be Laid ON Jan 13" Qatar Tribune official site. http://www.gatar-tribune.com (accessed December 11, 2010)

<sup>64</sup> Ibid

<sup>65 &</sup>quot;The Museum of Islamic Art" Arc space <a href="http://www.arcspace.com">http://www.arcspace.com</a> (Accessed March2, 2010)

#### Conclusion

After exploring my first two hypotheses that initially seemed like logical reasons for the dominance of western firms over local architects, I realized that they have not explained this discrepancy. I believe instead that the main explanation for this split stems from the importance of architecture in a city-state, and the direct and clear image that it can convey, an issue of which political elites remain very conscious.

Business and political elites of the studied city-states have expressed their fascination with a modernized image that makes them players on the global stage. This image consists of two parts; the first deals with cultural representation,<sup>66</sup> and the second and more important part is a signature style. A star architect that has the power to place Kuwait, Qatar, Bahrain, and the UAE on the world map.

"Iconic buildings by brand-name star architects can stimulate local development and international fame," 67 says Ahmed kana.

The second hypothesis suggests that local architects are capable of providing major clients with the revival of tradition and culture that they look for in a project. However, they will never be able to provide the signature style, the spectacle, which even small western firms such as Jean Nouvel or Zaha Hadid architects offer.

"Emaar Properties Unveils Luxury Armani Residences," [Fig.14]

"Qatar Museum Authority Unveils Jean Nouvel Design for New Museum,"69 [Fig.15]

<sup>&</sup>lt;sup>66</sup> seen earlier while testing 2<sup>nd</sup> hypothesis: Stylistic Approach

<sup>&</sup>lt;sup>67</sup> Ahmed Kana and Aran Keshavarzian. "The UAE's Space Race: sheikhs and starchitects envision the future" Middle East Report ( 2006) 35

<sup>&</sup>lt;sup>68</sup> IB-ME Staff "Emaar Properties Unveils Luxury Armani Residences," (Burj Khalifa, 2009) <a href="http://www.burjkhalifa.ae">http://www.burjkhalifa.ae</a> (accessed January 20, 2009)

"SOM Designed Al Hamra Carves a Landmark to Overlook Kuwait."70 [Fig.16]

"UK-based Zaha Hadid Architects win "Business Bay tower design competition in Dubai"<sup>71</sup>
[Fig. 17]

These headlines reveal business and political elites' attempt to demonstrate their own power and vision through attention-grabbing architects and architectural projects. In the first article, Emaar properties - owned by Sheikh Mohammed Bin Rashid Al-Maktoum of the UAE mentions that "Emaar's collaboration with Giorgio Armani marks the company's diversification in line with its vision to become one of the most valuable companies in the world."72 Similarly, Sheikha Al Mayassa, the daughter of the ruler of Qatar and chairperson of Qatar Museums Authority(QMA), pointed out in Qatar Art Daily that with Qatar museum, QMA is "moving closer to realizing their vision of building a forward- looking, sustainable Qatar."73 She later added, "We are extremely fortunate that in realizing this program we have the vision of Jean Nouvel, whose design is at once a masterwork of contemporary architecture and an evocation of a timeless desert."74

Furthermore, these headlines not only show that major clients are fascinated with the spectacle and prestige conveyed by hiring a large western firm, but that they also compete against each other in order to stand out the most by hiring star architects with the most cutting edge, signature styles that grab attention on the global scene. For instance, Jean Nouvel is currently

<sup>&</sup>lt;sup>69</sup> Valentine Ciuffu. "Qatar Museum Authority Unveils Jean Nouvel Design for New Museum" Qatar art daily (March 24, 2010) <a href="https://www.artdaily.org">http://www.artdaily.org</a> (accesses March 30, 2010)

<sup>&</sup>lt;sup>70</sup> Niki May Young. "SOM designed Al Hamra carves a landmark to overlook Kuwait." World Architecture News (June 23, 2008) <a href="http://www.worlsarchitecturenews.com">http://www.worlsarchitecturenews.com</a> (accessed February 15, 2010)

<sup>&</sup>lt;sup>71</sup> "UK-based Zaha Hadid Architects wins 'Business Bay' Tower Design Competition." AMEinfo (June 3, 2006) <a href="http://www.ameinfo.com">http://www.ameinfo.com</a> (accessed December 20,2009)

<sup>&</sup>lt;sup>72</sup> IB-ME Staff "Emaar Properties Unveils Luxury Armani Residences," (Burj Khalifa, 2009) <a href="http://www.burjkhalifa.ae">http://www.burjkhalifa.ae</a> (accessed January 20, 2009)

<sup>&</sup>lt;sup>73</sup> Valentine Ciuffu. "Qatar Museum Authority Unveils Jean Nouvel Design for New Museum" Qatar art daily (March 24, 2010) <a href="https://www.artdaily.org">http://www.artdaily.org</a> (accesses March 30, 2010)

<sup>&</sup>lt;sup>74</sup> Valentine Ciuffu. "Qatar Museum Authority Unveils Jean Nouvel Design for New Museum" Qatar art daily (March 24, 2010) <a href="https://www.artdaily.org">http://www.artdaily.org</a> (accesses March 30, 2010)

designing and building both the Louvre in Abu Dhabi and Nation Qatar Museum in Qatar. Similarly,

Zaha Hadid is designing the performance arts center in Abu Dhabi and the Museum of

Contemporary Arts in Bahrain.<sup>75</sup> Architecture has become a series of collectables that clients use for maximum branding recognition.

Figures and Tables 1-17

<u>Table 1:</u> Survey of major architecture projects in the GCC countries of Gulf Region

COUNTRY	PROJECT	Foreign Architect Local Architect	CLIENT	SCALE	DURATION
Dubai, UAE	Burj Al-Arab	Atikins Architects	Shiek Mohammed Bin Rashid Al Maktoum	\$650 million	1999-2001
Dubai, AUE	21 Century Tower	Atikins Architects	Al Rostomani Group	86,000 Sqm	2001-2003
KUWAIT	Al Sharq Tower	Atkins Architects	Al Mar and Agar	56,400 Sqm	
Riyadh, SAUDI ARABIA	Al Ajlan Tower	Atkins Architects	Al-Ajlan Allied Group	215,000 Sqm	2008-2010
Mecca, SAUDI ARABIA	Al- Diyaffa Hotel	Atkins Architects	Al- Diyaffa Real Estate Co.ltd		2013
Dubai, UAE	DIFC Lighthouse	Atkins Architects	Dubai International Financial Center	\$500 million	2009
Dubai, UAE	Jumaira Beach Hotel	Atkins Architects	Confidential	12.25 hectares	1993-1997
Dubai, UAE	Anara Tower	Atkins Architects	Tameer Holding Investments	470,000 Sqm	2009-2013
Dubai, UAE	Al Mas Tower	Atkins Architects	Dubai Muti Commodities Center	183,000 Sqm	2006-2008
Dubai, UAE	Pier 8 Tower	Atkins Architects	Multiplex Construction	50,000 Sqm	2008-2010
Dubai, UAE	Sheth Tower	Atkins Architects	Sheth Estate Intenational	36,000 Sqm	2006-2010
BAHRAIN	Marsa Al- Seef	Atkins Architects	Global Banking Corporation	\$2.5 billion	2010-2013
BAHRAIN	Durrat Al-Bahrain	Atkins Architects	Durrat Khaleej Al- Bahrain Ahmed Janahi	20 SKm	2004-2010
BAHRAIN	Marina West	Atkins Architects	Holdings, Kuwait Financial House and other investors in the GCC.	\$700 million	2010
BAHRAIN	Nomas Tower	Atkins Architects	Nomas Interprises W.L.L	400,000 Sqm	2008-
BAHRAIN	Bahrain World Trade Center	Atkins Architects	Confidential	120,000 Sqm	2006-2008
KUWAIT	Al Hamra Firdous Tower	SOM	Al Hamra Real Estate co.	\$372 million	2008-2010
KUWAIT	Kuwait Police College	SOM	Sh. Sabah Al-Ahmed Al- Sabah	300,000 Sqm	2009-2011
KUWAIT	Ali Al-Sabah Military Academy	SOM	Sh. Sabah Al-Ahmed Al- Sabah	186,000 Sqm	2009-2010
Jeddah, SAUDI ARABIA	King Abdulla Economic City	SOM	Emaar Property	\$80 billion	2008-2020
Jeddah, SAUDI ARABIA	King Abdul Aziz inInternational Terminal	SOM	Saudi arabia Genral Investment Authority	\$80 million	1981
Jeddah, SAUDI ARABIA	National Commercial Tower	SOM	Narional Commericial Bank	58,000 Sqm	1984
Riyadh, SAUDI ARABIA	Al Rajh Bank Headquartes	SOM	Al- Rajhi Bank	90,000 Sqm	2007-2009
BAHRAIN	Arcapita Bank Headquarter	SOM	Arcapita Bank	42,000 Sqm	2007-2009
BAHRAIN	United Gulf Bank Building	SOM	United Gulf Bank	10,716 Sqm	1986
Dubai, UAE	Burj Dubai	SOM	Emaar Properties PSJC	\$217 million	2006-2009
Dubai, UAE	Dubai Marina	НОК	Emaar Properties PSJC	\$325 million	2004

COUNTRY	PROJECT	Foreign Architect Local Architect	CLIENT	SCALE	DURATION
Doha, QATAR	Doha City Center Hotel Towers	нок	Al-Rayan Tourism Investment Company	185,000 Sqm	2005-2009
KUWAIT	city of Silk	нок	Private Sector Co. Through Sh. Sabal aAl Sabah	\$132 billion	2007-2023
KUWAIT	Central Bank of Kuwait	нок	СВК	\$103.4 million	2005-2007
Jeddah, SAUDI ARABIA	Industrial City	нок	Saudi arabia Genral Investment Authority	\$1 billion	
SAUDI ARABIA	King Abdulla University of Science and Technology	нок	Aramco Services Company	400,000 Sqm	2006-2008
Riyadh, SAUDI ARABIA	King Khalid Airport	нок	General Authority of Civil Aviation	47,500 Sqm	1983
BAHRAIN	Water Gardens	НОК	Albilad Real Estate Investment Co.	\$7 billion	2008-2020
Doha, QATAR	Education City Hamad Medical	Arata Isozaki	Qatar Foundation Sh. Hamed Bin	\$40 billion	2000
Doha, QATAR	City	Arata Isozaki	Qassim Al-Thani	\$450 million	2006
Doha, QATAR	Weil Cornell building	Arata Isozaki	Qatar Foundation	\$125 million	2006
Doha, QATAR	Qatar National Library	Arata Isozaki	Qatar Petroleum	63,000 Sqm	2002-2006
KUWAIT	Kuwait Business City	KEO International Consultants	United Realty Co.	\$95 million	
KUWAIT	KIA Headquarter building	KEO International Consultants	Kuwait Investment Company	\$200 million	2009-2012
KUWAIT	Gulf University for Science and Technology	KEO International Consultants	GUST	\$61 million	2004-2007
Doha, QATAR	Al-Dafna Residential Towers	MZ + Partner Architects	Thani Bin Abdulla Housing Group	\$275 million	2004-2006
Doha, QATAR	Palm Skyscraper	MZ + Partner architects	Diar Real Estate comp.	\$218 million	2007-2010
Doha, QATAR	West BayLagoon Plaza	MZ + Partner architects	Dar Investment	295,000 Sqm	2007
Doha, QATAR	Al- Fardan Twin Towers	AEB	Al- Fardan Real Estate Company	\$500 million	2005-2007
Doha, QATAR	Al Sharq Village	AEB	Qatar National Hotels	960,000 Sqm	2004-2007
Doha, QATAR	Gulf Tower	AEB	Sh. Hamed Bin Qassim Al-Thani	24,000 Sqm	2007-2008
Doha, QATAR	Texas A&M Univeristy	Legorreta and Legorreta	Qatar Foundation	50,000 Sqm	2003-2006
Doha, QATAR	Carnegie Melon Univeristy	Legorreta and Legorreta	Qatar Foundation	42,000 Sqm	2003-2006
Doha, QATAR	Qatar foundation Central library	OMA	Qatar Foundation	42,000 Sqm	ТВА
Doha, QATAR	Qatar Foundation Headquarter	OMA	Qatar Foundation	29,000 Sqm	2008-2010
Riyadh, SAUDI ARABIA	NCCI Towers	Omrania & Associates	Cooperative Real Estate Investment Co.	\$63 million	1990-1993
Riyadh, SAUDI ARABIA	Al-Rashid Tower	Omrania & Associates	Mr. Abdulaziz Al Rashid	\$61 million	2006-2008

COUNTRY	DDOJECT	Foreign Architect	CLIFAIT	COALE	DURATION
COUNTRY	PROJECT	Local Architect	CLIENT	SCALE	DURATION
Riyadh, SAUDI ARABIA	Al-Faisaliah Tower	Foster and Patners	King Faisal Foundation	240,000 Sqm	1994-2000
Mecca, SAUDI ARABIA	Makkah Expansion	Norman Foster/Zaha Hadid	Jabal Omar Co.	\$3.3 billion	TBA
Dubai, UAE	Dubai Signature Towers	Zaha Hadid Architects	Dubai Properties	500,000 Sqm	2006- stopped
Dubai, UAE	Jumaira Emirates towers	Hazel W.S Wong Norr, Norr Group Consultants	Confidential	\$132 million	1996-2000
KUWAIT	The Avenues Mall	NORR Consultants International	Mabanee Development	\$2 billion	2004-2010
Dubai, UAE	Dubai World Islands	Nakheel Properties	Shiek Mohammed Bin Rashid Al Maktoum	\$14 billion	2007- stopped
QATAR	Pearl of the Gulf	Callison	United Development Company	985 acres	2005-2010
Riyadh, SAUDI ARABIA	Princess Noura University for Women	Thomas Silvia Architects/ Perkins + Wills Architects	Ministry of finance	\$11.5 billion	2009-2012
Dubai, UAE	Madinat Al Soor Waterfront	RMJM Architects commissioned by Nakheel	Municipality of Dubai	11,000,000 Sqm	2008-
Dubai, UAE	Palm Island	Je Da Nul and Van Oord	Dubai Palm developers	\$10 billion	2002-2003
Doha, QATAR	Heart of Doha project	Edaw	Doha Land	\$5.5 billion	2009-2016
Dubai, UAE	Dubai Metro	Dubai Rail Link (DRL) constructed of Japanese firms	Shiek Mohammed Bin Rashid Al Maktoum	\$3.4 billion	2005-2009
BAHRAIN	Amwaj Islands	Scott Wilson	Ossis Property Developers	\$2.5 billion	2001-2015
BAHRAIN	Health Island	DP Arcihtects	Ministry of Health	\$1.6 billion	2001-2010
BAHRAIN	Bahrain Financial Harbor	Ahmed Janahi Architects	Bahrain Financial House	\$1.3 billion	2007
Riyadh, SAUDI ARABIA	Kingdom Center	Ellerbe Becket	Al-Waleed Bin Talal	\$1 billion	2000-2002
Dubai, UAE	Dubai International Airport	Dar Al- Handasa Consultants	Department of Civil Aviation	\$950 million	1994/ 2000- 2006
Dubai, UAE	Burj Al-Alam Tower	Nikken Sekkei	fortune Group	\$800 million	2009-2012
KUWAIT	Kuwait International Airport Expansion	Dorsch Consultants	Directorate General of Civil Aviation	\$750 milion	2007-2011
KUWAIT	360 mall Qatar National	RTKL	Tamdeen Developers	\$280 million	2006-2009
QATAR	Bank New Head Office Building Bahrain	James Noble	Qatar National Bank	\$250 million	2010-2013
BAHRAIN	International Circuit	Hermann Tilke	Bahrain International Circuit Co.	\$150 million	2002-2010
KUWAIT	Khabary City Project	Make Architects	Khabary Holding	\$134 million	2007-
KUWAIT	Sharq Mall	Nader Ardalan (KEO)	National Real Estate Co.	\$132 million	1996-1998
KUWAIT	Watya Complex	WZMH	United Realty Co.	\$101 million	2007
KUWAIT	The Fintas Center	Bernard Khoury Architects	MA Khrafy and Sons Co.	\$100 million	2009
KUWAIT	Arab Organization Headquarter	Pan Arab Consulting Engineers (PACE)	Arab Fund for Economic & Social Development	\$100 million	1991-1994
KUWAIT	Marina World	SSH Consultants	Wataniya Real Esatate Co.	\$90 million	2002-2004

COUNTRY	PROJECT	Foreign Architect Local Architect	CLIENT	SCALE	DURATION
BAHRAIN	Banyan Tree Desert Resort		Al Areen Holding Co.	\$90 million	2007-2010
KUWAIT	Al-Kout	Wael Al Masri	Tamdeen Developers	\$65 million	2004-2010
Jeddah, SAUDI ARABIA	Durat Al-Arus	Darwish Architects	Dallah Real Estate and Tourism Co.	\$54 million	1996-1999
Dubai, UAE	Telecommi- nication Academy	Ahmed Al-Rostomani	Telecommunication Company	\$50 million	1995-1997
KUWAIT	Kuwait Stock Exchange	John S. Bonnington	Kuwait Foreign Trading Contracting	\$50 million	1982-1984
Dubai, UAE	Ajman Municipal Headquarter Bldng	a-lab	Municipality of Dubai	15,000 Sqm	2007-2009
KUWAIT	Kuwait Fund Headquarter	Architect's Collaborative	Kuwait Fund of Arab Economic Devlopment	8500 Sqm	1980-1982
Riyadh, SAUDI ARABIA	Riyadh Diplomatic Quarter Central Area Development	Beaah	Riyadh Development Authority	80,000 Sqm	1986
BAHRAIN	Pearl Towers	Cassia and Partners	Member of the Royal Family	67,000 Sqm	2007
QATAR	Tornado Tower	CICO Consulting Architects and Engineers	Tornado Tower Company	80,000 Sqm	2007-2008
Jeddah, SAUDI ARABIA	Al Andalus Mall	David Brody Bond Aedas	Muhammed Al-Habib Real Estate	240,000 Sqm	2005
KUWAIT	Burj Mubarak Al- Kabeer	Eric Kuhne and Associates	Kuwait Government	390,200 Sqm	2009-2016
Riyadh, SAUDI ARABIA	Ministry of Foreign Affairs	Henning Larsen	Ar-Riyadh Development Authority	85,000 Sqm	1984
Doha, QATAR	Museum of Islamic Art	I.M.PEI	Qatar Petroleum	450,000 Sqm	2007
Dubai, UAE	Dubai Bus. Bay Tower	Jesse Reiser + Nanako Umemoto	Creekside Development Corporation, Dubai	31,400 Sqm	2006-2009
Riyadh, SAUDI ARABIA	King Faisal Foundation	Kenzo Tange Associates	King Faisal Foundation	100,000 Sqm	1980-1985
BAHRAIN	Bahrain National Museum	KHR Architects	The Government of Bahrain	123,000 Sqm	1990
KUWAIT	DCRTD	NBBJ	Sh. Jaber Al Ahmed al Sabah	42,000 Sqm	2008
Riyadh, SAUDI ARABIA	Al-Birr Foundation Office Towers	Perkins and Will	Al-Birr Foundation	4/4/20104/4/2010	2008-2010
BAHRAIN	Raffles City	Rafael Vinoly	CapitaLand	288,000 Sqm	2012
BAHRAIN	Al-Moayyed Tower	Shadid Enginerring Consultants	Al-Moayyed Properties	48,400 Sqm	2002-2004
Dubai, UAE	MOMEMA Tower	UN Studio Architects	Shiek Mohammed Bin Rashid Al Maktoum	25,000 Sqm	2008-2011

Scale of projects presented by cost or square footage due to confidentiality of project cost

### Western Firms

	Atkins Architects	Skidmore Owings Merrill SOM	Hellmuth, Obata,& Kassabaum HO+K
Year Established	1938	1906	1955
Number of Employees	18,000	2,500	3,000
Services	Master Planning ransport / Environmental Planning	Architecture Building / MEP Engineering	Advanced Strategies Conservation
	Landsrabe Architecture	Digital Design	Engineering
	Management consultancy	Graphics	Landscape Architecture
	Architecture Industrial Design Planning		Planning
	Engineering Design	Interior Design	urban Design
	MEL	Structural / C vil Engineering	Architecture
	Specialist Building Services Project Management	Sustainable Design Urban Design	Construction Services Interiors
	Cost Management Site Supervision		Lighting Design Sustainable Design
	Intrastructure		Visual Communication
	Industry		Transportation
	Olland Gas		
	Nuc ear	Principal de la constant de la const	
	General and Heavy Industry		
	Conveyance Systems		
Largest Scale Designed	Arch: Business bay	Arch: Burj khalifa - LAE	Arch: KAUST : ampus- Saudi
Project	executive towers - UAE \$1 bill	\$4.1 bi	Arabia 604,000 sqm
	Master Plan: Durrat Al	Master Plan: King Abdulla	Master Plan: City of Silk
	Bahrain Bahrain 53 bill	Economic City Saudi Arabia \$60 bill	suwait \$132 bill

### BAHRAIN

	Ahmed Janahi Architects	Khatib & Alami	Akbari Architects
Year Established	1988	1960	1960
Number of Employees	N/A	2,000	1,000
Services	Orban Design	Architecture	urban Design
	Marine Planning	Flanning	Architecture
	Architecture	□extrical / Mexhanical	
	Landscape Architecture	Structural Engineering	
	Structural Design	Bry remmental	
The first court will be the control of the court of the c	And the second of the second o	Industrial	The state of the s
Largest Scale Designed Project	A A's i shopping complex Benrain \$24 mil	Al Khalediya Palace Botana UAF s175 mil	Twin Towers Bahmain \$30 m. I

# Dubai, UAE

	Al-Hashemi	Adnan Saffarini	Ahmad Al-Rostomani
Year Established	1983	1568	1986
Number of Employees	60	250	100
Services	Architecture Landscape Archibocure	Architecture Landscape Architecture	Architecture andscape Architecture
	MEF Engineering Design	Structural / Civil Engineering	Structura Engineering
	Structural Engineering	Hieatro-Mechanical	
	Urban Dasign		
	Urban Planning		
Largest Scale Designed Project	New tenants labor camb West - UAE 5120 mill	Gold Lanc- UAE - \$000 mill	Al-Nahda towers - UAE \$100 mill

### **KUWAIT**

	Kuwait Engineering Office	Saieh Al Qallaf Engineering Consultants	Dar SSH Engineering Consultants
Year Established	1954	1396	1961
Number of Employees	1,750	200	200
Services	Architecture	Architer : ure:	rhan Design
	Interior Design	Industrial	Architecture
	Graphic Design	Urban Design	Landscape Architecture
	Landacabe Architecture	Inter or Design	MEP Engineering Services
and the same of the sales of the same and the	Structural Engineering	Infrastructure	Quantity Surveying
	Building Services Engineering		Structura Engineering
	Project Management Pre-Construction Services		Roads and Infrastructure
	Construction Management / Supervision Contracts / Claims Services		
	Intrastructure		
	Water / Brytron hero		
Largest Scale Designed Project	Al Bandar at al Baha beach- UAE 160,000 sgm	American University - UAE \$65 mill	United towers - Kuwait 99

## **QATAR**

	Arab Engineering Bureau	CICO Consultants	ERGA
Year Established	1966	1957	1980
Number of Employees	40C	100	500
Services	Architecture Urban Design Planning Lancscape Architecture Structural Engineering Electro-Mechanical	Architecture Landscape Architecture Structural Engineering Mechanical Engineering Project Management Construction Management	Master Planning Architecture andscape Architecture Project Management
Largest Scale Designed Project	Project Management Quantity Surveying At Sadd development complex - Qatar 204,948 agm	QIPCO Tower - Qatar \$200 mill	Business Village - KSA - \$300 mill

### Figure 1



Image from http://www.outnext.com/photos/uncategorized/2007/10/05/thepearlquatar05100705.html

Figure 2



Image from "World's Tallest Building Opens and Other Dubai Ridiculousness" The Boston Phoenix,
January 4, 2010 By Lisa Spinelli
http://thephoenix.com/blogs/blogs/phlog/dubai-palm-islands

### Figure 3



Burj Khalif, Dubai, UAE Image from http://www.travlang.com/blog/wp-content/uploads/2010/04/burj\_khalifa\_dubai\_10.jpg

### Figure 4



Education city, Qatar Image from http://tonysaba.files.wordpress.com/2009/03/education-city-site-plan.jpg



World Trade Center, Bahrain Image from http://www.skyscrapercity.com/

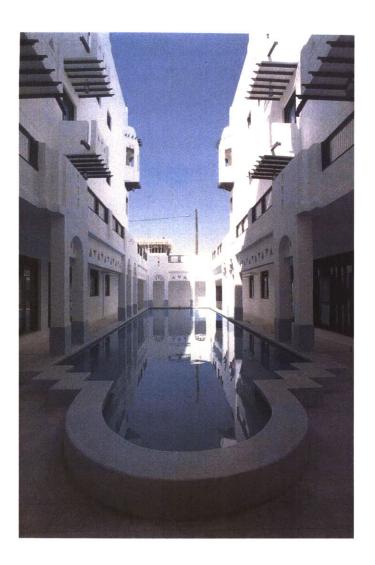
# Figure 6



Hand Ball Stadium, Saleh al-Qalaf Consultnast, Kuwait Image from Saleh al-Qallaf official website http://www.salehalqallaf.com/



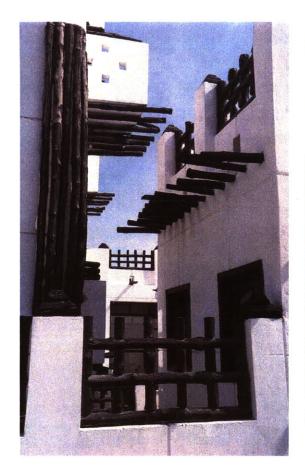
Tornado Tower, CICO Consultants, Qatar Image from CICO official Website http://www.cicoconsultants.com



Liwan is the space separating the pool from the rooms, Villa, Saleh al Mutawa, Kuwait Image from Saleh al-Mutawa,

History of Architecture in Kuwait and the Influence of its Elements on the Architect

(Kuwait: S.A. al-Mutawa 1994)

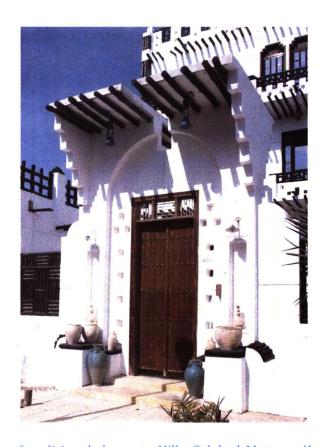




Jandal, Wooden beams extending out, Villa, Saleh al Mutawa, Kuwait
Image from Saleh al-Mutawa,
History of Architecture in Kuwait and the Influence of its Elements on the Architect
(Kuwait: S.A. al-Mutawa 1994)

Figure 10





The Use of traditional elements, Villa, Saleh al-Mutawa, Kuwait
Image from Saleh al-Mutawa,
History of Architecture in Kuwait and the Influence of its Elements on the Architect
(Kuwait: S.A. al-Mutawa 1994)



Handmade craft, Windows and fence, Villa, Saleh al-Mutawa, Kuwait Image from Saleh al-Mutawa, History of Architecture in Kuwait and the Influence of its Elements on the Architect (Kuwait: S.A. al-Mutawa 1994)

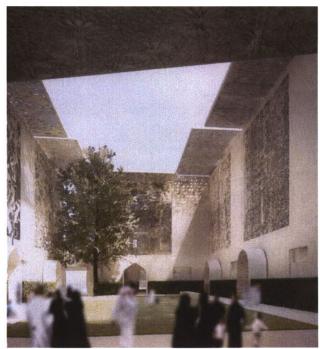
Figure 12





Al-Sharq Village and Spa, QATAR. Ibrahim Jaidah, Architecture Engineering Bureau From <a href="http://images.travelpod.com/users/travelingdiva/11.1262016564.sharq-village-and-spa.jpg">http://images.travelpod.com/users/travelingdiva/11.1262016564.sharq-village-and-spa.jpg</a>





Heart of Doha project, Qatar Images from project proposal book *Heart of Doha: A Blueprint For the Future* by EDAW (London, 2009)

4/29/10 2 40 PM Emaar univers luxury Armani Residences THE TOWER OBSERVATION DECK HOMES & OFFICES ARMANI HOTEL DOWNTOWN DUBBLE

Abitare - international design magazine » JEAN NOUVEL and his desert rose

4/29/10 2:50 PM

agenda columns specials tips themes search

abitare.bg abitarechina.cn costruire.it

CASA <u>login</u> / <u>regist</u>

### JEAN NOUVEL and his desert rose



### NATIONAL MUSEUM OF QATAR

The new National Museum of Qatar, as expressed in a striking and evocative design by Pritzker Prizewinning architect Jean Nouvel.

Posted by Valentina Ciuffi - 03.24.2010

#### **ShareThis**

Embodying the pride and traditions of Qatar's people while offering international visitors a dialogue about rapid change and modernization, the National Museum of Qatar will be the setting for a program in which entire walls become cinematic displays, "sonorous cocoons", shelter oral-history presentations and handheld mobile devices guide visitors through thematic displays of the collection's treasures. Though built

http://www.abitare.it/highlights/jean-nouvel-e-la-sua-rosa-del-deserto/

Page 1 of 17

"Qatar Museum Authority Unveils Jean Nouvel Design for New Museum,"
Qatar Art Daily, March 24, 2010 By Valentina Ciuffu
http://www.artdaily.org/index.asp?int\_sec=2&int\_new=37035

Al Hamra, SOM, world architecture news, architecture jobs

4/29/10 2:47 PM



### Kuwait skyscraper takes shape



As by Google

Kuwait Hotels
Great Hotels in
Kuwait Free
Internet & Kids
Eat Free!
www.Holday/im.com

Crowne Plaza
Kuwait City
Wake Up
Refreshed in
Kuwait! Book
online or call
800-261-9168
www.CrownePlaza.com

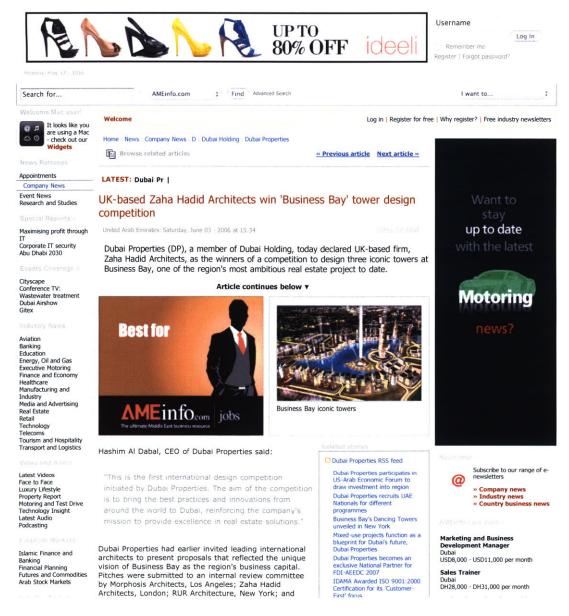
Kuwait Jobs
Search for
Kuwait jobs Find your new
job today.
Indeed Com-Kuwait
Call Kuwait for
10c/min
Call From Your
Landline or
Mobile - Try It
Now - 1st Call
Free!

 $http://www.worldarchitecturenews.com/index.php? fuse action=wanappln.project view \&upload\_id=10023$ 

Page 1 of 2

UK-based Zaha Hadid Architects win 'Business Bay' tower design competition | Dubai Properties | AMEinfo.com

5/17/10 3:48 PM



http://www.ameinfo.com/87789.html

Page 1 of 3

#### **CHAPTER II**

Behind every development project lies a system of networking within the process of decision-making, which affects the final implemented design. What makes the studied city-states unique is that this system comprises an intertwined relationship between social, political, and economic structures, which has evolved over the centuries from a traditional tribal system. The client - in most cases the ruler - wields sufficient authority to influence the designs and laws in order to get his vision across.

My first aim through the following chapter is to understand how the formation of a tribal social-political system within the studied city-states has given business and political elites the authority over major real estate developments. The main points I focus on through my research are:

- The history of the tribal system, where I explore how the tribal system was first established and when the role of a ruler and his family first came into power:
- The transformation of the political system after the discovery of oil, focusing mainly on how
  the relationship between the state, the ruler, and the citizens changed after the discovery of
  oil; and
- Forming a patronage system.

Furthermore, I test my third hypothesis, which examines:

3. The role and authority elites (clients) have by exploring three case studies [Fig.18, 19, 20].

I focus specifically on uncovering diverse processes of decision-making that major clients take within three different political systems. The three case studies are:

### 3.1 Burj al Arab. Dubai, UAE

- 3.2 Islamic museum of Art. Doha, Qatar
- 3.3 Al-Hamra towers, Kuwait

By exploring the process of decision-making, I look at

- The way in which the project started:
- The process of choosing the architect; and
- The client's effect on building laws and regulation while developing the project.

### History of the political system in the Kuwait, Qatar, Bahrain and the UAE

Tribal systems in Kuwait, Qatar, Bahrain, and the UAE were first established in the eighteenth century. Survival in the desert required that families band together to find water and move their flocks to new lands. At this point in time, the ruling families we see today - such as Al-Sabah in Kuwait or Al-Khalifa in Bahrain - were first established. The emphasis on having various tribal groups precluded the rise of strong leaders. With no standing armies to speak of, tribal leaders had to negotiate with each other to raise fighting forces. The few administrative mechanisms that existed were mediated through the sheikhs.<sup>76</sup> However, only during the British colonization did a hierarchical relationship become established, setting the basis for the current power of shuyookh (rulers).<sup>77</sup>

From 1763 until 1971, the British Empire maintained varying degrees of political control over Gulf states. As opposed to physical occupation, the British depended on a series of treaties with a few

<sup>&</sup>lt;sup>76</sup> According to Oxford English Dictionary 'Sheikh' is an Arab leader, especially the chief or head of a tribe, family, or village.

<sup>&</sup>lt;sup>77</sup> Rosemarie Said Zahlan. *The Making of the Modern Gulf States: Kuwait, Bahrain, Qatar, the United Arab Emirates, and Oman.* (London: Unwin Hyman, 1989) 19-32

selected tribal leaders.<sup>78</sup> These signatories played leadership roles, and took full responsibility for the actions of their people, with the promise that they would prevent any infringements of the treaties' regulations. With the exception of the Al-Khalifa, who had come to power in Bahrain as a result of conquest, ruling families emerged over the years through the efforts of individuals with outstanding leadership abilities, who were at a position to negotiate with British officials.<sup>79</sup>

The British policy of non-interference allowed these rulers a relatively free hand in governing their people. Although in principle the rulers had absolute power, they generally consulted a small, informal council (majlis) according to the Islamic principle of consultation (shura). This essential concept of shura dictated that most decisions of importance required a consensus agreement among one or two members of the ruling family together with social and religious notables. The British saw this as a social democratic system operating side-by-side with traditional authoritarianism.

The economic activities of the states provided the rulers and their descendents with their primary sources of income. In addition to the pearling industry, this income depended on other sources like customs dues and taxes on seafaring vessels. The extent of the ruler's income stemmed directly from his power and standing in the community, which determined his ability to impose and collect taxes. A state of economic interdependence existed between the ruler and his people, a relationship that became disrupted by the discovery of oil.

<sup>&</sup>lt;sup>78</sup> Malcolm C. Peck. *Historical Dictionary of the Gulf Arab States: Asian historical dictionaries*, no.21 (Lanham, Md: Scarecrow Press, 1997) 298-310

<sup>&</sup>lt;sup>79</sup> Gause, F. Gregory. Oil Monarchies: Domestic and Security Challenges in the Arab Gulf States. (New York: Council on Foreign Relations Press, 1994) 17-19

### The transformation of the political system after the discovery of oil

The most distinctive political aspect of the Arab monarchies of the studied city-states is that their governments have access to great wealth without having to tax their citizens. After the discovery of oil, oil revenues went directly to state treasuries, resulting in unfathomable wealth and power flowing to the hands the royal families in positions of governmental power. This transformed the ties between the citizens and their rulers into a one way, top-down relationship, where the government provides services and benefits to its citizens with little or nothing in return.<sup>80</sup> The four studied city-states became welfare states that provide all education free of charge and finance all medical expenses for the citizenry. The society became highly dependent on these actions, benefits, and decisions made by the government.<sup>81</sup>

The discovery of oil had also significantly weakened the old political structures. The rulers of Kuwait, Qatar, Bahrain, and the UAE received regular income from oil after signing the concessions - exclusive licenses granted by the host countries to foreign private investors to explore and develop oil - which made them financially independent of their people. Additionally, the influx of massive oil revenues rendered the former rudimentary methods of rule obsolete.

Complex government machinery flourished where previously no bureaucratic governmental tradition existed; civic departments were established, councils of ministers were appointed, and civil servants were employed. This machinery increased the widening gap between the ruler and his people, for it created a layer of bureaucratic hierarchy between the two, making it far more

<sup>80</sup> Cottrell further discusses the welfare system in the Gulf region through:

Alvin Cottrell. *The Persian Gulf States: a general survey* (Baltimore: John Hopkins University Press, 1980) 511-515

 $<sup>^{81}</sup>$  Mohammed Sadik and Willian Snabely also brings up the welfare system as system that resulted from a political reform in the mid  $20^{\text{th}}$  century where citizens were trying to get their fare share from the state.

Muhammed Sadik and Willian Snavely. *Barhain, Qatar, and the United Emirates: colonial past, present problems, and future prospects* (Lexington, Mass: Lexington Books, 1972) 62-66

difficult to gain access to the ruler. Previously, his citizens could approach him about any outstanding problems, no matter how personal. Suddenly, such requests had to be channeled through a long hierarchical political system, ultimately breaking the interdependence between the ruler and the ruled. <sup>82</sup>

A search for new forms of governmental participation began. The city-states attempted to form a new political system with a more balanced relationship between the citizen and the state, with mixed success. One of the common feature between Qatar, Kuwait and Bahrain is the fact that they all feature unitary systems, while the UAE is the only federal state in the community. These systems, except for Kuwait, lack real and effective political participation, with all decision-making power ultimately stemming from the central authority of the Amir<sup>83</sup> or king. He makes the final decision on future actions and developments made in his country.

### Patronage system

When rulers first received this independent oil income, they funneled large sums of it towards socioeconomic development projects, often separately from the formal government budget. Instead, this constituted one of the initial steps in the formation of a patronage system, wherein royal families for the first time entered the private sector in each country. They took charge of financing and controlling development projects based on their own vision and interests, which had significant effects on their states' economy.<sup>84</sup> Members of the ruling family were brought

<sup>&</sup>lt;sup>82</sup> Gause, F. Gregory. *Oil Monarchies: Domestic and Security Challenges in the Arab Gulf States.* (New York: Council on Foreign Relations Press, 1994)

<sup>&</sup>lt;sup>83</sup> Malckom C. Peck defines Amir as "an Arabic title variously translated as "commander" or "prince."" It has been used by the rulers of the city-states. However, this excludes Bahrain, who has assumed the title of king.

Malcolm C. Peck. *Historical Dictionary of the Gulf Arab States: Asian historical dictionaries*, no.21 (Lanham, Md: Scarecrow Press, 1997) 89

<sup>&</sup>lt;sup>84</sup> Gause, F. Gregory. *Oil Monarchies: Domestic and Security Challenges in the Arab Gulf States.* (New York: Council on Foreign Relations Press, 1994) 57-58

in to do business in their nations while simultaneously having political insurance. However, major merchant families and businessmen existed in these states before this entrance of the ruling family into the private sector. With the suddenly dominant role played by the state in the local economy, businessmen took advantage of having members of the ruling families in their sector. They worked on maintaining access to decision makers, which gave them more freedom in their own entrepreneurial efforts. Maintaining strong relationships with the members of the ruling family allowed major merchant families - such as Al-Zamil in Kuwait or Olayan in Qatar - to place their members in strategic places in the growing state bureaucracy and win profitable contracts and projects from the government.

This intertwined relationship between the social, economic, and political systems became the foundation of the decision-making process behind large-scale projects. Ultimately, these circumstances led to the strong presence of Western architectural firms in the region at the expense of regional competitors.

Testing hypothesis 3

3. The Role of the client

Burj al-Arab, Dubai, UAE85

"We have transformed Dubai from a collection of rag tag buildings surrounding a port to a touristic holiday destination, and a playground for the rich in the Arabian Gulf coast."86

Sheikh Mohammed Bin Rashid al-Maktoum

Background:

During the early 1990s, Mohammed bin Rashid al-Maktoum, the crown prince and minister of defense of Dubai, sought a way to respond to the economic time bomb facing Dubai. Sultan bin Saleem, the advisor of the Amir, says "Sheikh Mohammed was very aware of the fact that Dubai does not have oil. Therefore, he was constantly trying to find an alternative way to sustain the life of the people in Dubai."87 Facing an impending financial meltdown, in 1993 sheikh Mohammed decided to turn Dubai into a vacation destination for global elites.88 Needing a luxurious centerpiece to launch his state into high-end tourism, he focused on building an iconic 7-star hotel, the Burj al Arab by Atkins Architects, which would provide Dubai the global image that necessary to make it an exotic destination locale [Fig.18]. In the years leading up to the global economic crisis of 2008-

<sup>&</sup>lt;sup>85</sup> Most of the information in this section is gathered from personal interview with Simon Crispe, Region Commercial Director of Atkins Architects. He worked as a project architect with Tom Wright during the construction of Burj al-Arab, Dubai, UAE.

<sup>&</sup>lt;sup>86</sup> Mohammed bin Rashid al-Maktoum, *Ro'yati: altahadiyat fee sabiq al tamayuz* (Dubai, UAE: Motifit lilnashir, 2006 ) 212

<sup>&</sup>lt;sup>87</sup> Kotajotun. "Megastructure: Construction of Burg al-Arab, part 1" youtube. (March 11, 2008) http://www.youtube.com/watch?v=ow321Ximh70 (accesses January 28, 2010)

2009, Dubai became widely recognized as "the most famously booming city in the Persian Gulf."89

Choosing *the* architect:

In order to build the world's tallest building at the time, Sheikh Mohammed Bin Rashid Al-Maktoum sought a firm with the power and expertise necessary to accomplish his vision. He also preferred an architectural firm was based in the UAE, with round-the-clock availability and a complete commitment to the job. During the late twentieth century, Dubai had only a small number of local architects who worked mostly on small-scale villas. "They did not have the manpower and ability to build a 60-story building," 90 says Simon Crisp, project architect of Burj al Arab. However, even fewer international architects operated branch offices in the UAE, notably Atkins Architects, Godwin Austen Johnson, Rice Perry Ellis, and Norr Group. Most of these firms entered the scene in Dubai a while after Atkins, during the late 1980s and early 1990s. This first-mover advantage made Atkins Architects the only well-established end-to-end architecture and engineering firm in Dubai.

In the mid-1980s, as Dubai's economic growth began to accelerate and Western firms began to enter the architectural scene, the ruling family passed a law requiring that international firms form a partnership with a local firm in order to build the city state.<sup>91</sup> Without such collaboration with local architects, international firms could only build on sites that located in what are known as

<sup>&</sup>lt;sup>89</sup> Christopher M. Davidson. Dubai: the vulnerability of success. (New York: Columbia University Press, 2008)

<sup>90</sup> Simon Crispe Personal Interview. Tape recording, Dubai, UAE, Jan 10, 2010

<sup>&</sup>lt;sup>91</sup> Ammir Rehman, *Dubai & Co.: global strategies for doing business in the Gulf states* (New York: McGraw Hill, 2008) 3

free zones.<sup>92</sup> However, these laws did not apply to Atkins Architects.

Atkins Architects first arrived in Dubai in 197593, at a time when the government desperately needed professional expertise in developing and improving the state's infrastructure and urban conditions. As the first western firm to offer such expertise in Dubai, Atkins was therefore 'grandfathered in', and the new regulations allowed the government to consider them locally licensed architects.94 That gave the firm the freedom to build anywhere in the city-state, and so their near 20-year head start on other competitors helped them develop relations with key partners in the UAE, building some of the most prominent buildings like the Al Bawadi tower in Dubai. It was through these social connections that Mohammed bin Rashid al-Maktoum chose Atkins architects as the lead designers for the project. Simon Crisp adds,

"It was a natural reaction for the client to ask for a locally based firm like ours who has major international work forces and the right skills to express some interest in designing the most important building commissioned at the time."95

In September 1993, the crown prince of Dubai directly invited Atkins Architects to present ideas for the building. Led by the architect Tom Wright, a young team from Atkins arrived from Britain to create various conceptual designs to present to the client.

<sup>&</sup>lt;sup>92</sup> According to ministry of economy in Dubai, UAE, 'Free zones' are areas that have different economic laws than the laws of the country. Their main goal is to provide foreign companies unrestricted import of labor, and expert capital. There is a 100% foreign ownership in free zones.<sup>92</sup> Therefore, most Western firms based their firms and developments in these areas. This is where most of the developments in Dubai are located today.

<sup>93</sup> During the rein of Sheikh Rashid al Maktoum

<sup>&</sup>lt;sup>94</sup> This was also applied to other major international engineering firms such as Mot Macdonald, Alexander Gibb, and Hyder and Halcrow, who arrived during the same time. However, they never worked on architectural design and development.

<sup>95</sup> Simon Crispe Personal Interview. Tape recording, Dubai, UAE, Jan 10, 2010

"We were young designers who had never worked on a project of this scale before...the tallest buildings we have built were of 15 to 20 stories, but never of 60 stories high."96

Atkins hired architects to work on the project who had the same level of expertise as any local architect in the country, and like those local architects, they lacked experience on a project of this scale and size, having focused largely on designing schools and offices. However, unlike local architects, they received the opportunity to work on an iconic project, improving their skills and increasing their knowledge in the architectural field. Meanwhile, the few local architects continued working on the same smaller projects with which they had traditionally dealt. According to Simon Crisp, "major clients of the region were not ready to take the risk of challenging them, giving them a more prominent role that would allow them to excel and stand out on the architectural scene of the Gulf region today." Instead, Sheikh Mohammed al-Maktoum chose to play it safe and select Atkins Architects, who had the financial wherewithal to pay for any mistakes their own team of young architects might make.

**Process:** 

The client's brief focused on creating an iconic building for Dubai. Tom Wright and his team examined the pyramids of Egypt, the Eiffel Tower in Paris, and the Sydney Opera House in Australia as global icons of different countries.

"We were asked to consider ways that the UAE's icon would and could represent a forward

<sup>96</sup> Ibid

<sup>97</sup> Ibid

looking nation, but still one that recognizes its cultural heritage as a seafaring nation."98

After team decided deciding to use the sail of a dhow as the main concept for their design, the team fine-tuned the shape to incorporate the profile of a modern high tech yacht sail [Fig.21] One key insight stemmed from the realization that a building that can be immediately recognizable even after being drawn with only a few simple lines will be considered iconic <sup>99</sup>[Fig.22]. This insight – and Tom Wright's direct relationship with the client – allowed him to capture Sheikh Mohammed's vision of the project and present the dhow concept, whose simplicity and potential for becoming iconic immediately resonated with the sheikh, who asked Atkins to proceed with their designs.

Wright wanted to create a building that rose from the water like a large sailing vessel, which would require erecting the building atop an island base. However, no such islands existed in the area, so the architect suggested that they build an artificial island to produce the same effect, despite the increased risk and cost it would mean to the project.

However, the client's lofty ambitions made the impossible possible. Given the concentration of decision-making power in sheikh Mohammed bin Rashid al-Maktoum, he could easily agree to this radical plan to erect the world's first 270m high building on an artificially constructed island. His decision allowed Burj al-Arab to earn recognition as the "world's most luxurious hotel," and the "tallest stand-alone structure of its time." Furthermore, it paved the way for the construction of a series of similarly ambitious schemes, from the palm island to the world islands, and it opened up a new type of major developments that spread rapidly around the Gulf region.

<sup>98</sup> Kotajotun. "Megastructure: Construction of Burg al-Arab, part 3" youtube. 11 Mar, 2008 Web 28 Jan 2010.

<sup>99</sup> Khuan Chew and Uschi Schmitt. 1001 Arabian Nights at the Burj Al-Arab (Cyprus: ABC Millenium, 2000): 6

<sup>&</sup>lt;sup>100</sup> Kotajotun. "Megastructure: Construction of Burg al-Arab, part 1" youtube. 11 Mar, 2008 Web 28 Jan 2010.

<sup>101 1001</sup> Arabian Nights with Burj al-Arab. ABC Millenium; Cyprus. 2000

<sup>102 &</sup>quot;Burj al-Arab: Dubai Development" e-architect official site. Web 22 Jan 2010

### Conclusion:

The process of building Burj al-Arab clearly demonstrates how much of an impact the political structures of a city-state have on a project's development. The political system in Dubai operates within the framework of a constitutional monarchy, with Mohammed bin Rashid al-Maktoum acting as the head of state. He has the power to take matters in his own hands and make all the decisions needed for Dubai's development. As a real estate client, he exercised complete control over the project, with unchallenged authority to pursue his own vision of an iconic building. He also stayed within the laws by choosing Atkins Architects, a western firm that was nonetheless considered to be locally licensed, avoiding the need for involving a local architect. Clearly, the ruler did not see the importance of involving a local firm, and his authority allowed him to place the building anywhere he liked, even, in this case, in the middle of the sea. This unquestioned authority and unchallenged decision-making allowed the development of Dubai to take new shape and form, changing the future of the state.

 $<sup>^{103}</sup>$  Nadey Ali Mohammed. Population and development of the Arab Gulf states (Hampshire, UK: Ashgate, 2003)  $140\,$ 

#### Islamic Museum of Art, Doha, QATAR<sup>104</sup>

"Qatar has consolidated its position as a global capital of culture by positioning Doha as a cultural bridge between the Middle East and the rest of the world." 105

Sheikha al-Mayassa bin Hamad al-Thani

### Background:

Qatar remains highly dependent on oil and natural gas exports for its national income, but in 2000. Sheikh Hamad al-Thani sought a way to stimulate the private sector to become a role model for economic and social transformations. Unlike Dubai, which focused mainly on tourism to attract companies and entrepreneurs from all over the world, the ruler's vision was to mold the state of Qatar into a cultural capital, or in his words, a "knowledge economy" that uses knowledge and human capital to produce economic benefits and job opportunities. In addition to establishing an educational city composed of international colleges as proposed by Sheikha Mozah, Sheikh Hamad al-Thani considered museums another way to educate the citizenry on different cultures of the Islamic world. In order to turn Qatar into an educational and cultural hub, he built the world's largest dedicated museum. Built on a man-made island, the Islamic Museum of Art in Qatar became a landmark and symbol of Islamic culture. According to Qatar Museum Authority, "This

<sup>&</sup>lt;sup>104</sup> Most of the information in this section is gathered from personal interview with Aslihan Demirtas, worked with I.M. Pei as project architect in the Islamic Museum of Art, Qatar <sup>105</sup> "Qatar Unveils Museum of Islamic Art", Kuwait Times (November 27, 2008) <a href="http://Kuwaittimes.net">http://Kuwaittimes.net</a> (accessed February 20, 2010)

 $<sup>^{106}</sup>$  knowledge economy according to Oxford English Dictionary is a term that refers to the use of knowledge to produce economic benefits as well as job creation.

<sup>&</sup>lt;sup>107</sup> It was a gift from Sheikh Hamad al-Thani to Qatar and its people.

iconic building is the first phase in establishing Qatar's success as the cultural capital of the Middle East."<sup>108</sup>

Choosing *the* Architect:

In 1998, ruler Sheikh Hamad al Thani tasked the Aga khan Trust for Culture to organize a competition for the Museum of Islamic Art in Doha. Out of the 80 responses received, the organizing committee invited only the following eight to present their concepts: 110

Rasim Badran (Jordan)

Oriol Bohigos (Spain

Charles Correa (India)

Zaha Hadid (Iraq and United Kingdom)

Hans Hollein (Austria); dropped out for personal reasons

Arata Isozaki (Japan); dropped out for personal reasons

Richard Rogers (United Kingdom)

James Wines (USA)

 $^{108}$  Qatar museum authority official site, (December 2, 2008)  $\underline{http://www.qma.com}$  (accessed April 2, 2010)

 $<sup>^{109}</sup>$  Suha Ozkan, the Secretary General of the Aga Khan Award for Architecture was made professional advisor to the project

<sup>&</sup>lt;sup>110</sup> The organizing committee consists of Sheikh Saud bin Mohammed al-Thani (QATAR), Majid Bustami (Qatar), Nayyar ali Dada (Pakistan), Luis monreal (Spain), Domenico Negri (Italy and Qatar), Suha Ozkan (Turkey and Switzerland)

<sup>&</sup>quot;Competition for the Architectural Review of Qatar's Museum of Islamic Art" Architectural review. (May 3, 2010) <a href="http://www.findarticles.com">http://www.findarticles.com</a> (accessed April 10, 2010)

After much deliberation, the international jury<sup>111</sup> selected Rasim Badran and Charles Correa as the two finalists, ultimately choosing Rasim Badran after he presented his proposal to, Sheikh Hamad al Thani, the ruler and chairman of the museum's board.<sup>112</sup>

Rasim Badran immediately set to work on the museum, under the expectation that he would complete his design and the construction of the first phase by the year 2000. However, almost a year later, "Badran ran into complications such as cost overruns, attracting the Amir's attention at the project's delays." The Amir promptly terminated Rasim Badran's contract, and set about seeking a second architect for the project.

Luis Monreal, a member of the jury that selected Badran, had remained in contact with some of the people of the organizing committee from Qatar. According to Aslihan Demirtas, Monreal suggested I.M. Pei as the leading designer for the project. Well known for the prominent pyramid he built at the Louvre in Paris, Pei impressed Monreal, who believed him the ideal candidate for creating an iconic landmark in Qatar.<sup>114</sup>

After three years of pursuit, Monreal finally convinced Pei to take on the project. Pei expressed reluctance at first, for he remained unsure whether the art collection was of sufficient quality to justify building a monument of this scale. As a result, the museum's curators had to assemble a truly impressive collection simply to meet the architect's standards, at which point Pei finally agreed to take on the project. Pei and Sheikh Hamad al-Thani then met in Qatar in order to discuss the brief and move forward with the project.

<sup>&</sup>lt;sup>111</sup>Ricardo Legorreta (Mexico), Fumihiko Maki (Japan), Luis Monreal (Spain), Domenico Negri (Italy and Qatar), Ali Shuaibi (Saudi Arabia)

<sup>&</sup>quot;Competition for the Architectural Review of Qatar's Museum of Islamic Art" Architectural review. (May 3, 2010) <a href="http://www.findarticles.com">http://www.findarticles.com</a> (accessed April 10, 2010)

<sup>&</sup>lt;sup>112</sup> Aslihan Demirtas. Personal Interview. Tape Recording, New York City. New York, March 17, 2010

<sup>113</sup> Ibid

<sup>&</sup>lt;sup>114</sup> Aslihan Demirtas. Personal Interview. Tape Recording, New York City. New York, March 17, 2010

#### **Process:**

When the project first came into light in 1998, Pei expressed his discontent with the proposed sites located inside the city of Doha, worrying that his building might one day find itself lost and overshadowed by subsequent construction. He therefore requested that sheikh Hamad bin Khalifa al-Thani build him a private island so that his moment could remain isolated from the rest of the city, protecting its future. The Amir agreed, and located the island adjacent to a piece of land off the Courniche, which acts as a park with a ramp connecting the shore to the Islamic Museum.

"I worried a lot about what will come after. Even a beautiful piece of work can be overshadowed, destroyed by something else." Pei told the New York Times. "Doha in many ways is virginal. There is no real context there, no real life unless you go into the souk. I had to create my own context. It was very selfish." 118

After extensive traveling around the Islamic world, Pei finally found his inspiration in the courtyard of the Mosque of Ahmad Ibn Tulun in Cairo (876-879). Specifically, he drew inspiration by the 13<sup>th</sup> century ablution fountain, the sabeel [Fig.23], which resulted in a cubist composition of square and octagonal blocks stacked on top of one another to form a central tower [Fig.24].

When I.M.Pei first began work on his designs, building laws and regulations in Qatar required that he collaborate with a local architectural practice to sign and act as his local representative. However, Sheikh Hamad chose Qatar Petroleum to act as the local representative,

<sup>&</sup>lt;sup>115</sup> Rasim Badran worked on one of the sites, which acted as a key location to the city as it bordered the pedestrian path of the Corniche, the harbor to the east, and the National Museum to the North.

<sup>116</sup> It was a deserted land at the time

<sup>117</sup> Ouroussoff, Nicolai "In Qatar, an Art Museum of Imposing Simplicity" The New York time, (November 23, 2008) <a href="http://www.nytimes.com">http://www.nytimes.com</a> (accessed March 10, 2010)

<sup>&</sup>lt;sup>119</sup> Information on building laws and regulations found official site of Urban Planning and development authority, http://www.up.org.qa.

a firm without any type of architectural practice. Instead, they worked primarily on formatting Pei's drawings and examining the project's budget. It is believed that the Amir selected Qatar Petroleum due to his strong personal ties to the company's owner. <sup>120</sup>As a result, the project proceeded without the involvement of a local architect.

Pei's team of designers faced several issues while working on the project, such as Qatar's confusing and often conflicting building codes. This required frequent negotiations with the state as to whether they could simply adopt the American building codes with which they were already familiar. The Qatari building codes were not yet as developed as American or European codes, so ultimately Sheikh Hamad reasoned that borrowing the American codes would not present a problem.<sup>121</sup>

Pei's team also struggled in dealing with the Baytur Contractors chosen by the Amir based on their low bid. However, Baytur had never worked on a project of comparable scale and size, and had primarily worked on simpler infrastructure buildings or prefabricated low cost housing in Turkey.

"It was very difficult to get them to build to our standards" 122 says Aslihan. "They had to build the building five times in order to get it right." 123

This inexperience delayed the project, preventing it from completion on its originally anticipated date.

<sup>&</sup>lt;sup>120</sup> Aslihan Demirtas. Personal Interview. Tape Recording, New York City. New York, March 17, 2010

<sup>&</sup>lt;sup>121</sup> However, as mentioned by Aslihan Demirtas, there were some moments where the team was asked by the Qatar petroleum to respect some of the Qatari codes. She says, "we had to always be aware of satisfying the under developed building codes of Qatar as well."

<sup>122</sup> Aslihan Demirtas. Personal Interview. Tape recording, New York City. New York, March 17, 2010

Another major problem the architects faced throughout the project was a frustratingly inefficient flow of information from the founding director and local authorities. Constant turnover in these lower authorities made it difficult to know who to contact in order to obtain the necessary information, and this general disorganization slowed the project.

At the project's inception, the Amir hired his cousin, Sheikh Saud al-Thani, the former chairman of Qatar's National Council for Culture, Arts, and Heritage, as the lower authority with whom the architect would directly correspond. He played a significant role in the organizing committee and worked closely with Pei at the project's outset. He also headed the effort to curate and collect all the art pieces necessary for the competition. 124 Although Sheikh Saud received his bachelor degree in art and public administration from Western International University in Arizona 125, he lacked experience in buying and selling art, and had received his position entirely due to his close relationship to the Amir.

Between 1997 and 2005, Sheikh Saud was the world's highest spending art collector. According to BD Global magazine, "He spent over 1 billion pounds at the world's auction houses, and considered money to be of little object when set his sights on a prize item." <sup>126</sup> Eventually, his shopping spree came to an end when he was placed under house arrest under suspicion of misappropriating funds. The Amir then ordered his removal from the museum committee, and he played no further role in the new museum's opening celebration.

Sheikh Hamad al-Thani then hired Dr. Mohammed Abdulraheem Kafoud to replace Sheikh Saud.

The former minister of education did not last long in the role, as his lack of experience in budgeting

India, which is currently displayed in one of the exhibits of the museum.

<sup>&</sup>lt;sup>124</sup> "Sheikh Saud al-Thani Biography" Al Zawya official site. <a href="http://www.zawya.com">http://www.zawya.com</a> (accessed April 5, 2010)

<sup>125</sup> Ibid

<sup>&</sup>lt;sup>126</sup> Baring, Louise. "Scandal of the sheikh and his £1bn shopping spree" Telegraph magazine, UK (April 10, 2005) <a href="http://www.telegraph.co.uk">http://www.telegraph.co.uk</a> (accessed March 8, 2010)

For instance, 113 times the estimated price of an mogul flywhisk that once belonged to Clive of

and and the art world made him an imperfect fit. Frustrated, the Amir created the Qatar Museums

Authority, with a main mission of 127:

- Coordinating all museum activities:
- Proposing laws relating to historic preservation:
- Establishing Museums:
- Acquiring and conserving collections; and
- Creating exhibits and public programs.

Her highness Sheikha al-Mayassa Bint Hamad al-Thani, the daughter of the Amir, became the chairperson of the Qatar Museums authority. This thrust her into the role of the lower authority with whom the architect corresponded. Although her highness was took primary oversight of the project, any major decisions invariably went back to the Amir for approval. Once the right people were finally hired – such as Sheikha Mayassa and Sabeeha al Kamir, who took the art pieces from complete chaos and organized them into a more organized inventory – the project proceeded as planned. Pei worked closely with the interior designer, organizing the exhibit spaces and their surrounding programs, and transformed the previously troubled project into the landmark seen today.

#### Conclusion:

The Islamic museum of Art in Qatar presents another example of an autocratic system operating behind the project and bringing it to fruition. However, unlike the case of Dubai, Sheikh Hamad al-Thani had the authority to change the direction of the project at any time, and modify the

<sup>&</sup>lt;sup>127</sup> Qatar museum authority official site, (December 2, 2008) <a href="http://www.qma.com">http://www.qma.com</a> (accessed April 2, 2010)

laws as necessary in order to see his museum completed exactly as envisioned. This power allowed him to stop the project one year after Badran began, ignoring the results of the competition of the Aga Khan by choosing an architect that he found most appropriate to give him the spectacle he desired. His strong influence on the law allowed him to change the building codes to American building codes, make the decision to build the project on a man-made island, and more importantly, hire a petroleum firm as the local architect despite their lack of architectural experience. This demonstrates how the social system comes into play in the execution of a large-scale project.

Through this project, we see a more intertwined relationship between the political, social, and economic systems than that of Burj al-Arab. Sheikh Hamad al Thani used his social relations to the disadvantage of local architects by hiring Qatar Petroleum as the local architect to collaborate with I.M. Pei; local architects never participated in the project. Furthermore, members of the ruling family were given important positions and tasks to take control of throughout the project, even though they lacked the necessary expertise to carry out their duties. This created a more intertwined relationship between the political, social, and economic systems than the previously explored case study.

 $<sup>^{128}</sup>$  I am talking specifically about sheikh Saud al-Thani, the Amir's cousin, and Sheikh al-Mayassa, his daughter.

Al-Hamra Tower, Kuwait<sup>129</sup>

"Its innovative design places Kuwait on the map as a center for business and creativity." 130

Khalid al Othman, CEO Al-Hamra Real Estate

Background:

In [1993], Firdous Cinema Company, a company composed of a small number of business elites, initiated the idea of developing al-Hamra and Firdous cinema project in a 30 story high commercial building. However, after various business and political elites presented projects that would represent Kuwait as a center for business and creativity, the same project - al-Hamra tower, designed by SOM - grew to a 412m building, taking its place as the future landmark of Kuwait city.<sup>131</sup> [Fig.20]

Choosing the architect:

When the project first started in 1992, local regulations forbade the construction of such large-scale projects. The client first approached Al- Jazeera consultants to prepare an architectural concept design for the project.

<sup>&</sup>lt;sup>129</sup> Most of the information in this section is gathered from personal interview with Ahmed Juyahim, Managing Director of Al-Jazeera consultants and Ahmed Hantoush, Project construction manager, Turner International

<sup>&</sup>lt;sup>130</sup> "Al-Hamra, Highly Anticipated in Kuwait, and Admires Worldwide" Al Hamra Newsletter (Kuwait, June 2009): 9

<sup>&</sup>lt;sup>131</sup> Niki May Young. "SOM designed Al Hamra carves a landmark to overlook Kuwait." World Architecture News (June 23, 2008) <a href="http://www.worlsarchitecturenews.com">http://www.worlsarchitecturenews.com</a> (accessed February 15, 2010)

"Our involvement in the project first started through social networking...the main client has always been a very good friend of mine. That is how we became the first and only local architects in charge of the project," says managing director, Ahmed al Juhayim, of Al jazeera consultant.

As initially conceived, the project would involve only a 30-story high commercial building on a site that was not always commercial in nature. The zoning laws in Kuwait city in this area were primarily residential at the time. 133 Ahmed al Juhayim, the Managing Director of Al-Jazeera consultants, and Waleed al Nisif, the main client and owner of Firdous Cinema company, both saw that a few commercial buildings had cropped up in the area, and requested that the government rezone the area to allow for a larger commercial project.

"It was not difficult to convince the government, since the minister of planning at the time was a good friend of ours," 134 says Juhayim.

After obtaining governmental approval, Firdous Cinema Company found another obstacle; it did not have the right to work on commercial real estate projects, as its license only permitted it to develop cinema or movie theatre-related projects. In order to move forward with the project, the company formed new real estate-focused entity called Ajial, and transferred the project to this new entity. [Fig.25]

In 2000, Ajial called for a concept design competition, requesting that two international consultants and Al Jazeera design a 30-story tower, shopping mall, and a multi-story car park. The client hired PM Stanley consultants, an American firm, to judge the submittals. When asked why they were the only local firm chosen for the competition, Al Jazeera said that when the project

<sup>&</sup>lt;sup>132</sup> Ahmed Al-Juhayim. Personal Interview, Tape recording. Kuwait, January 3, 2010.

<sup>&</sup>lt;sup>133</sup> Jaber al-Ali street (street adjacent to the project) had a number of old inhabited and abandoned houses

<sup>134</sup> Ahmed Al-Juhayim. Personal Interview, Tape recording. Kuwait, January 3, 2010.

moved to a competition-based project, "it seemed like Firdous Cinema Company felt the need to include us out of respect." However, on 21st November 2001, Stanley Consultants declared AlJazeera Consultants the first prizewinner [Fig 26, 27,28]. Al-Jazeera carried on with the design development of the tower, retail podium, multi-story car park, and permitted the project from the local authorities. 136

When the construction first began in 2004, the client noted that nearby cities like Dubai and Qatar had gained a great deal of international recognition for building some of the highest and most unique buildings in the world. According to the building regulations, skyscrapers in Kuwait could not exceed stories, so Al-Jazeera consultants formed a consortium with six other real estate companies to lobby for the right to build larger projects. All of the owners of these companies came from the same family or "friends that have studied or worked together before." 137

Later in 2005, due to an increase in covered area percentage, i.e. FAR, the authorities accepted approved the plan for a 100-story building as part of Kuwait's cityscape. 138 The project at this point was under what is known today to be the primary client behind the project, al Hamra real estate. Many clashes erupted between those who owned most of the shares in Firdous Cinema Company and Ajial. In order to avoid conflict, the Al-Marzooq family - the main shareholders of Firdous Cinema Company - decided to trade their shares in Ajial with Sheikh Mubarak Jaber al-Ahmed al-Sabah, the late Amir's son's shares at Firdous Cinema Company, giving Marzooq a controlling share of Firdous Company while Sheikh Mubarak al-Ahmed held a similar controlling share in Ajial 139 This exchange allowed each client to build their own administration in different companies, extracting both firms from the joint relationship. When contractors Al-Ahmadiya came

<sup>135</sup> Ibid

<sup>136</sup> Ibid

<sup>137</sup> Ihid

<sup>138 &</sup>quot;Al-Hamra...A Brief History" Al Hamra Newsletter (Kuwait, June 2009):14

<sup>&</sup>lt;sup>139</sup>Ahmed Al-Juhayim. Personal Interview, Tape recording. Kuwait, January 3, 2010.

forward asking the client - now Ajial - if they could own 20% of the shares of Ajial the client went ahead and opened another real estate company, now known as Al-Hamra Real Estate Company. 140

According to Al-Hamra magazine, because local consultants lacked experience in designing such extremely tall buildings, Al-Hamra Real Estate Company chose to preserve the commercial podium and multi story car park designed by al-Jazeera, but decided to hire a western firm to design the tower. Al-Jazeera's role changed from the project's leading architects to the local consultants supervising the project. The client turned to Turner International as the project's managers, and asked that they locate a foreign firm with the experience of designing a tower of this scale. 142

Turner International had a direct relationship with the client, managing time, quality, and the cost of Al-Hamra tower. Giving Turner International the power to choose a foreign firm represented a critical decision that changed the direction of al-Hamra towers from another commercial building to the future iconic structure of the country. One of Turner International first steps in choosing the firm was to launch a design prequalification process, inviting firms to submit a statement of qualifications in order to vet firms' qualifications [Fig.29].<sup>143</sup>

Even before going through such a process, Turner International knew exactly whom to choose as the leading designers. Having already worked with SOM on multiple projects such as Burj Khalifa in Dubai and other skyscrapers in Saudi Arabia, Turner asked SOM to propose a few concept designs to the client, confident that SOM had passed Turner International's prequalification process in the past and had the requisite experience in designing a project of this scale. The client selected one of the most challenging concepts that SOM proposed, which is currently under construction

<sup>140</sup> Al Hamra Real Estate: Main Client/developer

<sup>&</sup>lt;sup>141</sup> In order to get a loan from the National Bank of Kuwait, the client knew that the bank would feel safer and have more confidence in the project if it was built and designed by a firm that had the experience in building a 100-story high skyscraper.

<sup>&</sup>lt;sup>142</sup> Ahmed Hatoush, Personal Interview. Tape recording. Kuwait, January 6, 2010

<sup>&</sup>lt;sup>143</sup> Ibid. All Statements and forms used in this chapter such as statement of qualifications, prequalification criteria, and construction select list are taken from Turner International

today and will result in one of the tallest towers ever built as well as the tallest sculpted skyscraper in the world. [Fig.30]

### Conclusion:

The process and system of networking behind al-Hamra tower differs greatly from those of Burj al Arab in Dubai or The Islamic Museum of Art in Qatar. Most notably, the clients for the al-Hamra tower were business and political elites who used their social connections to influence the laws and changes that drove the project.

Unlike the earlier studied cases, the political system in Kuwait operates under a constitutional monarchy with a parliamentary system that acts as the legislative body. Therefore, members of parliament must agree on all the relevant issues before the ruler makes his decision. Since the public chooses these members, most of them come from local families other than the ruling family, so business elites can leverage their social relationships with other families to support their vision for the project. 144 For instance, the rezoning of the project site required strong connections in the municipality and the parliament. These same business elites used similar connections to change the maximum height for buildings in Kuwait City. These social ties played a critical role throughout the project; the initial architect admits that even his position in the project was highly dependent on such ties.

<sup>&</sup>lt;sup>144</sup> Gause, F. Gregory. *Oil Monarchies: Domestic and Security Challenges in the Arab Gulf States.* (New York: Council on Foreign Relations Press, 1994)

Although most of the clients in case of al-Hamra did not occupy a position of high political authority, 145 they still had sufficient power to influence the laws that threatened to block their initial vision of the project, and instead allow for something far more spectacular.

<sup>&</sup>lt;sup>145</sup> As mentioned earlier, Most of the clients are Business elites from Kuwaiti families such as Al Nisf, Al Othman, and Al Marzoug. The only client that has access to political authority is Shiekh Mubarak bin Jaber al-Sabah, the son of the late Amir Shiekh Jaber al-Sabah

#### CONCLUSION

I am aware that in focusing on large-scale projects in Qatar, Kuwait, Bahrain, and Dubai, my research has been limited to looking at only a specific type of Western firm that is currently building in the region. Thus, I do not address smaller western films that are currently building less significant projects and infrastructure in the region. Future studies on the relationship between smaller western firms, local practices, and the client might provide different answers than what my study has concluded.

However, some of the issues the strategy that I have taken to follow the domination of Western firms and the absence of local architects from building major projects in the studies city-states has uncovered are that most major projects within these city-states have been autocratically produced. Figures of authority are aiming for a common vision that focuses mostly on an image that fits the global scene, a spectacle. However, what they do not realize is that there is a downside to this spectacle. One of the most important downsides is the weakening of the local architecture profession. Their actions have created conditions for architects to head into two different directions other than design that I will discuss further below.

No matter what the political system is within each state, or the process of decision-making behind each project, the studied cases reveal that clients from various backgrounds succeed in pushing through their projects because they hold sufficient authority to influence the laws and the project's direction. Political rulers and business elites have used the power of architecture's physicality to their own advantage in conveying their visions of the image they want to convey to their citizens and the world. Those common visions have placed each of these studied city-states on the world map.

In order to fit into the modern global scene, major clients have aimed to create grand spectacles that convey images of power, wealth, culture, and luxury. This has resulted in the strong presence of major western firms, but more importantly, star architects with signature styles.

Architecture has become a series of collectables that each state uses to "one-up" its neighbors. In order to stand out from the rest of the world – or simply the other states in the region – massive, iconic projects are being built, many with price tags that exceed \$1 billion, at an extremely fast pace. 146

According to business and political elites, their actions have benefitted their own citizens and states. While figures of authority have fixated on competing against each other for maximum branding recognition, they do not realize that they have been competing for an image that has resulted in tremendous downsides to their own people, mainly local architects and their practices. Yes, they have produced architecture that is not environmentally or financially sustainable, as witnessed today in different parts of Dubai, 147 however, I believe, more importantly, their efforts have resulted in the weakening of the local architecture profession within each state.

Most local architects today have taken one of two different directions. The first direction is working for the government, where they receive a higher salary in a more relaxed working environment. Local architects work on minor renovation and design projects, where the work environment lacks motivation, challenge, and the essentials for development. The second direction that local architects have taken is working as consultants, whose local license allows them to collaborate with higher-profile western firms. In providing these kinds of job opportunities in order to satisfy their citizens, the state has de-incentified local architects from improving their

<sup>&</sup>lt;sup>146</sup> "We need to join the global economy. We can't wait because we are already behind, and speed is our biggest challenge." Ahmed Kana and Aran Keshavarzian. "The UAE's Space Race: sheikhs and starchitects envision the future" Middle East Report (2006): 34

 $<sup>^{147}</sup>$  While making this statement I am looking mainly at urban scale projects such as the palm island and the world islands in Dubai.

<sup>&</sup>lt;sup>148</sup> These points go back to the comments made by Ibrahim Jaidah in Chapter II.

design skills and professional capabilities as architects. These job opportunities that the state has offered to local architects are known as masked unemployment.

Furthermore, while exploring the three case studies of the most iconic projects within the studied city states, one cannot help but observe that authority figures have found ways to carve out the few opportunities local architects have at inclusion on major scale projects. They have found ways around the laws that require collaboration of local architects with western firms during the process of developing a project. Clients have used social relations to avoid hiring local firms by hiring non-architectural firms like the case of Qatar, or by hiring already locally authority have weakened the local economy, reducing opportunities for local architects to excel in his/her expertise and build up a reputation for excellence in projects of this scale. Furthermore, by allowing western firms to produce mega scale projects, the smaller residential and commercial projects designed by local architects become lost in the shadows of these mega projects, dwarfed by the much larger projects built by western firms. This has taken away any chance for local architects to stand out within their own cities, creating severe future implications for the local architectural profession.

As this thesis shows, Western firms have been building in the Gulf region since the mid 20th century. The reasons for their presence are not only the outcome of the clients' actions, but also, as mentioned by Jaidah, the unavailability of local architects from the private sector at a time when each city-state was ready to develop architecturally and urbanize. Therefore, since local architects are currently available in the architecture scene, owning their own practices, my future implications are not ones that would expect the absence of Western firms from the region, but one in which local architects can be professionally and creatively challenged benefiting as much as Western firms from the contemporary architectural scene. Business and political elites should adopt ways to allow local architectural knowledge and expertise to participate in the projects that

will define each city-state. Can this be done by changing the laws and regulations of the state, where local firms gain a footing in their own architectural scene while still enjoying the experience and benefits of collaboration with western firms? Isn't it time for practicing local architects to voice their concerns on the effect these state of affairs are having on their practices, while challenging themselves through architectural design?

Mishari Al-Naim, an associate professor of architectural criticism at King Faisal in Saudi Arabia points out,

"Local architects are not challenging themselves in building strong, highly skilled architecture practices that will be able to compete globally... they do not have the drive to learn from the outcomes of major Western firms.<sup>149</sup>"

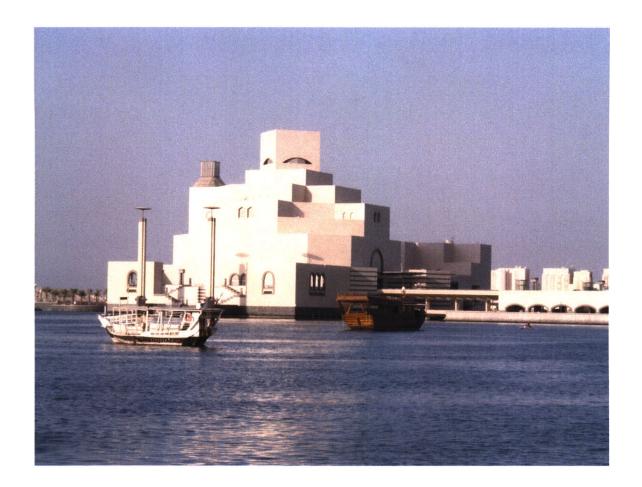
Therefore, local architects must find ways to push in competing with western firms on these large-scale projects. There are just some of the possible question that one can start asking to enable local architects practice to develop themselves, while contributing to the development of each city state's architectural scene.

<sup>&</sup>lt;sup>149</sup> Mishari al-Naim states that this results from the confidence local architects have in their skills and capabilities, and the satisfaction they also have in the projects that they are being hired to work on without the help of Western firms.

Figures 18-30 Figure 18



Burj al-Arab, Atkins Architects, Dubai, UAE 1991-2001 Image from http://illegal-crew.org/dubai-7-star-hotel-ixs/

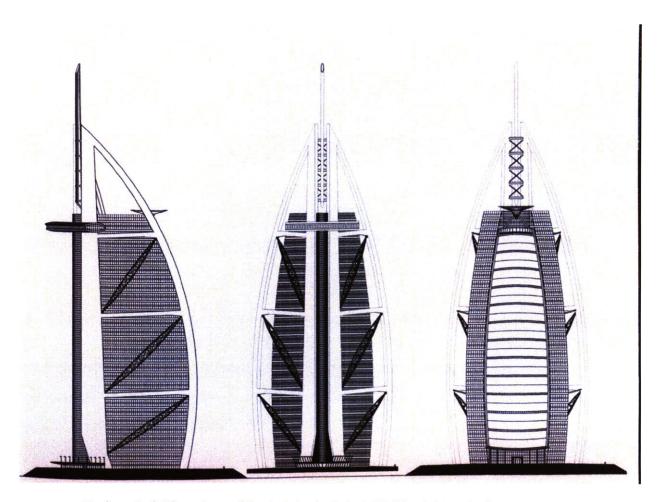


Islamic Museum of Qatar, I.M. Pei , Qatar 2007 Image from, Philip Jodido and Lois Lammerhuber, Museum of Islamic Art: Doha/Qatar (Munich: Prestel . 2008)



Al-Hamra Tower, Skidmore, Owings and Merrill (SOM), Kuwait From Al-Hamra Newsletter, October 2008, Kuwait

Figure 21



Modern Sail, Elevations of Burj al-Arab, Dubai, UAE by Atkins Architects Image from 1000 Arabian Nights with Burj Al-Arab (Cyprus: ABC Millenium, 2000)

Figure 22

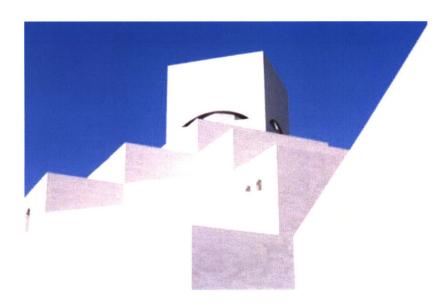


Line Drawings of Iconic buildings Image from 1000 Arabian Nights with Burj Al-Arab (Cyprus: ABC Millenium, 2000)



13<sup>th</sup> century Sabeel in Central Courtyard, Mosque of Ibin Tulun, Cairo (876-879) Image from http://www.lts-orient.ch/lts-eng/staedte\_am\_nil/kairo/index.htm

Figure 24



Central Tower, Museum of Islamic Art, I.M. Pei , Qatar 2007 Image from, Philip Jodido and Lois Lammerhuber, Museum of Islamic Art: Doha/Qatar (Munich: Prestel . 2008)



-17797/1A/4 a

### حضرة السيد/ مدير عام البلحية

المحترم

الموضوع : طلب شركة أجيال العفارية الترفيهية العوافقة على التصساميم الخاصسة بإنّات مجمع تجاري على عثار سينما المحسراء والفسردوس وموافست السيارات التابعة لها بعنطقة العقوع الشرقي.

البشاوة : التحسب مرجسع (أت/١٠/١/١٠/١ السورخ فسسي ٥ ١٤٨٢ م ٠ ١٠٠١/١٠ السورخ فسسي

### تنبث . ـ تحية وبعد،،،

رُ فَرَ اللَّهُ قُولُو الْمُجلسِ اللَّهِ عِلَى وَقِيمَ (مِمْهُ أَنِّ ١٧٢/٨/١٧٦ مَدْ) المُعتَّفِينَ بِسَارِيخِ ٢٥/مورم/٢٢ ١هـ الدوافق ١/٤/٠٠ م يقضي بما يلي :-

أولاً: الموافقة على الطلب المقدم من/ شركة السينما الكويتية الوطنية لتطوير عقار مسينما الحمراء والفردوس وذلك بالهدم وإعادة البناء بنسبة تجارية (٥٢٠٪) الإقامة مجمع تجاري يشمل على الاشطة التالية:-

١- سينما ومسارح ٢- قاعة باتوراما ٣- صالات ألعاب أطفال ٤- صالات العساب فيديو والعاب الكترونية ٥- العاب طاوله ٦- محلات بيع وتسجيلات فيديو ٧- مكتبة أطفسال ٨- مكتبة كمبيوتر ٩- محلات تجارية ١٠- مكاتب ١١- قاعة جولسف مصغره ١٢- نادي صحي رياضي للرجال والسيدات ١٤- صبالة بلياردو كسره طاولسه ١٥- صالات عرض ١١- قاعسة احتفسالات ١٧- كافتيريسا ومطسأتم وجسات مسريعة ١٠- صكاتب خاصة للشركة ١٩- مواقف للميارات .

ثانياً: تقوم الشركة صاحبة العلاقة ببناء مواقف عامة للمبيارات متعددة الابوار على موقسع ما المراقب المنطقة المخصص لذلك من سرداب وخسسة أدوار على نفقتهم ليصبح مراقب عامة تديرة شركة أجيال العقارية الترفيهية وبسندات المسيعار ششركة أدارة المراقبة

P.O. Box 1674 Safat, \$18017 Kuwait Tel.: 2432900 Fax: 2404593



Proposal for Al-Hamra Towers, HLW Image from *"Al Hamra Project...A Brief History"* Al-Hamra Newsletter, June2008, Kuwait



Proposal for Al-Hamra Towers, Langdon Wilson Image From *"Al Hamra Project...A Brief History"* Al-Hamra Newsletter, June2008, Kuwait



Winning proposal for Al-Hamra Towers, Al Jazeera Consultants Image From *"Al Hamra Project...A Brief History"* Al-Hamra Newsletter, June2008, Kuwait

# 6. Consultant Selection Checklist

#### **Consultant Selections**

The following checklist contains lists of design consultants. Carefully review your project requirements to understand scope required for various consultants. It is important to include into the Pro-Forma since their expertise is valuable to the success of the project.

#### Standard

Description	Notes/Details
Architect	Architect of Record (responsible for design)
Code Consultant	Life/safety issues, Building classification, Fire, ADA
Geotechnical Engineer	Soils Report and Borings
Civil Engineer	Civil design for site development and surveying
Structural Engineer	Structural systems including seismic design
Mechanical Engineer	Mechanical systems design
Plumbing Engineer	Plumbing systems design (usually with Mechanical)
Fire Protection Engineer	Usually part of Plumbing or design/build by sub
Electrical Engineer	Electrical systems design
Landscape Architect	Landscaping systems (separate from Architect)

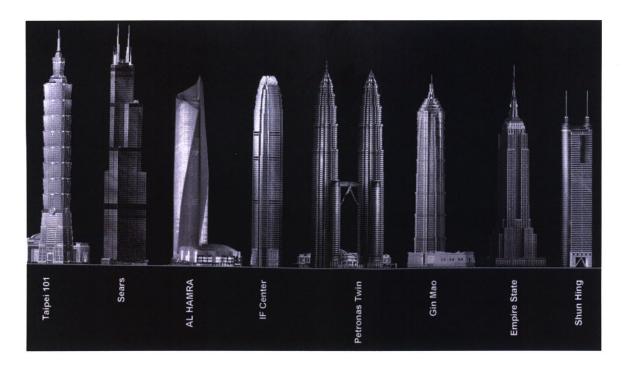
### **Specialty Consultants**

Description	Notes/Details
Design Architect	Special design to compliment Program Architect
Interior Design	Special design for the interior finishes scheme
Elevators	Vertical Transportation consultant
Food Service or Kitchen	Food Service consultant (separate from MEP)
Acoustical Consultant	Acoustical design evaluation and testing
Lighting Consultant	Specialty lighting systems (not part of Electrical)
Security Consultant	Special design for security, card readers, cameras
Audio/Visual Consultant	Special design for A/V systems, phone/data
Parking Consultant	Evaluates required spaces, parking controls
Signage/Graphics	Special design for building graphics and signage
Pools/Water Features	Special consultant for water feature elements

### Page 1 of 3

Consultant and Architects Checklist From Turner International Ahmed Hantoush, Personal Interview January 2010, Kuwait

Figure 30



Al-Hamra Towers, one of the tallest skyscrapers in the world Image
From *"Roof heights Comparison with Completed Skyscrapers"* Al-Hamra Newsletter,
October 2008, Kuwait

#### **BIBLIOGRAPHY**

- "2009 Best Tall Building Middle East & Africa." Council on Tall building and Urban Habitat. http://www.ctbuh.org (accesses February 9, 2010)
- Al Asfoor. Personal Interview, Tape recording. Kuwait, July 21, 2009
- Āl Maktūm, Muh ammad ibn Rāshid. 2006. *Ru'yatī: al-tah addiyāt fī sibāq al-tamayyuz*. Dubayy, al-Imārāt al-'Arabīyah al-Muttah idhah: Mūtīfayt.
- Al Mutawa, Saleh Abdulghani. 1994. History of architecture in old Kuwait city, and the influence of its elements on the architect. Hawalli, Kuwait: S. Al-Mutawa.
- Al Qallaf, Saleh, Personal Interview. Tape recording, Kuwait, July 20, 2009
- Al Rostomani, Ahmed, Personal interview. Tape recording. Dubai, UAE, August 7, 2009
- Al-Rostomani.. 2009 Gulf and its Architectural Heritage
- Baring, Louise. "Scandal of the sheikh and his £1bn shopping spree" Telegraph magazine, UK (April 2005) <a href="http://www.telegraph.co.uk">http://www.telegraph.co.uk</a> (accessed March 8, 2010)
- Bouman, Ole, Mitra Khoubrou, and Rem Koolhaas. 2007. Al manakh. Volume, Special issue. Netherlands: Stichting Archis.
- Cheicka, Ahmed, Personal Interview. Tape recording. Doha. Qatar, August 5, 2009
- Chew, Khuan and Uschi Schmitt. 2006. 1001 Arabian Nights at the Burj Al-Arab. Cyprus: ABC Millenium,
- Cottrell, Alvin J. 1980. *The Persian Gulf States: a general survey*. Baltimore: Johns Hopkins University Press.
- Ciuffu, Valentine. "Qatar Museum Authority Unveils Jean Nouvel Design for New Museum" Qatar art daily (March 24, 2010) <a href="http://www.artdaily.org">http://www.artdaily.org</a> (accesses March 30, 2010)
- Davidson, Christopher M. 2008. Dubai: the vulnerability of success. New York: Columbia University Press.
- Demirtas, Aslihan, Personal Interview, Tape recording, New York City, NY, March 17, 2010
- Elsheshtawy, Yasser. 2010. Dubai: behind an urban spectacle. New York: Routledge.

- Elsheshtawy, Yasser. 2008. *The evolving Arab city: tradition, modernity and urban development.*London: Routledge.
- Gause, F. Gregory. 1994. Oil monarchies: domestic and security challenges in the Arab Gulf states. New York: Council on Foreign Relations Press.
- Golden, Lynn Lara. "Construction Boom Tops \$2.4 Trillion in Gulf Region." *Ame infro* (November 2009). <a href="http://www.ameinfo.com">http://www.ameinfo.com</a> (accessed April 10, 2010)
- IB-ME Staff "Emaar Properties Unveils Luxury Armani Residences," *Burj Khalifa*, (2009) <a href="http://www.burjkhalifa.ae">http://www.burjkhalifa.ae</a> (accessed January 20, 2009)
- Jaidah, Ibrahim and Malika Bourennane.. 2009. The History of Qatari Architecture. Milan: Skira,
- Jaidah, Ahmed, Personal Interview, Tape recording, Doha, Qatar, August 5, 2009
- Joudar, Ahmed, Personal Interview, Tape recording. Bahrain, August 4, 2009
- Lara Lynn Golden. "Fatsest Growing Real Estate Market in the World." *AME info* (March 2007), <a href="http://www.ameinfo.com">http://www.ameinfo.com</a> (accessed April 5, 2010)
- Kana, Ahmed and Aran Keshavarzian "The UAE's Space Race: sheikhs and starchitects envision the future" Middle East Report (2006): 34-40
- Keshri, Gyanendra. "Heart of Doha Project Stone to Be Laid ON Jan 13" *Qatar Tribune*. http://www.gatar-tribune.com (accessed December 11, 2010)
- Koolhaas, Rem. 1994. *Delirious New York: a retroactive manifesto for Manhattan.* New York: Monacelli Press.
- Kotajotun. "Megastructure: Construction of Burg al-Arab, part 1" youtube. (March 11, 2008) <a href="http://www.youtube.com/watch?v=ow321Ximh70">http://www.youtube.com/watch?v=ow321Ximh70</a> (accesses January 28, 2010)
- ------. 2008 Kuwait Engineering Office and Consultant Houses Guide 2008-2009. Kuwait: Admire 4c Group.
- Mohammed, N. S. A. (2003). *Population and development of the Arab gulf states: the case of Bahrain, Oman and Kuwait.* Aldershot Hampshire, UK, Ashgate.
- Nicolai, Ouroussoff "In Qatar, an Art Museum of Imposing Simplicity" The New York time, (November 23, 2008) <a href="http://www.nytimes.com">http://www.nytimes.com</a> (accessed March 10, 2010)
- Parker, Geoffrey. 2004. Sovereign city: the city-state through history. Globalities. London: Reaktion.
- Peck, Malcolm C. 1997. *Historical dictionary of the Gulf Arab states*. Asian historical dictionaries, no. 21. Lanham, Md: Scarecrow Press.

- "Registration of Foreign companies Rise in UAE." *Ministry of Economy, UAE* (December 2009) http://www.government.ae (accessed April 10, 2010)
- Rehman, Aamir A. 2008. Dubai & Co.: global strategies for doing business in the Gulf states. New York: McGraw-Hill.
- Sadik, Muhammad T., and William P. Snavely. 1972. *Bahrain, Qatar, and the United Arab Emirates:* colonial past, present problems, and future prospects. Lexington, Mass: Lexington Books.
- "Sheikh Saud al-Thani Biography" Al Zawya official site. <a href="http://www.zawya.com">http://www.zawya.com</a> (accessed April 5, 2010)
- Sick, Gary G., and Lawrence G. Potter. 1997. The persian gulf at the millenium: essays in politics, economy, security, and religion. London: Macmillan
- "UK-based Zaha Hadid Architects wins 'Business Bay' Tower Design Competition." *AMEinfo* (June 2006) <a href="http://www.ameinfo.com">http://www.ameinfo.com</a> (accessed December 20,2009)
- Young, Niki May "SOM designed Al Hamra carves a landmark to overlook Kuwait." World Architecture News (June 2008) <a href="http://www.worlsarchitecturenews.com">http://www.worlsarchitecturenews.com</a> (accessed February 15, 2010)
- Zahlan, Rosemarie Said. 1979. The creation of Qatar. London: Croom Helm.
- Zahlan, Rosemarie Said. 1989. The making of the modern Gulf states: Kuwait, Bahrain, Qatar, the United Arab Emirates, and Oman. The Making of the Middle East. London: Unwin Hyman.
- "Building a Future" Middle East Architect Magazine (May 2009) 25-28.
- "Building a Future" Middle East Architect Magazine (May 2009) 25-28.
- "Competition for the Architectural Review of Qatar's Museum of Islamic Art" Architectural review. (May 2010) <a href="https://www.findarticles.com">http://www.findarticles.com</a> (accessed April 10, 2010)
- "The Museum of Islamic Art" Arc space <a href="http://www.arcspace.com">http://www.arcspace.com</a> (Accessed March2, 2010)
- -----. "Al-Hamra, Highly Anticipated in Kuwait, and Admires Worldwide" Al Hamra Newsletter (Kuwait, June 2009)
- -----. "Al-Hamra...A Brief History" Al Hamra Newsletter (Kuwait, June 2009)