# THE MEETING POINT

RETHINKING PUBLIC SPACE IN THE CITY OF JEDDAH, SAUDI ARABIA

by Reem Abuzeid

B.A. Interior Design
Dar Al Hekma College, 2007

Submitted to the Department of Architecture In Partial Fulfilment of the Requirements for the Degree of

MASTER OF ARCHITECTURE AT THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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#### **Abstract**

Can urban intervention affect social behaviors within a city? And if so, what happens when that city is partial to cultural restrictions? The target in question here is the city of Jeddah, Saudi Arabia. The dilemma is that the city has no true form of public space; despite having spaces designated as such.

The lack of public space can be related to two main aspects linked to the nature of the city:

<u>01. Gender Segregation:</u> Questioning what actually IS public if both males and females can't access these spaces freely.

<u>02. The development of the city since the oil boom:</u> Looking at social, economic, demographic and urban ramifications.

My thesis serves as a contribution to the social needs of the Saudi society in Jeddah today. By questioning the issue of 'publicness' I intend to analyze how the development of the city has been affected by the cultural restrictions imposed upon it.

Thesis Supervisor: Nasser Rabbat

Title: Aga Khan Professor of Islamic Architecture, MIT

### ACKNOWLEDGEMENTS

To my committee:

Nasser, for your time, interest and advice throughout this process Michael, for your advice and sense of humor Ma'an, for your support throughout the past 6+ years

To my parents + siblings:

For your constant love and support, thank you for believing

To my brother Faris:

For your help during the final hours

And to ry:

For being there when I needed you the most

+ to all the friendships made at MIT; Duncan, thanks for lending an ear!

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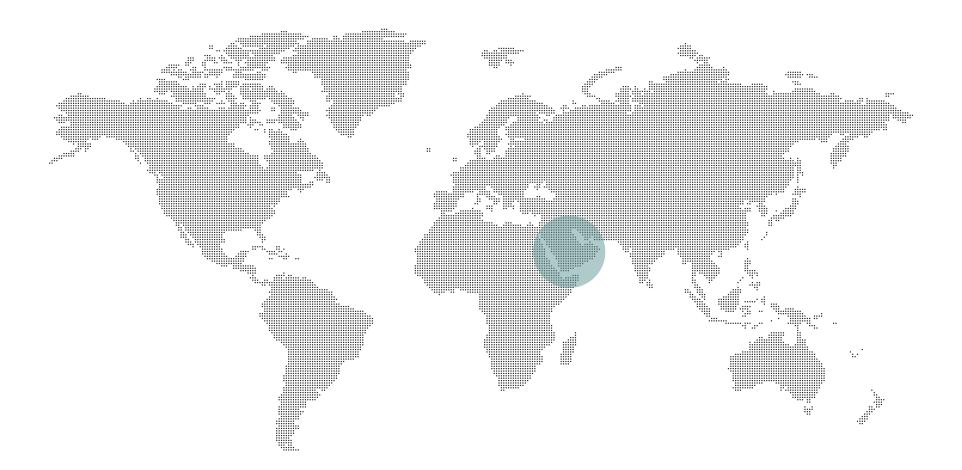


# THE MEETING POINT

RETHINKING PUBLIC SPACE IN THE CITY OF JEDDAH, SAUDI ARABIA



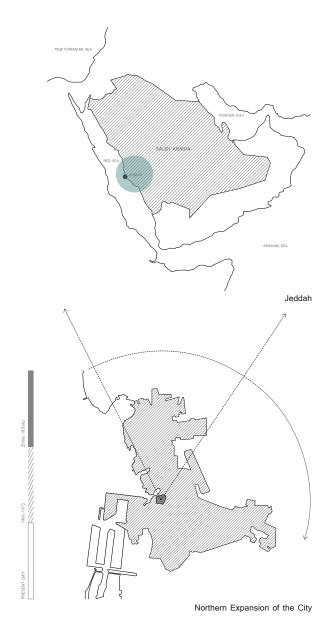
INTRODUCTION



### CONTEXTUAL DOMAIN

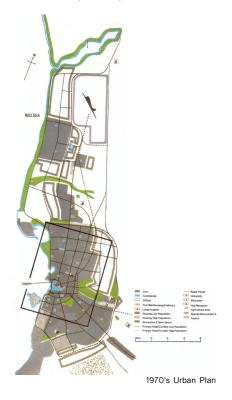
The question of 'What is Public' has different meanings when it comes to different societies; there are several social implications of public space within each culture and each city, and the non-existence of public space may sound like a radical notion to most urban settings although it is a fact that this problem does exist. This is, for instance, the case of the city Jeddah. There are several contributing factors to the shrinkage of public space in Jeddah, although two of the most evident are gender segregation in several public spaces throughout the city and the rapid evolution of the city during the 1980's oil boom.

Jeddah started off as a walled city, the walls were constructed in 1490 as a defence mechanism against the Portuguese. The original urban layout of old Jeddah – currently known as 'Al Balad' – was based around a central nucleus originating on the coast of the Red Sea and rippling out into the desert as the population grew. In the 1940's the city walls were torn down to allow the northern expansion of the city, with them went Jeddah's old identity as the town began to advance across the sand evolving into a modern city. Today, Jeddah is considered to be a city of striking variety with a combination of seascape and cityscape uniting the ancient with the modern. Despite these aspects the city does not function well in terms of providing a comprehensible amount of public space that caters to all of it's people.



13

The public markets of the old city functioned very well in terms of providing public space; the souqs were not only a space for trade but also a cultural hub where people gathered, it was also a place that did not segregate men and women; making it completely open to the public at all times. The souq is one of the last standing notions of public space the city fosters, my aim is to dissect the meaning of the souq in order to understand how it functions within the social network as well as observe the activities that take place there other than trade in order to design a new form of public space that caters to the public.





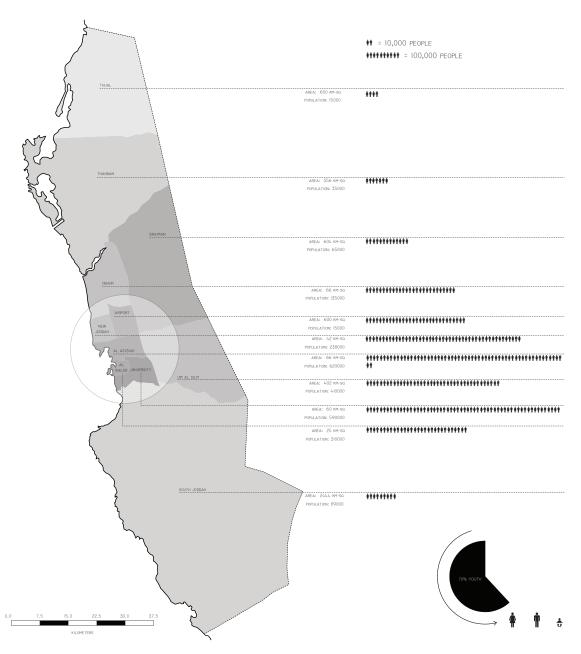


Old Jeddah

### GROWTH + POPULATION

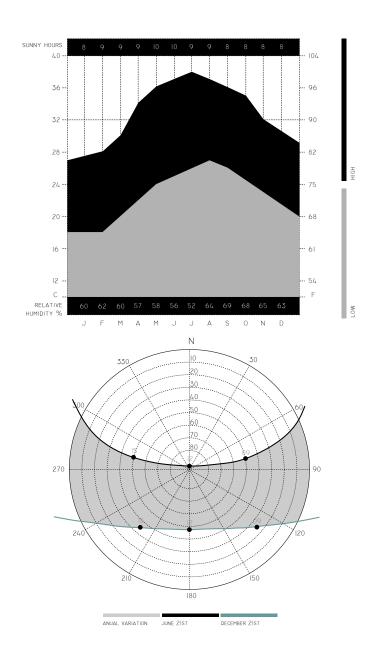
With a population of 3.4 million, about 70% of the population of Jeddah is between 18-35 years of age, which means it is a young society. Through observation, the public does not have clear spaces that nourish the enormous amount of cultural collection that has been inserted into the city over the years through the trade port, not to mention people migrating through Jeddah in order to perform the Hajj pilgrimage every year.

The city is subdivided into 11 divisions – I'll be focusing on al Aziziah division because of the high population and location along the coast, as well as it's close proximity to Al Balad.



## CLIMATE

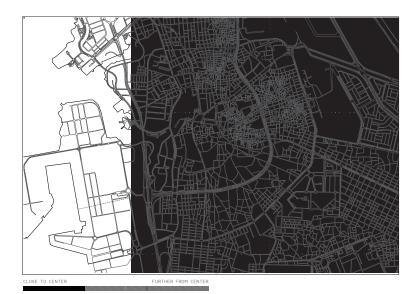
The climate in Jeddah is mostly hot and humid reaching highs of 45 sometimes 50 degrees Celsius in mid August, and lows of about 18 degrees in January. The city experiences these severe weather conditions year round, and without careful consideration open public spaces could end up deserted areas with the only visitor being the harsh mid-day sun.



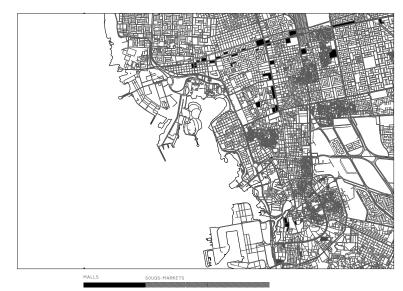
### PUBLIC SPACE IN JEDDAH

Public space in Jeddah is lacking. The issue is not that public space does not exist, but it is mainly that there are numerous areas masquerading as space for the public. In order to understand this notion, one must go back to the customs and traditions of the city that involve gender segregation in many areas that are generally considered public. One aspect is the restriction of the presence of single males at certain times of the day in a number of areas; similarly females suffer the same consequences in different circumstances. Places such as malls and restaurants experience these regulations as well. Looking back at the old customs of the city, segregation was not as apparent as it is today, as many observers assert. After discussing this issue with my great aunt she attributes it to the fact they were "simpler times" she then added "the city was very small, everyone knew each other and we all acted as family" this also provides some explanation as to why segregation was not an issue, since everyone was considered "family". She continued to say that when the city started growing people moved further out from the center of town that contributed to "loss of the connection" and thus segregation came into play.

Furthermore, by looking at the expansion of the city, rural migration from the more conservative northern parts of Saudi Arabia is also a major contributing factor to the implementation of gender segregation in Jeddah.



Residents of old town moving away from center

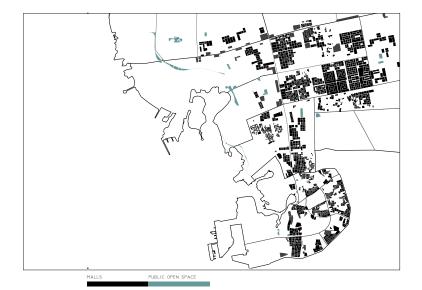


Distribution of malls vs markets in Al Balad + Aziziah divisions

i (International, 1980)

Public space is defined as a social space that is open and accessible to all, regardless of gender, race, ethnicity, age or socioeconomic level. 
This issue brings up the question of what exactly is public if the publicmales and females—can't access these spaces freely at any time.

On parallel grounds, the evolution of the city has contributed to the deterioration of public space as well. The 'souq' or traditional public market places were the heart of the old city mainly because they were accessible to all and they performed as the hub of the city economically, culturally and socially. Therefore, the souq is a space that contributes to society as a whole. While many markets still exist within the typology of the city, today most of them are located within the historic district 'Al Balad' or 'Old Jeddah' and they are open to the public. Although with the building boom, the concept of a public market space has morphed into mainstream malls that are rapidly multiplying by the minute. This adds to the decline of one of the last notions of 'Real' public space we have left.



MALLS SOUGS-MARKETS RESIDENTIAL FUBLIC OPEN SPACE

i (Wikimedia, 2011)

## CONCEPTUAL APPLICATION

The conceptual application is based on two main strategical moves: <u>The Social Strategy</u>, targeting gender segregation; and the <u>Urban Strategy</u>, targeting the city.

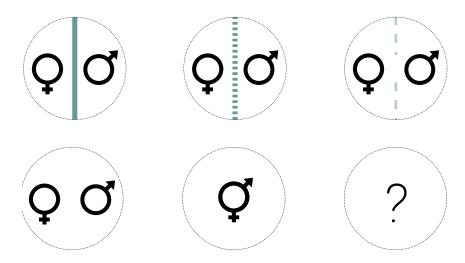


O1. The Social Strategy O2. The Urban Strategy

## • The Social Strategy:

The goal is not to eliminate these gender boundaries completely, but to maintain some familiarity within the social context. I chose to do this by learning from the past in order to adapt to the demands of contemporary life.

The two functions that were always present in the old Islamic city were the souq and the mosque. These were the places that people would go to socialize with one another. My strategy is to introduce two new functions (a community park and an existing open air art museum) in order to encourage gender integration in a familiar way.



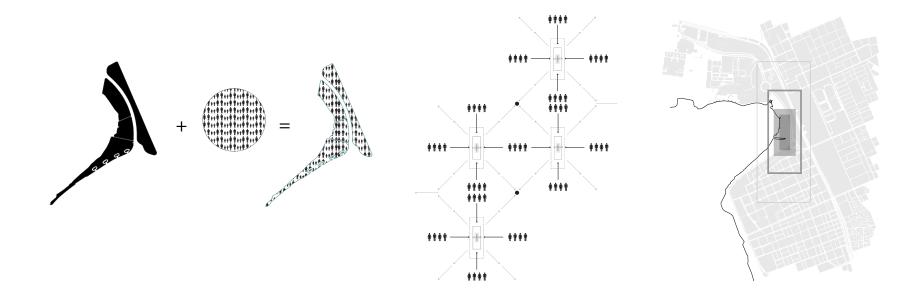
Maintaining familiarity within the social context without completely eliminating the boundaries



Introducing programmatic functions that encourage gender integration in a familiar way



- The Urban Strategy:
- 01. Programatizing a large open space that is not being used to its full potential
- 02. Creating a series of interconnected social hubs within that space
- 03. Giving it the potential to act as a center for cultural collection



الحيز العام و السوق

PUBLIC SPACE AND THE SOUQ

#### HISTORICAL BACKGROUND

The souq is a public market place that denotes the commercial exchange of goods and services. The notion of the souq can date back to pre-Islamic times and has evolved tremendously ever since. The concept is significant to the commercial activity of pre-Islamic and Islamic civilizations through the transport and exchange of merchandise by the travelling traders. Islamic economy was largely a market economy, and Islamic tradition holds that Makkah was inhabited and controlled by the merchants that operated within the structure of the public markets. Some examples of trade cities in Islam are:

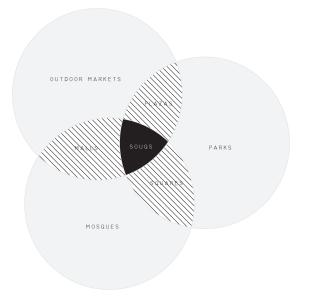
Aleppo, Syria; Isfahan, Iran; and Douha, Qatar

These cities are some examples of how sough performed as a place for trade, providing wealth for the city, they also created an active space for many additional functions such as lodging for visitors to the town, stables and sometimes a mosque and a public bath. In addition to these functions one must not overlook the concept of creating a main gathering space that brings people together from diverse backgrounds and allows them to share ideas as well as create a melting pot for cultural exchange.

### A MULTI-FUNCTIONAL SPACE

In order to understand the meaning of public space one must look at the different spaces that are considered as public domain. These spaces consist of: outdoor markets, plazas, squares, malls and in Islamic regions mosques and souqs. After analyzing the souq and its functionality, it is safe to say that it is a space that includes the majority of these functions that are embedded within the typology of the city. This makes it a multiuse space that caters to the community as a whole.

The aim of the project is to incorporate the Souq as a building block to the formation of new public space in the city, and from there introduce new functions that will enable gender integration in a familiar way.



i(Bianquis, et al., 2011)

### SOUQ TYPOLOGIES

### Linear

The linear souq is relatively simple, it typically consists of a long narrow street linking shops on either side.

### Enclosed/Courtyard

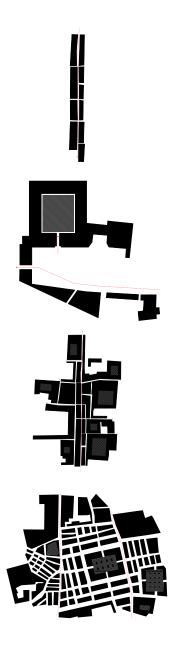
The enclosed souq typically resembles a self-contained village with a main gate. It contains a number of activities such as an open courtyard space with surrounding stores, lodging and stables. Some other terms used for this type of soug are: khan, wikalah, raba'a, rubat.

### Cluster

The cluster souq consists of a number of buildings devoted to separate trade that is organized around dome-covered courtyard spaces. This type of organization typically contains a mosque as well as lodging.

#### Linked

The linked souq is mainly a combination between the linear, cluster and courtyard typologies. A narrow street connects the different buildings that house numerous activities. The hatched areas represent courtyard spaces typically lined with arcades.



### CASE STUDIES

Through my research I looked at different types of market typologies around the Islamic world. Each of these examples reveal how the space facilitates human interaction in different ways. By looking at each of these examples I've extracted three major points that make a successful public space.

- 01. Climatic Comfort. Soug Wagif: Al Douha, Qatar
- 02. Facilitates Human Interaction: Soug Aleppo: Syria
- 03. Responds to Urban Surroundings: Bazaar of Isfahan

#### · Souq Waqif: Al Douha, Qatar

Souq Waqif dates back to at least one hundred years; it has been recently restored back to its original state, and is considered an urban revitalization project situated along one of the banks of the river. It is now a traditional open-air public space that is used by shoppers, tourists, merchants as well as the local residents. With an area of 164,000 m2 the space is composed of a number separate buildings with interconnecting streets, which makes it fall under the cluster organization. The space is designed to house numerous activities starting with the main market, mosques, restaurants, hotels, poetry rooms, galleries, and stables.

The climate in Doha is extremely arid and temperature varies throughout the year from 12°C in January and 45°C in July, during most of the year the weather is dry and dusty. The rain is scarce, and humidity is high during the summer. With such harsh conditions it is interesting to look at such a space in terms of climatic comfort. The design of the souq is based around densely packed buildings; this helps a lot in terms of providing shade for pedestrians, the narrow streets and covered walkways also play a role as well. Also, a number of buildings are equipped with air-cooling towers; this ancient device collects the wind and circulates it into the lower levels of the building without the use of electricity.

i (Radoine, 2010)

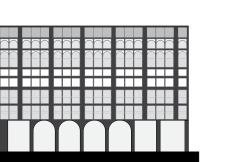








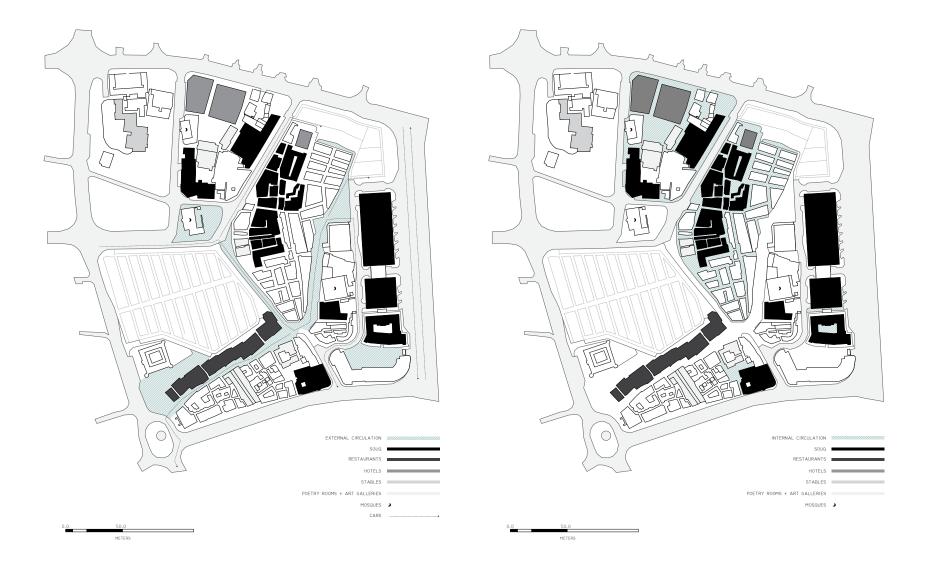








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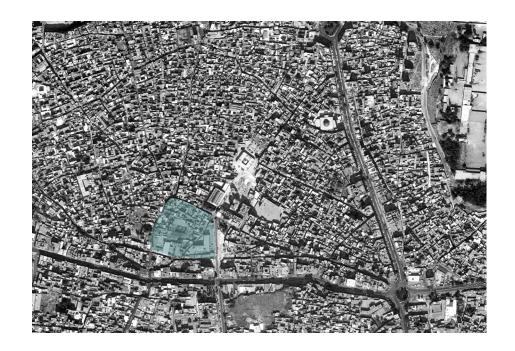


### Souq Aleppo: Syria

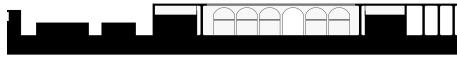
The souq of Aleppo is a good example of a multi use space. It contains a number of 'khans' or lodging for travelling merchants (01). These are usually courtyard spaces with surrounding arcades. Other functions include a mosque (02), 'madrasas' or schools (03) and shops.

What is interesting in this typology is the combination of a number of courtyard spaces that are linked together through a central street that branches out and connects different parts of the market. The courtyard spaces help breakdown the large area and creates more intimate spaces for human interaction, also the narrow and bent streets create the opportunity for social exchange along the storefronts.









0.0 25.0

### Bazaar of Isfahan: Isfahan, Iran

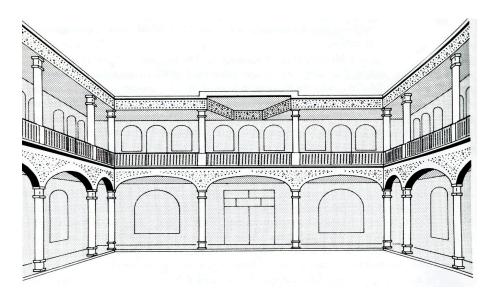
The bazaar of Isfahan is one of the oldest and largest bazaars of the Middle East, dating back to the 17th century. It is composed of a chain of domed with a large courtyard interconnected with a vaulted two-kilometer street linking the old city with the new. The bazaar opens out into the Nagsh Jehan Square; which is situated at the center of the city and has an area of around 90,000 m2, one of the largest in the world.

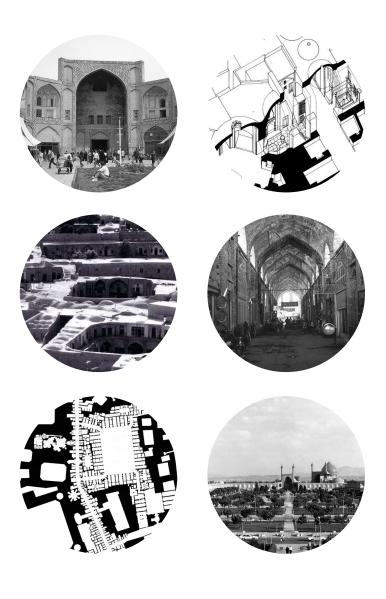
The Bazaar exemplifies an intelligent response to its urban surroundings by acting as a main gateway to the square; it also directly mirrors the grand mosque on the adjacent side. Furthermore, the series of domed spaces create interconnected buildings that are linked with the city.



i (Wikimedia, Naqsh-e Jahan Square, 2011)









THE SITE





### EXISTING CONDITIONS

The chosen site is located in Al Aziziah division along the bay of the Corniche.

The site was divided into four zones in which will later designate the different programmatic functions that will take place:

### Zone 01:

An existing Open Air Art museum that was developed during the 1980's in an attempt to create public open space for the surrounding residential buildings. Due to the inadequate shading and lack of proper seating the museum is mostly deserted during the day, but once the harsh sun starts to settle residents from the surrounding neighborhoods make use of what is available.

### • Zone 02:

Existing neighborhood mosque.

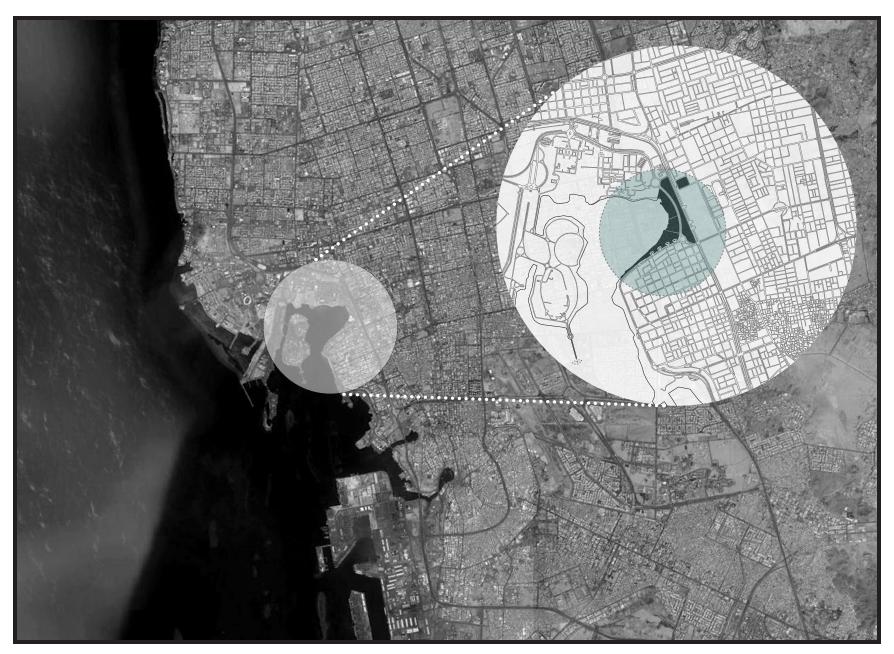
### • Zone 03:

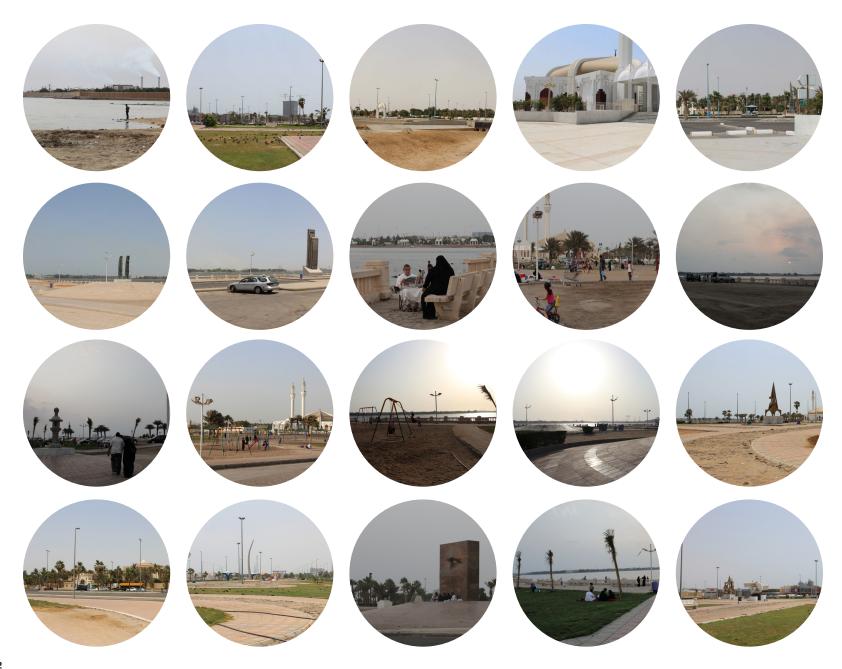
This area is mostly deserted at all times.

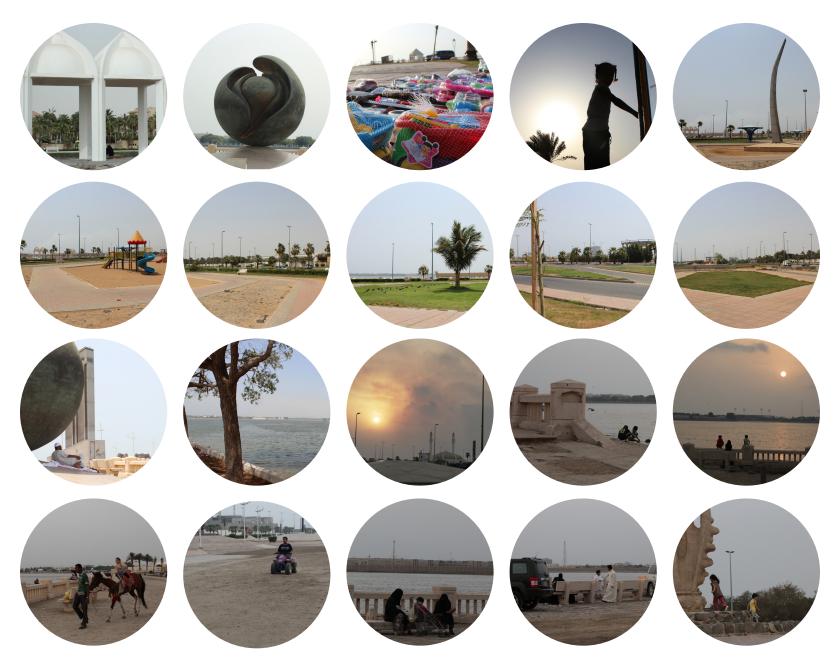
### Zone 04:

Landscaped strip.









### WORKING WITH THE SITE

The choice to work with this site in particular is related to four major points:

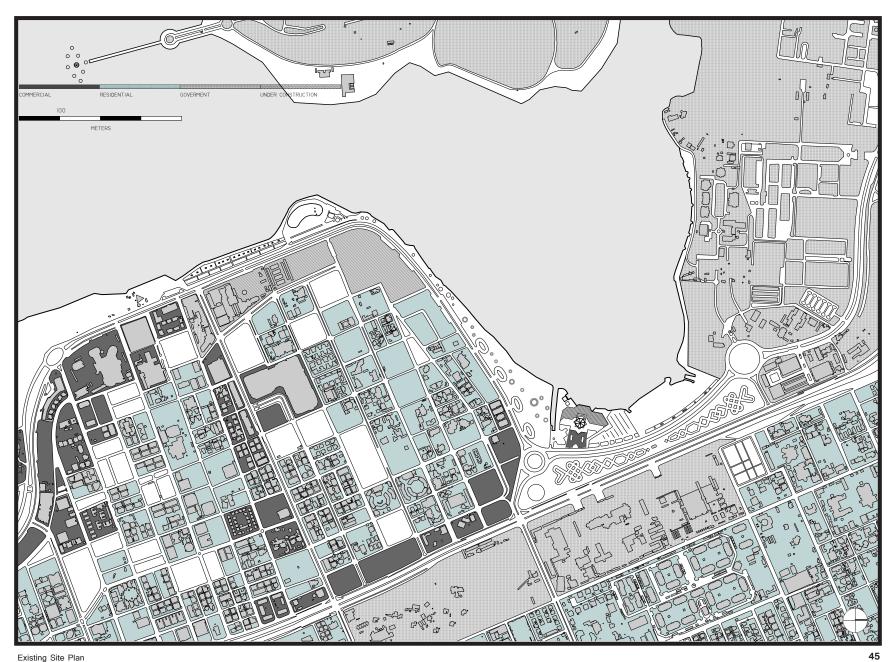
- 01. The high concentration of residential buildings in the area.
- O2. The central location of the mosque, which is easily accessible to the surrounding neighborhoods.
- O3. Al Malek Road which is considered a major connector between North (New Jeddah) and South (Old Jeddah-Al Balad).
- 04. The integration of the existing open air art museum.











Existing Site Plan

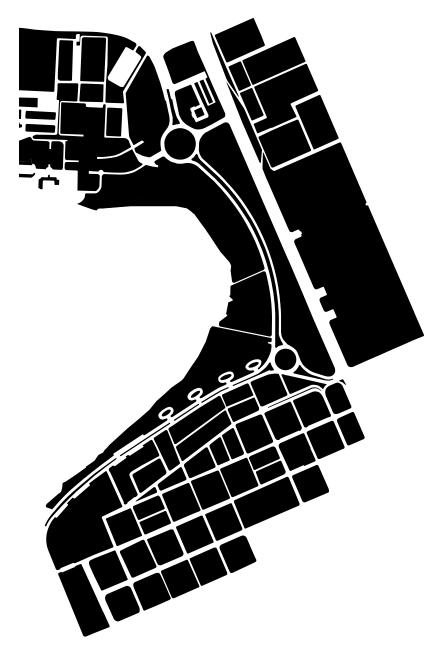








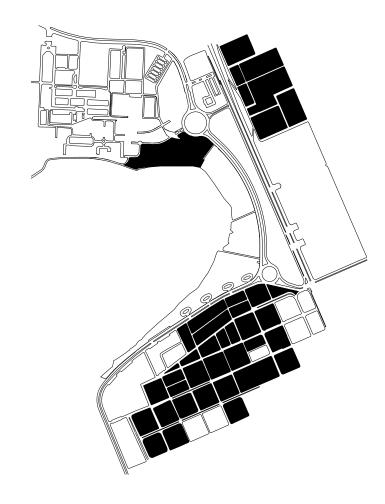


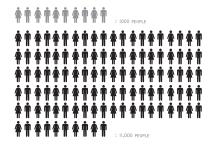




### POPULATION

The population within the area is about 11,000 people, with roughly 2000 families and each household having 3-5 children





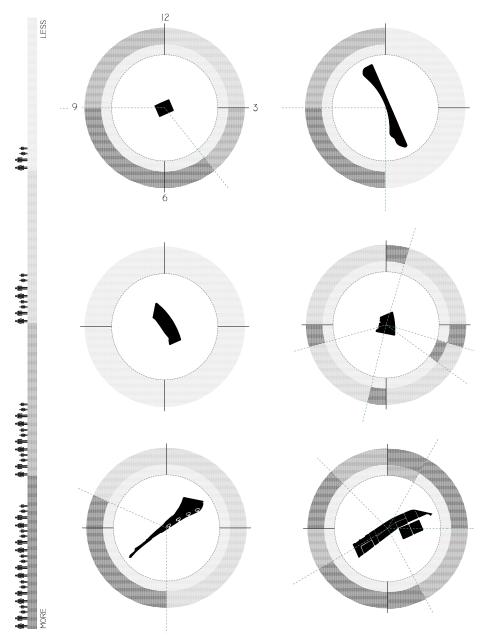




# CURRENT USAGE

If looked at during a 24 hour period, most of the site usage happens in the evening - which is marked in the darker shade.







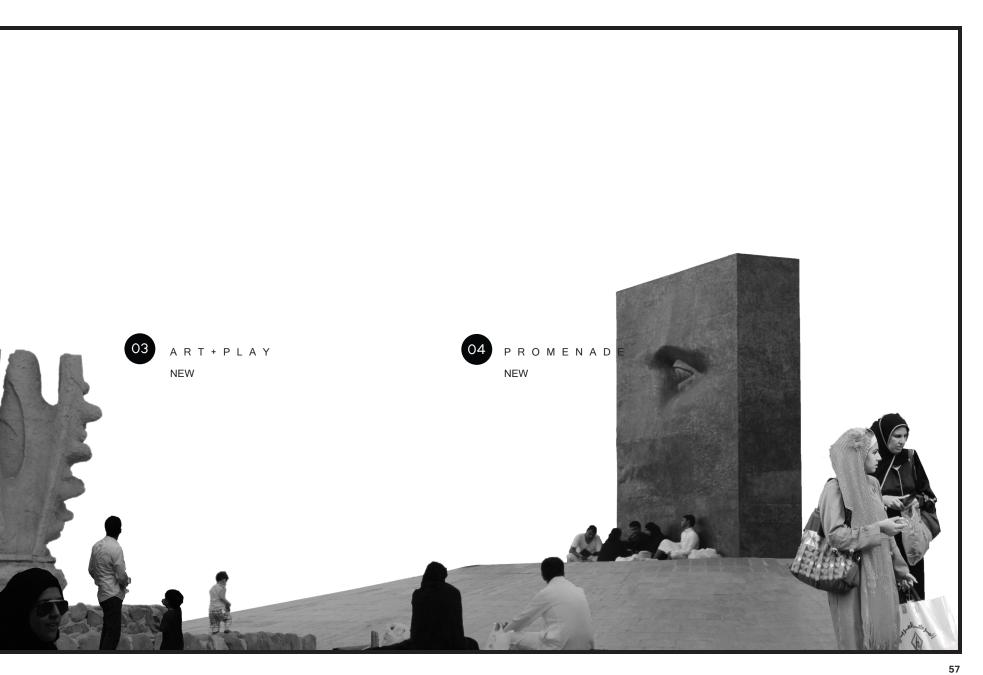
APPLICATION

## PROPOSED PROGRAM

The two functions that were always present in the old Islamic city were the souq and the mosque. These were the places that people would go to socialize with one another. My strategy is to introduce two new functions (a community park and an existing open air art museum) in order to encourage gender integration in a familiar way.

The goal is to learn from the past in order to adapt to the demands of contemporary life.



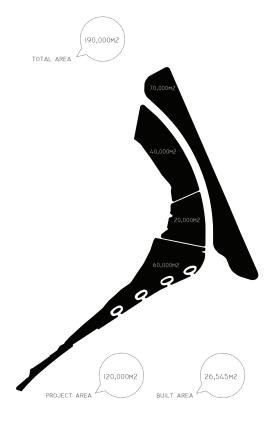




## AREAS

The total area of the site is around 190,000m2. The area that will be programmed is 120,000m2, with a built area of 26,000m2. This is consisting of 1-2 story buildings in the Souq area - Market

This will serve a population 11,000 people with roughly 2000 families and each household having 3-5 children.





### PROGRAM BREAKDOWN

#### Souq:

Located in the Northern part of the site, the souq consists of 2 main programmatic functions: a farmers market selling local foods and goods as well as small cafes and restaurants mainly located on the second level of each building. Parts of the souq also filter through to the art museum and park where it is incorporated as small kiosks integrated through the space.

### Mosque:

With its central location, the mosque acts as a breathing point between the densely packed souq area and the park.

### Park + Art:

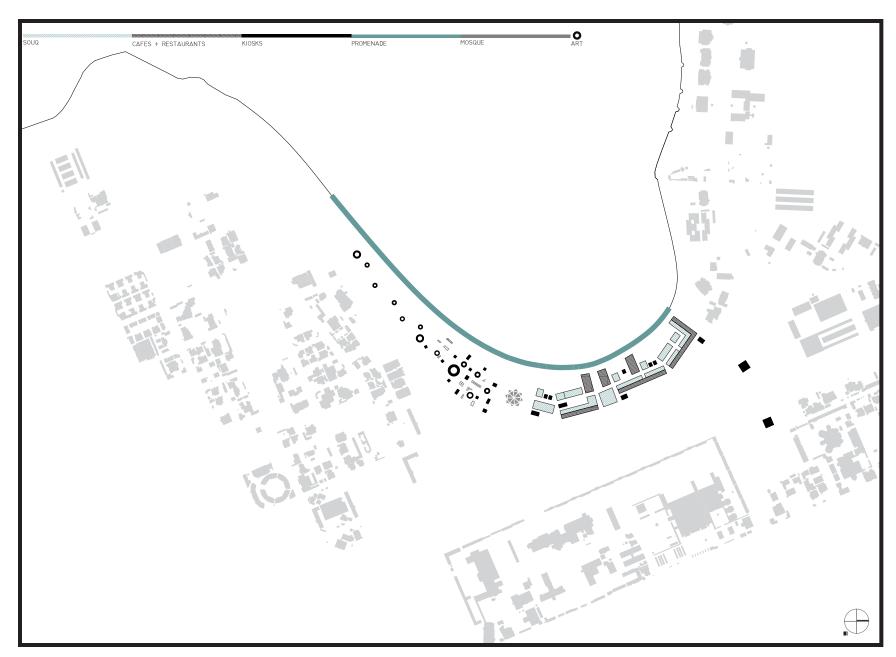
The park is incorporated into the existing layout of the art museum in order to create a proper community gathering space for the surrounding neighborhood. It also acts as a gateway to the mosque and souq.

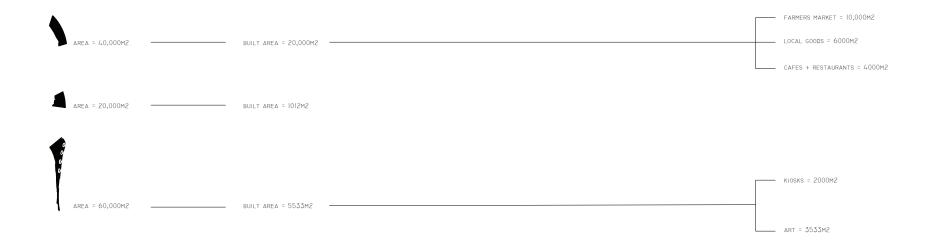
#### Promenade:

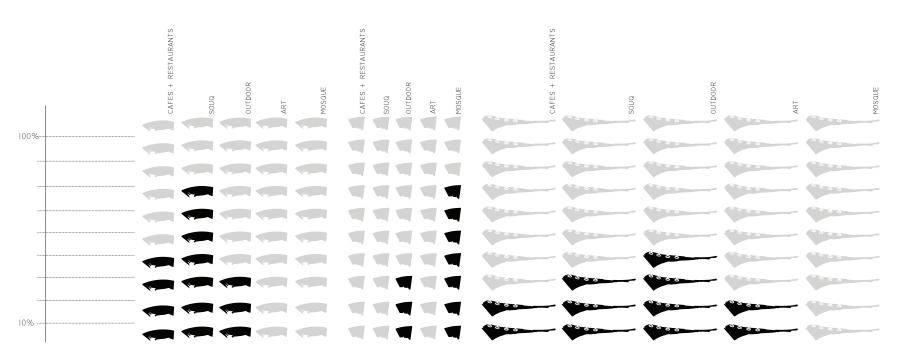
Seeing since the water is the most consistent element throughout the site, the promenade acts as the major connector from north to south. It also incorporates the water through small elevated pavers that provide seating and areas for children to play.

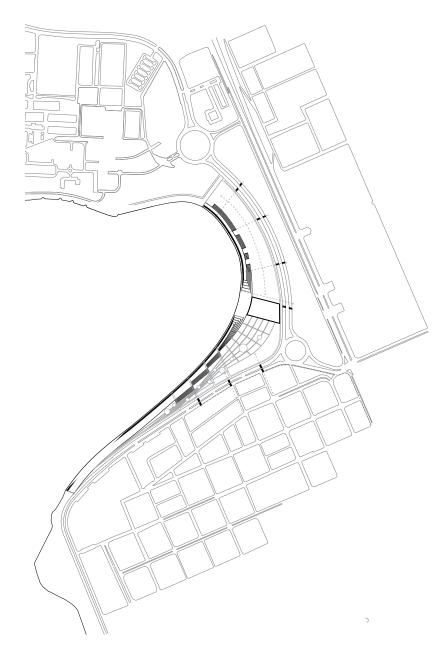
### Buffer Zone:

The landscaped strip between the chosen site and the high traffic of Al Malek Road is mainly used as a sound and traffic barrier. This is done by strategically planting trees along the strip.











Introducing Pedestrian Access

Vegetation: Sound Barrier



64 Urban Plan



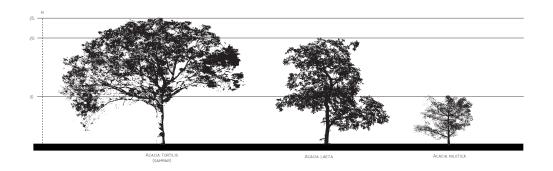
Aerial View

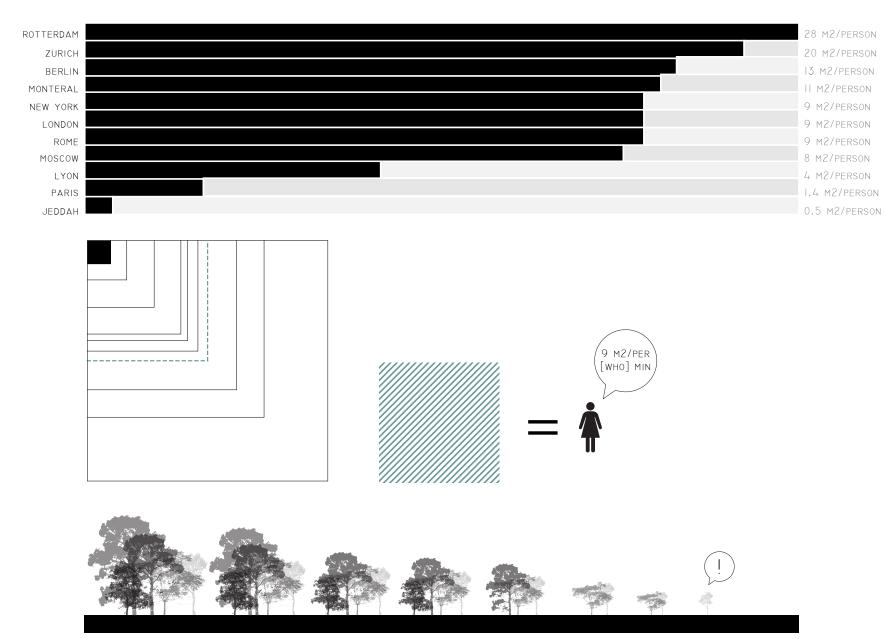
### USE OF VEGETATION

A recent study showed that the current amount of green space allotted per person in the city of Jeddah is 0.5m2, this is way below the minimum requirement of 9m2/person according to the world health organization. Through the urban scheme I've looked at ways to incorporate green space in order to facilitate this need.

As mentioned previously the climate in Jeddah is mostly hot and humid reaching highs of 45 sometimes 50 degrees Celsius. And so, the weather became a major contributing factor to the types of trees that were selected. After researching trees that tolerate drought, heat and extreme temperatures, it was concluded that trees of the Acacia family grow best in the region.

TREE	TEMP	DESCRIPTION	REGION
OI. ACACIA LAETA	0 - 50 C	- HEIGHT: 4-10M (13-32FT) - KNOWN TO TOLERATE DROUGHT, HIGH TEMPERATURES	
02. ACACIA TORTILIS (SAMMAR)	RAINFALL	- HEIGHT: .10-25 M (69 FT) - ORIGINALLY USED FOR FURNITURE - PROVIDES GOOD SHADE	
03. ACACIA NILOTICA	0 - 50 C	- HEIGHT: . 5-20 M (16-65FT) WITH A DENSE SPHERIC CROWN - PROTECTIVE HEDGE BECAUSE OF ITS DENSITY	3







Souq



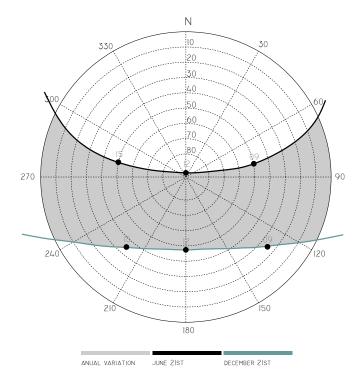
Water Feature 69





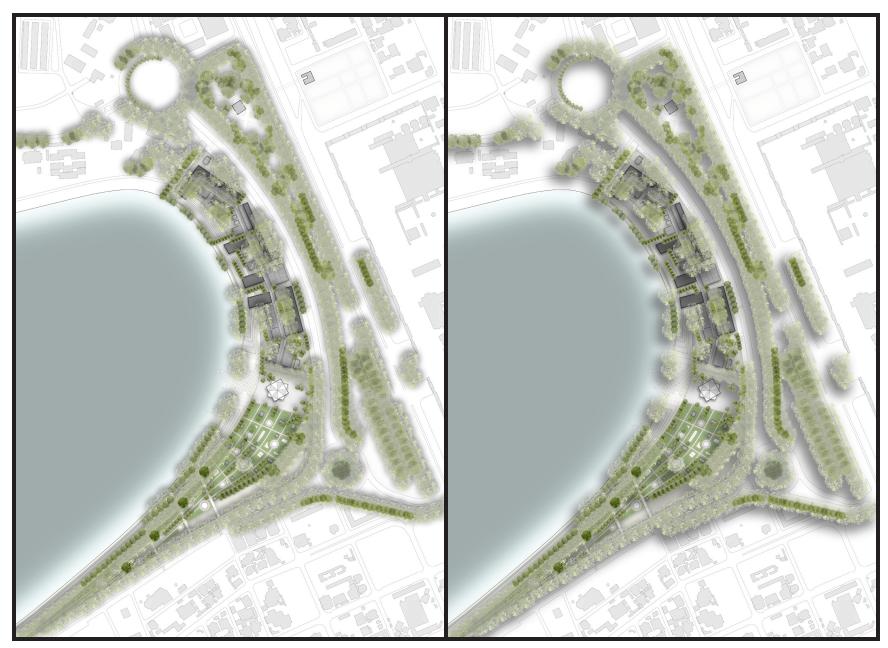
# SHADING

• Summer: June 21st



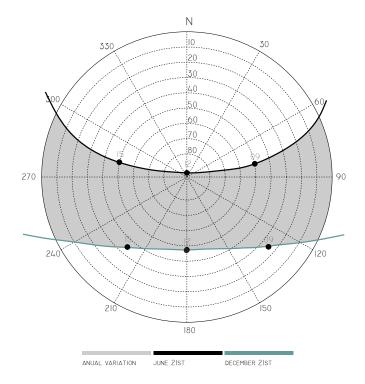


**72** 



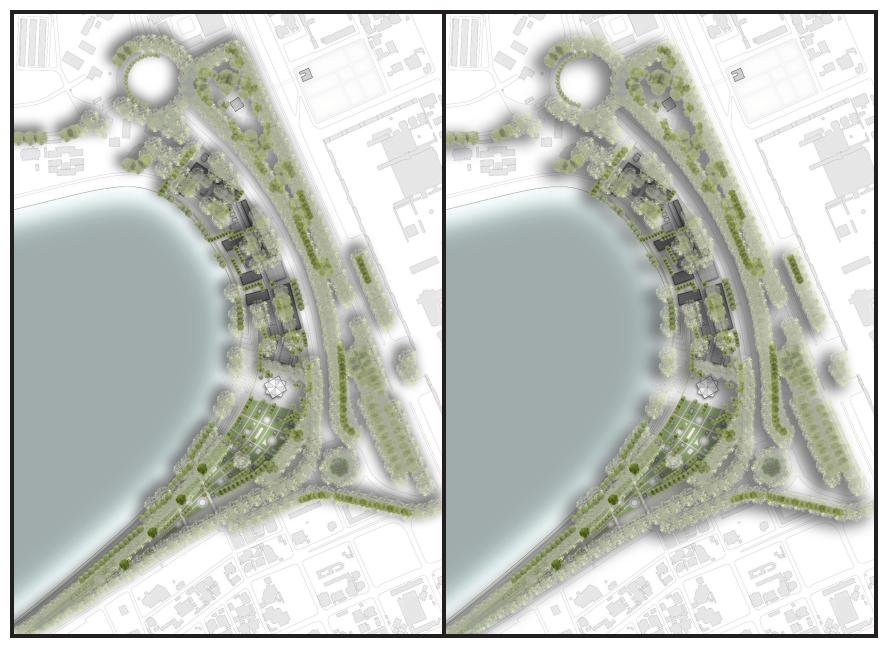
# SHADING

• Winter: December 21st

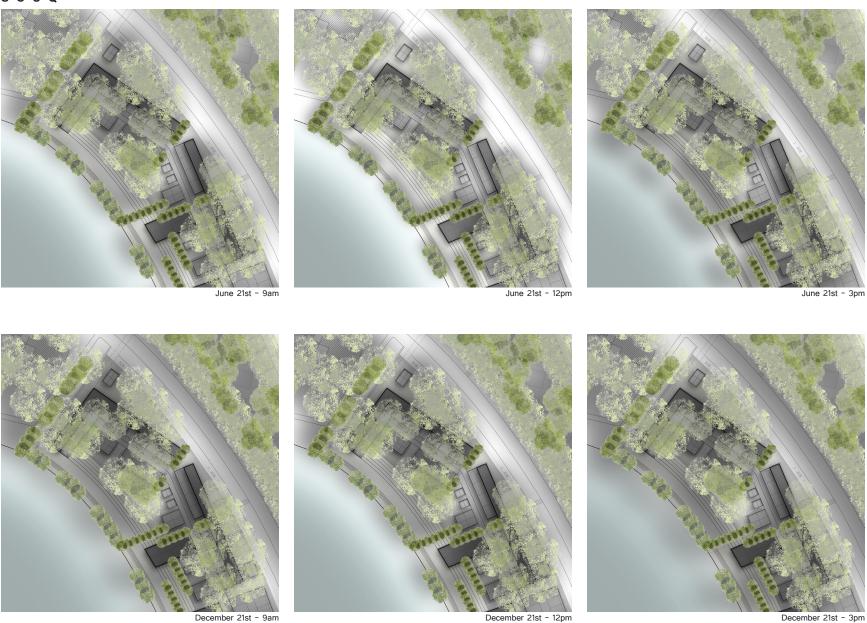




**74** 



# S O U Q

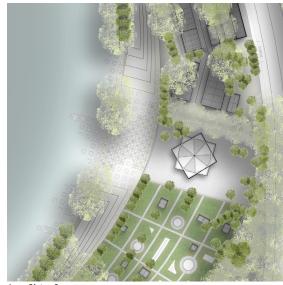


76

# MOSQUE







June 21st - 9am

June 21st - 12pm

June 21st - 3pm





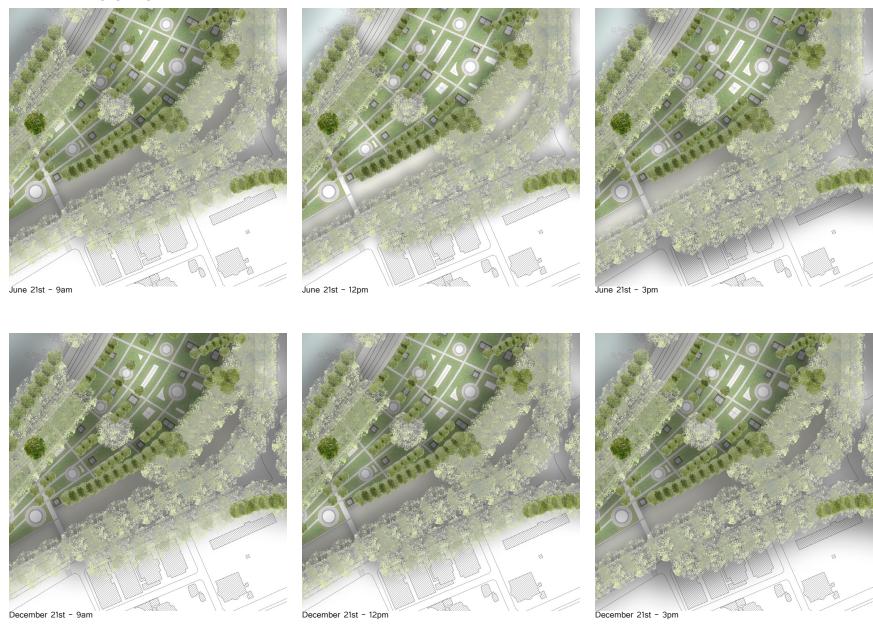


December 21st - 9am

December 21st - 12pm

December 21st - 3pm

### PARK/MUSEUM



79

### Scenario A:

Crossing from residential zone into park.

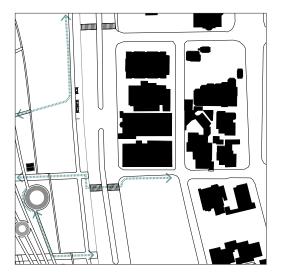
The multiple entrances to the site don't allow for easy control of gender segregation; unlike malls where entrances are limited and are guarded by a security guard.

### Scenario B:

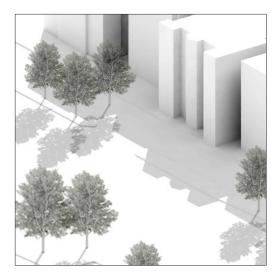
Meeting people at the park + socializing around the art sculptures.



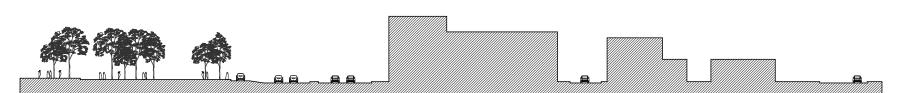
80 South Access from Residential Zone Shading: June 21st, 2pm







Circulation



# • Scenario A:

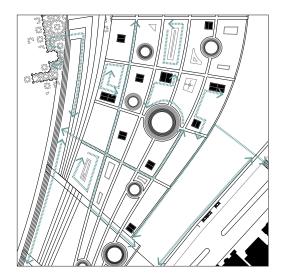
Tree shade breaks down the vast space and creates a more intimate setting.

## Scenario B:

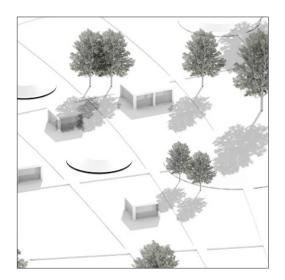
Pavers extend into the water creating a setting for people to socialize with one another.



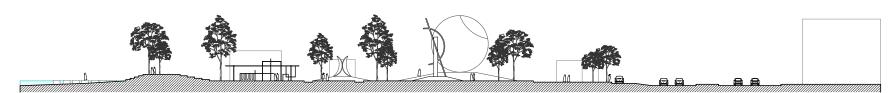
82 Park: Art + Play Shading: June 21st, 2pm







Circulation



### Scenario A:

The linear path allows for quick movement through the souq.

#### Scenario B:

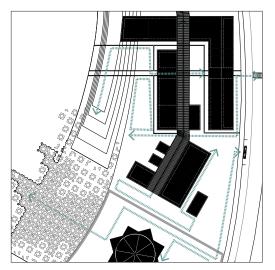
Smaller pathways cut across the long linear path of the souq to provide easy access to the promenade. It also creates the opportunity for gender integration by moving from an open space to a more intimate setting.

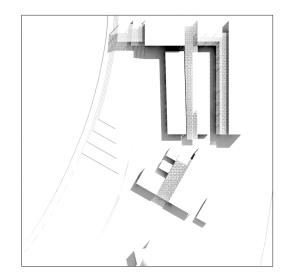
### Scenario C:

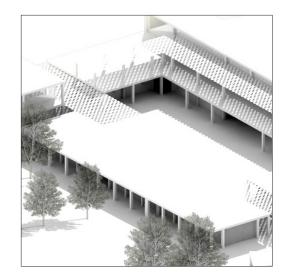
Pavers extend into the water creating a setting for people to socialize with one another, as well as provide areas for children to play.



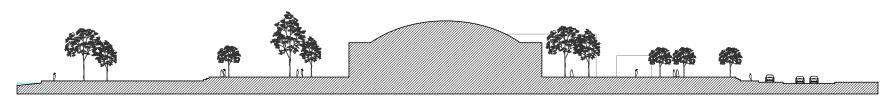
Mosque + Plaza: Connection to Water Through Pavers







Circulation



### Scenario A:

Smaller pathways cut across the long linear path of the souq to provide easy access to the promenade. It also creates the opportunity for gender integration by moving from an open space to a more intimate setting.

### • Scenario B:

Tree lined paths help define crossing from promenade into souq.

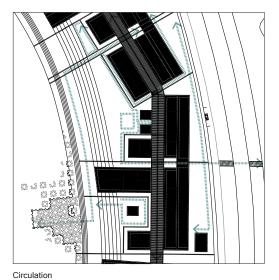
### Scenario C:

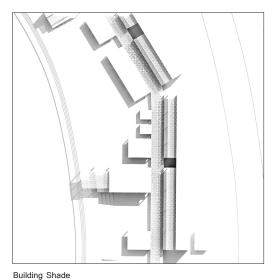
86

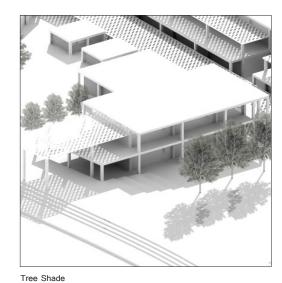
Courtyard space opens out into promenade.



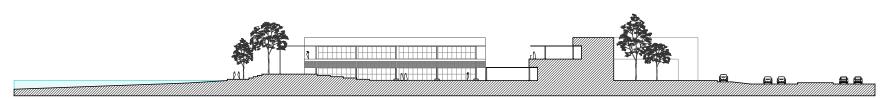
Souq + Promenade: Relationship to Water Shading: June 21st, 2pm







culation Building Shade



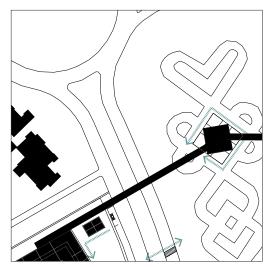
### Scenario A:

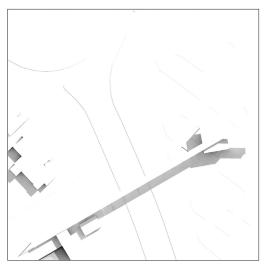
Crossing from residential zone into souq.

The multiple entrances to the site don't allow for easy control of gender segregation; unlike malls where entrances are limited and are guarded by a security guard.



North Access from Barrier Zone: Bridge - Suggested Future Expansion



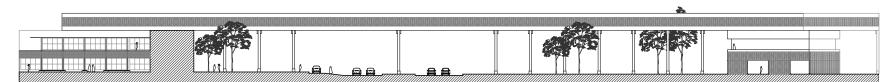




Circulation

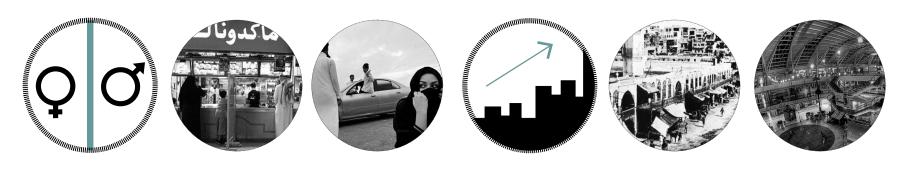
Building Shade

Tree Shade





CONCLUSION



O1. Social O2. Urban

#### CONCLUSION

As times are changing, public space in Jeddah is becoming a major issue that will be looked at for many years to come. This thesis focuses on the possible changes that can occur by <u>learning from the past</u> and adapting 'traditional' notions of socializing in the city to 'modern' day life.

It is inevitable that the city is evolving, and proposing the opportunity for change is my attempt to contribute to these growing social needs that have been limited by the <u>social and urban</u> restrictions imposed on the city throughout the years.

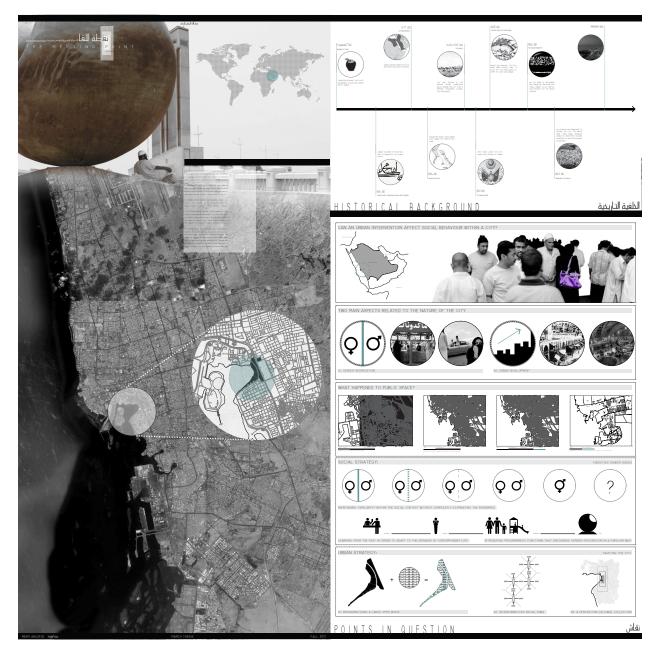
The social connection between human beings is part of everyday life. Jeddah is a city that is considered a 'melting pot' for cultural collection in Saudi Arabia, and by slowly eliminating these boundaries one can start to see the true potential that the city has to offer.

Compare Jeddah today to the ancient walled city. The walls were put up for a reason; to protect the city against the attacks of the Portuguese. It is true that the walls served a purpose at that time but once torn down the city began to expand and flourish. The same goes for the issue of Gender Segregation; if we look at it as being 'the wall' one can only imagine the opportunities that can begin to emerge as a result of this change.

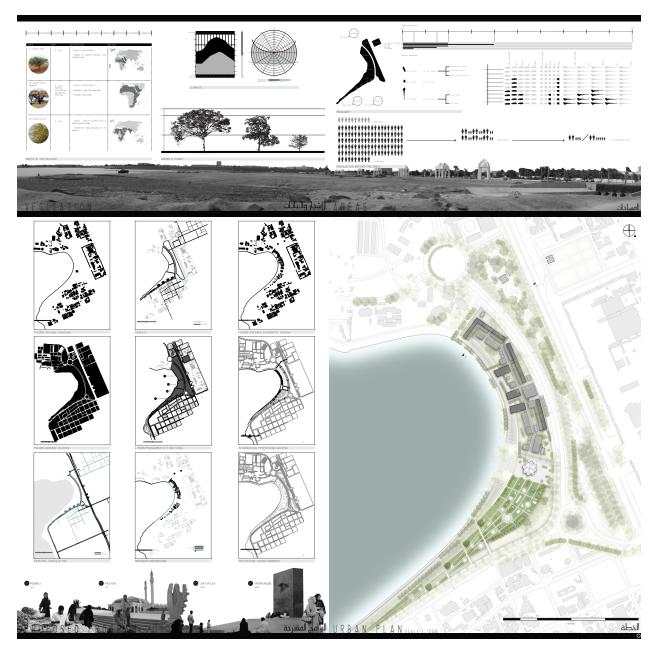


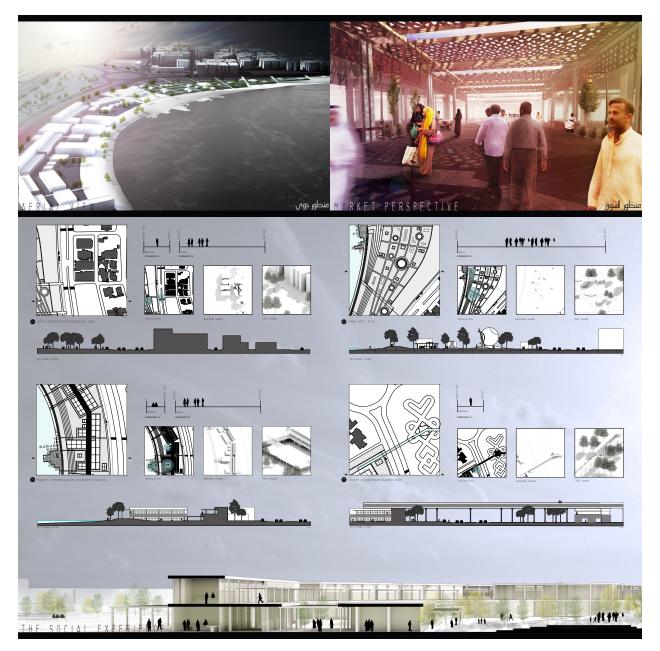
THESIS DEFENCE PRESENTATION

DECEMBER 15, 2011









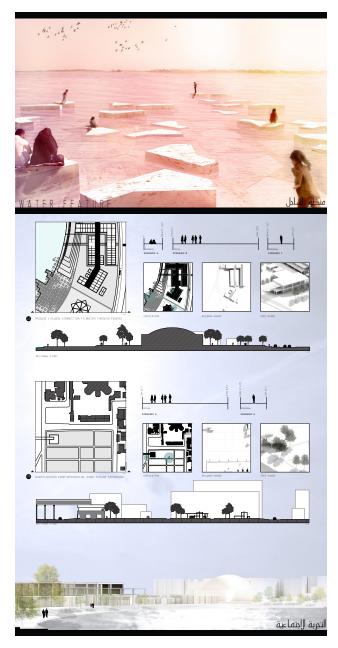
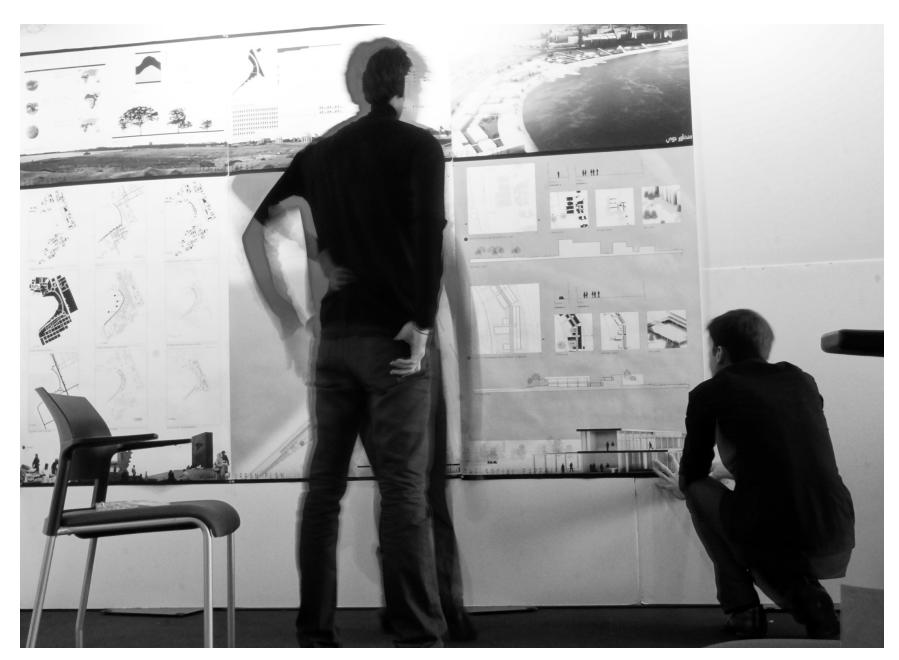




Photo by Ma'an Bajnaid













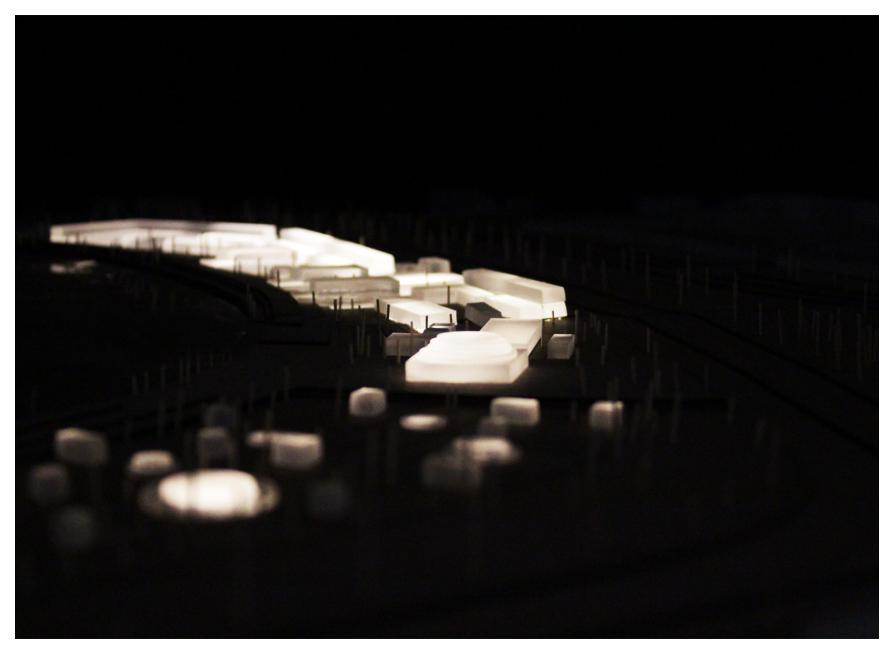


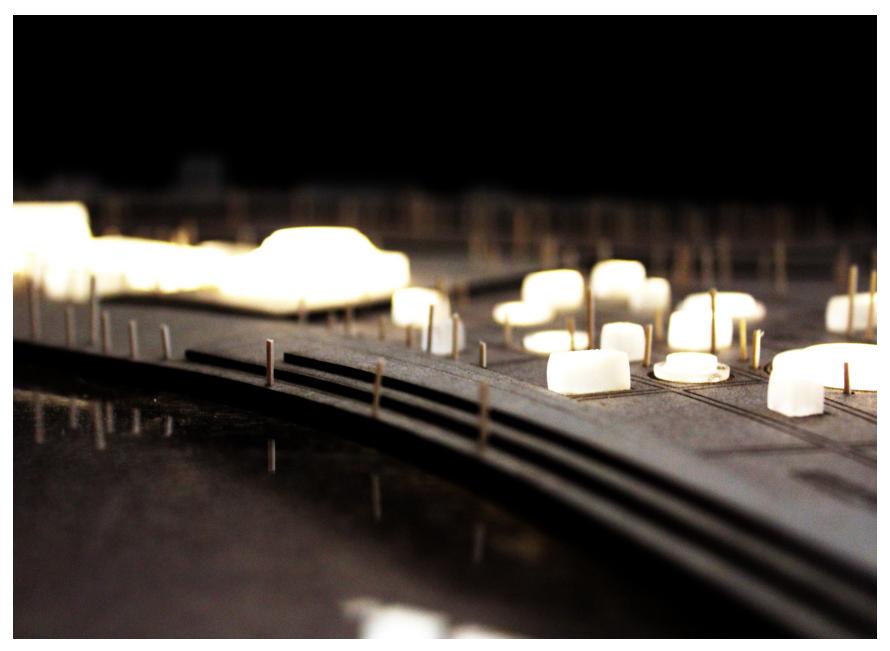


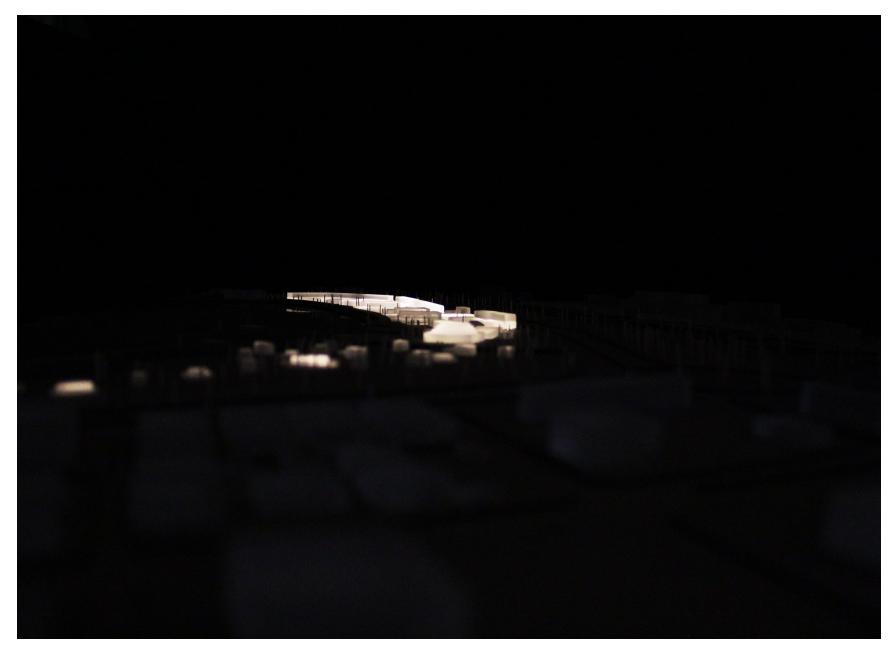


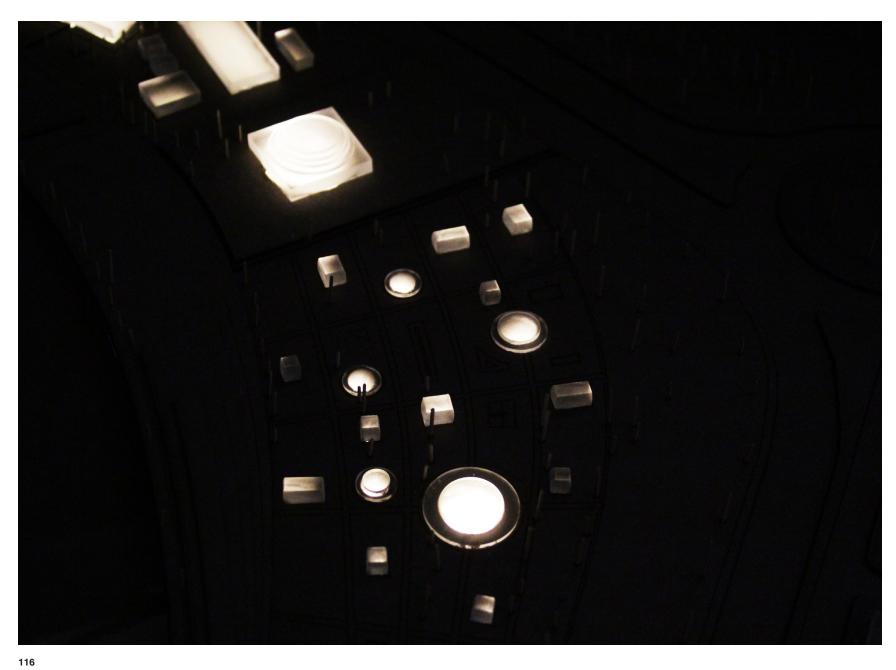


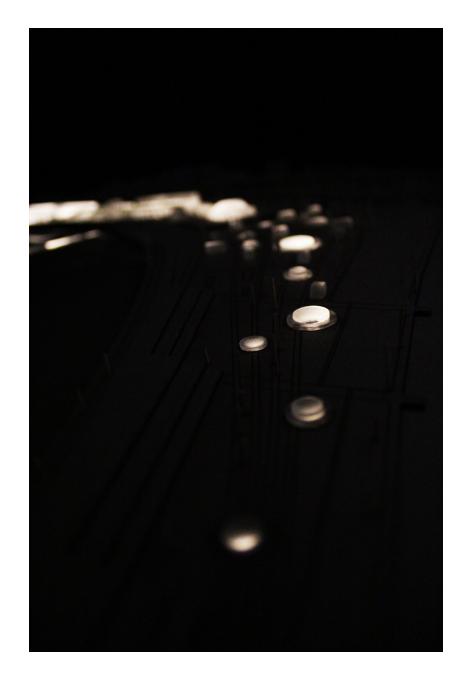


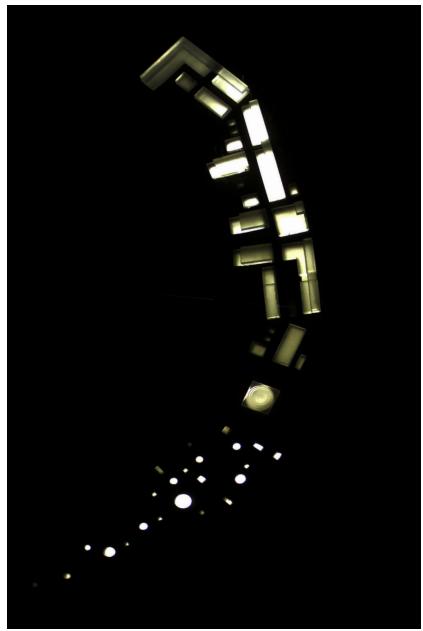








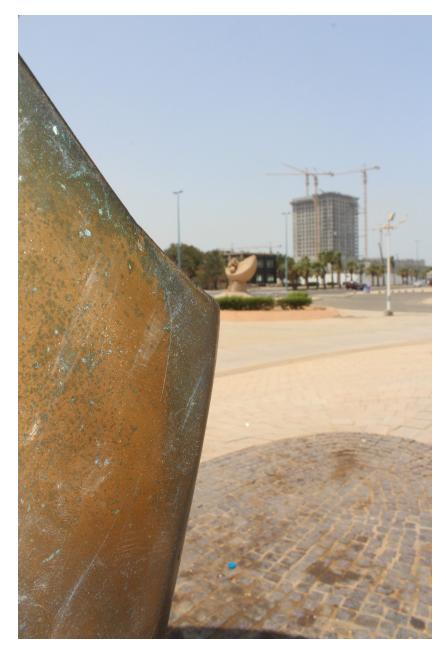






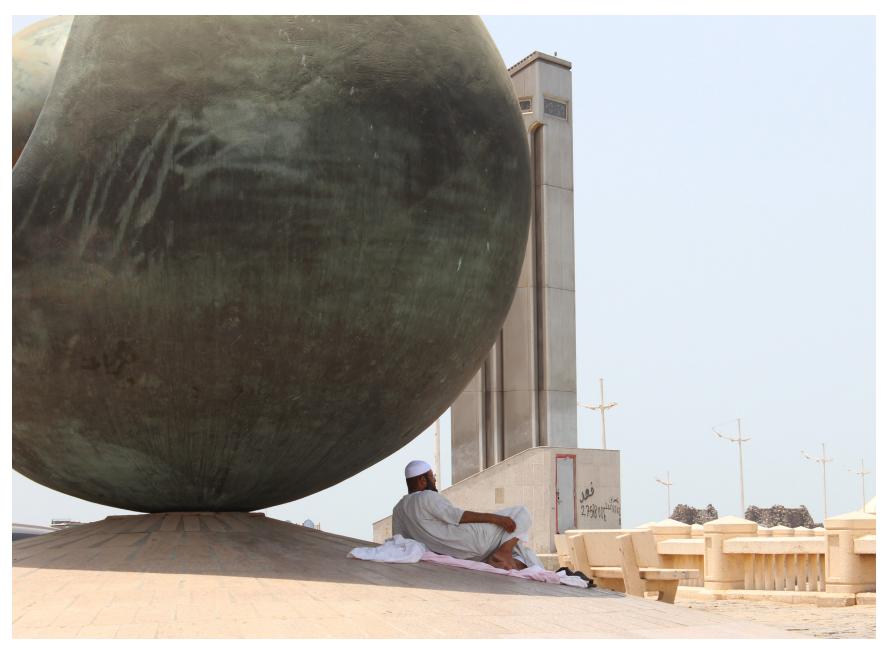
P H O T O G R A P H Y

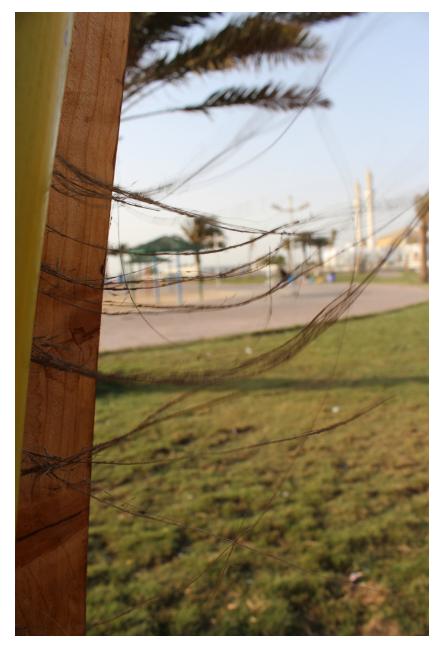










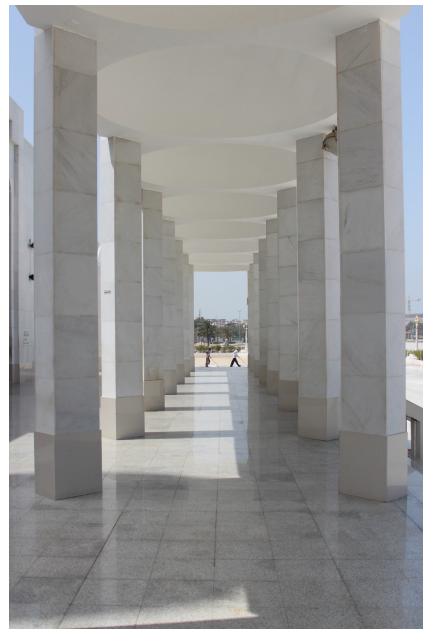






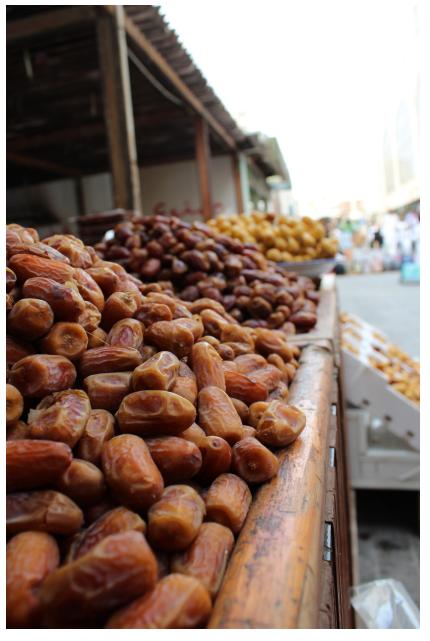
















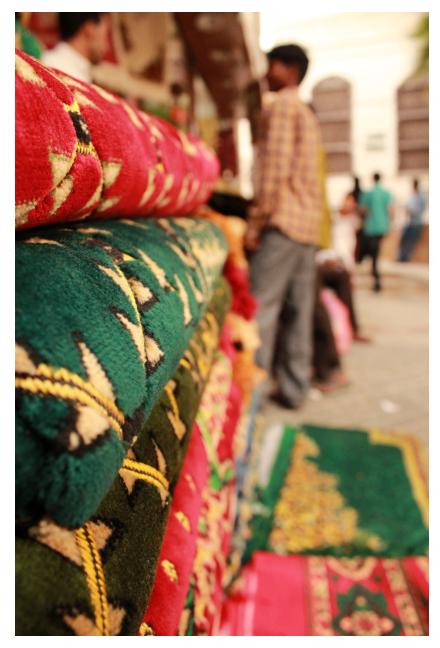




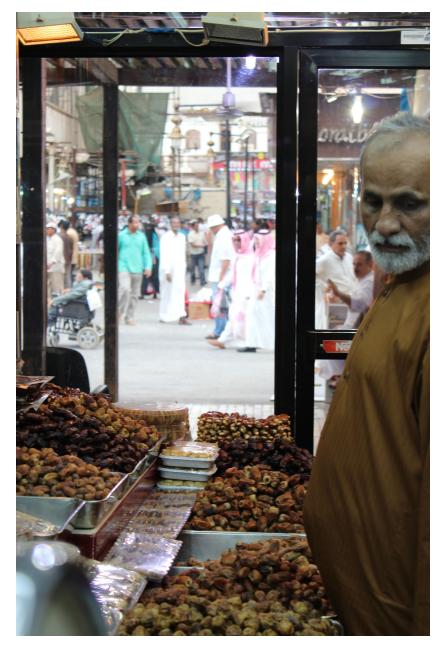




















B I B L I O G R A P H Y

## BIBLIOGRAPHY

Benjamin, Walter. The Arcades Project. Cambridge: The Belknap Press of Harvard University Press, 1999.

Courtright, Gordon. Trees and Shrubs for Temperature Climates. Portland: Timber Press, 1979.

Farsi, Hani M. Jeddah City of Art. London: British Library Cataloguing Publications, 1991.

Gaisma. Sunpath Diagram. Jeddah, Saudi Arabia. http://www.gaisma.com/en/location/riyadh.html (accessed 2011).

Gaventa, Sarah. New Public Spaces. Mitchell Beazley, 2006.

Hanssen, Beatrice. Walter Benjamin and the Arcades Project. London: Continuum International Publishing Group, 2006.

Hariri-Rifai, Mokhless Al. The Heritage of the Kingdom of Saudi Arabia.

Singapore: Eurasia Press, 1990.

Hartmann, R, and Phebe Ann Marr. "DJudda." Encyclopaedia of Islam, Second Edition. 2011. http://www.brillonline.nl.

International, Stacy. Jeddah Old and New. London: Stacy International, 1980.

Jacobs, Allan. Great Streets. Cambridge: MIT Press, 2001.

JDURC. Jeddah Urban Development & Regeneration Co. http://www.jdurc.com/ (accessed 2011).

Jeddah Book.

King, Geoffrey. The Traditional Architecture of Saudi Arabia. London: I.B. Tauris & Co Ltd, 1998.

Krauel, Jacobo. New Urban Spaces. Barcelona, Spain: Carles Broto, 2006.

Lacey, Robert. Inside the Kingdom. London: Penguin Books, 2009.

Michell, George. Architecture of the Islamic World. London: Thames and Hudson LTD, 1978.

More, David, and John White. The Illustrated Encyclopedia of Trees. Portland: Timber Press, 2002.

Ochsenwald, William L. "History of Arabia." Encyclopaedia Britannica. 2011. http://www.britannica.com/EBchecked/topic/31568/history-of-Arabia.

Radoine, Hasan. "Souk Waqif." On Site Review Report, 2010.

Wikimedia. "Naqsh-e Jahan Square." www.wikipedia.com. 2011. http://en.wikipedia.org/wiki/Naqsh-e\_Jahan\_Square.

Public Space. February 27, 2011. http://en.wikipedia.org/wiki/Public space.

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The race is long, and in the end, it's only with yourself.