

# POCKET ECOLOGIES

Baghdad, Iraq  
Graduate Submission - Studio Competition Project



This studio aimed to bridge the cultural gap between **Iraq and the United States**. The studio brought together American graduate architecture students with fifth year Iraqi architecture students in a **collaborative studio**. American students were tasked with designing an intervention in Baghdad while Iraqi students were tasked with designing an intervention in Washington, D.C. The students communicated via video conference calls and social media, gathering and exchanging information about the students' respective cities through site analysis and designing **small urban intervention** projects.

The final project for the American students consisted of an architectural intervention near Tahrir Square in Baghdad. The studio worked together on a master plan for the immediate area around Tahrir Square. Each individual student then took a piece of the urban proposal to design in detail over two weeks an architectural intervention. The Iraqi students stressed that the designs for Baghdad **imagine a brighter future** than the day to day realities people of the city face.

Pocket Ecologies is part of a larger proposal aimed at **reactivating the Tigris Riverfront** near Tahrir Square. Currently, people cannot interact with the river's edge. The master plan focused on reactivating the riverfront through the creation of a promenade of two interconnecting paths that mimicked the shapes of the Tigris and Euphrates Rivers. These paths would support new activities which recognize the cultural and ecological heritage of the river. Pocket Ecologies specifically looks at the **ecological context** of the river, recognizing that the marshes that once existed along the Tigris are out of sight and out of mind for many Iraqis. The design envisions a brighter future for Baghdad which reconnects the people of Baghdad with the river through **habitat revitalization**. Floating pavilions will allow people of all ages to enjoy life at the water's edge while appreciating the natural beauty of the Tigris' marshes.

# CONTEXT



Iraq, 200km Altitude

## THE FERTILE CRESCENT

The Tigris and Euphrates Rivers are a vital lifesource in the Middle East. However, Dams in Iraq and Turkey are one of the many factors threatening life along the river. The Fertile Crescent has changed.



The rivers are responsible for sustaining life in this arid region.



Dams in Iraq and Turkey threaten the vitality of both rivers.



# CONTEXT



Baghdad, 100km Altitude

## LIFE ON THE PERIPHERY

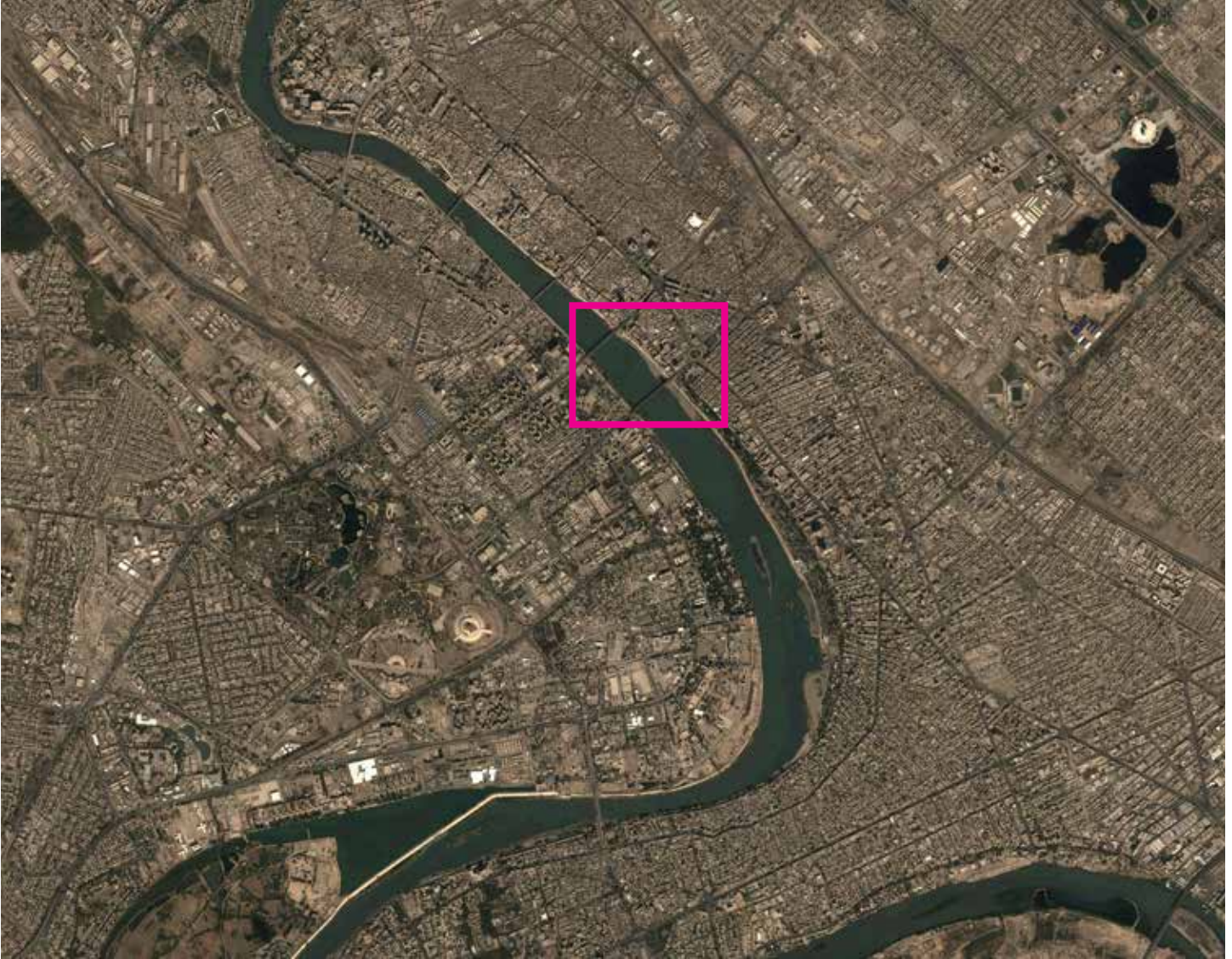
The rivers irrigate the land that lies between them. Declining water levels are causing this once fertile land to dry up. Many farmers are finding themselves forced to move to the city.



The rivers rarely flood like they used to and more often dry up in places. Agriculture is dying in the place where it was born.



# CONTEXT



Iraq, 10km Altitude

## LIFE IN BAGHDAD

The Tigris River cuts right through Baghdad, but it is not the only divisive force present. Many areas of the city are inaccessible for security purposes. Yet life finds a way to go on.



Blast walls line many streets, imposing a divisive presence.



Life goes on in Baghdad, even under constant threat of violence.



# CONTEXT



Baghdad, 1.5km Altitude

## LIFE IN BAB AL-SHARQI

Tahrir Square is at the center of the Bab Al-Sharqi district. Here, cars are first and people second. Pedestrian accessibility is further limited along the river whose banks are a back road for parking.



Buildings like the decaying Tahrir Tower impede access to the river.



Sloped levee walls and sandbars distance people from the river.

# PROBLEMS

## FROM WETLANDS TO DRYLANDS

The marshlands of southern Iraq have shrunk to 10% of their original size. The problems of the Tigris and its marshes are out of sight and out of mind for citizens of Baghdad. A green intervention near Tahrir Square could be a catalyst for a systemic solution.

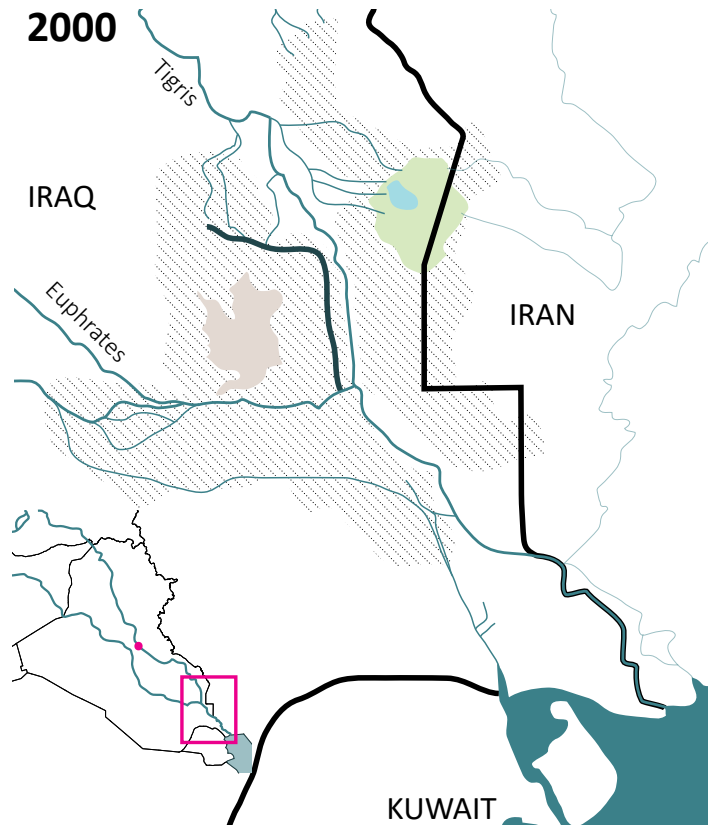
"We shouldn't even call this a river. It's not swimmable, it's not drinkable, it's not fishable."

Nabil Musa

1973



2000



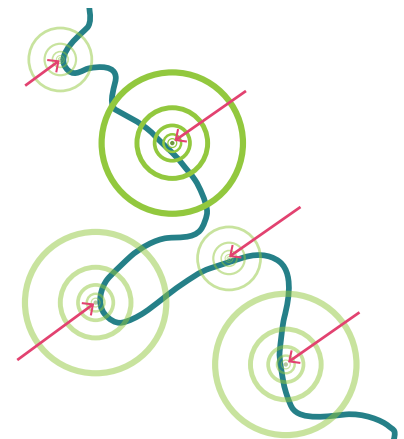
DISCONNECTIVITY

Hard edges divide people and water



ACTIVATION

Utilizing landscape to activate



SYSTEM

System of designs reconnects city



# USER PROFILES



## NADIA KALIF

Nadia is a young school girl in Baghdad who loves to use her imagination and build with her hands. Nadia wants a place where she can build and create outside with her friends.



## AZZAM ALWASH

Azzam works to protect, restore, and preserve Iraq's ecological heritage. Azzam needs locations to monitor and collect data on the environment.



## ZAINAB SALBI

Zainab is a women's rights activist and a native of Baghdad. Zainab dreams of swimming in the river like she did as a child without divisions between men and women.



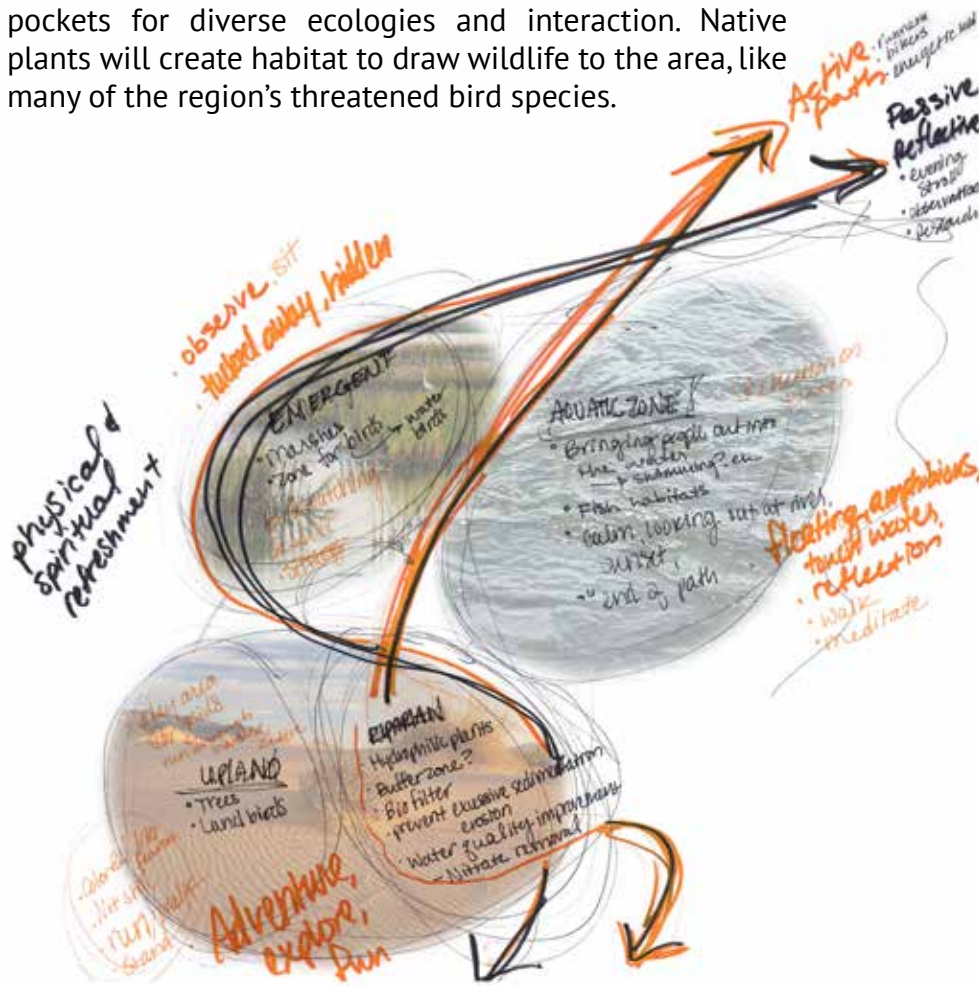
IDEOGRAM

Attracting people and wildlife to reactivate the Tigris river through revitalized marshlands

# OPPORTUNITIES

## WILDLIFE

Nature is an opportunity to attract life at the river's edge. The new weaving paths designed in the master plan offer pockets for diverse ecologies and interaction. Native plants will create habitat to draw wildlife to the area, like many of the region's threatened bird species.



**Yellow Pond Lily**  
Nuphar luteum



**Yellow Pond Lily**  
Nuphar luteum



**Yellow Pond Lily**  
Nuphar luteum

**White-headed Duck**  
Oxyura leucocephala

**Dalmation Pelican**  
Pelecanus crispus

**European Roller**  
Coracias garrulus

**Macqueen's Bustard**  
Chlamydotis macqueenii

**Semi-collared Flycatcher**  
Ficedula semitorquata

**Sociable Lapwing**  
Vanellus gregarius

**Great Snipe**  
Gallinago media

**Red-breasted Goose**  
Branta ruficollis

**Eurasian Curlew**  
Numenius arquata

**Cinereous Bunting**  
Emberiza cineracea

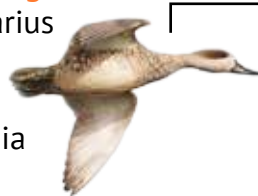
**Marbled teal**  
Marmaronetta anquistrostris

**Black-tailed Godwit**  
Limosa limosa

**Syrian Serin**  
Serinus syriacus

**Basra Reed Warbler**  
Acrocephalus griseldis

**Lesser White-fronted Goose**  
Anser erythropus



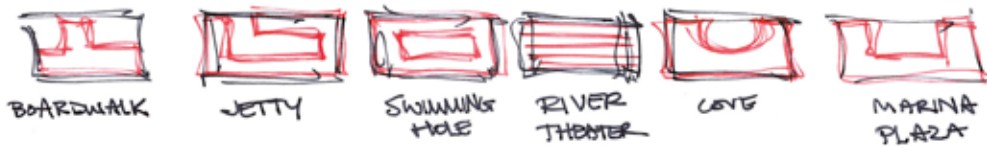
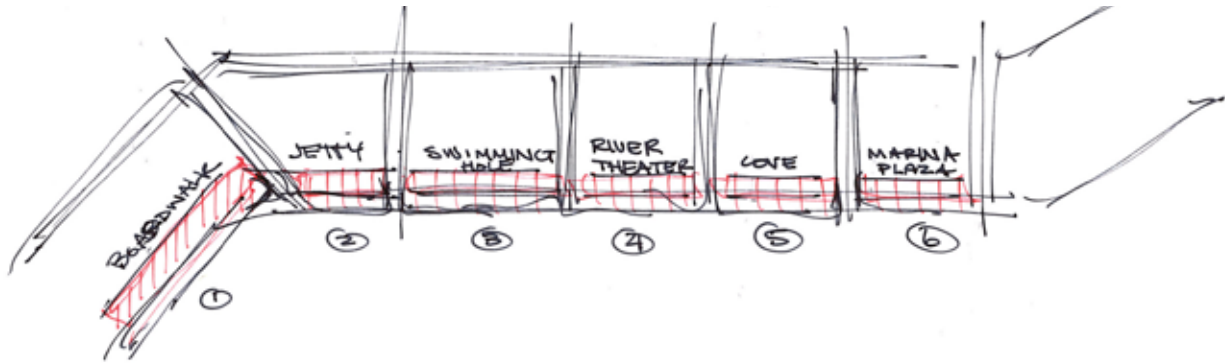
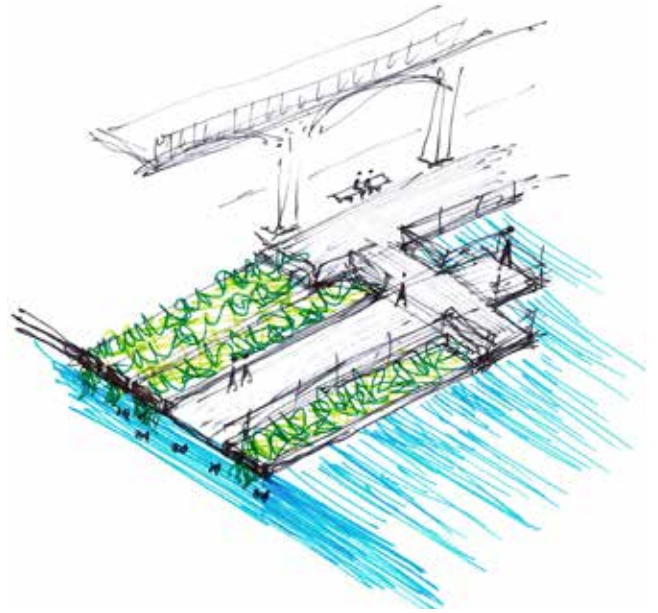
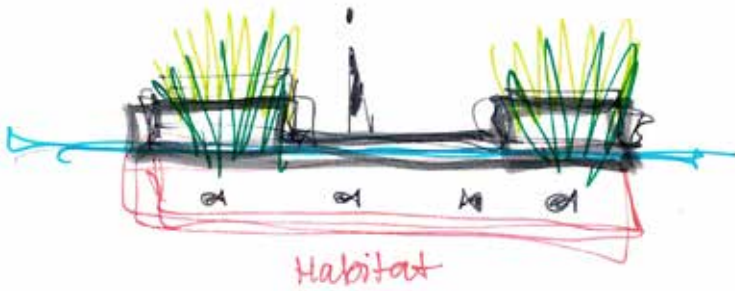


# PRECEDENTS

## CHICAGO RIVERWALK

Sasaki + Ross Barney Architects | Chicago, IL, USA, 2015

The architects designed unique “rooms” between each bridge that respond to the distinct **program** associated with it. Each room invites a different type of water activity to take place. The Jetty was informative for the way in which it **creates and sustains habitat**.

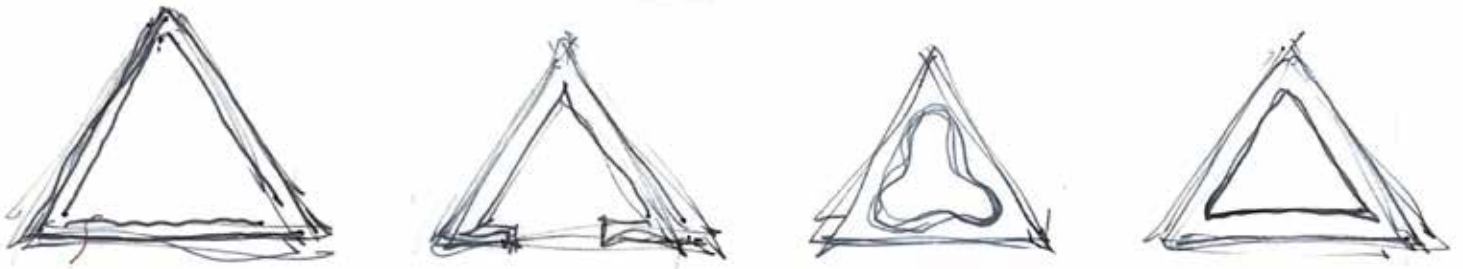
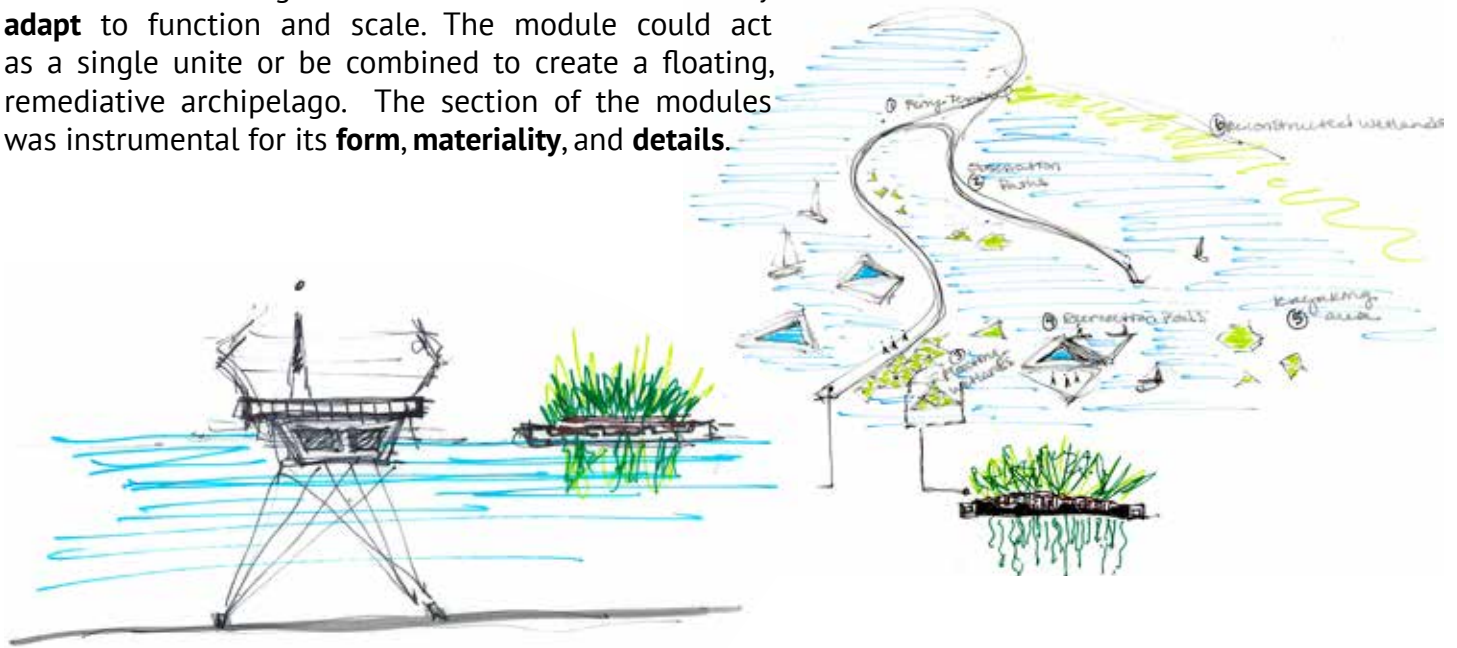


# PRECEDENTS

## NY PARALLEL NETWORKS

Fard/Jafari | New York, NY, USA, 2011

The architects designed a **module** which could easily **adapt** to function and scale. The module could act as a single unite or be combined to create a floating, remediative archipelago. The section of the modules was instrumental for its **form, materiality, and details.**



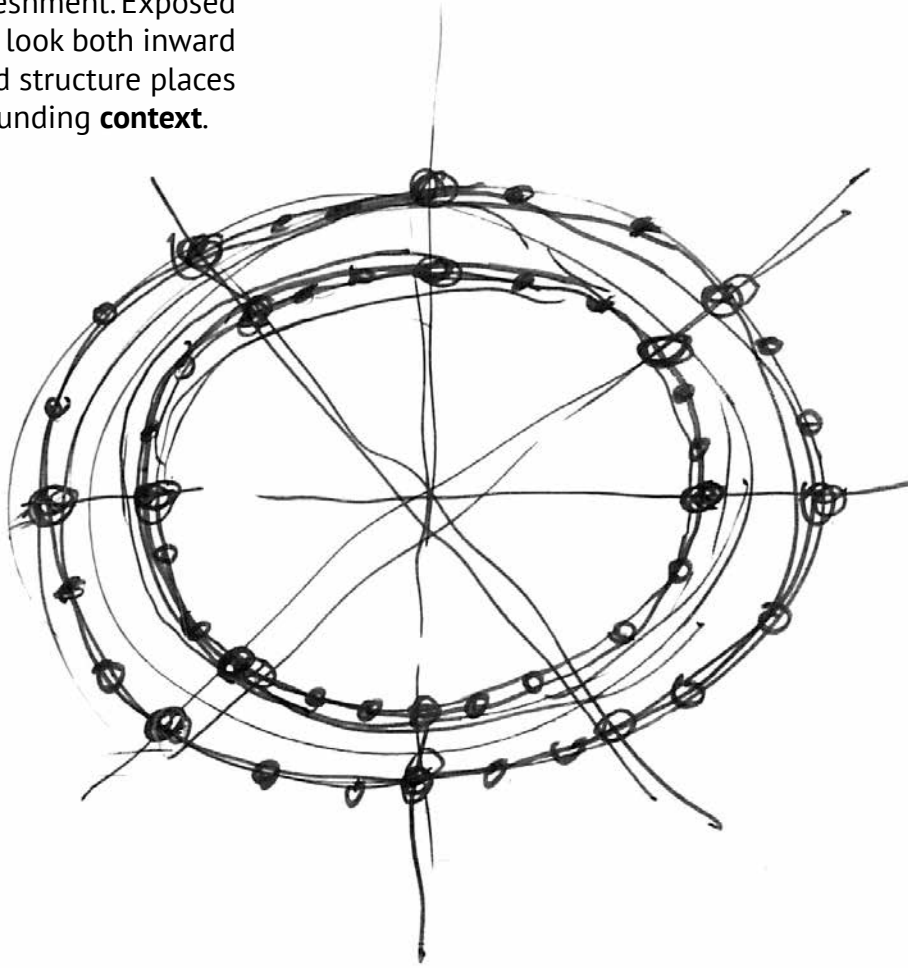


# PRECEDENTS

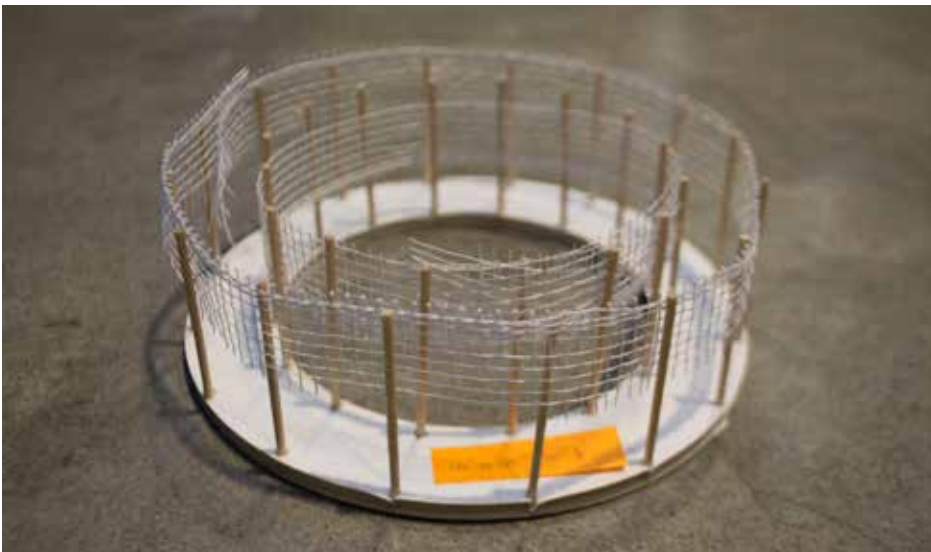
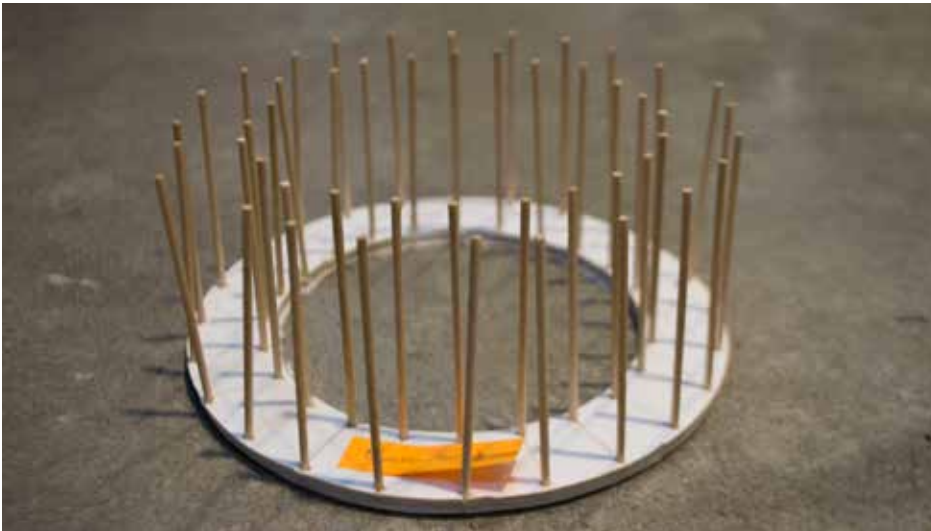
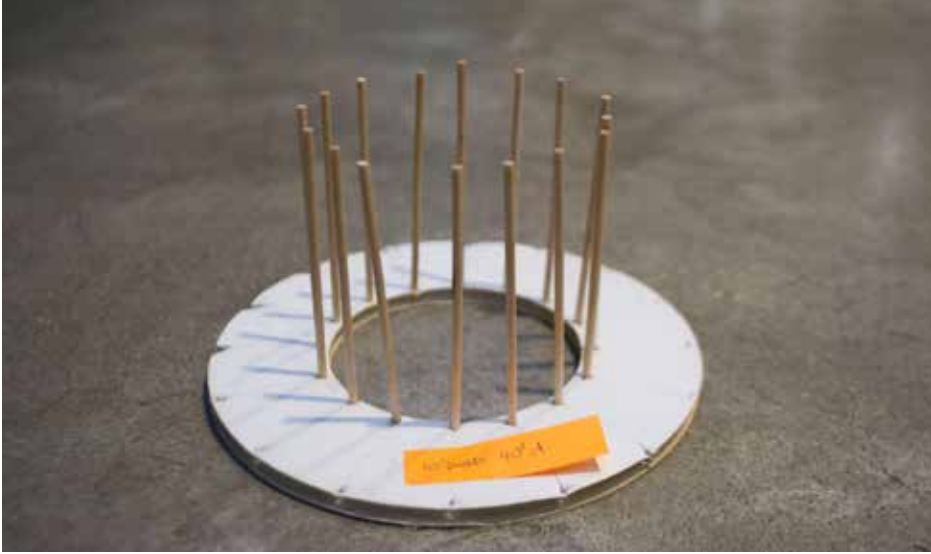
## ANTIROOM II

Chiavi/Mad/Goldoni | Valletta, MLT, 2015

The **circular form** invokes the idea of the **Islamic Garden** as a place for physical and spiritual refreshment. Exposed structure on all sides provokes users to look both inward and outward. The **simplicity** of form and structure places the architecture secondary to the surrounding **context**.



# PROCESS

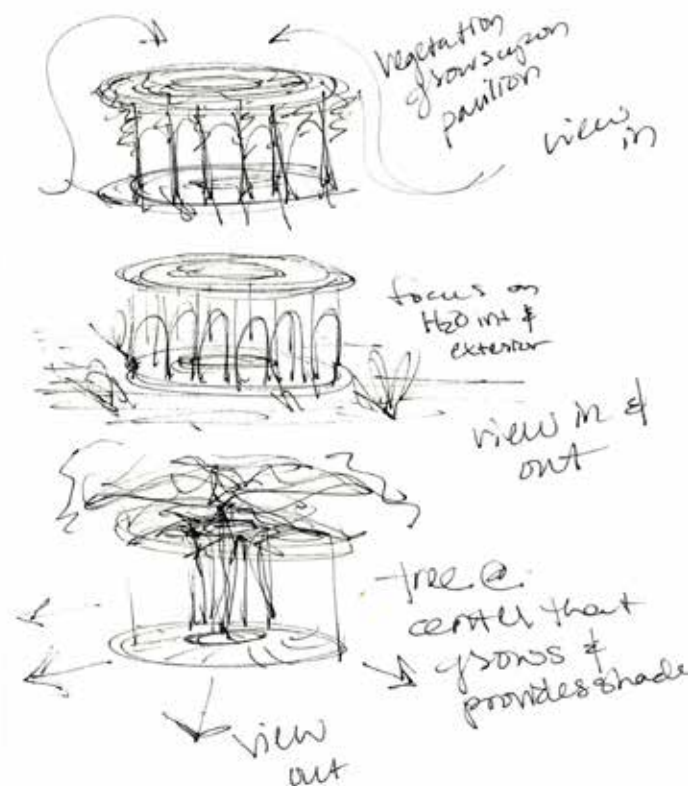
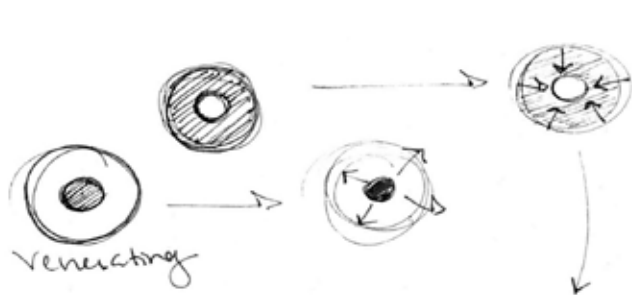


## STUDY MODELS

Quick models were the first means of exploring the form of the design. The repetition and placement of structure assisted in conclusions on where views were focused. Different models suggested varying activities that could be supported by the pavilions.



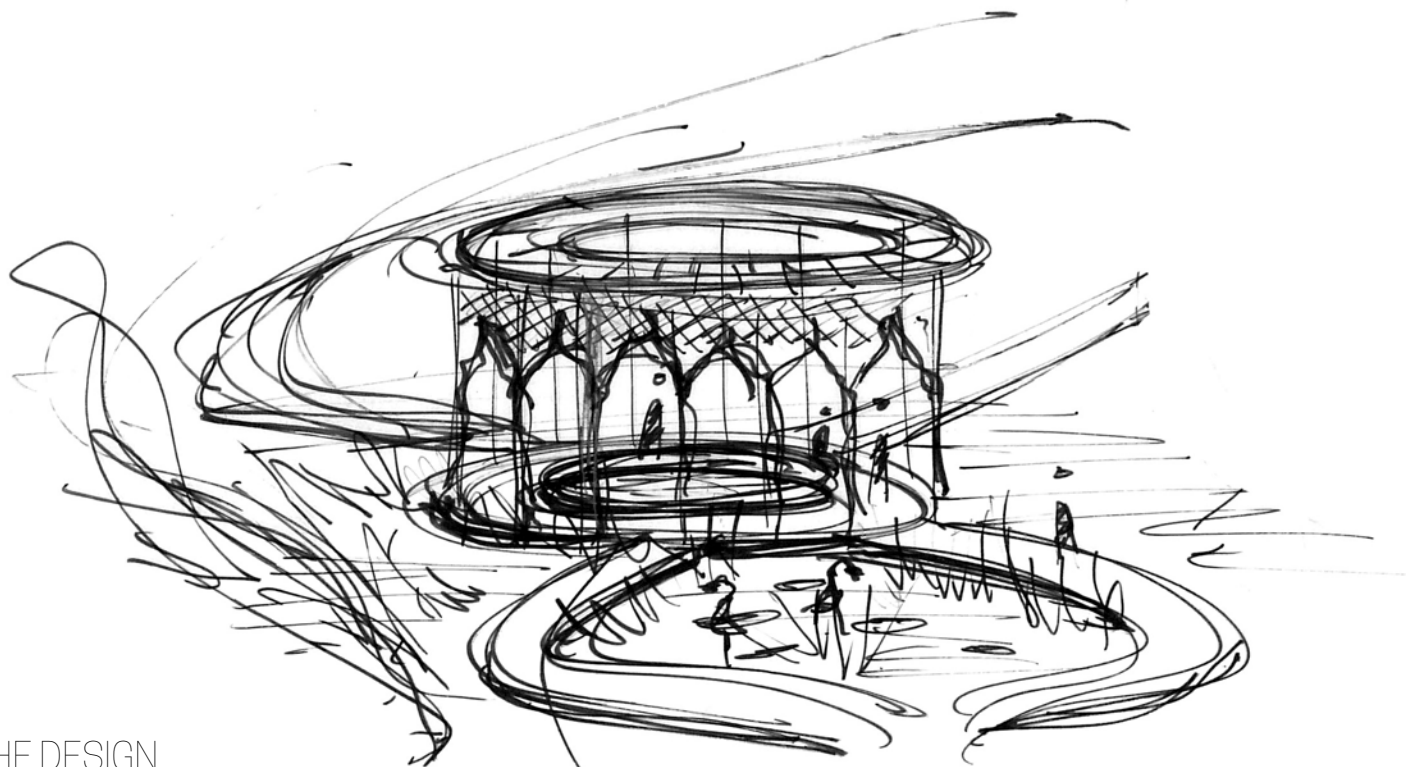
# PROCESS



THE SYSTEM

THE FORM

THE DESIGN



# MASTER PLAN

## DANCING RIVERS

The riverfront portion of the studio's master plan aims to reactivate Tahrir Square through a riverwalk supporting various water activities. Three promenades were designed: one parallel to the river, and two which ebbed between river and shoreline. The latter mirrored the Tigris and Euphrates Rivers, highlighting their interconnectivity in sustaining life in the region.



### POCKET ECOLOGIES

Activating the river's edge through floating pavilions which celebrates the diverse ecologies found along the Tigris River.

### MASHRABIYA NEST

Activating the river's edge through a nest-like structure, offering people a respite from the sun while enjoying installations of Iraqi artwork.

### FLOTILLA WORKSHOP

Activating the river's edge through a flotilla rental shop which allows people to navigate the river on traditional Tarada canoes.



# SOLUTION

## POCKET ECOLOGIES

Baghdad, Iraq



# SOLUTION

