

ISLANDS OF THE NILE



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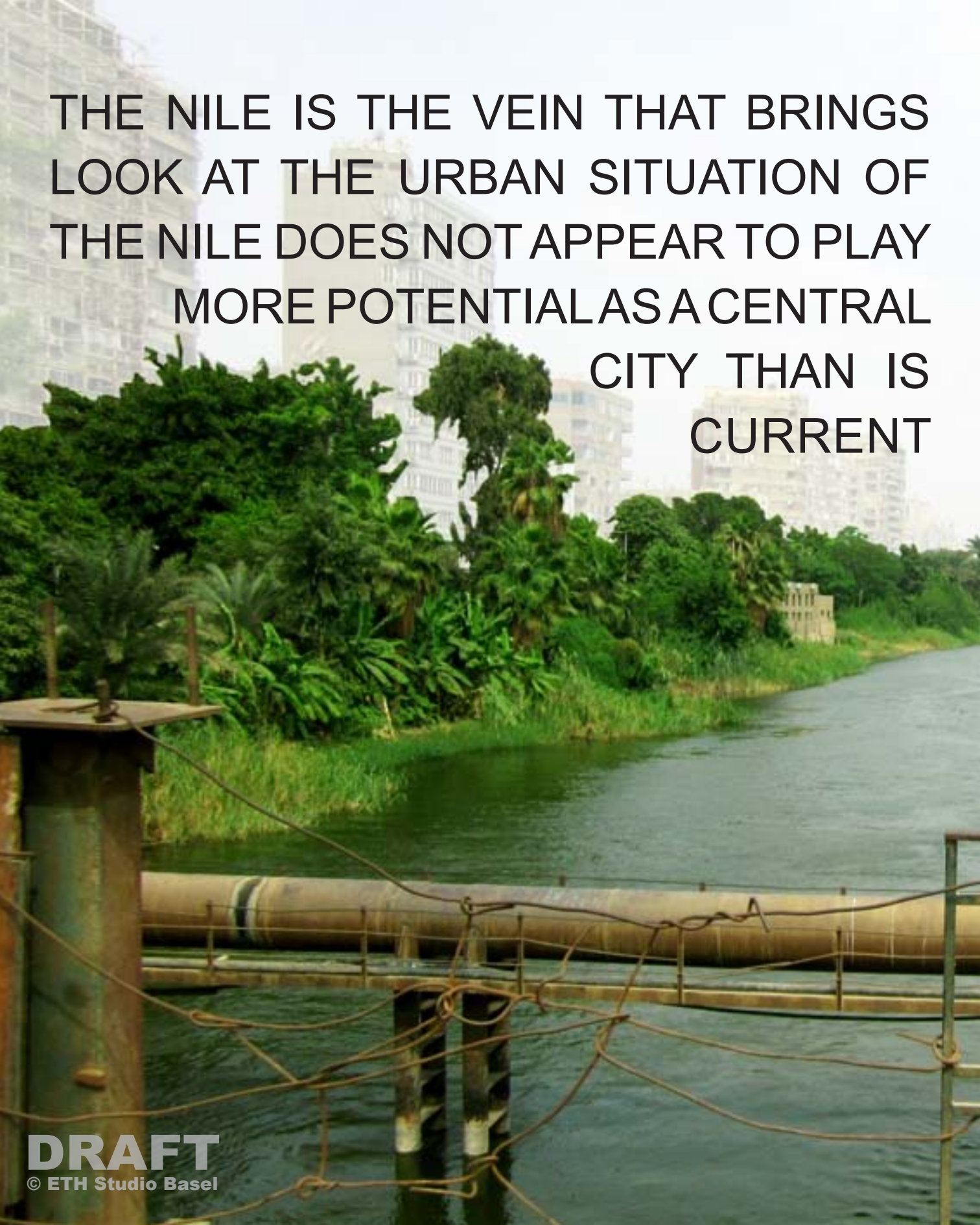
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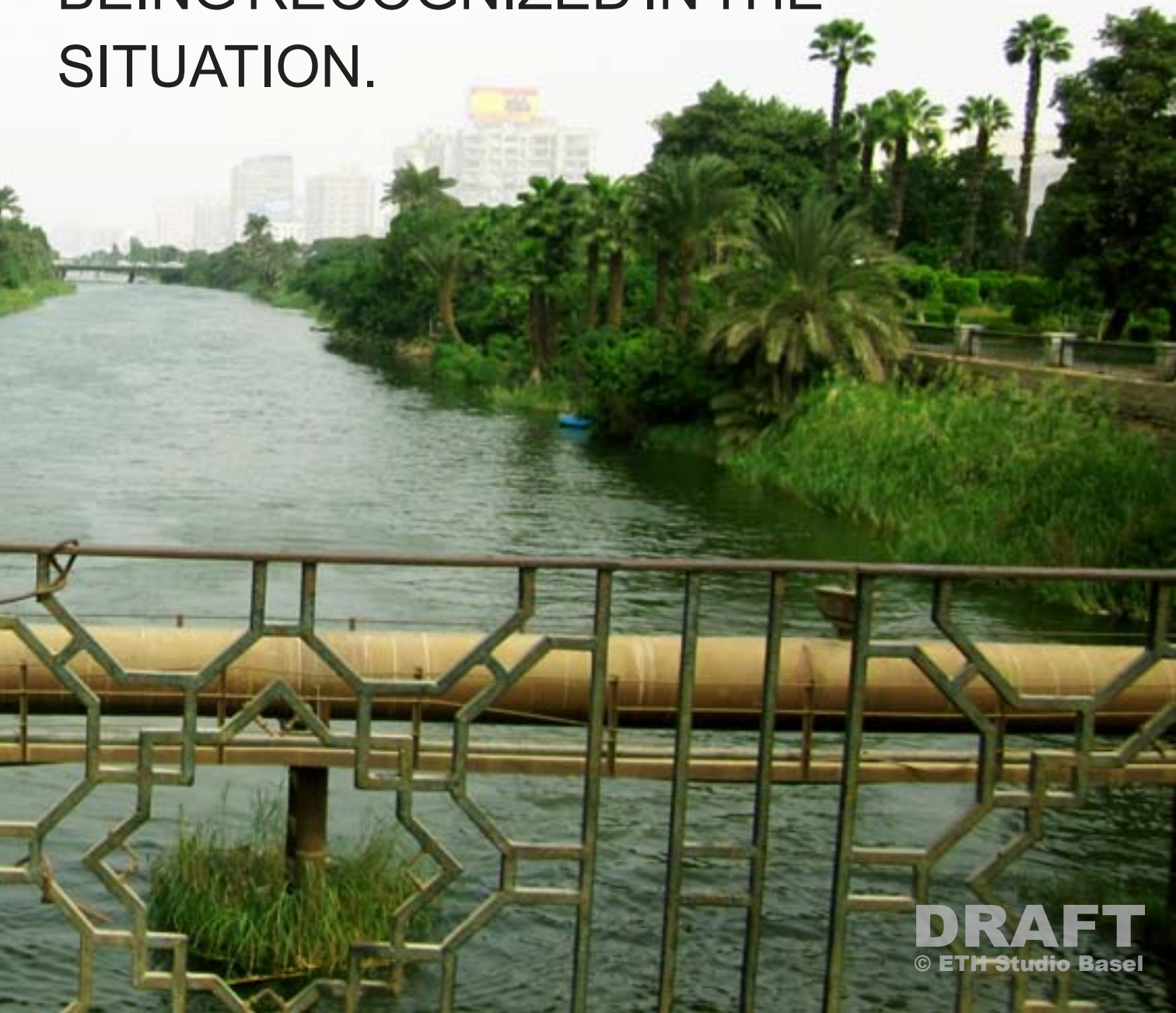
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ISLANDS OF THE NILE



THE NILE IS THE VEIN THAT BRINGS
LOOK AT THE URBAN SITUATION OF
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SITUATION.



DO THE RIVER BANKS OF THE NILE THE URBAN FABRIC OF CAIRO?



FUNCTION AS A PUBLIC SPACE IN



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Green in the Heart of Cairo
The Nile as a Public Space

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Problems with Nile Water
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1. INTRODUCTION

Green in the Heart of Cairo
The Nile as a Public Space



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GREEN IN THE HEART OF CAIRO

There are hundreds of islands scattered along the 6 825 km stretch of the Nile. A unique situation occurs in Cairo, where the islands on the river play an important role in the urban fabric, due to their location in the middle of the city. In total, there are six islands in the Nile in Cairo: Canataire, Waraq, Zamalek, Rawdah, Qusairah and Dahab¹. Only two of these islands are densely built: Zamalek and Rawdah. The other four are rural, agricultural islands in the city.

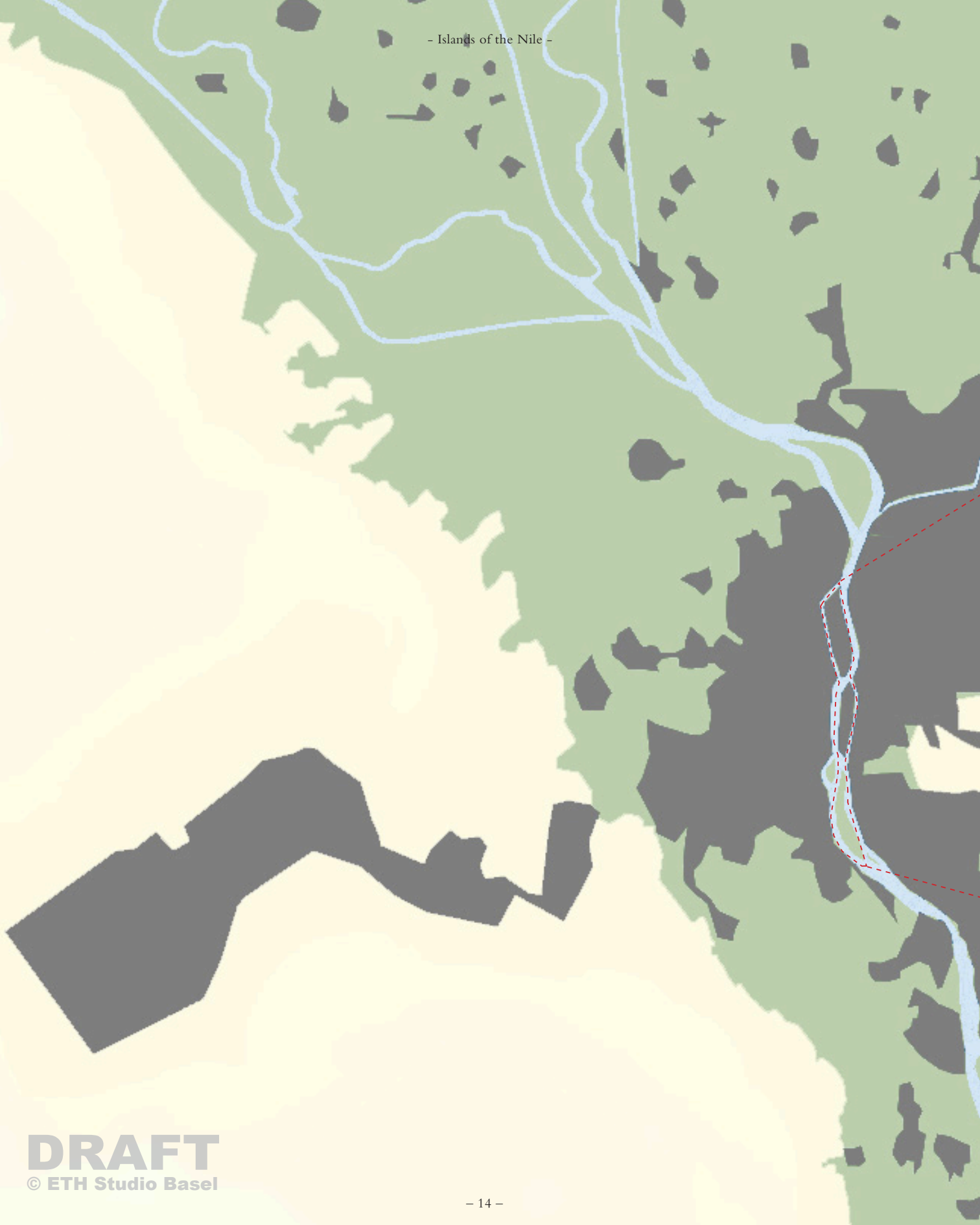
The development of Cairo started out on the green areas along the Nile, where water and fertile ground provided the possibility for civilisation to begin. Eventually, the city began to grow around the river. More recently, a visible shift in the way land is urbanised occurred: In the yellow desert areas, new cities are built as 'satellite cities' of Cairo. Does this development mean that the grey of the urban city is gradually being moved out to the yellow of the desert? We can only speculate, but it could be something to do with the growing awareness that the presence of green is important within the city.

There is a striking difference between the area of the islands and the rest of the city. In the heart of the city, along the flowing blue vein of the Nile, there are some big green areas which have not been occupied by the grey of the city yet.

Is this green space an opportunity to be used as public space? Are the other river banks also used as public areas? The potential is there: green space, water and the rare availability of the fresh breeze in Cairo's dense urban fabric.

Is the Nile accessible for everybody? Should that not be a fundamental right for the inhabitants of Cairo?

1 Interview Barthel (2010)





Zamalek

Rawdah

Dahab





THE NILE

AS A PUBLIC SPACE

Do the river banks of the Nile function as a public space in the urban fabric of Cairo?

Background Information

How did the urbanisation of Cairo influence the islands? Which important political, cultural, social and scientific events and conditions took place that influenced the development of the islands?

How do we define the characteristics of public space in Cairo? What is the water quality of the Nile?

Fieldwork

What is the atmosphere and identity of the area?

Analysis of the River Banks

Which parts of the banks are accessible? How does the map look if we divide the banks into public, private and areas requiring payment?

Which activities take place at the river banks?

How are the banks connected? Does the connection affect the traffic and use?

Which bank typologies are there and what are the consequences?

How are the buildings used at the river banks?

Is there a relation between building height and river width?

What are the real estate values of the river banks, and how does that affect the use and outlook of the area?

Case Studies

How have other cities in the world shaped their river banks for the public to access?

Possibilities

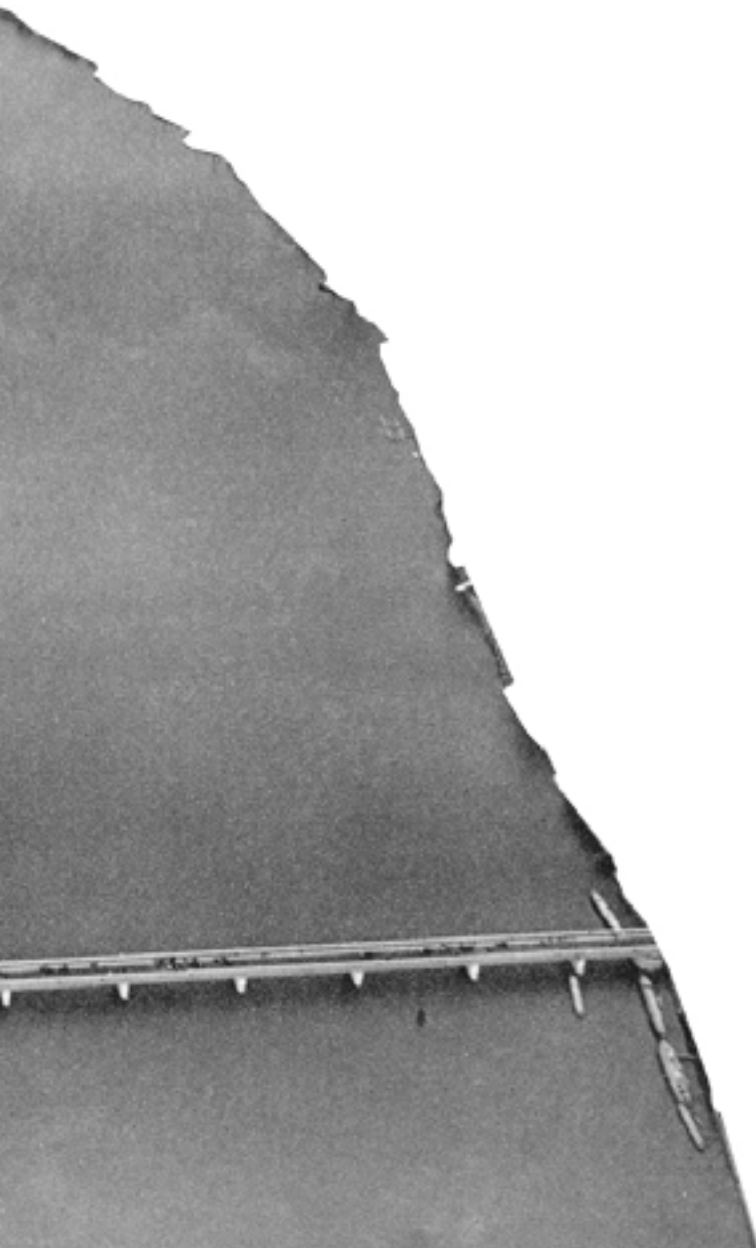
What are the future plans for the area? Which strengths, weaknesses, opportunities and threats do these plans pose?

Finally, to what extent do the river banks of the islands and their corresponding banks on the mainland function as a public space in the urban fabric of Cairo?



2. ISLANDS THROUGH TIME

Development of the Nile
Problems with Nile Water
Urbanization of the Islands



DEVELOPMENT OF THE NILE

The Nile is the reason for civilisation to be able to begin in the deserts of Egypt. 95% of the Egyptian population settle down on the fertile land by the Nile, which travels for 6825km from the Ethiopian and Sudanese highlands to the Mediterranean Sea. Proximity to the fork of the Nile as well as a link connecting it to the Suez Canal makes it unsurprising that Cairo is the largest city in the African continent.

The Nile has changed its course several times since its valley was first cut 5.2 million years ago. The first episode of the Nile, Eonile, began as a response to the Messinian Salinity Crisis, an event which occurred during the late Miocene. During the Crisis, the level of the Mediterranean Sea was lowered by several hundred metres. The erosive power of the rivers increased, creating deeper cuts into the soft limestone on the elevated Egyptian plateau that they were flowing through. This resulted in the formation of the Nile Valley.

The early Pliocene brought a rise in sea level, which filled the excavated canyons caused by the Messinian Salinity Crisis.¹ This was the start of the Paleonile, the second episode. However, the onset of arid conditions over Egypt at the start of the Pleistocene caused the Paleonile to weaken and stop flowing into Egypt.

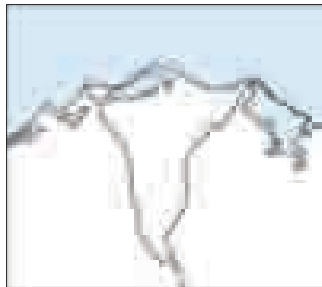
The Protonile followed after the Paleonile, thanks to a wet climate during that period. It flowed a course that was 80 to 100 metres above the current flood plain. It carried various sediments such as complex gravel, coarse sand, and loamy materials.

How the Protonile made the transition to the Prenile is unclear. However, the Prenile is known to have an abundant supply of water, despite the arid climate. The river lasted almost the whole of the middle Pleistocene, which has resulted in the most effective outline of the modern valley. During this time, the tilt of the land towards the west of the Nile may have caused the path of the river to gradually move eastwards.

The interval between the Prenile and the Neonile was marked by the great pluvial, an extended time of abundant rainfall, which lasted from 125,000BC to 80,000BC in Egypt. This was followed by a period of aridity before the Neonile began to flow around 27,000BC.²

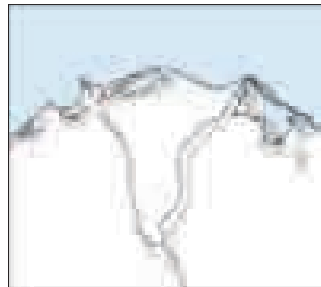
The Neonile flowed in the same route as the modern Nile, only at a higher elevation, and is almost indistinguishable in terms of sediments. Slowly, it carved itself lower to the river we know today.

1 Unesco (1981)



Mionile

2 Said, Rushdi (1981)



Paleonile



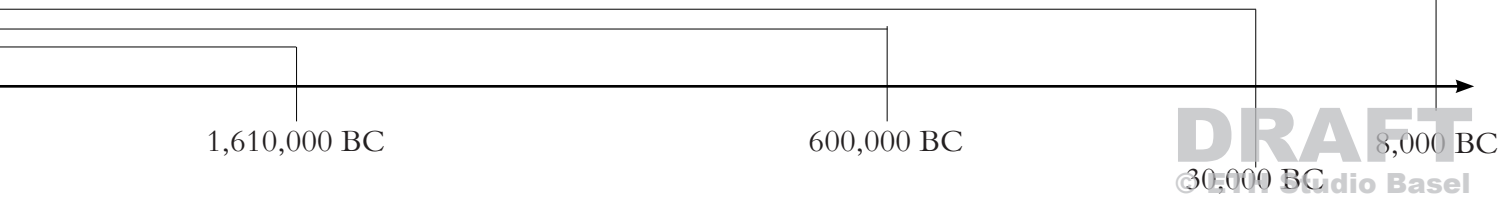
Prenile



Neonile



Modern Nile

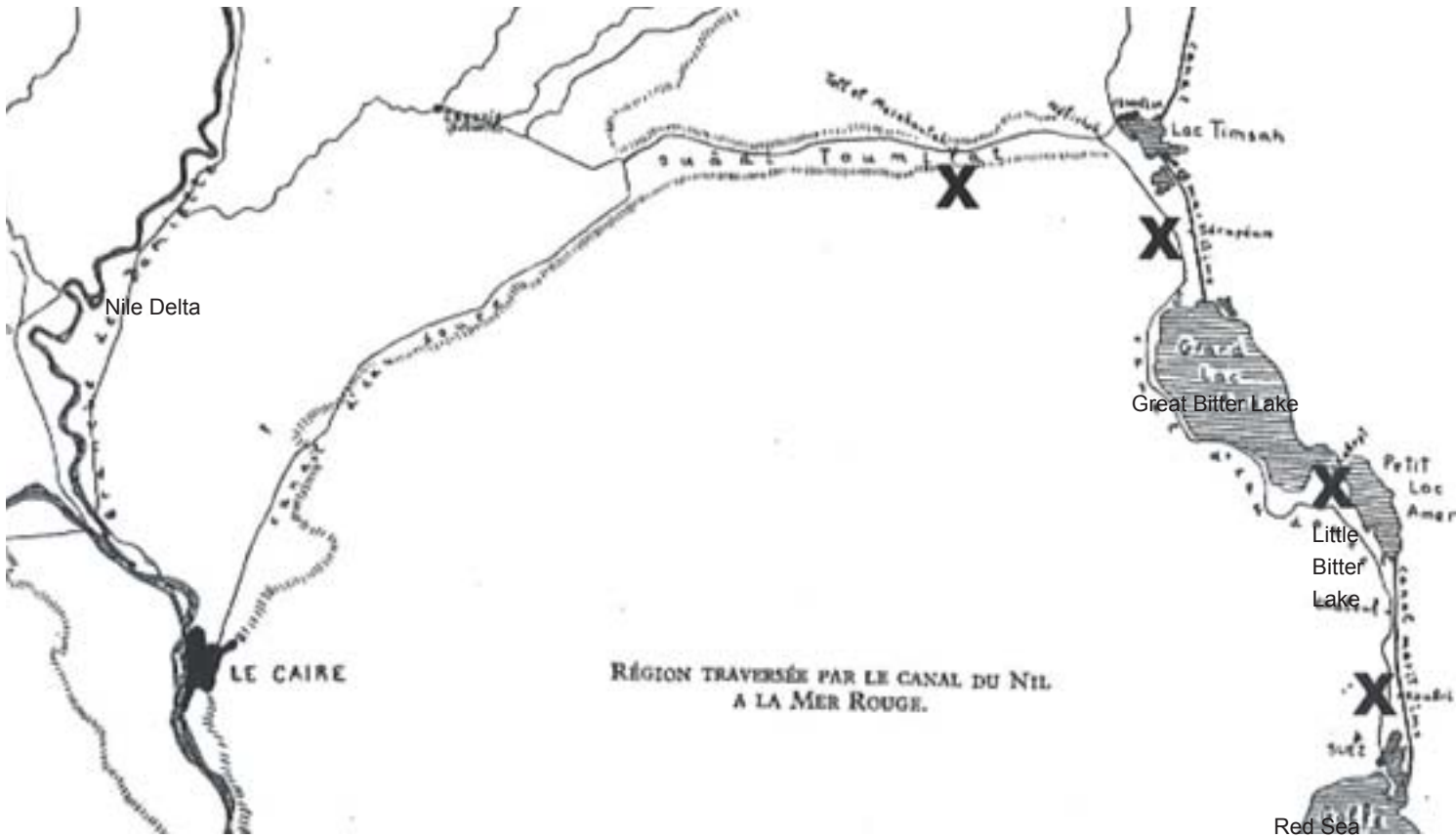


1,610,000 BC

600,000 BC

8,000 BC

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Trading Routes before the opening of the Suez Canal (Sheehan, 2010)

Trading Routes

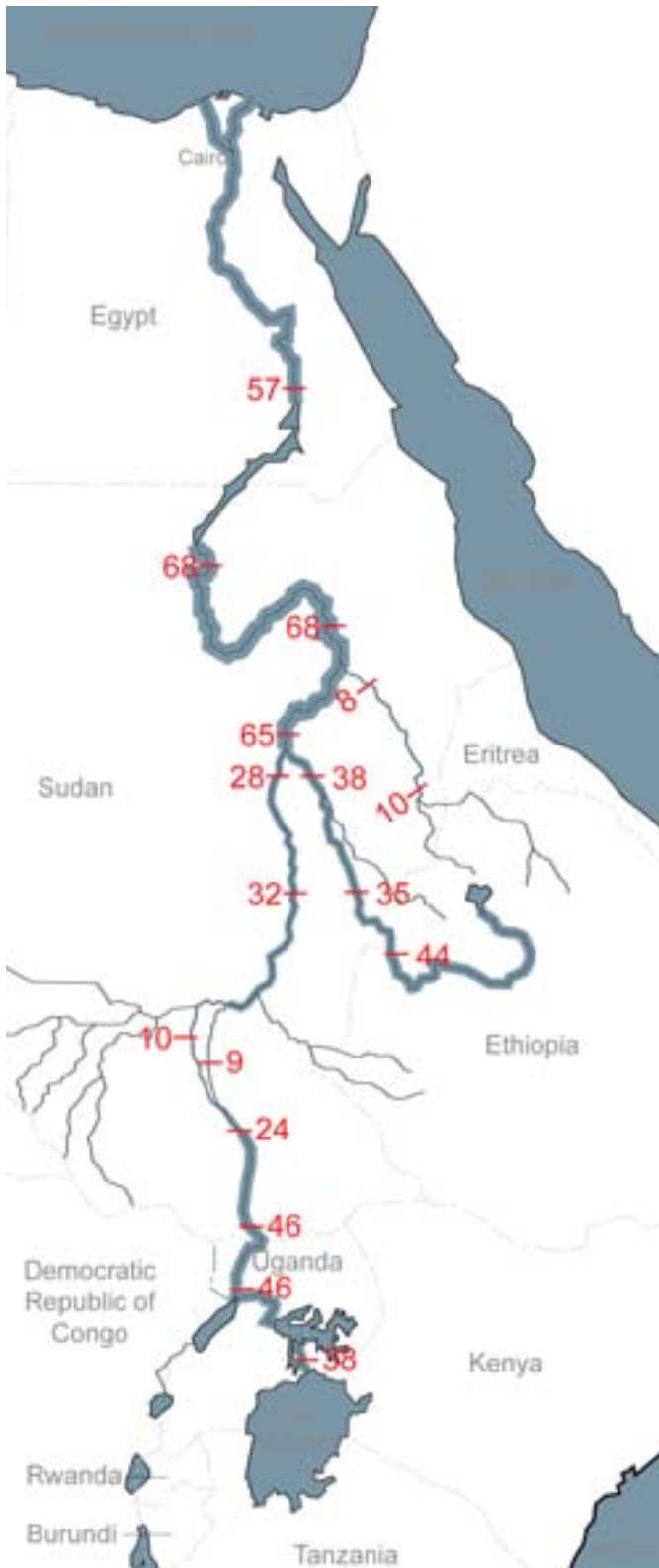
The idea of linking up the Red Sea to the Mediterranean Sea has always been of interest. The first attempts to do so were during the pharaonic times, where a canal was built to the Nile, so vessels could travel westwards from the Red Sea, then head towards the Mediterranean Sea through the Nile. However, this canal fell into disrepair, was extended, abandoned, and rebuilt again by the Persians around 500BC, and the Romans again around 100AD.

Eventually in 1799, efforts towards a modern canal were made as part of a strategic plan by Napoleon Bonaparte. However, a miscalculation in the difference in sea levels, making construction too expensive, put progress to a halt. In 1833, a group of French intellectuals arrived, with keen interest to continue the

Suez project. A confirmation that the sea levels were equal was made in 1847. This was followed by a series of interruptions with opposition from the British and Mohammad Ali¹.

Finally, the Universal Company of the Maritime Suez Canal, a private company, was founded in 1858 to fund the construction of the canal, under an agreement to operate it for 99 years before reverting its ownership to the Egyptian government. In 1869, the waters of the Mediterranean began to flow into the Red Sea through the newly opened Suez Canal.²

1 Sheehan (2010)
2 Raymond (2007)



Water Amounts through Nile (in km³/year)

Water Distribution of the Nile

The course of the Nile crosses ten countries. It is a critical source of water for the northern ones, Egypt and Sudan, where it does not rain much due to the desert climate. Egypt depends on the Nile for 89% of their total renewable water sources¹². The southern countries are located around the sources contributing to the Nile, and have a positive net input into the river. The water distribution is becoming a bigger issue, as Egypt wants to continue their claim on the lion's share of the water, arguing that it is their natural historic right. The fact that this right exists means that any perceived reduction of the Nile water supply to Egypt is tampering with its national security and thus could trigger potential conflict. Egypt has even threatened to go to war over Nile water.

1 Karyabwite (2000)
2 FAO (2010)





PROBLEMS WITH NILE WATER

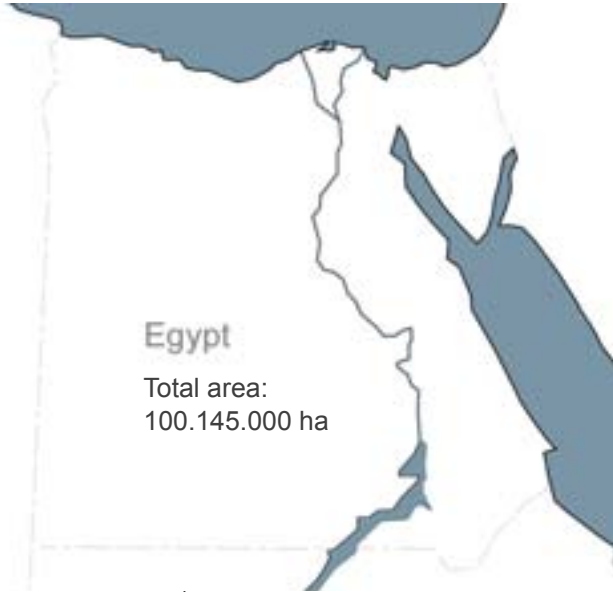
89% of Egypt's freshwater reserves come from the Nile: 55,5 km³ a year. Other freshwater sources such as rainfall (1-3 km³/year) and groundwater (2,3 km³/year) are of marginal importance in the renewable water of Egypt. Non-conventional water resources, the re-use of wastewater and agricultural drainage water and the desalination of brackish water, contribute only 4,9 km³/year to the total.

The demand for freshwater is rapidly growing, which calls for improvement in the management of water from the Nile. Furthermore, Egypt's share of water from the Nile is also being discussed currently.

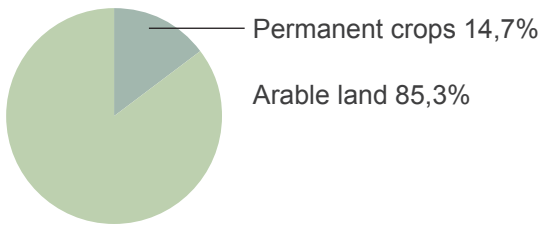
In the Nile Water Agreement in 1929, the total amount of water of the Nile of 84,0 km³/year is divided over the countries sharing the course of the Nile. Since Egypt is getting the largest share at 55,5 km³/year, the country is under a lot of pressure from the upstream countries wanting to increase their share in the Nile water.



Inhabitants
81,5 million

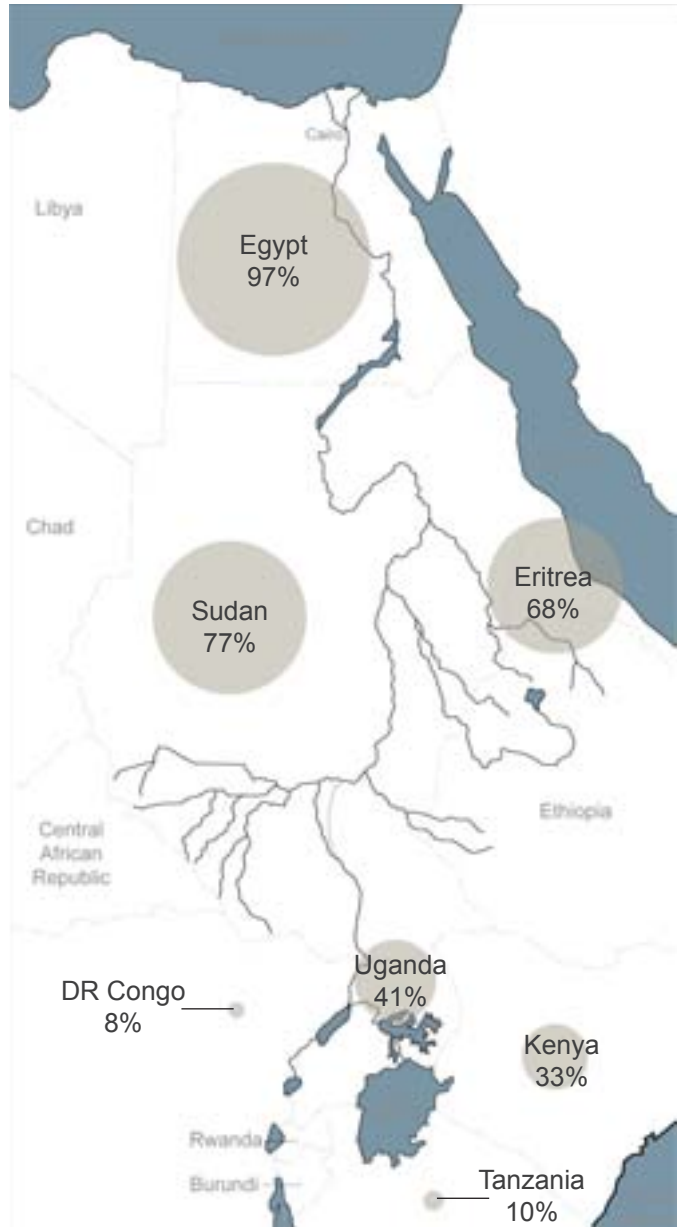


Cultivated (Nile Valley)
3.538.000 ha (3,5 %), of which:



Fertile Nile Valley

In Egypt, most of the fertile land is used as agricultural land. The agriculture does not cover a big area in comparison to the all the land available, but the cultivated land is very fertile and suitable for intensive agriculture. Therefore, it plays a big role in the Egypt's economy and employment. Almost 30% of the people of Egypt work in agriculture, and 20% of the county's GDP comes directly from agriculture. Indirectly from this sector is 20% of the GDP from industries linked to agriculture.

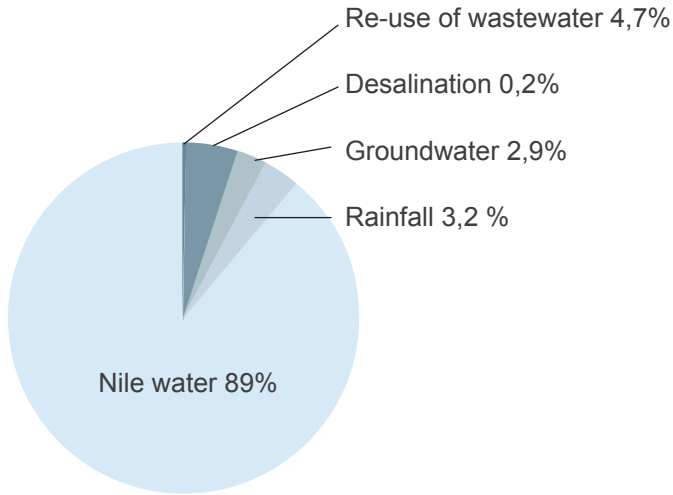


Dependency on the Nile in %¹

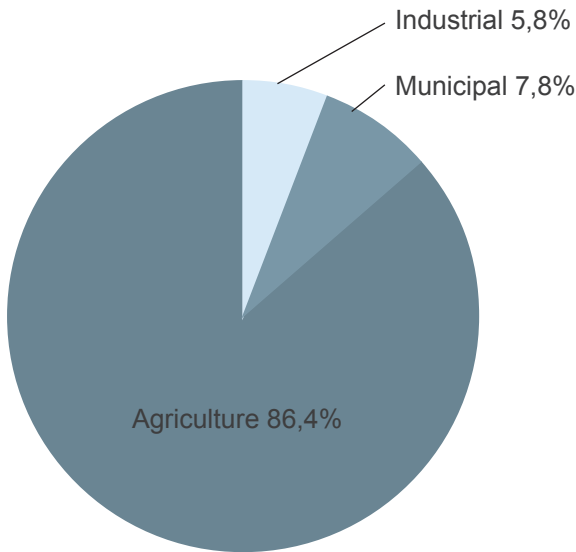
Total dependency on the Nile

For some countries sharing the course of the Nile, the water is only a small part of their total water resources. Egypt however, and to lesser extent Sudan, Eritrea, Uganda en Kenya, is completely dependent on the Nile River for its resources. Of these countries, the water Egypt and Sudan rely on are all generated outside of their borders.

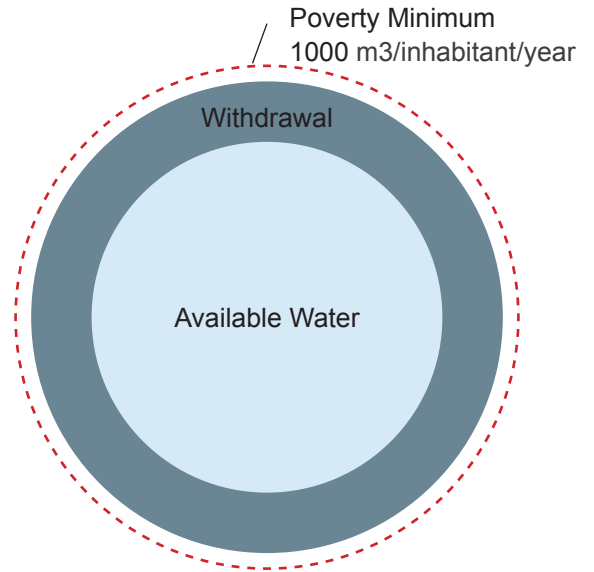
1 FAO (2010)



Available Water
Total: 62,3 km³/year¹²



Water Use
Total: 76,4 km³/year¹²



Available water	= 702,8 m ³ /inhabitant/year
Water Withdrawal	= 937,0 m ³ /inhabitant/year
<hr style="border-top: 1px dashed red;"/>	
Poverty Minimum	= 1000 m ³ /inhabitant/year

Water Resources and Demands

The available water per capita for Egyptians is lower than the international poverty standard of 1000 m³/inhabitant/year. Also, the water withdrawal exceeds the available water resources. That is a problem, since the lacking water is obtained from limited sources.

1 FAO (2010)
2 UNEP (2000)



Felucca fleet owner, 2010:

„We [inhabitants of Dahab] collect our garbage at the river banks and cover it. After one year, it will disappear.“

Pollution

The water quality of the Nile is degrading due to domestic, industrial and agricultural activities. A big challenge lies in improving the water management of the water of the Nile. This is necessary because of the rapid growth of the population and of industry requiring ever higher amounts of water from a limited supply. At the same time, the water that is available is often severely polluted.

Along the stream of the Nile, there are 36 industries that discharge wastewater and polluted sources directly into the river. Indirectly, there are 41 industries that discharge their pollution into irrigation canals.

Due to a lack of sewage systems upstream of Cairo, the water of the Nile also exceeds the European Community Standards of fecal contamination and there is a high salinization in the delta¹.

In Cairo, at almost the end of the stream of the Nile, the water is contaminated with municipal wastewater, oil pollution, agricultural pollution, heavy metals, pesticides, herbicides and microbes. The heavy metal pollution, including high concentrations of lead, cadmium, copper, iron, manganese and zinc, is expected to cause the high rate of pancreatic cancer in the northeast Nile Delta region.

¹ Dumont (2009)





URBANIZATION OF THE ISLANDS

The urbanization of the islands dates back to the beginnings of Cairo. In 641, when Fustat was founded, there was already a bridge of floating boats over the Nile at a crossable point in the river; at the island which we now know as Rawdah¹. By using the island, the distance to bridge was smaller, namely 350 metres on every side of the island. From the moment the bridge was realised, farmers started to settle on the island. In 841, the Nileometer was built on the tip of Rawdah to measure the river height and establish the taxes for the following year. From 1240, the island was used to house Mamluk slaves.

On Zamalek, urbanization started only 200 years ago with the modernization in the 19th century. Before modernization, there were a few villas on the island, but the island was not flood-free so not all parts could be inhabited. Also, the building of bridges to connect Downtown to Zamalek and Rawdah according to the masterplan carried out under Khedive Isma'il between 1863 to 1879² was an important factor in the urbanization of Zamalek.

The last island to be urbanized was Dahab, which was only habitable since the realisation of the Aswan Low Dam in 1902. This is the lowest island, which used to flood frequently. On the island are just agricultural settlements, with no urbanization as how it is on Rawdah and Zamalek.

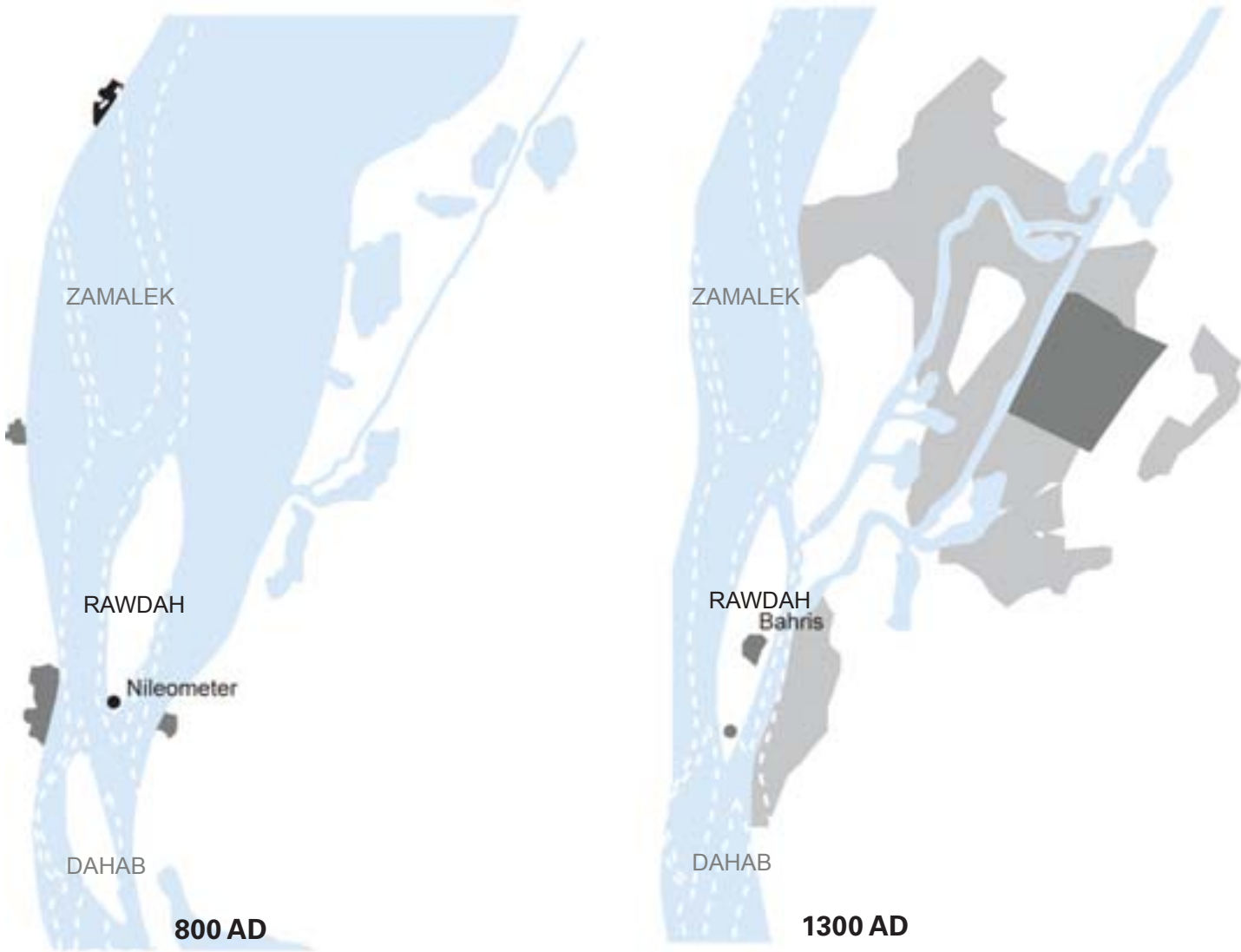
From these three islands, the urban history of Cairo can be read. For the first period in the history, it can be seen from Rawdah how the city grew since the 7th century. Zamalek was urbanized since 1800, and shows the transformation through modernization. Dahab closes off the urban history and states question marks for the future: What does one do with such a young island? Is urbanization a desired development, or should Dahab be kept in the state it is today? These questions will be raised again in Prospects.

1 Raymond (2007)

2 Mootaz, Farid & El Shafie, Hatem (2007)

EARLY DEVELOPMENT UNTIL 1800

Rawdah has been developing since the beginnings of Cairo. The island has the highest elevation of the three, and has always been generally flood-free. While it has been a challenge to settle near the Nile, due to its unpredictable shifts and periods of drying or flooding, the Cairenes have developed through the years a flood system that decreases the chance of big floods. The Nile-o-meter serves as evidence that the island has not shifted much over the years. The meter was re-built in 841 and it is still there today.



Nileometer

Mamluks on Rawdah



Nileometer, rebuilt in 841

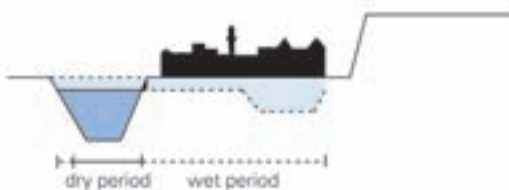
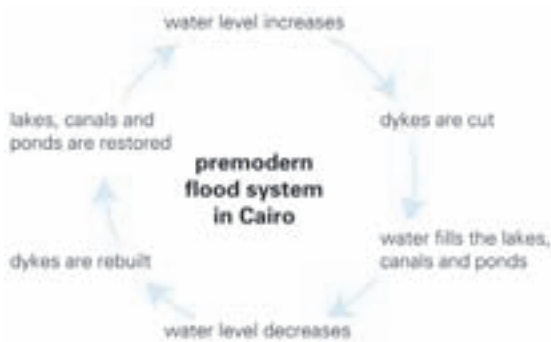


Entertainment by the shores of birkat al-Fil

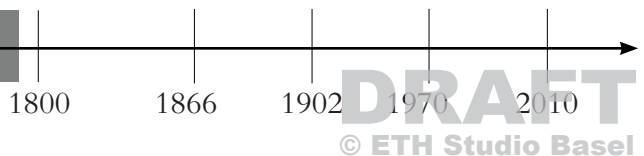
When Fustat was founded, the main activities in and around the city were farming and trade. The island and river banks were generally not inhabited because of the unpredictability of the Nile. It had violent phases of drying and flooding, with its islands appearing and disappearing with the fluctuating water levels. These conditions did not favour settlement in the areas closest to the river. To tame the Nile, dykes were built since the 14th century to protect Cairo and its river banks. When the Nile was in a dry period, the dykes would be strengthened to protect the adjacent area of flooding. Sometimes, the flood would rise so high that the dykes were destroyed by the force and the banks would flood up to 200 to 300 metres towards the Citadel.

In 1240, the Mamluk Sultan Salih decided to abandon the Citadel and establish his residence on Rawdah island for security reasons. The barracks of his Turkish mamluks were also placed in this fortress, called the Bahris. There was some civil work done on the river, to ensure that there would always be water in the east branch of the Nile to keep it isolated. But this project failed very quickly with the death of Salih in 1249.

In medieval Cairo, the water management system to control the course of the Nile was developed. In the city of Cairo, this flood system was visible by the different channels, ponds and lakes that were artificially created to store excess water in periods of flood. These water-filled basins were important social and recreational places for the Cairenes.



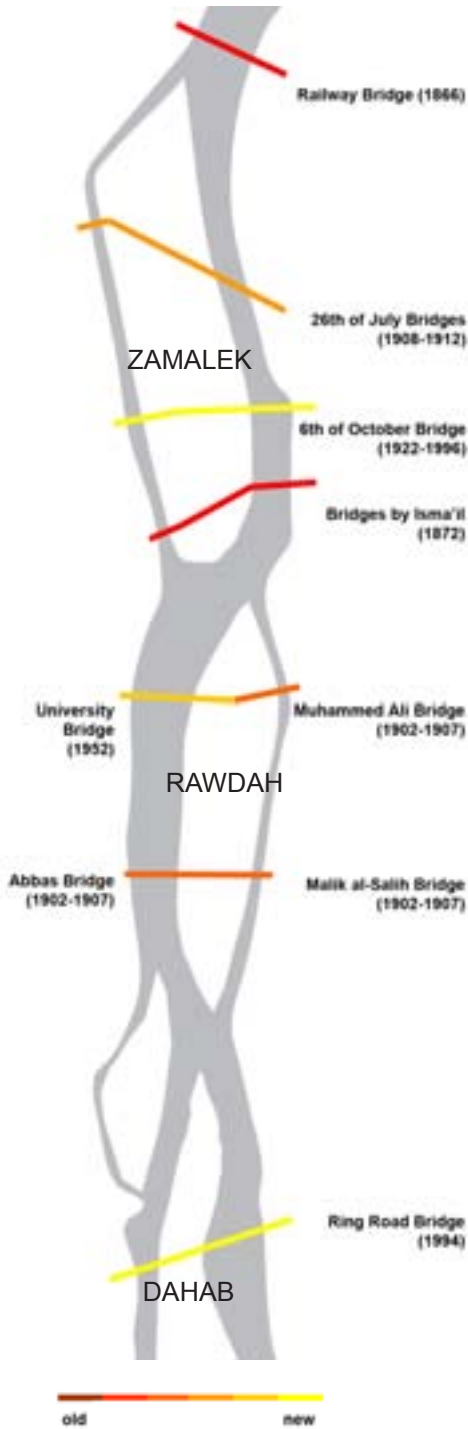
Flood cycle of the Nile



MODERNIZATION

Big changes for Cairo came with Muhammed Ali in 1805 and his predecessor, Isma'il Pasha, who began radical westernization and modernisation. By 1866, the ponds, canals and lakes were filled up to make the city more hygienic, there was a new railroad system, the Suez Canal was planned, the Nile was channeled and the river banks reinforced. When Isma'il Pasha took over the power in 1863, he made the first overall plan for the city's development, realised the Isma'illiyya Canal, and planned the Aswan Dam.





Development of bridges of Cairo



Kasr-el-Nil Bridge by Isma'il in 1873

Muhammed Ali, who seized power and ruled from 1805 to 1848, led Egypt into the modern world. The political and administrative systems were reformed, an army was established, and a new economy developed. In Cairo, he took measures to increase sanitation and started cleaning out the streets.

From 1863, Isma'il Pasha ruled Egypt and made an urban plan for Cairo. He was deeply impressed by Haussmann, whose new urbanism was predicated on an organization of space in which the street system had primacy. His plans included big boulevards, housing blocks and axes through the city.

With Isma'il, spectacular technical innovations were introduced in Cairo. He provided Cairo with a railway system, finished the reinforcement of the banks, channeled the Nile and started planning the Aswan Dam. Another important contribution was the introduction of gas for public lighting from 1865 and water delivery from 1891. Between 1864 and 1866, the Isma'illiyya Canal was constructed to bring fresh water to the construction site of the Suez Canal.

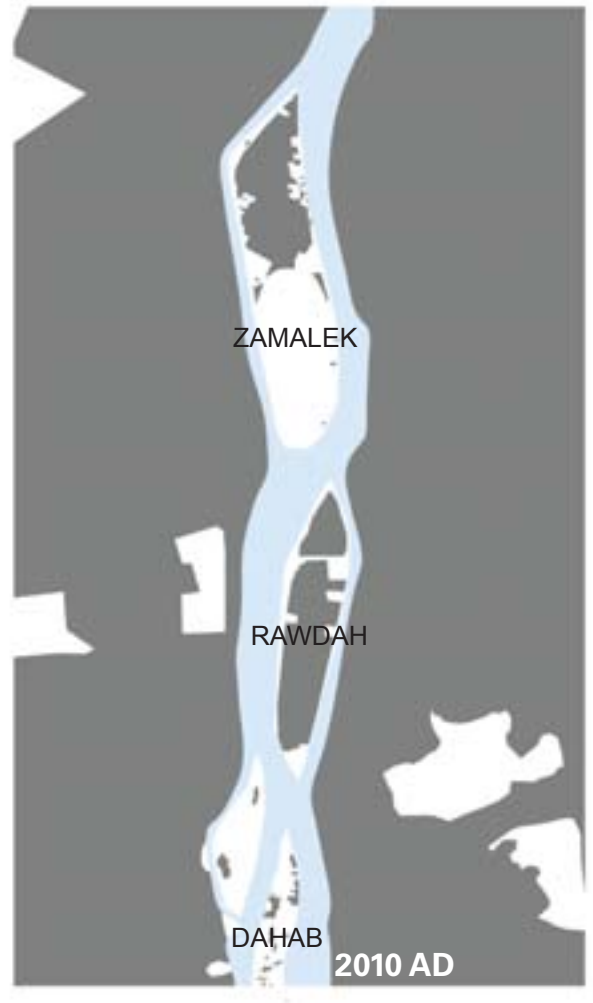
Muhammed Ali | Isma'il Pasha | Suez Canal



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DAHAB: BARELY TOUCHED BY URBANIZATION

Because of the Aswan Dam and reinforcement of the river banks and islands, the water level of the Nile was controlled. That meant that the river banks could now be built on: residential areas and bridges were constructed to link Rawdah and Zamalek to the mainland. Between 1902 and 1907, three bridges were added to the already existing Kasr-el-Nil Bridge Isma'il developed in 1872. The third island of the Nile, Dahab, was also suitable for urbanization. But because the lack of connections with the banks on the mainland, only a few farmers settled there and it remains an agricultural area until today.



Rawdah

Between 1890 and 1905, the New Town plans were developed. This masterplan included Zamalek, where it provides in the need for high-end residences. On Rawdah, this masterplan introduced a clear structure with a main axis through the center of the island.

In 1936, Egypt gained independence and an explosive growth of the city was set in. While the 'European' city developed, the old city was more or less abandoned. The upper-income residents moved to modern neighborhoods outside the city centre. Zamalek was one of these modern neighborhoods, while Rawdah was part of the old city. Luxurious, spacious apartments were built on Zamalek in the 20's-50's while the cheaper standard housing of the 60's had big success on Rawdah.

The buildings reflect the history of their respective islands. On Rawdah, there are a few monuments left and its urbanization shows many similarities with that of older neighborhoods in other parts of Cairo. On Zamalek, the buildings are mainly well-planned apartments. Some older buildings, usually villas from the early colonial years of the island, house embassies or schools today. On Dahab, urbanization has only just begun. There are a few villages at present, but small apartment buildings have been constructed, with others under construction, hinting at possible densification.

To conclude, the three islands differ in history, urbanization stage, height and inhabitants. They can be seen as a timeline of Cairo's development as a city with an old centre, modern suburbs and land that is still set aside for agricultural purposes.



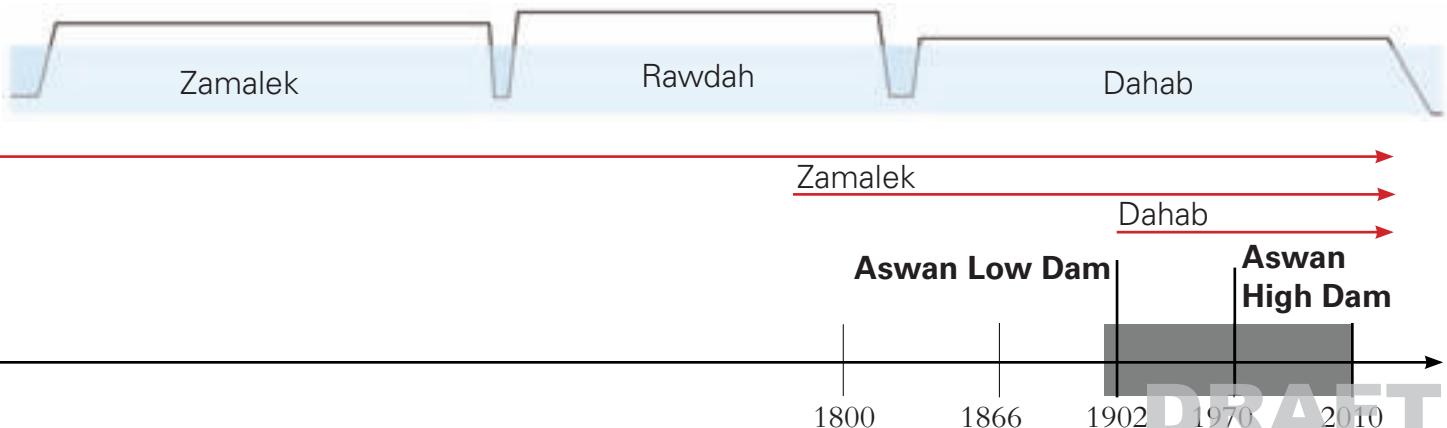
Streets of Rawdah



Modern apartments on Zamalek



Dahab settlements





ZAMALEK

RAWDAH

DAHAB

3. THE ISLANDS

Defining the Islands
Dream for the Bourgeoisie
Extention of the Mainland
The Green Heart of Cairo
Signs of the Islands



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DEFINING THE ISLANDS

Looking at the islands today, can we say that there is an overall island identity? And do the river banks belong to the island identity as well?

There are phenomena which you can find on every island or river bank: green and shaded streets, the presence of the Nile that defines its boundaries, river bank activities, activities on the Nile, and a connection through the island that links the river banks of mainland Cairo.

However, the islands are very different from each other as well. Westernised, liberal and upper-class Zamalek has a different identity from the more conservative Rawdah, which is occupied mostly by the lower-middle class. Rawdah has a rich history and is fully urbanised, which is the total opposite of Dahab, a relatively new island with all of its land used for agricultural purposes.



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Zamalek

A DREAM FOR THE BOURGEOISIE

building for the bourgeoisie

traffic that demands a two-storey
road

western culture

crowded by cars

rush hour 24/7

gated central park

green and colonial

exclusiveness



Luxury apartment blocks from the beginning of the century

Building for the Bourgeoisie

The first inhabitants of Zamalek were English bankers and investors, who brought along with them their western attitude and colonial architecture style. The wealthier Egyptians who were attracted by the ways of the west and their more liberal mindset, also moved to Zamalek to have their own place in one of the most desirable districts of the city.

With the introduction of satellite cities in the desert, many inhabitants of Zamalek chose to leave the crowded city for a luxurious apartment in a gated compound, where the promise of spaciousness and tranquillity were compelling. However, some of them returned in the end, missing their life on the island.



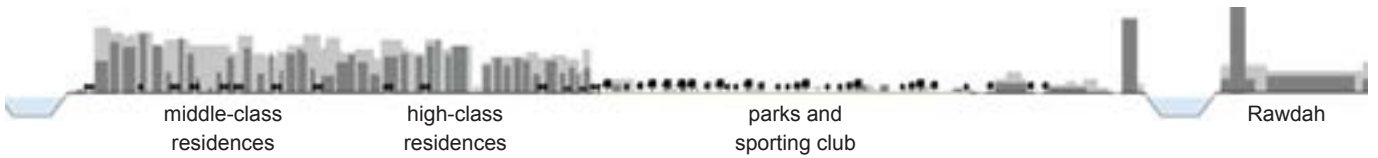
Fly-over on the 26th of July, one of the main streets of Zamalek

Traffic that Demands a Two-storey Road

On Zamalek, there is a lot of vehicular traffic due to the several schools and banks on the island. Hundreds throng in from the mainlands to use these services, while many residents from Zamalek drive out to work on the mainland. Hence, this creates a huge jam not only on the main streets but also the smaller ones in the residential areas, as most residents travel by car.

In the evening, it is busy again because of the varied nightlife options on the island. The 26th of July Street is especially busy, as it stems from the Tahrir Square in Downtown. Because of the huge traffic load, a flyover was built over it - the 15th of May flyover. The new flyover adds a new character to the existing urban fabric.





High Density Urban Typology



Inhabitants

Western Culture

The western influence can be felt very strongly in Zamalek. It offers the American MacDonalds, British Costa Coffee, and western bookshops. Suits and other western attire are commonly worn, even by locals. Many foreign ambassadors stay on the island, which has created a different kind of atmosphere, one that is more liberal than at most other parts of Cairo.

Crowded by Cars





The plots of land on Zamalek were originally divided up for villas in 1937¹. Today, apartment blocks up to 16 storeys are built on the same plot meant for one villa, very possibly multiplying the number of cars on the streets by the same number, due to the affluence of the residents. As a result, the streets are packed with cars. The shortage of parking spaces available results in the need for cars to rove around looking for a parking lot, which further worsens the existing traffic problem.



Transport

1 CAPMAS-Zamalek (1991)







-  All-day traffic jams
-  Peak hour traffic jams
-  Occasional traffic jams
-  Boat connection

Rush Hour 24/7

The streets of Zamalek are always filled: in the morning and afternoon the usual traffic jams occur because of the schools and banks on the island. At night, the crowds are moving again because of the nightlife on the boats along the river banks and in the coffee houses, bars and restaurants on the island itself.



- Living
 -  - Upper class
 -  - Medium class
 -  - Lower class
- Working
- Recreation
 -  - Public
 -  - Private
- Tourism
- Agriculture

Gated Central Park

On the plan of Zamalek, the big parks immediately stand out. These functions are not public, and for the common Cairenese never accessible since the membership prices are very high. The other main functions are the banks and schools, attracting inhabitants from all over Cairo to the island.



Dreams of westernization



Recent developments



Parks on the south part of Zamalek

Green and Colonial

The building typology and layout of the island is very close related to the colonial history of the island. It used to be an island parcelled up for villas of rich bankers and ambassadors. Nowadays, because of the

increasing real estate pressure on the island, most of these parcels are filled up by highrise apartment blocks. Only some of the villas are still standing, but mostly serving another purpose now as embassy or school.



1



2



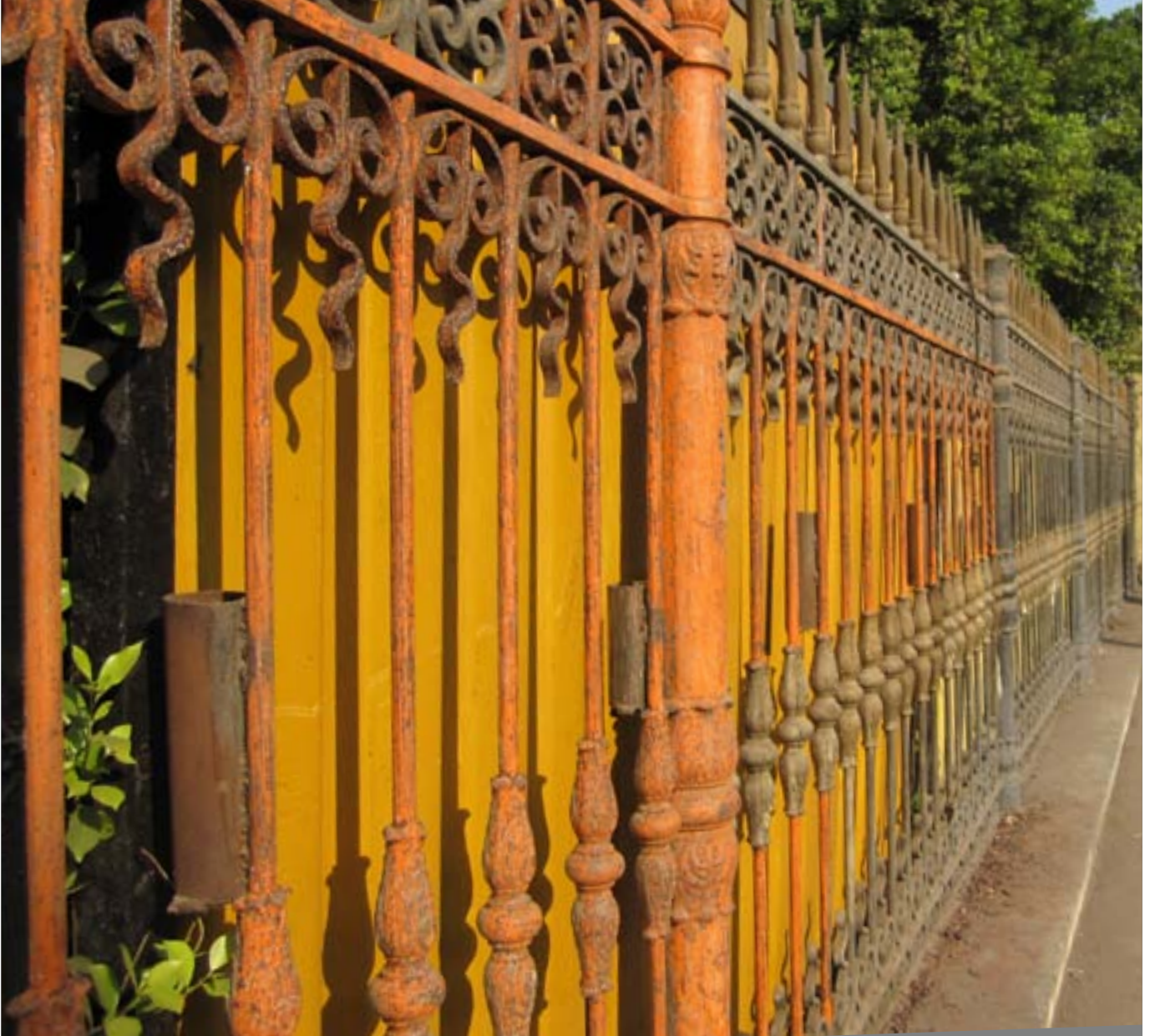
3



4

Impressions

1. Western attitude: lovers lanes
2. Nigtlife at boats on the Nile
3. Streets filled with school kids in the afternoon
4. High income recreation: Cairo Opera House



One of the many gates on Zamalek

Exclusiveness

Many parts of Zamalek are nice, green and calm areas, but gated. Big parts of the river banks and parks are occupied by big players that shut off the areas for the common Egyptians. Exclusive clubs and governmental functions take their claim on the public space. For

the original inhabitants, proud of their island and its exclusive reputation, this is not a problem. They are able to pay and be part of the select few making use of the unique function that Zamalek offers.





Rawdah

EXTENTION OF MAINLAND

lively streets

neglected heritage

laid-back community

bikes and dented cars

jams vs. empty backstreets

urban clarity

influences of modernization

vanished treshold



Market on the northeast of the island

Lively Streets

As one walks through the streets of Rawdah, there is a feeling of community. The inhabitants know each other and share daily activities. Markets, shops and small mosques occupy the backstreets, ensuring a continuing stream of activity through the day. On the main road in

the central axis, there is more traffic, bigger shops and people passing through. The university hospital on the northern part of the island is also a node that draws many people around it due to its range of users: the students, doctors, patients, and their families.



Extended monumental villa

Neglected Heritage

The Nileometer is a reminder Cairo's history, and evidence that although the Nile shifted westwards through the years, Rawdah has stayed in more or less the same position. Since the rebuilding of the Nileometer in 841, it has been used to determine the taxes for the following year. On other parts of the island, less obvious traces of the island's rich history can be found through its monuments. Unfortunately,

this piece of its heritage has not been taken care of as well as the Nileometer, perhaps because the latter can be milked for tourist dollars. Due to rent control and private ownership of the monuments, many are empty and badly maintained. Worse, some are 'renovated' by private owners and extended with one or two storeys, underestimating the historical value of the building.





High density urban typology



Inhabitants

Laid-back Community

On Rawdah, there is a noticeable bond between the inhabitants. Most of the families there have been living on the islands for many generations, and the family members have all stayed to reside and mostly also work on Rawdah¹. The little backstreets are filled with activities. Markets, shops and mosques being people from the island together, and function as a social place for the inhabitants to catch up, as many seem to know each other and even have familial relations.

1 Wahdan (2010)



Transport

Bikes and dented cars

The transportation means on Rawdah are not as high-class in comparison to Zamalek, but also not primitive like on Dahab. There are more cyclists on the streets, since the backstreets are quiet and safe to ride in. The cars seen on Rawdah are usually old and of cheap brands. Sometimes, they are abandoned, and left to degrade in a parking lot.



- █ All-day traffic jams
- ▬ Peak hour traffic jams
- ▬ Occasional traffic jams
- - - Boat connection

Jams vs. Empty Backstreets

Rawdah is connected to the mainland by bridges, which are always crowded. This is due to the huge junction caused by the crossing of cars commuting between internal roads and those wishing simply to get from one side of the mainland to the other. Because of the hospital on the north tip of the island, a lot of traffic is coming through over the north bridge. The south bridge is a major access from the eastern river bank to the Cairo University, which is on the Giza's side of the Nile. The smaller streets of the island are very quiet during the day, because they are 'dead ends' and only used by internal traffic.



- Living**
- █ - Upper class
- █ - Medium class
- █ - Lower class
- Working**
- Recreation**
- █ - Public
- █ - Private
- █ Tourism
- █ Agriculture

Urban Clarity

Rawdah is an island with a clear structure. The most significant axis stretches over the length of the island. Two other main connections over the width of Rawdah divides the island in three functional zones. In the north zone of the island is mainly occupied by a university hospital complex for patients from all over the country. The other two thirds of the island are mainly used for housing, with the middle zone for middle class income and the south zone for lower income residences.



Monumental villa



Urban results of modernization in the 60's



Housing at the river banks, mix of premodern and postmodern apartment blocks and premodern villa's

Influences of Modernization

In the urban fabric of Rawdah, the effects of the modernization are clearly visible. The premodern housing was a maximum of 6 storeys, with generous floor heights and some ornamentation. The modern and

postmodern housing is characterized by standardization of building plan, higher building heights and almost no decoration.



1



2



3



4

Impressions

1. Crowded main street with high residential buildings
2. Quiet back street with lower residential buildings
3. Monuments on Rawdah: 15th century mosque
4. Fishing as a typical river bank activity



Is Rawdah losing it's characteristics to the urban developments during modernization of Cairo?

Vanished Threshold

Rawdah has been developing since the founding of Fustat in the 7th century. By then, there was already a floating bridge connecting the east and westbank over the Nile¹. In the 13th century, the Mamluks used the island and its natural thresholds to raise Mamluk slaves as princes.

After the Mamluks, the line drawn between Rawdah and the land towards its east has slowly become thinner. While some villas and palaces from when the island was wealthy can still be found, the urban fabric and urban activities from the mainland seem to continue seamlessly onto the island today.

1 Raymond (2007)





Dahab

THE GREEN HEART OF CAIRO

agriculture

rural life

village typology

island community

unconnected

ring road fly-over

dependency

formal vs. informal

Aswan Dam product



Taking care of the irrigation canals, southern tip of Dahab

Agriculture

Agricultural use dominates the island. The crops harvested are sold at nearby markets in Maadi on the east bank corresponding to the island.

The methods of agriculture are not confined to what the residents already know. People from the mainland

do come and impart new knowledge and tools to the inhabitants, for example technology to improve irrigation by laying pipes.

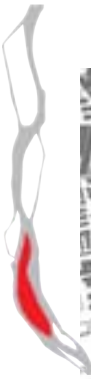


Main street, village in the south of Dahab

Rural Life

The inhabitants of Dahab are living in isolation from the rest of the city. The metropolitan Cairo is relatively far away, because of the lack of vehicular or pedestrian connections with the mainland. This makes access difficult, and creates a threshold more visible in the consciousness of the Cairenes, as compared to those

surrounding Zamalek and Rawdah. The intensity of the threshold for Dahab, the very idea that crossing the river is the only way to get there, is a big factor in the ability for the inhabitants maintain their current lifestyles on the island.



Rural typology



Inhabitants

Island Community

The residents of Dahab are fulfilling what seems to be a dream of living on their own island, away from the stress and chaos of the rest of Cairo. While situated near the center of a city with millions of inhabitants, this community maintains its distance from the traffic, noise, air pollution and heat that overwhelms urbanised Cairo. There is an atmosphere of carefree abandon, which is created not only by children but also the adults. The villages function as places for the inhabitants to come together, spend time and function as a unique sub-community in Cairo.



Transport





Unconnected

On Dahab, there are no cars. The only vehicles present are tractors, to increase productivity for their agricultural activities. There is no easy way for vehicles to be transported to the island. To cross the Nile from the island to the mainland, the only way by felucca.

On the island itself, distances are small enough to go by foot or ride a donkey. The longest distance on the island, from the southern tip to the northern one, is just 4,1 km¹.

1 Google Earth (2010)



-  All-day traffic jams
-  Peak hour traffic jams
-  Occasional traffic jams
-  Boat connection

Ring Road Fly-over

On Dahab, there are no cars except for those speeding through the ring road that flies over it. The ring road has no exit that leads into Dahab, the only connection to the mainland possible is by boat. Internal infrastructure consists of unhardened roads which are used by pedestrians and livestock.



Dependency

Dahab is an agricultural island, with a few small workshops and houses in the villages. Also, every village has at least one small shop, selling bottled drinks and snacks that can be similarly found in convenience stores all over Cairo, but with lesser variety. For actual groceries, the inhabitants have to cross the Nile to the nearby markets on the mainland to obtain them.



Use of local materials in traditionally built houses and farms



Informality?



Shift to use of economic materials, concrete structure with brick infill

Formal vs. Informal

On Dahab, the appearance of formal and informal building structures seem to be the other way around from what they look like in the rest of Cairo. The formal buildings are those on the farms: self-built houses and stables for the livestock, usually with simple materials

and methods. Informal buildings appear in several villages, in the form of big apartment blocks constructed by wealthy Cairenese as a getaway from their lives in the city.



1



2



3



4

Impressions

1. Main street in a village on the north of the island
2. Buildings with local materials and methods
3. Agricultural activities
4. Village centre in a village on South-Dahab



Low river banks: until the realisation of the Aswan Dam, the island used to flood

Aswan Dam Product

Dahab has permanently surfaced since the Aswan Dam. The Aswan Low Dam was completed in 1902. Until that time, Dahab was flooded periodically and inhabitable.

But from then on, immigrants from Upper Egypt have moved to the island, after coming to Cairo and finding Dahab an easy place to start working on the land.



Agricultural Life on Dahab

Vulnerable

Life on Dahab has only begun to develop over the last few generations. In the recent years, the Egyptian government has noticed the potential of Dahab as a big, green and empty central space in Cairo. Several studies have been done to examine the potential of the island and to make plans for the future. If nothing is done,

the island is likely to gradually transform in another urban neighborhood of Cairo. It is important that a design is chosen which takes into account the existing characteristics of Dahab, while simultaneously ensuring sustainable development, and avoiding massive urbanization.



Extra boat connections on several banks

Protected birds area

Route over the island based on existing structure

Preserving existing villages

Eco-tourism on the southern tip

CEDEJ Plan for Dahab (2009)

Dahab for eco-tourism

ocus: tourism on the southern tip, better and more connections with the mainland by boat. The existing roads are maintained as the connector through the island¹. This plan takes into account the existing fabric of the land, and only alters the southern tip.

1 CEDEJ Plan for Dahab (2009)





Selling Dahab

In this plan a part of Maadi is also considered, as part of a masterplan that aims to take advantage of lucrative land next to the river banks. The plan focuses on using the land all around the banks as saleable property. This model would require a complete overhaul of the existing infrastructure on the islands. The path from the north to the south of the island would have to be removed, to make way for east-west connections that link up clusters of saleable land. However, the proposal does take note of the current character of the island, and retains the bulk of the existing greenery¹.



¹ Abdelhalim CDC (2008)



Green zones in Maadi, connecting boulevards

Green strip along the westbanks of Giza

Park on Dahab

New connections to the mainland

Redeveloped river banks

New connection from Maadi to Al-Qusaira

Central Park Dahab

In the 2050 plan for Cairo, Dahab plays a central role in the green Nile redevelopment. The west bank of Giza and the east bank of Maadi are both included in the design. There are new bridges added, with a biomorphic structure covering an artificially manicured park. The other green islands, Warraq and Al-Qusaira are part of the new green axes of the city. To realise these green veins however, the existing structures on the 'green islands' have to be relocated or removed¹.



1 Cairo 2050 (2007)



Advertisements - arabic and roman writing



Advertisements - arabic writing



Street signs - arabic and roman writing



Street signs - arabic writing

Zamalek: Colonial Heritage

Rawdah: Arabic Culture



Advertisements - handwritten



House signs - handwritten

Dahab: Handwritten

SIGNS OF THE ISLANDS

The three islands are clearly different from each other. Where Zamalek has a modern and western reputation and shows colonial heritage, Rawdah is more a typical Arabic community with monuments and a rich history. Dahab has a traditional village appearance with a colorful island community.

This differences show in the signage of the islands, where Zamalek has advertisements and street names in arabic and western writing, on Rawdah mostly Arabic is being used. On Dahab, advertisements are written in Arabic and by hand, and graffiti is being used to label the houses and it's inhabitants.



Green, shaded streets (picture taken on Zamalek)



Presence of the Nile (picture taken on Rawdah)



The islands as a threshold (picture taken on Rawdah)

Island Phenomena

Despite the fact that the islands are all very different in character, there are still some phenomena that occur on all the islands. It cannot be called an overall identity, but it is clear that the islands are all connected by the Nile and share a part of their identity to that connection.



DRAFT
© ETH Studio Basel



ZAMELEK

RAWDAH

DAHAB

4. RIVER BANKS

Power vs. Accessibility

Crossing the Nile

Left-over Spaces Turned Public

Concentrated Areas of Activities

Visibility of the Nile

Imminent Pressure of Property Developers

INACCESSIBLE RIVER BANKS

A big problem with the river banks is that they are mostly not accessible to the common Egyptian. If we look at the trend in the city centre of Cairo, taking into account the densely urbanized islands Zamalek and Rawdah, only 15% of the river banks is accessible. The biggest part, 85%, is occupied by private investors and governmental institutions that limit access to the property. It is either inaccessible or requires an entrance fee. The few accessible spaces are used as public space, but due to the limited available space the activities are clustered only on certain areas.



Privately owned and neglected river bank on Rawdah

LEGEND

Accessibility

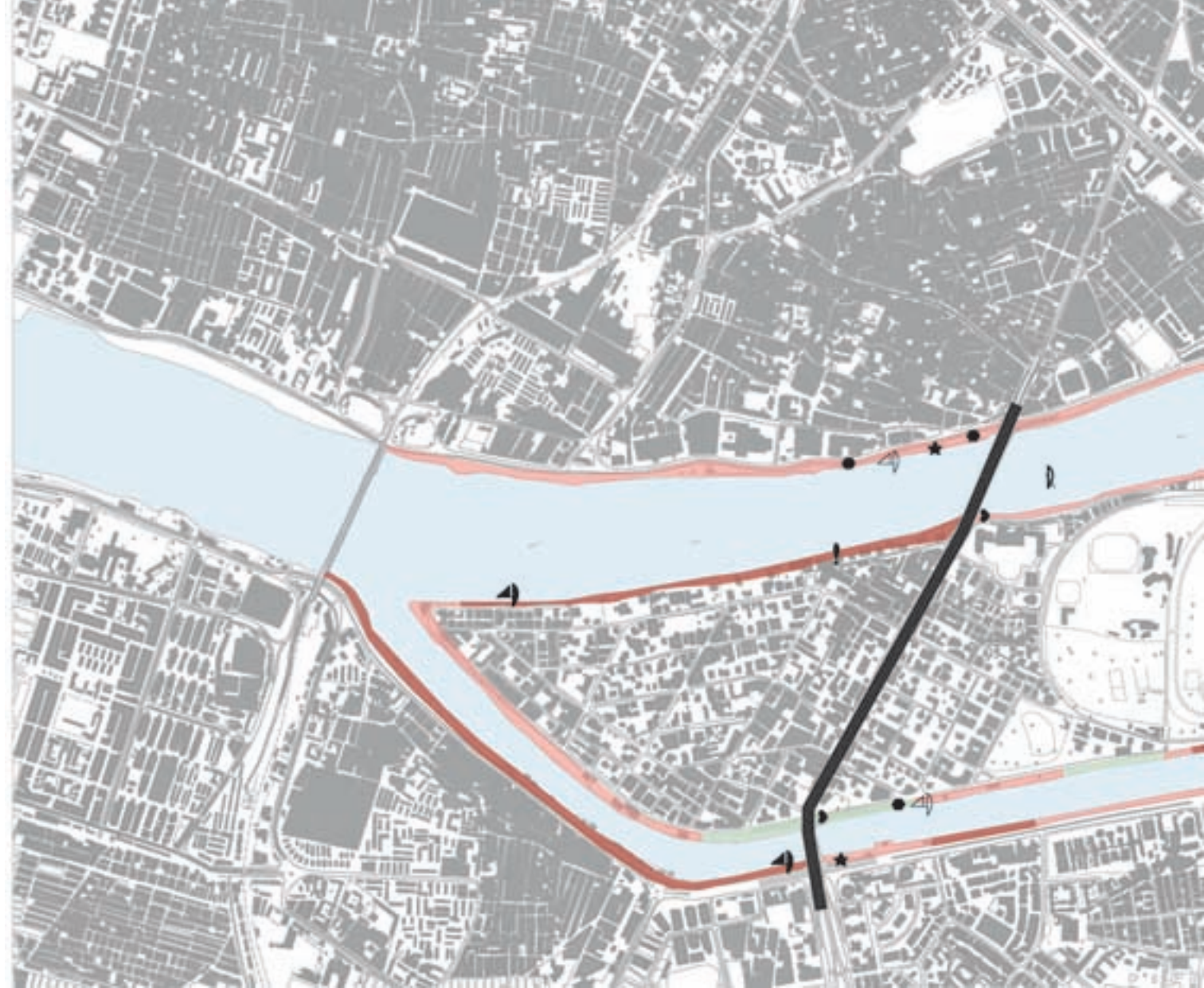
- Inaccessible
- Pay to Enter
- Free

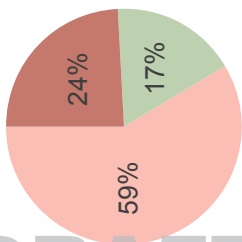
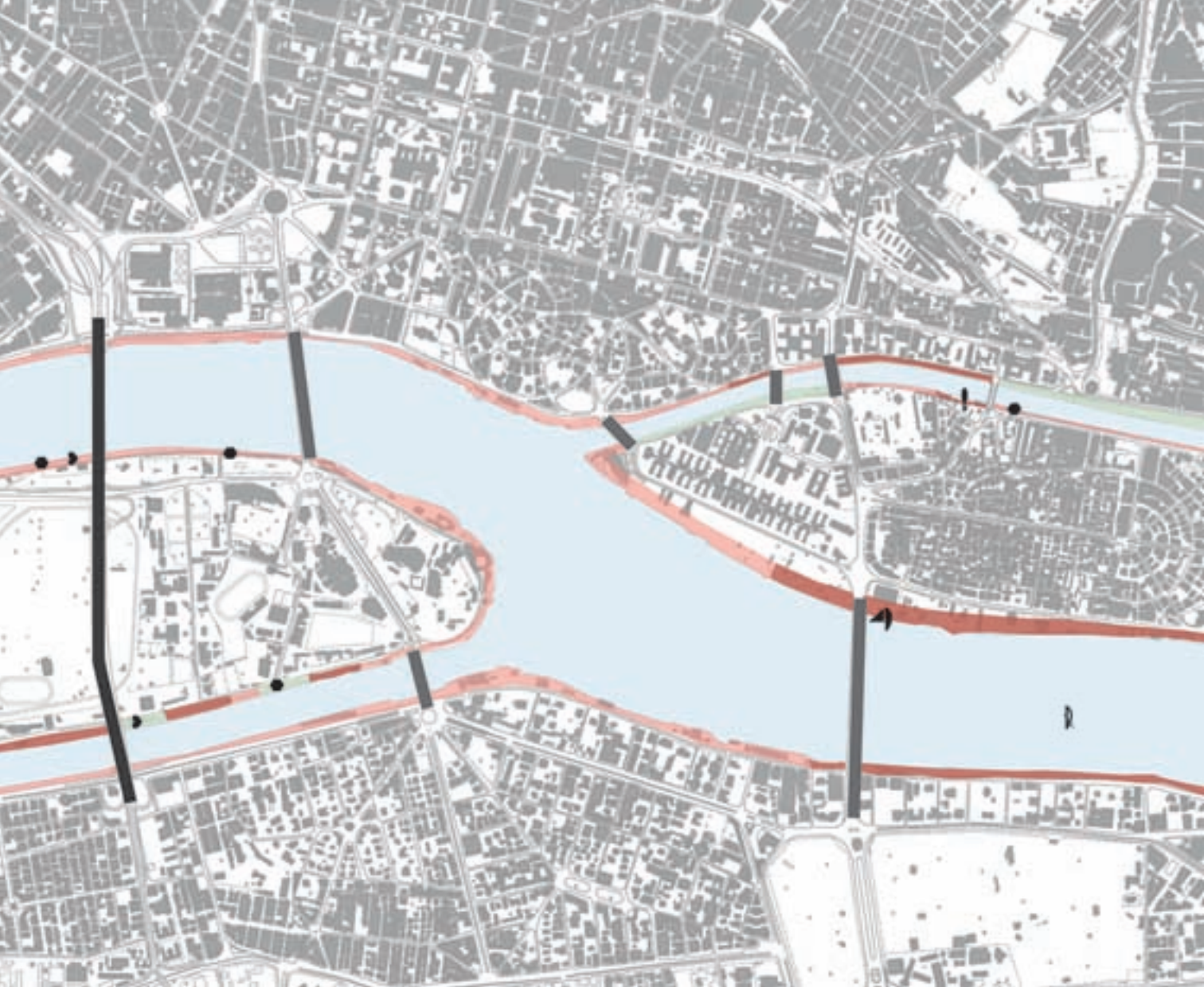
Connections

- Fly-over
- Bridge
- Only Pedestrian

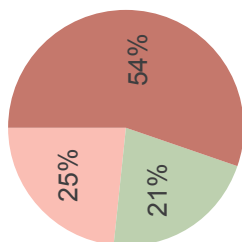
Activities

- Lovers Lane
- Lingering
- Fishing
- Private Rental Boats
- Informal Rental Boats
- Water Sports
- Events
- Swimming

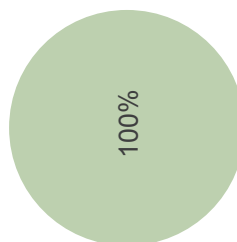




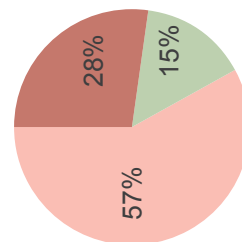
Zamalek
Total: 8,2 km



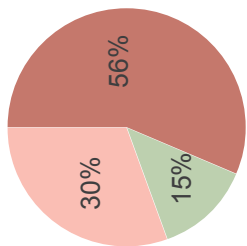
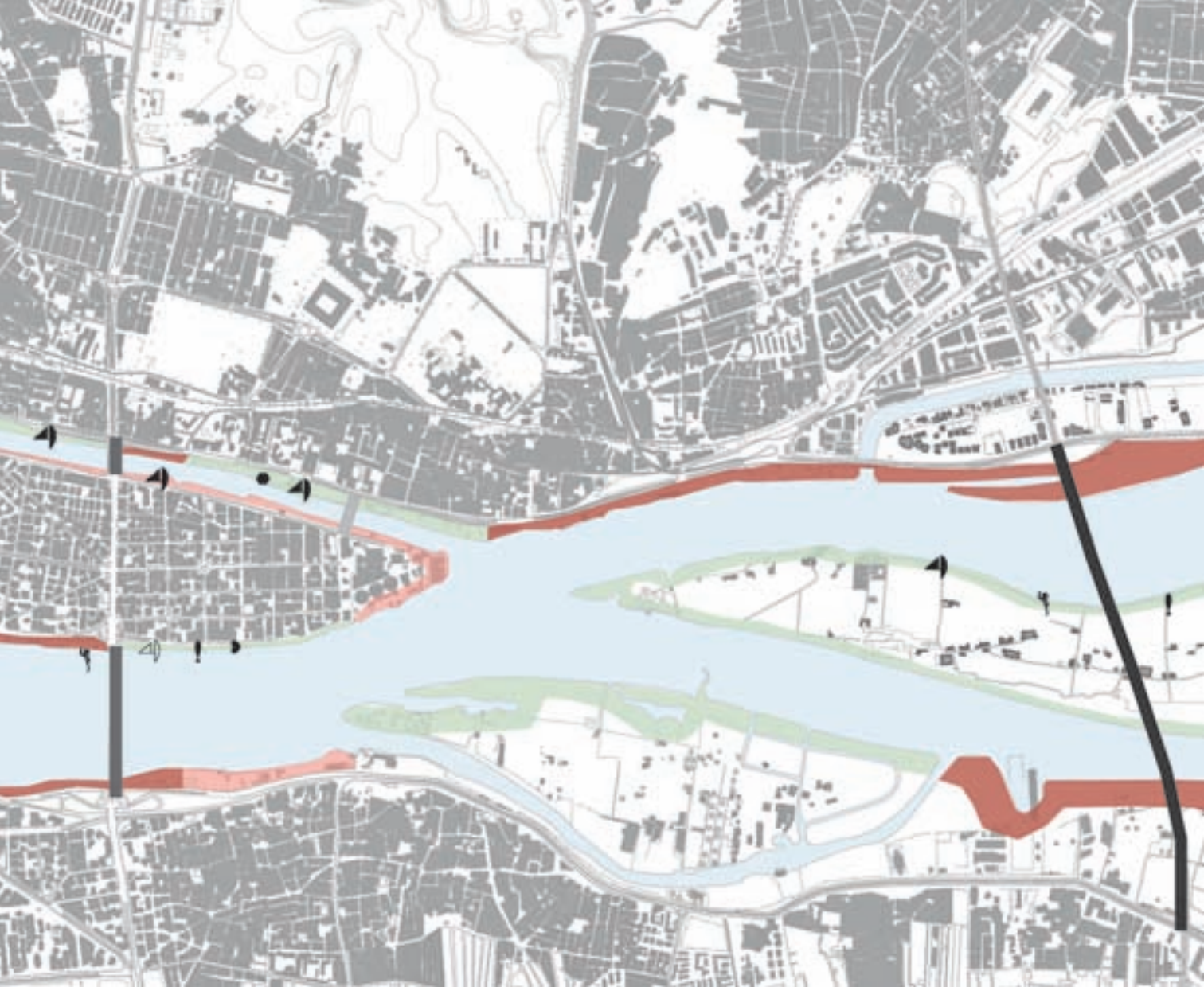
Rawdah
Total: 6,5 km



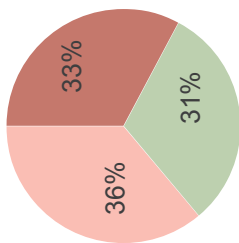
Dahab
Total: 8,8 km



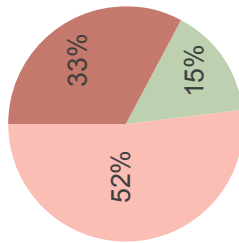
East Bank
Total: 12,1 km



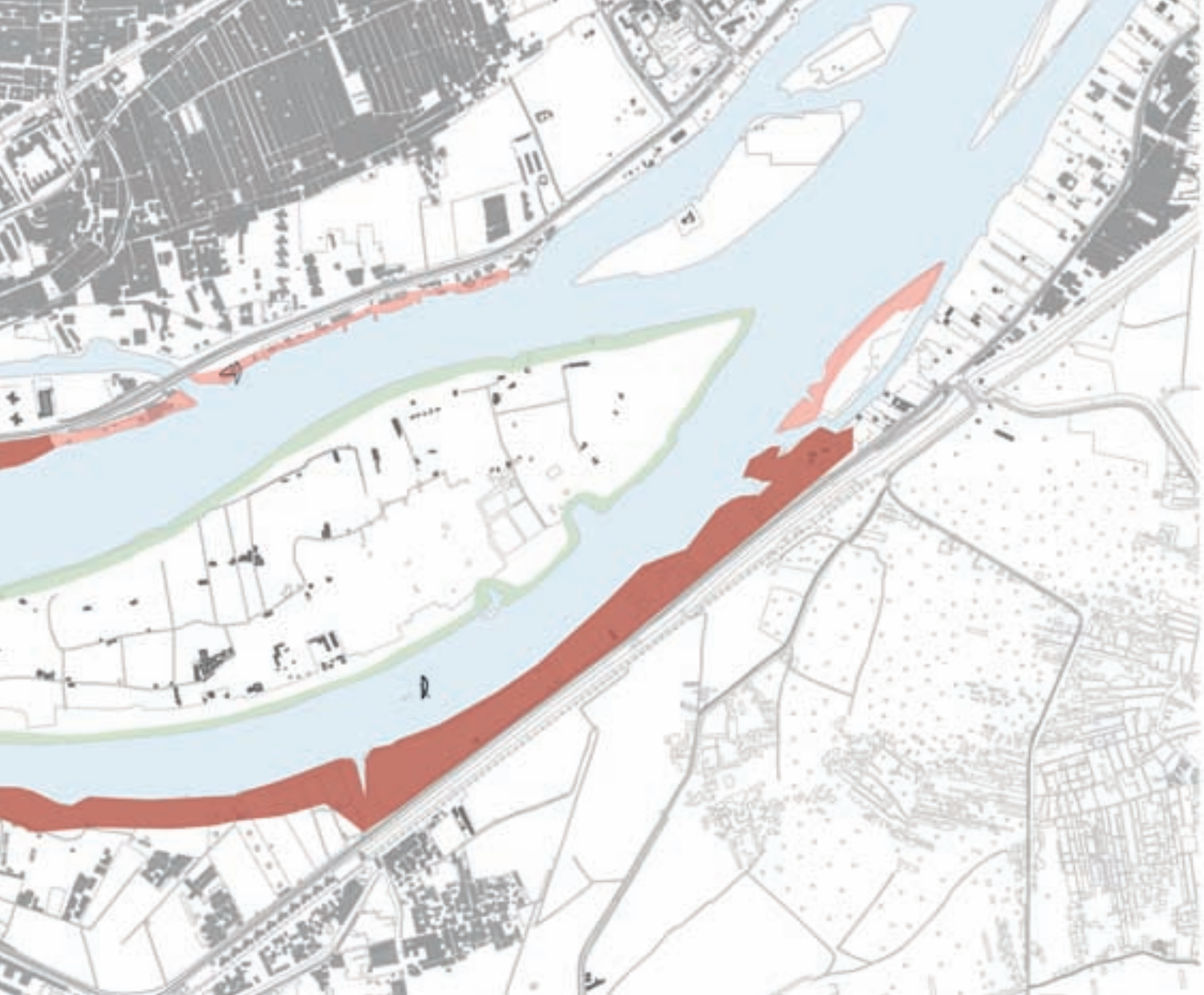
West Bank
Total: 13,1 km



Total
Total: 48,7 km



Total without Dahab
Total: 30,3 km





Governmental owned and neglected military fitness centre on the bank of Zamalek





POWER VS. ACCESSIBILITY

The most part of the river banks are inaccessible to the common Egyptian, and does not function as a public space. This has to do with the combination of ownership and function, resulting in a certain use or exclusiveness.

The private investors and the government have the biggest share in the ownership of the island. They gate the land and use it to increase economic means or reserve the space for a restricted group of users. This results in an exclusiveness, whereby the use of the banks is limited by one's economic means and status.

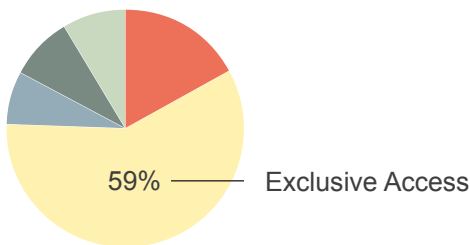


Power vs. Accessibility

- Private and Inaccessible
- Exclusive Access
- Gated and Unused
- Gated but Accessible
- Free
- Under development



Exclusive access to restaurants and private boats, Zamalek



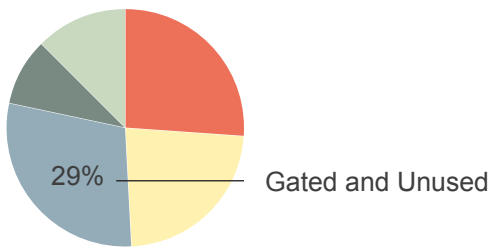
Zamalek
1,4 km of freely accessible river bank out of 8,2 km total

Paying for the Nile

The banks of Zamalek are characterized by their exclusivity. Many parts of it are owned by private investors for use ranging from hotels, restaurants, clubs, or private residence. Some intensively used parks on the river banks are also reserved for the richer few who have the means to pay to take recreational strolls along the Nile. The few freely accessible spaces Zamalek has are heavily littered and unkempt. Other spaces not used commercially are gated and appear abandoned.



River banks reinforcements, Rawdah



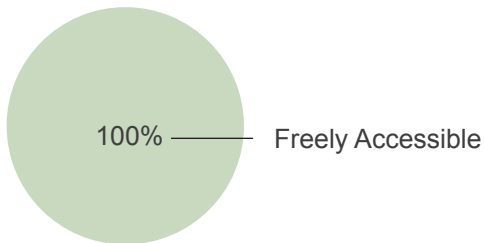
Rawdah
1,7 km of freely accessible river bank out of 6,5 km total

Use of Steep Bank Reinforcement

In Rawdah, large parts of the bank are technically free, and may have been gated just to prevent people from falling over the steep slope down into the waters. However, there is a small part at the south of the island where the river bank reinforcement meets the river without any other kind of space wedged in between. This area is enjoyed by the locals for fishing or just to enjoy the feeling of their feet dangling above the waves of the river.



Children playing on the river banks, Dahab



Dahab
8,8 km of freely accessible river bank out of 8,8 km total

Garbage Boulevard

All of the river banks in Dahab are freely accessible to everyone. Some have even been 'pedestrianised', with the vegetation cleared away to create a path for people to walk through. While granted that not many use the space for recreation or relaxation, it may simply be due to the smaller population on the island in relation to the vast area of river bank that it possesses. Although freely accessible, the river banks are mainly used to store garbage.



Exclusive Rights to the Nile

The bulk of the privately-owned sections of the river bank, inaccessible to the public, lies in the area around Zamalek island. There, a long stretch of private residences have blocked off a part of the river bank as their own.

On its corresponding bank along the side of Imbaba lies Kitkat, an exclusive strip of floating boat-residences, which literally stake their claim on a part of the river Nile.



Houseboats on the west bank, seen from Zamalek





Charged for the View

Much of the banks, especially around Zamalek island, require membership, restaurant patronage, entrance fee, or some other kind of payment before one may enter and position themselves next to the Nile.

However this is not limited to that area. A stretch of river bank along Maadi, across from Dahab, has also many restaurants and boat clubs, which render the banks unavailable for public enjoyment.

Above: Restaurant with outside platform, Zamalek

Below: Park, Zamalek





Ambiguous Banks

Despite the obvious real estate potential of the river banks, large stretches of it in central Cairo remain functionless. These parts are generally filled with trash and neglected, or overrun with unkempt plants. Sometimes, they are even taken over informally, by people who simply build a structure to house their small family. However, these activities remain unregulated. Interestingly, even such areas have gates, or at least are blocked by balustrades.

Above: Informal settlements on the east river bank

Below: Gated playground on Zamalek





Cairo's Little Urban Gardens

The counterpart to the gated and unused, would be the gated and accessible. In the accessible typology, the river bank is typically used for small scale agriculture that is taken care of by a private gardener.

People do not usually access these areas due to the physical separation by a balustrade. However, the owners are usually happy to talk to any visitors that come into their garden.



Well maintained and accessible garden on the east bank, opposite of





Open for Use but Neglected

The river bank areas that are freely accessible varies greatly in appearance. In Zamalek, these areas are completely unkempt and littered with rubbish. In Rawdah, it is used as a place for recreation and relaxation. All the banks of Dahab are free to be used by anyone, but perhaps precisely for this reason that it is under the care of no one. Litter piles accumulate and are ignored; the residents do believe that after a year the rubbish would disappear on their own.

Above: Recreation on the southwest bank of Rawdah
Below: Garbage disposal on the river banks of Dahab





Housing development on the west bank of the Nile, opposite of Dah

Developer's Heaven

Some of the undeveloped areas in Cairo near the river banks are currently undergoing construction. The prime land along the banks are bought over and built on by real estate developers, eager to tout the Nile view as a selling point of their property. Often, these property would be residences or hotels.







CROSSING THE NILE

The islands each have different forms of connections to the mainland. The types of connections on each island affects the daily life of their inhabitants, as well as the preception that the Cairenes have of the islands. For Zamalek, the overarching flyover deeply impresses in one's mind the separation between it and the mainland. Rawdah's low bridges across its eastern branch of the Nile make it less obvious that it is geographically separated from Garden City. As for Dahab, the only physical connection it has to the mainland is just visual, making it psychologically further away from mainland Cairo.



Guaranteed Traffic Jams

The first connections to be constructed between the islands and mainland Cairo were the bridges, as can be seen by how most of them are on Rawdah, the island that was first developed. The bridges connect the two pieces of land from river bank to river bank, which was probably adequate for the human and vehicular traffic that existed when they were first built.

Today, these bridges have resulted in a large volume of traffic that clog up the east-west thoroughfares through Rawdah, resulting in vehicular standstills during rush hour.

Above: Jammed bridge, Zamalek

Below: Morning rush hour, Rawdah





Avoiding the Crowded Islands

The use of flyovers to avoid passing through the islands' internal traffic, has been used to ease the movement of cars over Zamalek and Dahab, A reason could be that lessons were learnt from the bridge connections between the mainland and Rawdah, which has resulted in massive traffic jams on both through vehicular bridges.

An interesting point to note is that there are no exits from the flyover down to Dahab island, vehicular or otherwise, a decision that has impacted the development of the island today. The lack of cars has allowed the slow pace of life and the main (occupation?) as agriculture to be maintained.

On the other hand, Zamalek has maximised the use of its flyover, by having vehicular access both on and below it. This allows traffic to flow much more freely, and while traffic jams still exist, they are not as heavy as the ones in Rawdah.



Above: Two leveled traffic, fly-over and the main street underneath, Z
Below: Fly-over of the Ring Road, Dahab







Walking over the Nile

The pedestrian access to the islands are simply a combination of the access by flyover and bridge, as they all have a pedestrian walkway next to the vehicular road. Tellingly, there are many ways to enter Zamalek and Rawdah on foot but none for Dahab.

Above: Pedestrian access to Zamalek

Middle: The only pedestrian bridge in Cairo, Rawdah

Below: No possibilities to cross by foot, Dahab







LEFT-OVER SPACES TURNED PUBLIC

The lack of publicly free space on the river banks does not deter people from finding a space where they can enjoy what the river offers. The most typical phenomena is for people to go onto the bridges connecting islands to the mainland. There, the pedestrian pathway is generous and the bridge provides not only a vantage point, but an unblocked view of the river. Not only are the tops of the bridges well-frequented, the space created below the bridge is also enjoyed for the shade it brings in Cairo's hot weather, and put into multiple uses.



Benches under a bridge on Rawdah

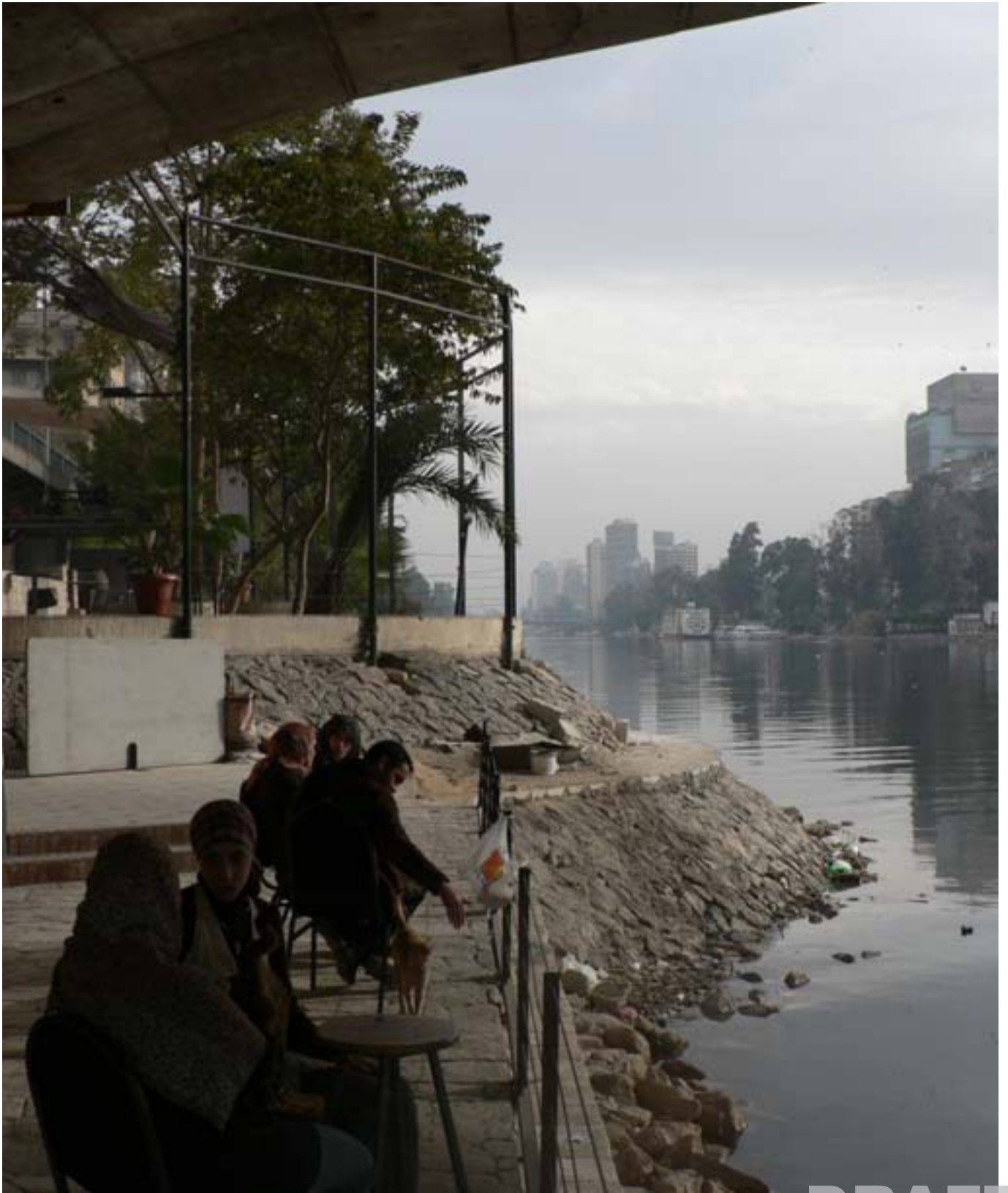


Existing kerbs used as seats under a fly-over on Zamalek

A Place to Meet

The bridges provide an ideal place for Cairenes to gather with friends and family. They are freely accessible, and offer fresh breezes and shadow as well as uninhibited views of the river. It is also alright to stay as long as they wish, without anyone who might chase them away. Linger is particularly common

in Zamalek, where the flyovers create many shaded spaces with no clear function. These spaces are then adapted by the Cairenes for their own use, seen by how they would bring their own chairs or use the existing kerbs as seats, due to the lack of public benches.



Theatre with cafe on the Nile, Zamalek



Selling tea to the people in a traffic jam on Zamalek



Market stall under a fly-over on Zamalek

Livelihoods and the Everyday

A host of different commercial activities converge on the river banks under the bridges, due to the large amount of vehicles and people frequenting the bridges each day. The businesses are mostly informal. There is the tea-seller, who simply places all his equipment under a staircase leading up to the flyover on Zamalek, and hawks his tea to the drivers stuck in the massive rush hour traffic leading up to the bridge. Another business taking advantage of the slow-moving traffic in Zamalek are the fruit sellers, who peddle their wares from a horse-drawn cart.

Rawdah does not have elevated expressways passing through the island, but the flyovers leading up to the bridges have also generated an unexpected use - parking for cars.

In Dahab, the space under the flyover is not built on but rather used for their livestock, where space abounds for them to feed and graze as they wish.



Above: Left-over space used as parking, Zamalek
Below: Fly-over as shelter for animals on Dahab





CONCENTRATED AREAS OF ACTIVITIES

The Nile in the perception of the Egyptians is a place for relaxation, a respite of open space in the dense urban build-up in the city, calm in the middle of the chaotic traffic jams.

The reality is not as ideal as one might imagine. While there is a wide range of activities currently taking place at the banks and also on the river itself, the fact that they are concentrated at specific areas mean that such occurrences are limited, to the extent that there may be a lack of awareness that such opportunities exist.

If the length of publicly accessible and free spaces along the Nile in Cairo is increased, then type of activities and the number of people who can enjoy them will be expanded.



A terrace along the Nile, Zamalek (photo taken by Ahmed ZaaZaa)

Lingering

Just walking past or stopping by the river is actually rare, as many parts of the river banks are inaccessible to public. However, people still manage to find the few spots, sometimes beyond physical gates or under the bridges, where the river could be enjoyed with friends for free.

The river does not just offer a physical separation between the islands and the mainland, but also a psychological one. Detached from the strict social customs in everyday Cairo, couples can be seen along the river or on the bridges, being intimate without worry of persecution





Young couples spending time together on the University bridge, Zamalek.

A Place for Lovers

In the Egyptian culture, it is not generally accepted for young unmarried couples to spend time together. Inhabitants of Rawdah for example, decide to cross the Nile twice to get to Zamalek and enjoy the more western and accepting culture of that island. This phenomena leads to the ‚lovers lanes‘ in the parks of Zamalek. For

those who can't or won't spend money on entering a park, the bridges are used as an extension of the island.





Fishing on the river banks of Rawdah

Anglers along the Nile

The one of the most popular activities to do along the river is be fishing. On all three islands, people can be observed intently engaged with fishing. A favourite spot on Rawdah is be the southernmost publicly accessible area on the west bank, where a small clusters of

residents would gather everyday to fish under the shade of the trees and relax with their family and friends.





Luxurious yachts on the Nile, Zamalek

Boat tours

A common feature of the river banks are the availability of private boats for hire, often present in small clusters forming a harbour-like structure floating on the Nile. They are usually possessed by a common owner,

normally a patriarch, who receives the payment from his customers and then distributes a share to the boys who guide the individual boats.



Boat owners, informally living on their boats on the river banks of Zamalek.

Working and Living on the Nile

As not much policing is done on the waters of the Nile in Cairo, some residents simply set their own boats onto the river. However, in this case, it is not for commercial purposes. Sometimes, the boat is treated as a house, with all their belongings loaded onto it. At other times, it is a means of transport, with their home built informally

on an abandoned or undeveloped part of the river banks. Even in the north of Zamalek, near the stretch of river banks closed to public use for expensive private residences, such incidents are observed.





Rowing on the Nile, seen from the University Bridge, Rawdah.

Sports on the Nile

The least commonly observed recreational activity on the river is water sports. Due to the length of the river, such incidents can only be observed sporadically, when such a sailboat, motorboat or kayak happen at that moment to pass by. This is not due to a lack of facilities and equipment available, as several sports clubs do

line the banks of the river. However, these clubs tend to be quiet and do not appear frequented, perhaps because only people from a certain income group are able to afford the cost of these activities.



Sham el Nessim, east bank.



Exhibition, Zamalek.



Canal festival in Cairo, about 18th century.

Events

As a physical landmark, it is no wonder that event organisers look favourably on it as a venue in order to attract as many people as possible to attend. From the 18th century, there is already evidence in the form of a drawing, showing the Nile as a place to hold an occasion.

One big annual event today is the Sham el Nessim (literally “smell the breeze”), the Egypt Spring Festival, where families come down to the Nile or crowd other public spaces, bringing food and blankets to enjoy the breeze of spring together.





Swimming in the Nile, Rawdah.

Swimming

Although the first activity that comes to mind when one thinks of water is swimming, there are very few such occurrences that are observed along the river. Possibly due to the strong current, only informal incidences occur, such as when boys are looking to have some fun after school.





Ali Gabr, Zamalek resident:

„From our balconies here in this building, I remember when I was a child, I would see the pyramids and Sahara...

...very very quickly, 1960s, 80s, you know like expansion... so this became a nasty sort of view.“

VISIBILITY OF THE NILE

Everyone knows that the Nile flows through the city of Cairo. But as one moves through the city, it is often not apparent that such an impressive river exists. The density of the urban fabric, coupled with the super tall buildings that line the river banks, block the view of the Nile even if one may be very near it.

The functions of the buildings that line the river banks can also indicate the exclusivity of the Nile. Coupled with the distance from the river that is freely accessible to the general public, it is possible to evaluate how accessible the river is to the people today, both visually and physically.



Building Heights vs. Free Space

- Free public space
- Residential
- Hotel
- Commercial
- Public Institution
(e.g. Museum, School)



Decreasing Free Space Around the Nile

Most of the river banks in the center of Cairo have already been developed, leaving only minimal stretches of free space for the public along the Nile. The heights of the buildings along the river banks tend to be very tall, and are mostly residential or hotels, which show the high desirability and demand for a riverside residence.

How will the remaining undeveloped land in and around Dahab turn out if left to the devices of the government and real estate developers? The outcome

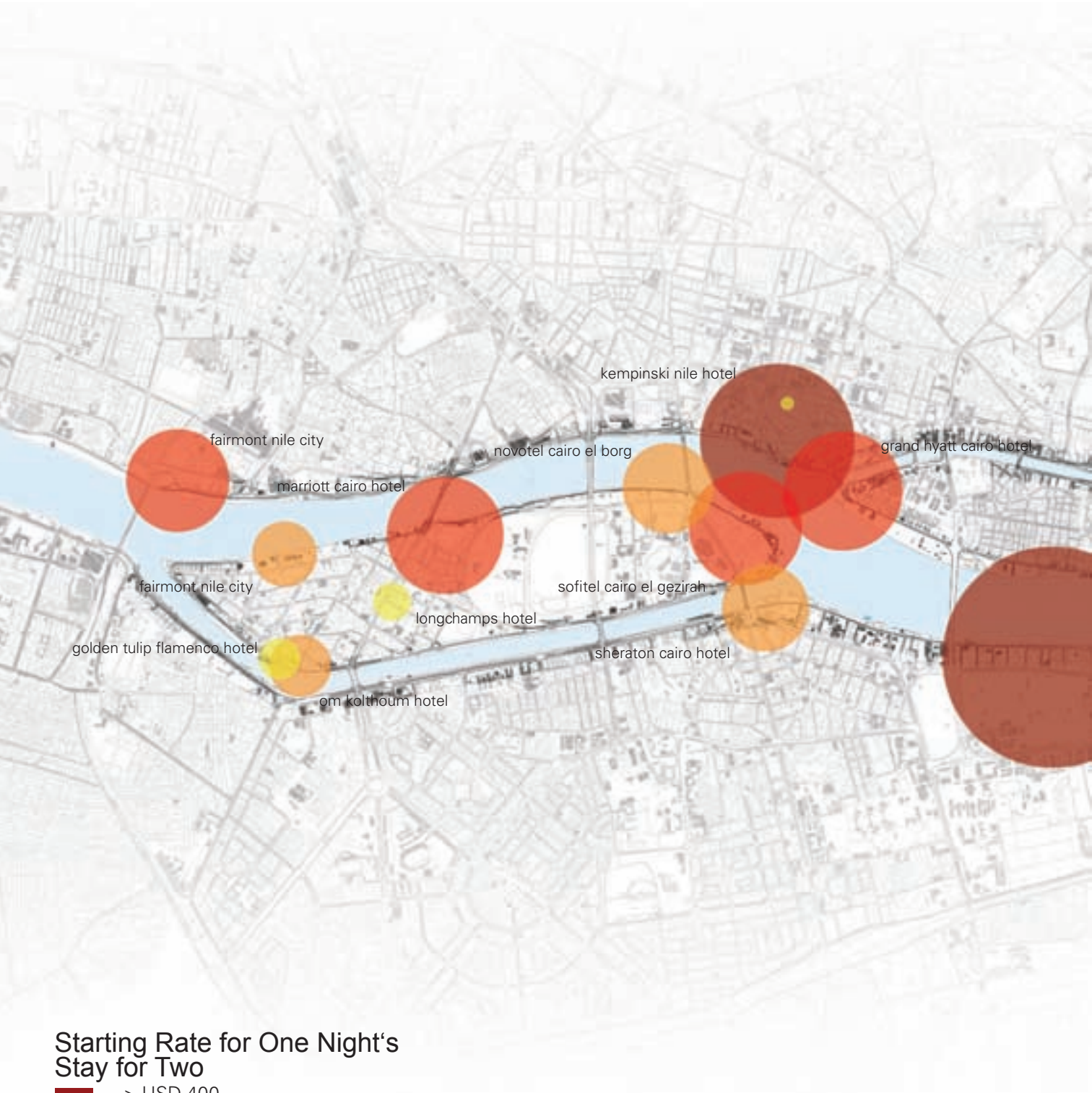
is highly likely to be very similar to the present-day state of the river banks around Rawdah and Zamalek. In fact, plans have already been eagerly proposed by private investors, mostly for the creation of new high rise residences. Some of these plans are now under construction, on the banks opposite the western side of Dahab. Others are currently being reviewed by the Egyptian government.





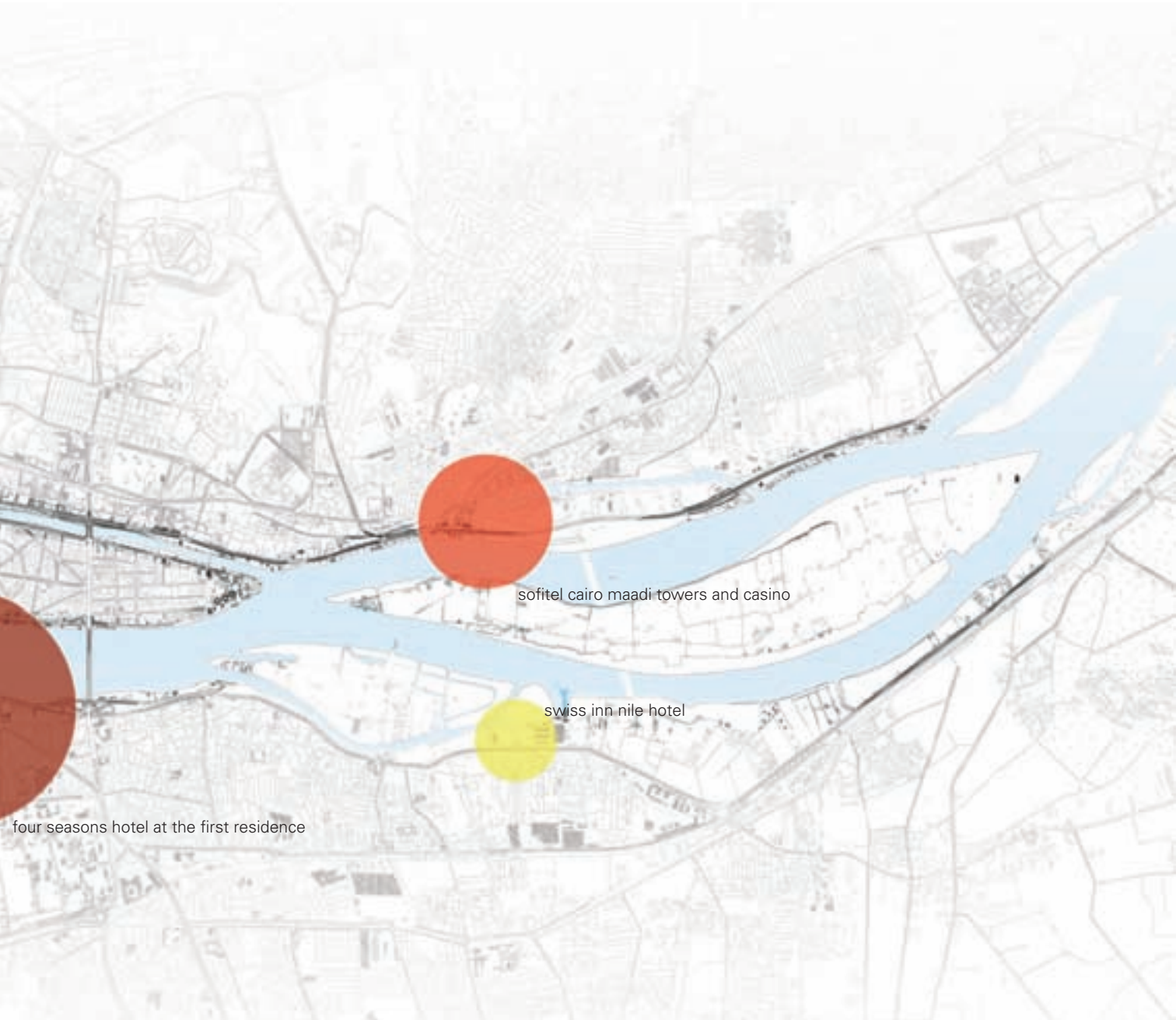
PRESSURE FROM PROPERTY DEVELOPERS

The use of the Nile as a selling point has not been lost on real estate and property investors in Cairo. Hotels vie to be built at strategic points along the river, in order to capture the attention of tourists who perceive the Nile as an integral part of their experience of the city. Residences along the river are also able to fetch much higher rents than others elsewhere which are not able to boast views of the Nile or proximity to the river banks.



Starting Rate for One Night's Stay for Two

- > USD 400
- USD 200-400
- USD 100-200
- < USD 100



sofitel cairo maadi towers and casino

swiss inn nile hotel

four seasons hotel at the first residence

A Hotel Room with Nile View

The Nile is an irresistible magnet for hotel developers. Most of Cairo's luxury hotels line up along the river banks, and boast to offer fantastic views of the Nile. This counts towards their ability to charge a premium for a night's stay. The river banks around Zamalek have been able to command the highest prices per night, due to its diversity of facilities exclusive to those who can pay for it, like the various sports clubs, floating

restaurants, gated manicured parks, and western oriented pubs and restaurants. With the Sofitel already stamping its presence along the banks of Maadi, it will only be a matter of time before the river banks surrounding Dahab will boast a similar spread of luxury hotels like the ones now available around Zamalek and Rawdah.



Rent per Month for 3
Bedroom Furnished
Apartment

- > USD 3000
- USD 2000 - 3000
- USD 1000 - 2000
- < USD 1000

Dreams of Living Along the Nile

The attractiveness of staying next the river is felt by the locals and not just the tourists. The ability of landlords to charge more for rent seems to correlate with the proximity to the river as well. Especially for Zamalek, and its surrounding areas, where the main city area is close by and recreational possibilities scattered along the river banks, people are willing to fork out more for the coveted location that is accessible by metro even when the inevitable traffic jam occurs.

This eagerness for a permanent, personal place next to the river has obviously not been fully satiated. From the high rentals, it can be seen that this desire is still very much present. The real estate pressure on the parts of the banks yet to be developed is very high.





Left and Above: Renderings of Warraq and Dahab respectively, for Cairo 2050



Abdelhalim's proposal for Dahab

Eager to Transform Dahab

As many parts of the river banks in central Cairo have yet to be developed, especially around Dahab and Warraq, their potential to be urbanised has not been overlooked by the government and private investors.

In 2007 the proposal for Cairo 2050 was put forward, with plans and renderings detailing how the future of these undeveloped river banks are envisioned. Unsurprisingly, they show an array of super-highrise buildings lining up along the Nile, to take advantage of the river view. A giant sculptural building is also planned for the southern tip of Warraq, due to its vantage point on the river. For Dahab, attempts are made to preserve the current abundance of greenery, but the island is otherwise totally rebuilt. A huge floating "cloud" sweeps across half the island, encompassing an artificial garden.

The Egyptian government has also requested proposals from private firms. Amongst them is Abdelhalim, who has proposed highrise residential developments all around Dahab's banks, to complement those intended for the banks of nearby Maadi. Similarly, they try to retain the existing "green" character of Dahab island.

*Three different approaches to improving the accessibility of the river banks in the city.
Are these solutions applicable to the situation in Cairo?*



5. COMPARISONS

CAR FREE RIVER BANKS: TRAFFIC IN TUNNEL

Along the river banks of Cairo are big, crowded streets. This often makes the strip of land between the road and the water noisy and unattractive. By putting the traffic underground, as is done in this project in Düsseldorf, the quality of the river banks would be improved. But are the street patterns along the Nile too complicated for such a high level of interference?



Düsseldorf, Germany

The Rheinufertunnel Project - Returning the People to the Rhine

The Rheinufertunnel in Düsseldorf, Germany, is an example of infrastructure which has been altered in order to provide a better and more open public space along the river.

The 2 kilometre long Rheinufertunnel was completed in 1993, after three and a half years of construction. The project's slogan was, appropriately, „Düsseldorf returns



Rheinufertunnel

to the Rhine“. It aimed to reroute an existing highway next to the river underground, so as to free up the river banks for the public to enjoy.

The tunnel effectively removed 55,000 cars everyday from above street level, reducing noise levels and vehicular traffic. The space freed up by the removal of expressway was replaced by a generous stretch of public promenade, which has been lined with trees, landscaped and well maintained.



Traffic tunnel to clear the Rhine banks

FREE ACCESS TO THE WATER

A big problem with the river banks in Cairo is that they are often not accessible, but also not used. When we look at Cologne, the river banks of the Rhine are made accessible for everyone and it is even possible to enter the water of the Rhine. In Cairo, making the river banks accessible by opening up slopes and boulevards that lead to the river would also be possible. Without much means, it is an effective way to open up the area. But is the situation of the Nile comparable to the Rhine? The level of pollution, currents and speed of the water will need to be considered, or opening up the river to the public might be hazardous.



Cologne, Germany



Rhine banks

River Rhine in Cologne, Germany

The city Cologne grew from a section of the Rhine. Its urban fabric is very dense, just as how Cairo is densely built around the Nile. However, the river banks are completely open for use by the public. A boulevard extends through both sides of the banks for people to walk by and enjoy the view of the river. At certain areas, it is also openly possible for people to go right down to the edge of the water, unlike Cairo's river banks where the entire stretch of river banks are gated.



Event along the Rhine river



Open view to the river

TRANSFORMATION TO A BROAD BOULEVARD

A third possibility of increasing the quality of the river banks in Cairo is to add wide boulevards to the water, opening up the view to the water and inviting inhabitants to spend time along the water. In Rotterdam, this works as a generous strip along the river that invites different users: drivers, cyclists, pedestrians, performers. For this option, a wide stretch of land is needed to cater to the different kinds of activities and users. However, to open up the view to the water like in Rotterdam, a lot of green along the Nile would have to be removed. This is not a desired solution.



Rotterdam, The Netherlands



Maasoevers

The Maas in Rotterdam, Netherlands

The river banks of the Maas have been artificially reinforced, like has been done in Cairo. However, the Dutch have gone one further and created berths for private boats on land adjacent to the path of the river. While this makes substantial parts of the Maas inaccessible to public, there are long continuous stretches of public boulevards and bicycle lanes where anyone can take a stroll, jog or cycle while taking in the sights along the river.



Maasoevers, with the Erasmus bridge in the background



Boulevard along the Maas



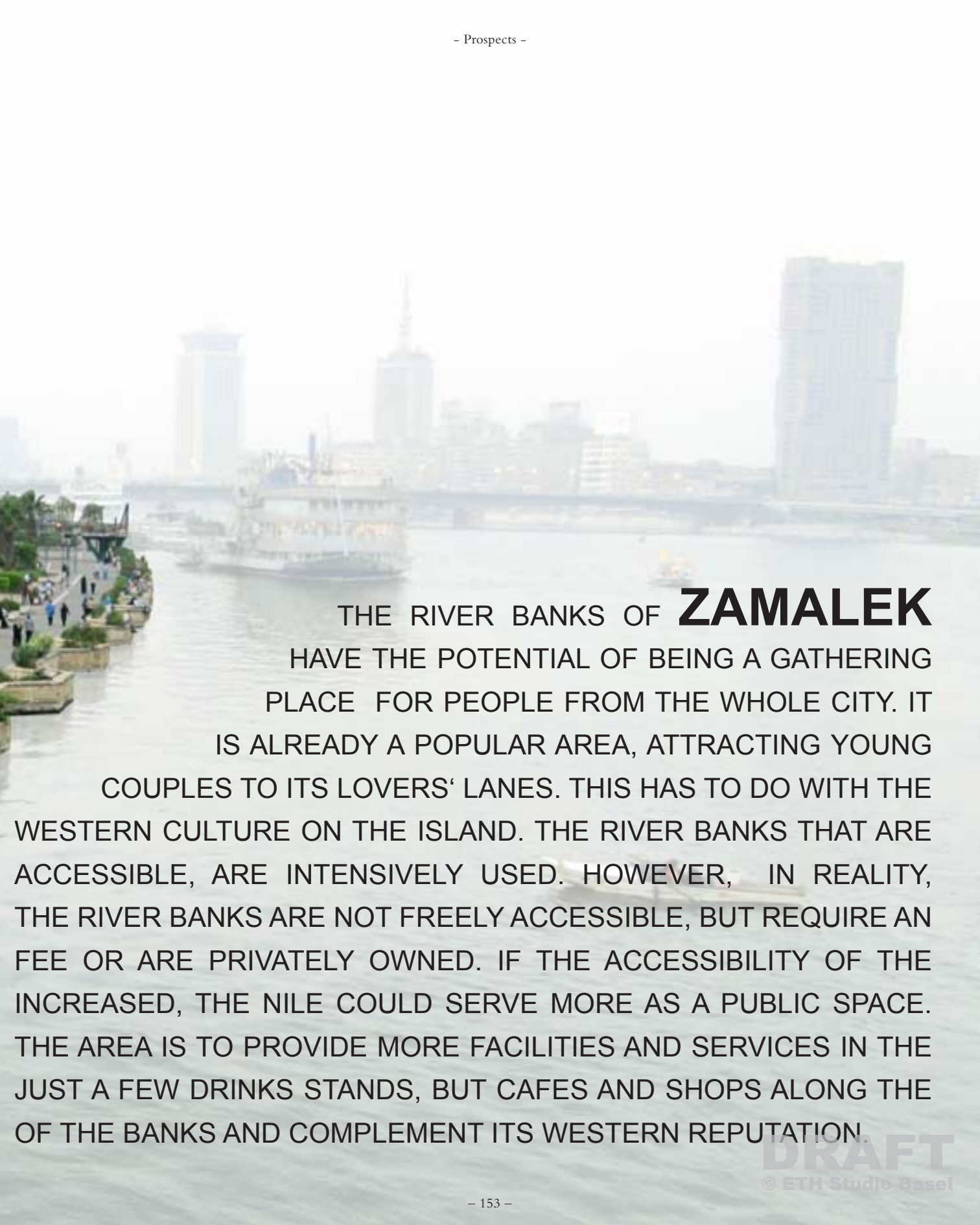
6. PROSPECTS

DRAFT

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MOST OF
ENTRANCE
BANKS WOULD BE
ANOTHER POSSIBILITY OF
PUBLIC SPACES. NOW, THERE ARE
BOULEVARDS WOULD RAISE THE QUALITY



THE RIVER BANKS OF **ZAMALEK** HAVE THE POTENTIAL OF BEING A GATHERING PLACE FOR PEOPLE FROM THE WHOLE CITY. IT IS ALREADY A POPULAR AREA, ATTRACTING YOUNG COUPLES TO ITS LOVERS' LANES. THIS HAS TO DO WITH THE WESTERN CULTURE ON THE ISLAND. THE RIVER BANKS THAT ARE ACCESSIBLE, ARE INTENSIVELY USED. HOWEVER, IN REALITY, THE RIVER BANKS ARE NOT FREELY ACCESSIBLE, BUT REQUIRE AN FEE OR ARE PRIVATELY OWNED. IF THE ACCESSIBILITY OF THE INCREASED, THE NILE COULD SERVE MORE AS A PUBLIC SPACE. THE AREA IS TO PROVIDE MORE FACILITIES AND SERVICES IN THE JUST A FEW DRINKS STANDS, BUT CAFES AND SHOPS ALONG THE OF THE BANKS AND COMPLEMENT ITS WESTERN REPUTATION.

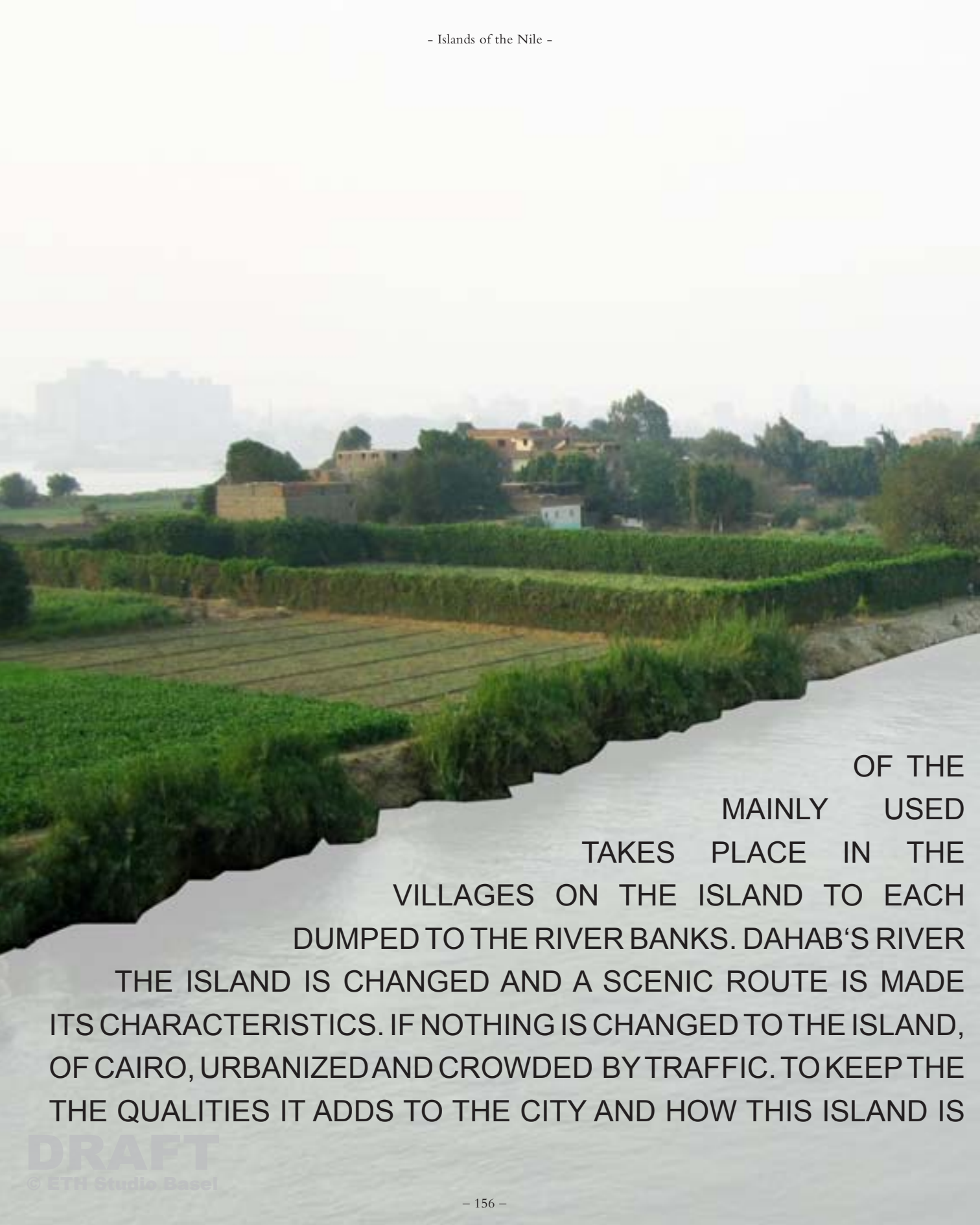


RAWDAH'S BANKS ARE USED AS PLACES FOR RECREATION AND SHORT BREAKS. THERE ARE A FEW PUBLICLY ACCESSIBLE AND CAN BE USED WITHOUT PAYING ENTRY WHERE THE VERTICAL BANK REINFORCEMENT CAN BE USED OR THE OPPORTUNITY FOR RAWDAH, LIKE ZAMALEK, TO WORK ON THE FOR THE WHOLE POPULATION OF CAIRO TO VISIT. IF THE RIVER BANKS IT WOULD DEFINITELY BE FREQUENTED BY THE INHABITANTS OF

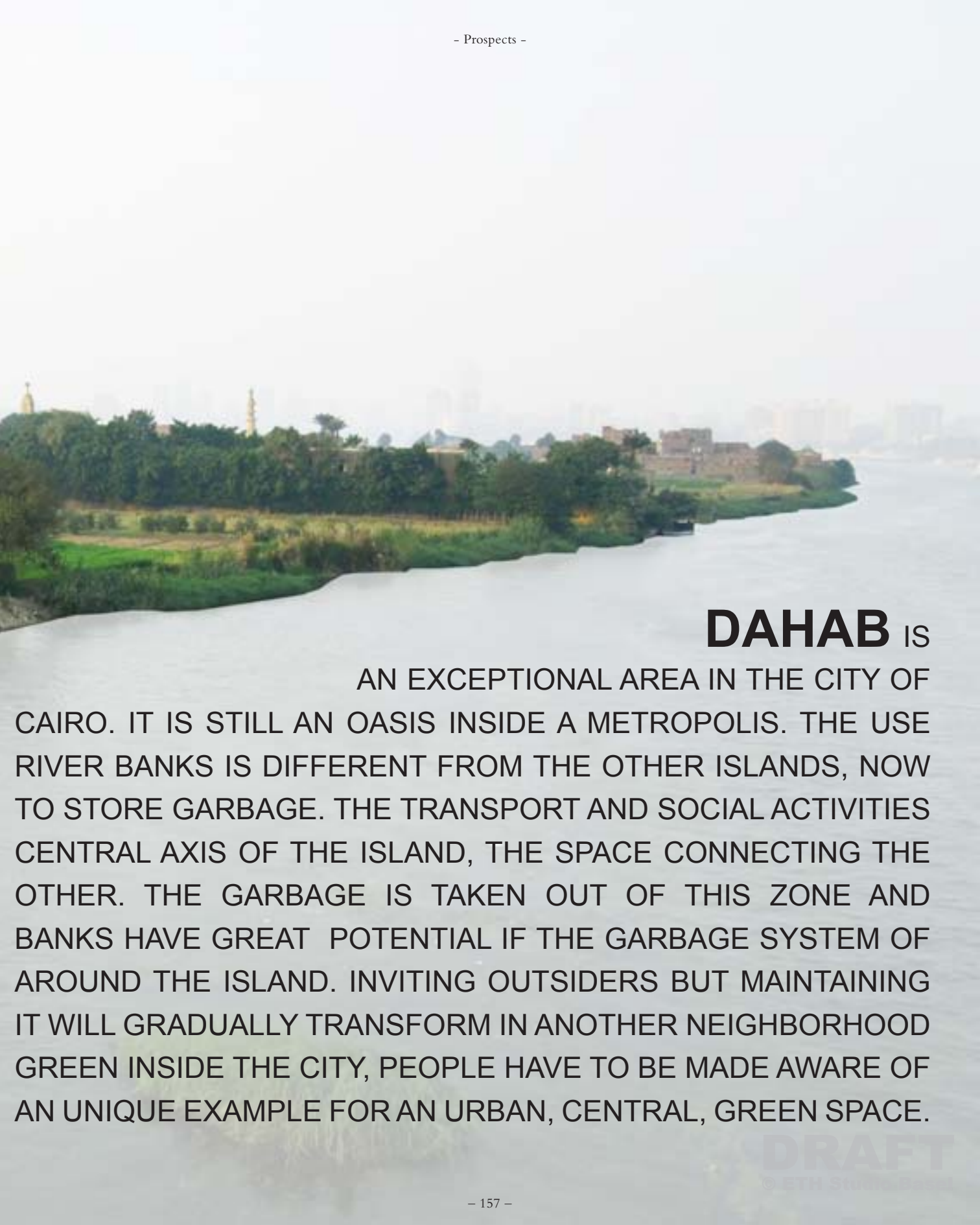


SPOTS WHICH ARE FEES. THE BANKS ON RAWDAH ARE SUITABLE FOR BOULEVARDS, EVEN TRANSFORMED TO STAIRS REACHING TO THE NILE. THERE IS ACCESSIBILITY OF THE RIVER BANKS AND MAKE IT A PUBLIC PLACE WOULD BE TRANSFORMED TO AN ENTIRE STRETCH OF BOULEVARD, RAWDAH AND THE SURROUNDING NEIGHBORHOODS.

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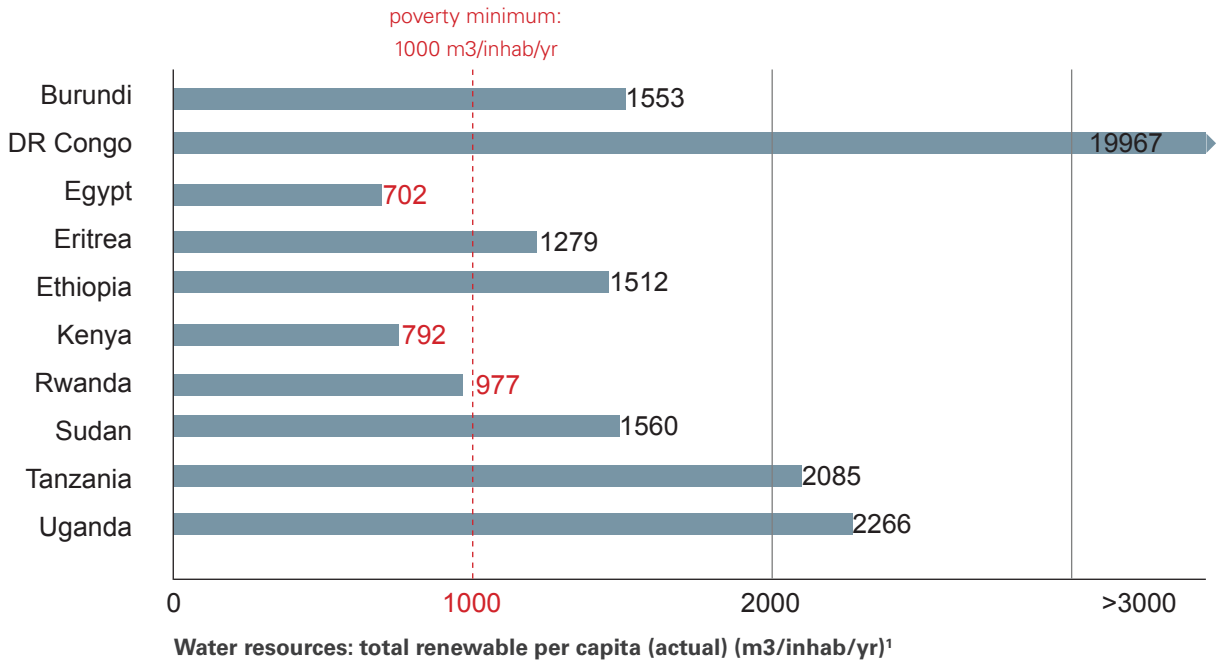
OF THE
MAINLY USED
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THE ISLAND IS CHANGED AND A SCENIC ROUTE IS MADE
ITS CHARACTERISTICS. IF NOTHING IS CHANGED TO THE ISLAND,
OF CAIRO, URBANIZED AND CROWDED BY TRAFFIC. TO KEEP THE
THE QUALITIES IT ADDS TO THE CITY AND HOW THIS ISLAND IS



DAHAB IS

AN EXCEPTIONAL AREA IN THE CITY OF CAIRO. IT IS STILL AN OASIS INSIDE A METROPOLIS. THE USE RIVER BANKS IS DIFFERENT FROM THE OTHER ISLANDS, NOW TO STORE GARBAGE. THE TRANSPORT AND SOCIAL ACTIVITIES CENTRAL AXIS OF THE ISLAND, THE SPACE CONNECTING THE OTHER. THE GARBAGE IS TAKEN OUT OF THIS ZONE AND BANKS HAVE GREAT POTENTIAL IF THE GARBAGE SYSTEM OF AROUND THE ISLAND. INVITING OUTSIDERS BUT MAINTAINING IT WILL GRADUALLY TRANSFORM IN ANOTHER NEIGHBORHOOD GREEN INSIDE THE CITY, PEOPLE HAVE TO BE MADE AWARE OF AN UNIQUE EXAMPLE FOR AN URBAN, CENTRAL, GREEN SPACE.

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1 FAO (2008)

On the Brink of a Water War?

On 14 May 2010, Ethiopia, Uganda, Rwanda and Tanzania signed an agreement to allow for a fairer distribution of Nile water, a desire expressed for 13 years without progress towards attaining it. However, Egypt and Sudan have refused to sign, with Egypt claiming that they are already currently “struggling with a shortage of water“ (see ‚Water Resources‘ table above).

Currently, Egypt and Sudan have the lion’s share of the Nile water, receiving 75% and 11% of it respectively, based on colonial treaties signed in 1929 and 1959. The rest of the upstream countries, including Kenya, Burundi and Congo, have to share the remaining 14%. The disparity is apparent.

More recently on 3 December, Egypt and Sudan have agreed to attend a meeting in January to discuss the implications of the agreement.

A Narrower Nile = Creation of New Public Space?

If Egypt signs an agreement to reduce its share of the Nile water, the repercussions are huge. The reduction in volume of water passing through the city after an increased intake of water from seven upstream countries would be substantial, and consequently the dropping of water level.

However, it is also worth looking at the potentials caused by such an event. With the lower volume of water, it is now possible to extend the river banks by a few metres all along Cairo, in order to maintain the same water level as in the current situation. The extended bank may then be officially declared public space. A continuous boulevard extending through Cairo would allow for public enjoyment of the river, a stretch of open space in the urban sprawl of the city.

2010



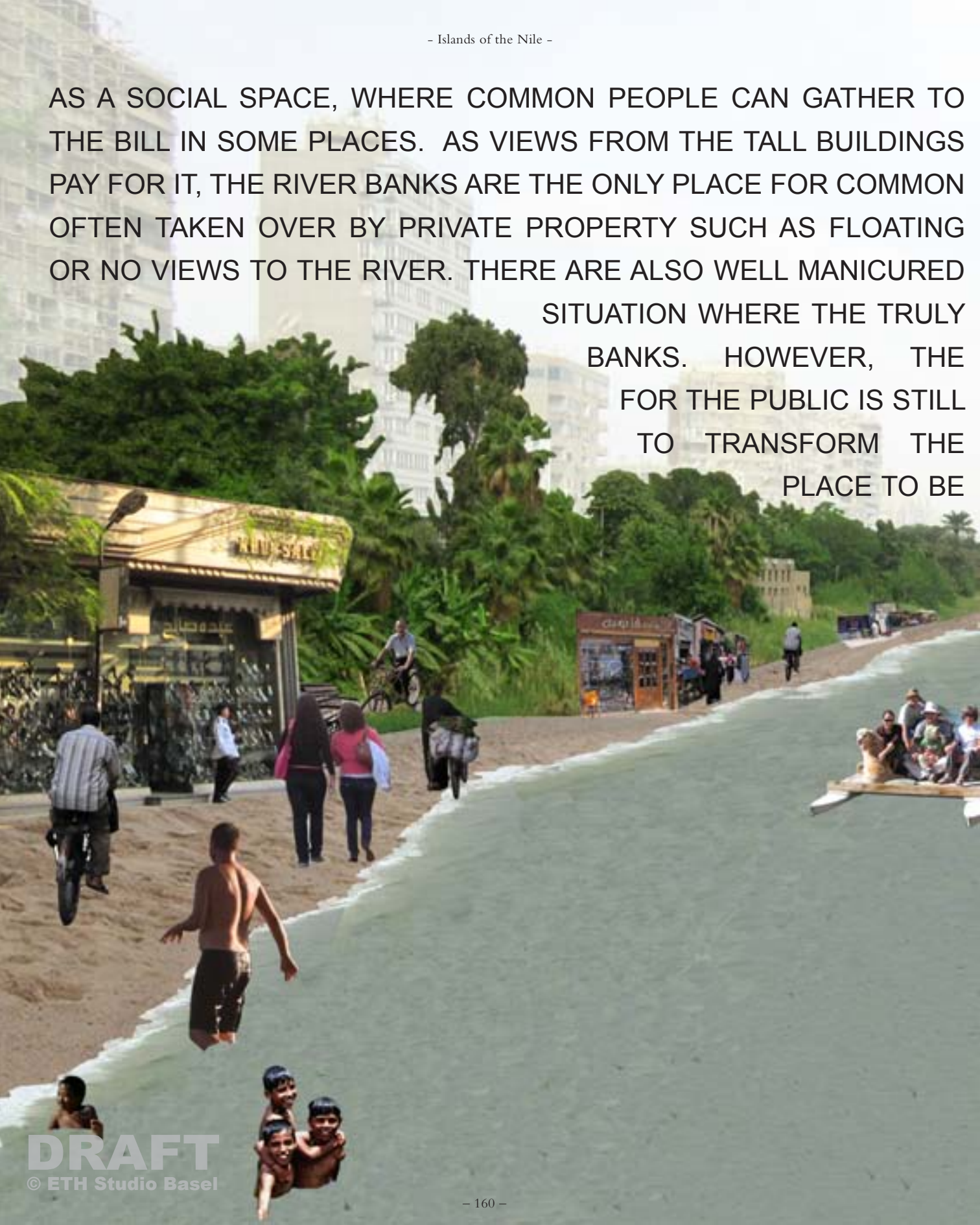
2015?



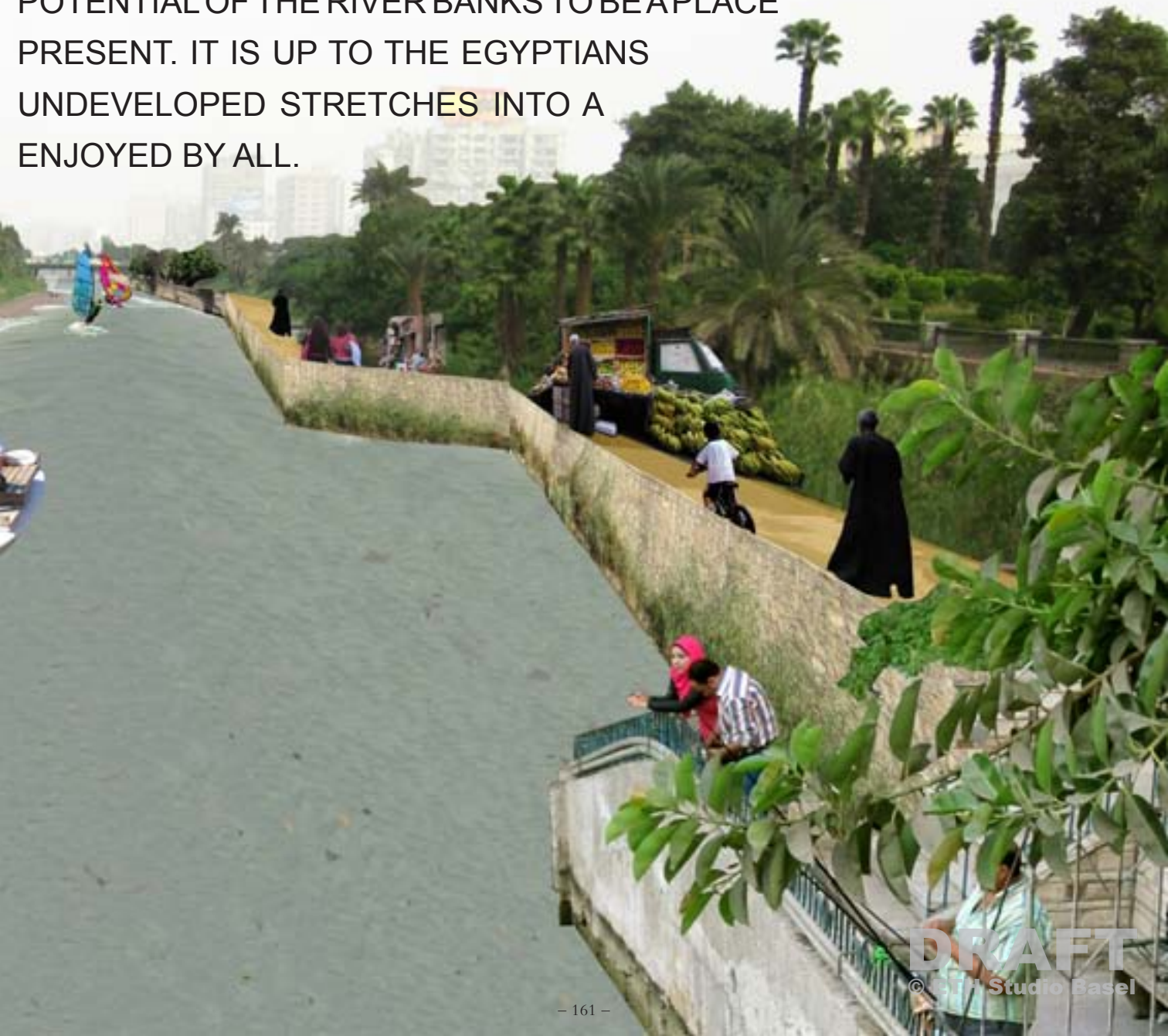
... 2050?



AS A SOCIAL SPACE, WHERE COMMON PEOPLE CAN GATHER TO
THE BILL IN SOME PLACES. AS VIEWS FROM THE TALL BUILDINGS
PAY FOR IT, THE RIVER BANKS ARE THE ONLY PLACE FOR COMMON
OFTEN TAKEN OVER BY PRIVATE PROPERTY SUCH AS FLOATING
OR NO VIEWS TO THE RIVER. THERE ARE ALSO WELL MANICURED
SITUATION WHERE THE TRULY
BANKS. HOWEVER, THE
FOR THE PUBLIC IS STILL
TO TRANSFORM THE
PLACE TO BE



ENJOY THE VIEW OF THE RIVER AND ITS BANKS, THE NILE ONLY FITS ALONG THE NILE ARE RESTRICTED TO THOSE WHO ARE ABLE TO PEOPLE TO VIEW THE NILE. HOWEVER, THE RIVER BANKS ARE RESTAURANTS OR CLUBS, OR SIMPLY GATED WITH RESTRICTED PARKS WHERE VISITORS HAVE TO PAY TO ENTER. THIS RESULTS IN A “PUBLIC SPACE“ OF THE NILE BECOMES ITS BRIDGES AND NOT ITS POTENTIAL OF THE RIVER BANKS TO BE A PLACE PRESENT. IT IS UP TO THE EGYPTIANS UNDEVELOPED STRETCHES INTO A ENJOYED BY ALL.



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Unlabeled photographs

p4-5 View north from the pedestrian bridge, Rawdah

p6-7 View north from the ring road fly-over, Dahab

p24-25 Narrow branch of the Nile east of Rawdah

p30-31 Building block on Zamalek, seen from the Nile.

p40-41 View from a tower on the north tip of Rawdah

p42-43 Colonial villa on Zamalek

p54-55 Narrow Nile branch between Rawdah and the east bank

p64-65 Agricultural land in Dahab

p88-89 River banks on the east of Zamalek

p106-107 Boats under the ring road fly-over on Dahab

p114-115 Lovers lane on the 15th of May Bridge on Zamalek

p120-121 Fishing and lingering on the river banks of Rawdah

P130-131 Lingering along the boulevard on the west bank of the Nile

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