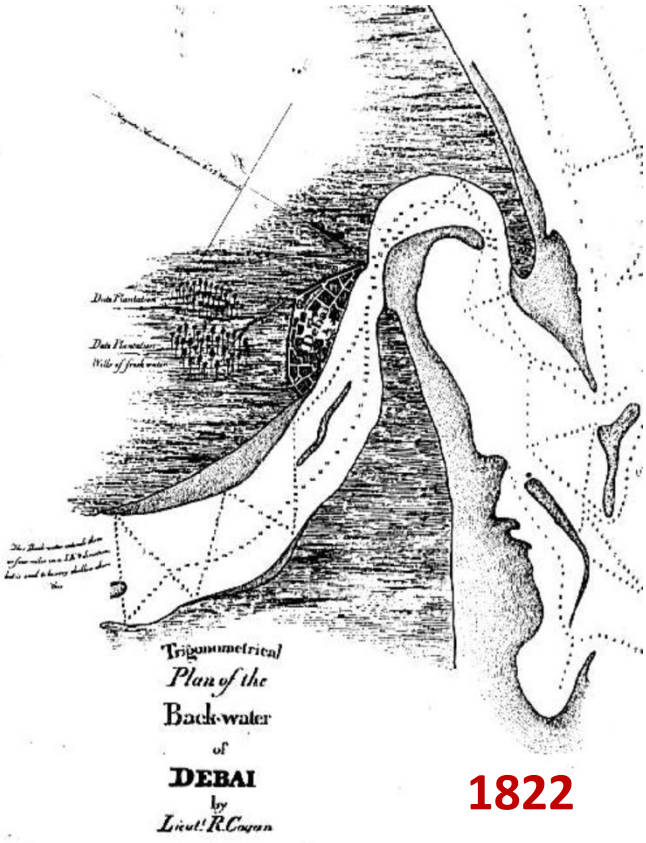
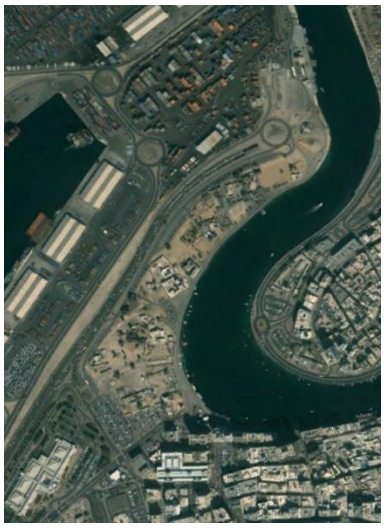
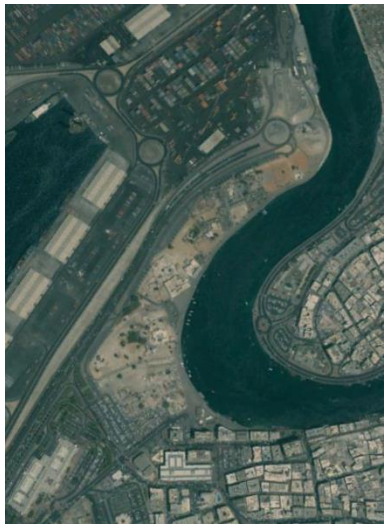
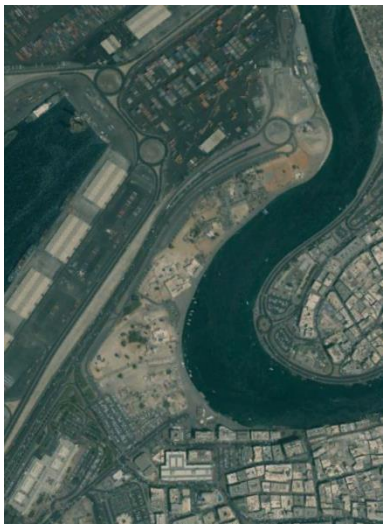
Al Shindagha – Natural Processes



After doing a bit of research, to no avail, I decided to visit the site and experience some of the environmental changes in first person. I took the old map of Dubai (from assignment 2) with me for comparison; the first and most obvious thing I began to notice was the actual shape of the land, although they have made a tremendous effort to keep the original form, I could see that a lot of work had been done due to the proximity of the creek. The river banks have been constructed to direct, channel, and control the flow of water to it's destination. That made me go on google maps and begin to wonder what would have happened if river banks were not constructed and the water was allowed to flow freely – perhaps the creek would have continued meandering as the high velocity (outside bend) of the creek eroded the land. Especially due to the current extension of the creek through Festival City, Downtown, Jumeirah, JBR etc, this would significantly increase the velocity of the flow of water and therefore the force of impact on the river banks. There is a possibility that the neighborhood of Shindagha could have ceased to exist, the water could have swallowed it whole, as it does to various lands, and deposited it on the Deira side of the creek. There would be no beautiful (prime location) river side view, there would be no comfortable outside seating near the river banks, there would be no Al Bandar Restaurant, there would be no Al Areesh Restaurant.

The Dubai Creek is primary factor for the importance of this sight and the main reason influencer of factors that led Sheikh Saeed Al Maktoum to choose this prime location as his residence. As I discussed in my last paper, Dubai in the 1800s and early 1900s comprised

mainly of three areas; Deira, Bur Dubai, and Shindagha. The latest being the most elite of them due to it's most strategic location. This strategic location and 'upper echelon' inhabitants could be a suggestive reason to why it stands today. Not only because it has a palace within it that has become a tourist attraction but there are more layers and deeper connotations that could be extrapolated from it's vast history. After the ruling Maktoum family built their palace in 1896 it became an even more desirable location and attracted many elites, these wealthy individual built houses, mosques and infrastructure with the best materials and designed by the best architects of the time. To me, this is a major contributor to it's existence today – many other buildings (in Deira and Bur Dubai) built around the same time have been demolished due to instability and other structural and environmental issues, but some of these were of good enough to either restore or maintain. So walking around the area I could sense that this is not a modern community, but it is definitely an area that once upon a time housed a very wealthy community.

Another major environmental impact that I noticed as soon as I arrived was the heat! This has been a major factor in Arabian architecture since Imhotep. I could see that there was definitely conscious decisions made in the design of the buildings, the urban fabric and the materials used; on the other hand it is also noticeable that some of the later renovations and constructions were done without sufficient understanding of the original context. The reason I came to this conclusion is because of a multitude of signs; for example, when walking down the river bank where the restaurants and outside seating is located, you will notice that it is considerably hotter than the other areas of the neighborhood. This is because the old method of urban design considered climatic conditions as a priority in order to create comfortable spaces for the inhabitants. Dubai's climate is hot and humid, with the prevailing winds coming from north-west and the sun rising through the south. This is very important information that the architects absorbed and designed according to; firstly, they built the buildings in very close proximity to each other which primarily did two things – it reduced the amount surface area exposed directly to the sun, which meant less radiation and heat entering the spaces, and it also formed a highly dense environment with narrow pathways in between buildings. These pathways (sikkas), as seen on the maps, are mostly on the northwest-southeast axis, which allows the prevailing winds to pass through and cool the circulation paths, and because of how narrow they are they increase the velocity of the wind and therefore the perception of comfort for people walking or lounging between them. Lastly, because the buildings are so

close together and fairly high, they shade the alleys for most of the day. This implementation of vernacular architect is the best for hot and humid environments because the humidity gives you a sense of thermal comfort in areas that are not directly exposed to the sun, as oppose to a hot and dry climate. It is highly noticeable, visually and thermally, when you walk through the alleys into the river banks, the sun surprises, and almost blinds you (especially in the early half of the day) and the temperature almost feels like you're walking into a new environment.

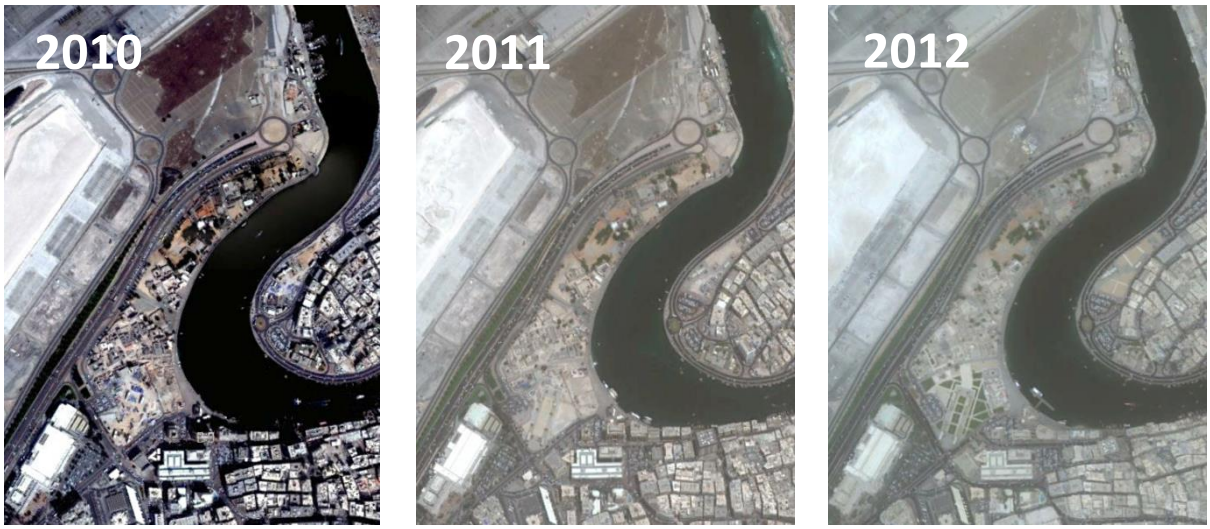
Most of the buildings in Shindagha still have traditional elements, like windtowers (bastakiyas) and the courtyard typology, but they have not been adapted/translated into modern components that can be functional today. I guess its because the main priority is to preserve the building and not change them, but it would be interesting to see at least some of the houses there be updated so that the traditional elements become functional. They could design the windtower with glass partitions that subsidizes air conditioning.

One thing I was surprised to see (or not see) was footpath erosion, from humans and animals). There was minimal evidence of any footpath erosion at all, and this was surprising because of the amount of visitors this location has, how old this area is, and because a lot of the pedestrian zones are still sand, and not paved. I expected there to be a visible difference or some kind of empirical evidence of footpath erosion, but there was little to no sign of that, this could be due to good maintenance or restoration, or an unprecedented design logic – maybe sand does not erode. Nonetheless this is a factor I was surprised not to find because it would have completely altered the experience of the site and while walking down those narrow pathways you would be able to tell that millions hundreds of thousands of people have walked down the same way for hundreds of years.

In terms of an urban fabric, or urban design, the growth of Shindagha happened organically and was not (master) planned exactly predetermined. It grew according to a certain logic and order that was in place and that was understood by most architects of the time. Today there is a demarcation drawn around the neighborhood as the coast continues to expand, on one side is the Dubai Creek and on the other side is Al Khaleej Road that joins Deira and Shindagha through Al Shindagha Tunnel. These boundaries, limit it's potential of impact as the source of growth and the data set that informs the logic of growth. If it were allowed to grow with no restrictions, I believe it would cover most of Al Karama, Bur Dubai, and even Jumeirah,

following the same logic and ordering system that it was built open. The reason I say this is because if you walk through the totality of the sight there is a sense of coherence and consistency that you experience through the structuring system, all the building oriented in a certain way, the alleys are a certain width and on a certain axis, there is a soft grid that is adaptable and malleable as it goes around larger buildings like the palaces of mosques, and tightens around smaller houses and more dense areas; I feel like these logics and data sets could continue endlessly if there was no boundary of preservation that was demarcated.

Dubai is located in the Arabian Peninsula, on the Arabian plate, so topographically it is pretty modest and has a more or less flat terrain (apart from the mountainous eastern coast – northern Oman, Ras Al-Khaimah, Fujairah etc). The only noticeable difference is that Dubai is mostly sandy desert while the southern region of UAE is gravel desert. Shindagha reflects this flat terrain with most of it being around 2 feet above sea level. The paving and renovation works that started in the 80s further solidify this 'flatness' of earth but also create a new problem – the heat island effect. Although not all of the areas in the neighborhood are paved, the areas that are have created an atmospheric difference called the heat island, which is when the average temperature is increased due to human activity and infrastructure. Another issue that needs to be taken into account looking forward is the global warming phenomenon and the rising sea levels around the world, this directly impacts the future of this site, because if the sea level was to rise anything above 2 feet then the area would start to submerge under water.



After doing some research, visiting the site, and writing the first part of this paper, I decided to go on Google Earth and trace the history of the site from the earliest point possible. The earliest images are from 2001 and my findings are unbelievable – according to Google Earth, everything in Shindagha, apart from the palaces and a few houses, was built in the last 15 years. My guess is that the architects used references from old maps to recreate the urban conditions of the 1800s and early 1900s, before then it was mostly large patches of sand surrounding the palaces. After this new information I did some further investigation, trying to trace the history and link it with events that might have caused this 'emptiness'. I came to the conclusion that the most reasonable explanation has to be the industrialization of the are and the expansion of Dubai. Port Rashid is very close to the site and it is possible that the residents did not favor being so close to such an industrial zone, also with the expansion of Dubai and

the city becoming polycentric, with new urban centers and business hubs, there were new prime locations and areas with closer proximity to family members and workplaces.

In conclusion, there has been a chain of events impacted by environmental factors (like climate, geographical location, geology etc) that have resulted in the emergence of Shindagha as well as the extinction, until it was rebuilt in the early 2000s as a replica of what was once there. The future of the site depends of the preservation that the municipality have rightfully invoked, and the many environmental issues that may arise, like the sea levels and increasing visitors. These will hopefully be dealt with accordingly and the legacy phase of this piece of urban fabric will continue to adapt to new functions.