A Tale of Two Cities:

Re-Imagining Tahrir Square’s Moggamaa Complexe

by

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“I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners. I understand that my thesis may be made electronically available to the public.”
Cairo, Al Qahera، القاهرة، the city Victorious in Arabic, is being replaced by a new administrative capital 50 km away from its core in the middle of the desert 1. Known throughout history as the City of a Thousand Minarets, Cairo is becoming the city of vast suffocating desert mirages. In the past 30 years, a series of satellite cities began to emerge in the desert in hopes of decentralizing the capital and easing congestion and alleviating living conditions. The newest of these desert mirages is the New Administrative Capital, still unnamed, the city is part of a series of reform policies and extensions in the past 5 years under the government of Abdel Fatah El Sisi that aims to improve living conditions, political turbulence and economic stability in Egypt.

The results of such policies are rapidly gaining recognition as Egypt is currently topping the charts of several travel websites as the world’s most popular tourist destination 2 and is labelled by The Economist and Forbes as the fastest current growing economy in the world 3, 4. In a planned move of all governmental, diplomatic and multi-national business entities, the government foresees a relocation of minimum 5 million households within the next 5 years to the new desert haven 5. Marketed as a smart, fully integrated city, boasting futuristic buildings and a mirage of a new Dubai, the new capital is set to draw investors and locals alike.

This thesis explores the aftermath of this migration within the capital. Since the new capital is undergoing construction and is well on its way, it becomes futile to debate its viability and efficiency and therefore it is more productive to explore the effect of the urban transformation on the old city.

The questions of concern here are what will become of Cairo after the relocation of its main governmental and business districts? Currently, there are approximately 76 buildings that will become function-less in downtown Cairo alone with no plans of rehabilitation or refurbishment. Each building has its own surrounding community and neighbourhood feeding off its current function with a plethora of services to the users of the building creating its own micro-urban environment.

To narrow the scope of this thesis, Al Moggamaa’ Complex in Tahrir square was chosen as a case study for an adaptive re-use project. An illustration of an architectural intervention that hopes to show the potential of what could be, if the building was adapted using a design framework that considers the community and the context historically, socially and economically. The building currently hosts 20-30 thousand employees daily and welcomes approximately 60-100 thousand visitors per day 6.

This project aims to re-imagine the building’s function as well as the neighbourhood around it in a complete revitalization and re-activation of the square. It is a design exploration of a minute part of downtown Cairo imagining a scenario of what could become of the core of the thousand-year-old city once it has been abandoned by its current users and its buildings left function-less and ready to embrace new communities and functions.

ABSTRACT

To my Mother, thank you for being my constant backbone and support system.

To Mamina, Merci pour vos prières éternelles, et pour me rappeler qu’il ya toujours de la lumière au fond du tunnel.
(Thank you for your constant prayers, and for always reminding me that there is a light at the end of the tunnel)

To my Sister, thank you for the long calming phone calls and food deliveries at all times of the day and night.

To my Dad, thank you for keeping me grounded and sane throughout my research.

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John McMinn, thank you for keeping up with my travels and always encouraging me to keep going and bringing out the best in me and believing that it is doable and most of all, thank you for being patient with me.

Marie-Paule Macdonald, thank you for always having new ideas and providing me with a sense of direction and constant inspiration.
To those who still believe that the revolution is in the hearts of the youth, in the minds of the innovators, in the souls of the intellectuals and in the spirits of those we have lost along the way.
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PREFACE

Growing up in a city with the Great Pyramids of Giza and the Nile as a backdrop embeds an unconditional love to the deeply rooted history of Egypt. The poetic illusion of walking through every district of the old city and imagining the history in every household told through the dust settling on the edges of the buildings and the hundred-year-old trees in the entrances serves as a reminder of the history that once was. The constant fantasy of having Pharaohs as ancestors and visiting the Pharaonic temples, the Mameluke mosques, the Coptic churches on school trips leaves me with a profound passion for the preservation of the city’s architectural history and nostalgic dreams of a more majestic kingdom recounted in the tales of my grandparents.

The history of Egypt and especially its modern history, and recent streak of revolutions has had an immense impact on its architecture and how the society perceives and appreciates different buildings. With every new Pharo, Emperor, King and President, came a new style and a new identity to building and expanding the urban realm away from the Nile River and into the desert and with each era came a set of laws attempting to erase and limit what was before it and show its power and reach through buildings and architecture and new methods of urban design.

How did Egypt evolve from a Pharaonic heaven to years of religious conquests, to a kingdom hiding behind European colonies and to a constant battle of militaristic rule? How did that change the definition of Egyptian architecture? How did we abandon the Pharaonic temples and the advanced knowledge in arts, engineering and architecture to settle for monotonous city of stacked concrete buildings? What can we, as educated architects do to shift the way of thinking when dealing with architecture in Egypt? Although the scope of this thesis will not address many of these issues, but touching upon them remains vital to comprehend how deeply rooted the problem is.

In modern day Egypt, the government has decided to let go of Cairo with its thousands of years of history and build a new administrative capital, still unnamed in the middle of the desert. The aftermath of that decision is the core of this thesis.

How can the Cairo be saved?

Can it actually be saved?

What can I do to save it?
“In the city, there is still a twinkle in the eyes of a dying man looking for someone to save him”

Egyptian Architect Raef Fahmi
Kamel, Said. 2018
INTRODUCTION

On January 25th 2011, thousands of Egyptians marched to Tahrir Square to demand: Bread, Freedom and Social Equality. The Revolution ended the 30-year rule of President Hosny Mubarak and launched a series of economic, political and social changes in the country. The following years consisted of a year of military council rule under a state of emergency, a year of an elected president from the Muslim brotherhood later ousted by a controversially disguised coup in the form of a second revolution, a year of an interim independent president and then the start of a new era with a former military general elected as president. The development of events lead Egypt to what it has become today; a country striving for stability. With inflation rates rising alongside unemployment and the price of basic goods, the newly elected government led by President Abdel Fatah El Sisi held the Egyptian Economic Development Conference in 2015 and announced the construction of a new capital through a call for investors. A city aiming to offset the struggles of the current capital and emerge as a new hope for a brighter future for the Egyptian people.

The New Administrative Capital was announced using a series of architectural renderings by internationally established architecture firms such as SOM and scaled models laid out as centre pieces for approximately 1700 investors, consultancy experts and world leaders in attendance including Christine Lagarde, Managing Director of the IMF, John Kerry, the US Secretary of State and former Prime Minister Tony Blair (who is currently advising El Sisi as part of an Emirates funded consultancy program). The land was divided and sold off to developers who later released their utopian vision of the residential, business and governmental districts of the new capital through marketing campaigns all around the old city’s highways calling residents to purchase homes located far away from the existing capital with names reminiscent of Western cities.

The average price of a 2 bedroom unit in the new capital is $100,000 (1.8 million Egyptian Pounds), considering that the latest consensus in 2016 shows that an Egyptian family that 'can spend $3,800 (EGP 60,700) annually is considered among the richest 10% of Egyptians' and only '1% have assets valued above $200,000 (4 million EGP)’, there is a huge discrepancy in the plans proposed by the current government that only cater for a limited segment of the population and the reality on the ground. Although the urban plans revealed at the conference show initiative for social housing and a promise that there will be equality in housing in the

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new capital including discounts and subsidies for governmental workers subject to relocation\(^2\), the advertisements on the highways as well as the walls of the old city say otherwise.

As a thousand-year-old city of 26 million inhabitants\(^3\), Cairo has been burdened by traffic, pollution, and plagued with poverty and social injustice for many years. 30 years ago, President Hosny Mubarak called for a planning ministry to decentralize Cairo and decrease its population density\(^4\). A strategy developed initially by Al Sadat in the 1970s and continued by Mubarak. Their vision was composed of satellite cities embedded with high-gated walls encircling westernised villas and mansions, manicured lawns, and luxury swimming pools. Developers flooded the Egyptian markets buying lands from the government and the military for very low prices and then developing them and reselling them at close to 1000% profits setting the Egyptian Real Estate market in an influx of inflated prices that are still rising today\(^5\). The plan was formalized in the Cairo 2050 vision released by the government addressing the development of new satellite cities and their supporting infrastructure.

In the first set of developments a ring road was built to facilitate circulation in between Cairo and the new satellite cities, completely encircling the old city leading with eight lane roads to the new business districts surrounded by the gated compounds. A secondary ring road is now being developed to lead to the new administrative capital and link to a series of new highways leading to the coastal, desert and rural cities that are also being developed as part of the new Cairo 2030 economic development reform plan lead by President El Sisi and his cabinet\(^6\).

This thesis will not focus on the benefits and limitations of uprooting one of the oldest capitals in the world and building a new one in what appears to be a mirage in the desert. While the major focus of current economic and urban development is on the new capital, this research will look at what could become of the old capital and its now functionless buildings due to the immigration of the administrative governmental and business districts and imagine their future. In 2020, the nameless capital is set to inaugurate the government district followed by the commercial and business district in the following phases. This in turn creates a vacuum in the old governmental and business districts in downtown Cairo. Consequently, this presents the opportunity to explore what could happen to the city as a result of the mass exodus of function and how the lives of the people will be affected specifically those whose business was reliant on the proximity of these functions, the surrounding micro-urban environment. Before exploring the means of an architectural or urban intervention that could attempt to save the old city of the fate of being left behind, it is important to understand the history that has led to the need to build a new city.

A focus on the chosen building of Moggama El Tahrir will enable a design exploration of an adaptive re-use approach to existing architecture in the city exploring and creating a new design program that could accommodate new functions and maintain the micro-urban environment in the area.

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Illustration 1.1: Map of Cairo Highlighting the main ringroads surrounding the city.
The focus of this thesis will be limited to Tahrir Square, where it all began, and specifically the Moggama building, home to all of the major governmental services required by Egyptians and foreigners in Egypt. Al Tahrir Square is one of the most prominent squares in downtown Cairo, most famous for housing the 2011 revolution, which removed President Mubarak from his 30-year reign\footnote{Observer, Cairo. 2011. “Albert Speer And The "Future Of Cairo"”. Cairoobserver. http://cairoobserver.com/post/5962338317/albert-speer-and-the-future-of-cairo#.W6RGA0gvyUk.}. Historically, Tahrir Square has always been an important public space. After the Egyptian Revolution of 1919, the square became widely known to Egyptians as Tahrir Square, meaning Liberation Square in Arabic, but was not officially renamed until the Egyptian Revolution of 1952, which changed Egypt from a constitutional monarchy into an autocratic republic\footnote{Berger, Marie Jean. 2014. “Cultural Enlightenment For Cairo’S Downtown Futures”. Mada Masr. https://www.madamasr.com/en/2014/07/17/feature/culture/cultural-enlightenment-for-cairos-downtown-futures/}. The area around Tahrir Square includes the Egyptian Museum, the Folklore Arts House, the Mogamma government building, the Headquarters of the Arab League, and the original campus of the American University in Cairo (now relocated to New Cairo). The National Democratic Party-NDP headquarters building stood here until it was set on fire during the 2011 revolution. The saturation of the square and its surrounding area with such important buildings for Egyptian culture, politics and economy provide the perfect drawing board for a thesis project with great opportunities of exploration and development.

This thesis will explore the Moggama building and its surrounding district of downtown Cairo through a series of site visits and urban explorations as well as a forensic architecture investigation on the building itself in an attempt to understand the social, economic and political context the building sits in. By studying the site and the building and their history an understanding of the micro-urban environment and its codependent relationship to the building can be developed.

The aim is to create a design framework manifesto that can be implemented to the other buildings that will be evacuated in the near future. By following an adaptive re-use strategy, one can attempt to preserve the history while maintaining an economically sustainable model for the building’s function that can in itself be a “revolutionary” thought that could spread and in turn create a new design ideology for Egyptian architecture. Instead of building mirages in the desert, if benefit can be highlighted in what exists, the debate for preservation of the historic architectural form is strengthened and instead of tearing down monumental buildings after abandoning them and moving elsewhere, the focus can develop to searching for better solutions to change the function of what’s existing and adapt the form and revitalize to suit the new program. As there are no official sources that announce exactly which buildings will be relocated and no transparency from the government or the parties involved as to what will happen to those buildings in the future, for the purpose of this thesis, assumptions have been made during the data collection and observatory site visits to the area regarding the future of the buildings that will be abandoned.

The aim of this thesis is to explore relevant moments in Egyptian history focusing on the political and economic shifts that developed Cairo as the named capital to further understand the context of the site and the building. Secondly, a redesign of the Moggama building by creating a program that could benefit the existing users in downtown Cairo as well as the surrounding neighbourhoods and in turn, maintain the codependent relationship in the surrounding micro-urban context. A design manifesto has been developed to inform the new function of the building with the far sight that it could, in itself as well, be part of a “revolution” of thought that could aid in the redevelopment of the vacated buildings due to the migration to the new Capital.
This thesis will first explore specific moments in the history of Cairo focusing on its urban growth and set the context in the city to understand the surrounding factors that can affect the architecture of downtown Cairo and the Moggama building. Through a series of site visits, urban explorations, observations and forensic architecture investigations, plans of the city, the Moggama and computer models have been developed to further aid in the design. Since the area is heavily secured by police and army presence due to the nature of the site, a cautious approach has been taken that limits interaction with the users to only observations by the author. As the building is a governmental building, access to real plans and drawings has been difficult so the building has been drawn from site sketches, Google map images and photographs found online and taken by the author documented in the following chapters.

Part One of the thesis constitutes of a collection of images, illustrations and notes documenting the existing state of downtown Cairo and the building as well as an exploration of the history of Cairo. These drawings provide the drawing board of the design. A program and manifesto have been developed for Part Two which will continue the research by exploration through design in an attempt to answer the question: How can the city be saved through an adaptive re-use approach of its abandoned buildings? The outcome of this section is a series of architectural drawings of what could be if the Moggama building is transformed following the new design manifesto that was developed, into a community centric building with an economically self-sustaining model, and illustrates how the building could extend a life-line to the surrounding buildings and their future functions.
PART 1

5000 YEARS OF HISTORY

Figure P.1: 1001 Minarets and Beyond
CHAPTER II

A 1000 MINARETS, A 1001 MIRAGES

Figure 2.1: Collage Of Architectural Styles in Cairo
In order to understand the present and plan for the future one must understand the past. Cairo’s streets and buildings, its urban life, are like a weathered history book with stories camouflaged in years of aging. This chapter explores the development of the city of Cairo from its ancient pharaonic roots to its establishment as Cairo, Al Qahera, the modern day metropolitan home to millions. Exploring the history develops the understanding of the context in which the site chosen for this thesis is set. Downtown Cairo as known today is the result of hundreds of years of development that cannot be fully contextualized without experience. This chapter recounts various political and economic shifts in the history of the city’s that drove development and urban growth.

‘ANCIENT’ CAIRO

Cairo and its surrounding vicinities have roots in settlements dating as early as 6000 BC19 with new discoveries happening every day proving older roots; the most notable being a Neolithic site discovered in the district of Maadi in the east of modern-day Cairo. Around 3000 BC, the first official city on the site, Memphis, was founded by King Menes (also known as King Narmer) who was responsible for uniting Upper and Lower Egypt20 the era was known as the 1st Dynasty and was the beginning of the history of the capital known today. The strategic location at the base of the Nile Delta was chosen for economic and political control of the boats passing through from the South to the North21. The core of the ancient form of the city lies 24km from the modern downtown to the west, currently in the area of the three pyramids of Giza in the Governate of Giza part of the administration of Greater Cairo. The Pharaohs mostly ruled from Luxor in the South of Egypt and the city of Memphis was not developed or maintained and the focus was on the Southern Parts of Egypt including Luxour and Aswan.

The Ptolemaic Period from 332-30BC saw the arrival of Alexander the Great and the establishment of the city of Alexandria in the North on the Mediterranean coast22. Temples, libraries and houses were built with a different architectural style from the ancient pharaonic architecture, and spread quickly all over Egypt and to what is now modern-day Cairo. It can be seen in various temples and continues to inspire an homage of a neoclassical architectural medley that can be observed in the new satellite cities still being built today as well as in the older districts around the city, as seen in Figure 2.4.

Figure 2.2 : Babylon Fortress with Islamic Mashrabeya in the Background

Figure 2.3 Hanging Coptic Church built on gate of Babylon Fortress

Figure 2.4 Neoclassical Inspiration in New Cairo district

The death of Cleopatra and Marc Anthony marked the end of this period and the beginning of the Roman occupation in the 1st century. The Babylon fortress along the Nile in the heart of the city is one of the oldest remaining structures from that era23. With the fall of the Roman empire, Egypt became part of the Eastern Empire based in Constantinople and part of the Byzantine empire which had transformed to a Christian state. The fall of the Western Empire and the spread of Christianity eventually lead to the disconnection

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from Roman culture as well as disappearance of Egypt’s indigenous culture as the priests and priestesses who officiated at the temples were gone which meant that no one could read the hieroglyphs of Pharaonic Egypt. Some of the temples were converted to Churches or abandoned. With the spread of Christianity in Egypt, Coptic Architecture quickly emerged in Cairo as the priests sought refuge in the abandoned city of Memphis and churches are still renovated and maintained and used today with 18% of the population in Egypt identifying as Coptic Christians.

The Graeco-Roman rule over Egypt ended in 639 AD as the first phase of Islamic Conquest arrived and with it, Islamic Architecture became the prevalent style of architectural expression and was formalized with the establishment of the city of Fustat (currently Cairo) as a strategic geographic location due to being the key link on the east-west spice routes. This created an economic hub for bustling markets such as Khan El Khalili, still operating today selling spices, jewellery, crafts and many tourist souvenirs. This was the beginning of the first formal planning of the city as a medieval gated city as well as the construction of the first mosque in Egypt and all of Africa, Masjid Amr Ibn Al ‘As. The city of Fustat is what is known today in Cairo as the district of Old Cairo (or Old Egypt, ‘Masr El Adima’) and lies adjacent to downtown Cairo today. In 969 AD Cairo was established as the Capital of Egypt and the name was officially changed from Fustat, accompanied by another wave of construction in the form of forts, mosques, markets and houses further expanding outside the gates and validating the city under Fatimid rule. Much of the Fatimid architecture still remains today with the old gates of Bab Al Nasr, Bab Zewiela and Bab Al Futouh still encasing the entrances of the old district.

In the 12th century, Saladin, the first Sultan of Egypt became ruler and the Ayyubid dynasty began further developing the city for a hundred years until the Mameluks took over in 1252 and expanded the city further spilling outside of the medieval gates. With the fall of Baghdad to the Mongols, Cairo became the center of the Islamic World and one of the most important cities. The Ottomans conquered Egypt in 1517 building Turkish inspired architecture in the city and further enhancing the architectural language of Cairo.

The Napoleonic Campaign brought the French in 1798 to Cairo and with it the French language spread quickly across the capital with 2% of the population still speaking French today. The French were expelled in 1805 and Ottoman Albanian Mohamed Ali Pasha took control of Egypt converting it into a modern state and ruling as governor from Cairo although nominally part of the Ottoman Empire. Mohamed Ali’s goals for Egypt were to transform it to a regional power. To do so he nationalized farmlands and established the textile industry creating

international recognition for Egyptian cotton, and reformed taxes to create profit. He built technical schools in Egypt modeled after the Ecole Polytechnic in France to spread education and he was responsible for building several teaching hospitals in Cairo including supporting Antoine Clot to establish a school of Medicine for women 31. The mosque of Mohamed Ali and his fortress remain one of the most famous landmarks in modern day Cairo with views from a platform overlooking the old city as well as the modern highways. His successors also shared his love for the development of Egypt, their education in Paris helped bring further ideas of modernization to the city in terms of its laws, urban planning, architecture and infrastructure 32.

Ismail Pasha, Mohamed Ali’s grandson ruled from 1863 and 1879 heavily investing in industrial and urban and economic development33. The Suez Canal was constructed during his reign, but he lost control of the Egyptian shares to the British due to the debt he was taking for all of the reform projects. Ismail Pasha commissioned ‘Paris on the Nile’, currently known as downtown Cairo, modeled based on Hausman’s Paris with Tahrir square at its root (then named Ismail Pasha square)34. The buildings in that area were designed based on Parisian Renaissance architecture of the 1800s and another architectural style invaded the city, an infusion of Renaissance, Belle-Époque and Art Deco architecture was transferred onto the blank canvases of the new district creating wide boulevards around central roundabouts surrounded by multiple story buildings with mixed typologies and ornamented facades and interiors.

Downtown Cairo still remains one of the most beautiful neighbourhoods, architecturally, in the city and efforts of continued renovations and development spurred in the last decade in an attempt to conserve it35. The period of Mohamed Ali and his successor’s rule brought great development to the capital and shaped it to the Cairo that is known today but it also put the country in debt to the British Empire who gradually took over in 1882 and officially making Egypt a British protectorate in 191436.

In 1919 Egyptians led a revolution against the British rule and Egypt became a sovereign state in 1924 under the rule of King Fouad I, a descendant of Mohamed Ali, and later under the rule of his son King Farouk, the last ruling King of Egypt37. Under their rule, education and military budgets were increased, universities, libraries, theaters were commissioned, and the arts and culture scene began thriving38. The gap between the rich and the poor increased dramatically eventually leading to civil unrest turned coup d'état in 1952 which dethroned the royal family and sent them to exile while leaving Egypt in the hands of the Free Officers, a group of army officers who organized the civil unrest and led the revolution and later were voted into the presidency39.
It is notable to mention that in this author’s opinion, great architecture and socially focused urban planning in the city of Cairo ended with the last monarch with a few exceptions from architects who strive to defy the new norm. The following period under the rule of the various presidents saw new innovation in material due to new industry and various attempts to expand the city through decentralization to the West and the East of Cairo’s core with consecutive failures recorded today as the new districts still remain 45%-79% vacant and uninhabited and are continuously dubbed as ghost towns 39, while Cairo’s overhauling congestion slowly deteriorates the core of the city due to the unmaintained and undeveloped infrastructure from the 1800s-1900s.

The population of the city was growing with limited formal planning to house the new residents, the rise of informal settlements was spreading in the city like a plague with no control from the government due to the lack of affordability of governmentally sanctioned residences that were being built, as well as the lack of monitoring for construction and planning 40. This is a phenomenon that continues to present day leaving 40% of the population living in unplanned and informal areas as of 2015 41. The following period of history, although much shorter than the one explored in the previous section, lead to the demise of Egyptian architecture through lack of policy and regulation, lack of planning as well as a decline in education spending and the spreading of corruption and political turmoil accompanied by a rise in population and lack of employment opportunities.

In 1953, Egypt was declared a Republic with Free Officers’ leader Mohamed Naguib as president followed quickly in 1954 by Gamal Abdel Nasser. Nasser’s reign increased Egypt’s popularity with the Arab world and introduced a new constitution with socialist ideologies 42. The Suez Canal was nationalized which created political unrest with the UK and France, the biggest shareholders, but garnered support from the US, creating a new ally for Egypt and a new source of aid 43. Within a few years, Egyptian economic and political policies evolved to include a ban on foreign investors in an effort to increase local production but in turn created a shortage of building materials causing prices of steel and concrete to soar but also forcing local production of lower quality materials 44. Abdel Nasser also nationalized privately owned farmlands, companies and 80% of sectors in the industry as well as forced several business owners to sell or forfeit 50% or more of their private companies 45 in an attempt to redistribute the country’s resources which caused a decrease in his popularity among business and landowners.

Other decrees were issued including agrarian reform laws limiting ownership of lands, tax reforms including up to 90% income tax in the upper brackets as well as a limit of government employee salaries, eventually leading to corruption the government as the salaries were not efficient which in turn lead to an increase in the acceptance of bribery with long lasting effects of corruption that continue to affect the city today 46. Although Nasser’s reforms could be justified as an attempt to decrease the gap between classes and create social equality, it created unrest due to being perceived as ruthless and unjust towards large local businesses and landowners.

41- Ibid,
43- Ibid.
More importantly, within the context of this thesis is a decree issued by the
government to freeze rent values to make residential units more affordable for
the general public and to encourage household expenditure on emerging local
goods. This decision was the beginning of the downfall of Downtown Cairo, as
the years passed, the prices of commodities rose, and inflation increased while
rent remained the same. Eventually, it became too expensive for the landlords
to maintain residential buildings as they were no longer making any profit and
laws prevented them from increasing the rent or evacuating residents, and the
buildings began to age and weather with time and the increased pollution in
the city with no maintenance for over 50 years\textsuperscript{47}. The rent freeze resulted in
the welfare loss to both the tenants and the landlords, since there were many
exceptions to the rule, a wide discrepancy in rent values occurred in the market
for existing as well as for new residences which had little rent control imposed
on them and were valued according to location and the level of perceived
luxury as well as assumed market values which also became highly inflated
and unaffordable for the general public\textsuperscript{48}.

The rent freeze benefited state authorities the most as they were renting
buildings and nationalized mansions, and offices at frozen values for years with
no real regard to real inflation values, or equivalent financial compensation for
the landlords \textsuperscript{49}. One could argue that the unaccounted benefit of freezing rents
in the downtown district saved the buildings from demolition and destruction
and preserved the cultural identity of the area especially that the tenants could
not be evicted and it slowly became too expensive for them to go anywhere else
so they stayed in their art-deco style apartments for minimal rent values and
maintained their communities and handed over their rented apartment’s leases
to their children in their wills upon their death who then, for the most part, took over and
continued the life cycle of the building. In 2017, Egypt’s current president, Abdel Fatah
El Sisi began relaxing rent controls to be fully effective upon the death of the current
tenant and with gradual increases during their lifetimes as well as imposed maintenance
fees for buildings on the ‘old rent’ system, leases could no longer be inherited and slowly
buildings in downtown began evacuating and landlords began selling them to private real
estate companies as well as state sanctioned investment companies with the exceptions of
few families who chose to invest in their own buildings\textsuperscript{50}.

\textsuperscript{47} Attia, Shereen E. 2016. “Rent Control Dilemma Comeback In Egypt’s Governance: A Hedonic
\textsuperscript{48-Ibid
\textsuperscript{49} - Younes, Ahmed. 2018. “Egyptian Property Owners Win Right To Evict Government Tenants”. Al-
html.
\textsuperscript{50} - Attia, Shereen E. 2016. “Rent Control Dilemma Comeback In Egypt’s Governance: A Hedonic
In 1970 Anwar El Sadat was sworn into presidency and the political and economic scene shifted again. Sadat ruled with an Open-Door policy in all matters, known as *Al Infitah*. His policies encouraged economic liberalization, boosted the private sector in line with a more capitalist system rather than his predecessor and loosened state control on assets and profits. In doing so, he also weakened the public sector which in turn had crippling effects on the lower classes who had become heavily dependent on state subsidies and aid. This led to the first of the ‘Bread Riots’ in 1977 after the state announced it will retire subsidies on basic foodstuffs. Due to such high dependency on the state’s supplies and a lack of support in the educational and skill development realms, the struggle to remain aligned with the workforce increased, unemployment rose and it became more difficult to find skilled labor and salaried jobs, further increasing the gap between the classes.

Consequently this encouraged a black market for local and international goods and commodities, disconnecting a major sector of the economy from the official figures. According to a study in the Journal of Arab Affairs analyzing the effects of the retreat from Nasser’s economic nationalism policies to *Al Infitah*, Sadat’s Open-Door policy was heavily criticized for: ‘wild rents, land speculations, inflations and corruption’. Sadat’s policies favoured the investing class further supporting the wealthy and concurrently created a small middle class who formed Sadat’s biggest supporters for the years to come. Sadat’s Nobel prize after the Peace Treaty with Israel brought peace to Egypt and the end of the war on the political scene but lost Egyptian popularity with neighbouring Arab states and created unrest in the lower social classes and eventually lead to his assassination by the Muslim Brotherhood in 1981.

Realigning with the objectives of this chapter of understanding the political and the economic shifts that created the context of Cairo today, Sadat was the first president to announce the decentralization of Cairo through several nucleus cities around its core to ease congestion and provide work and investment opportunities as well as development of new industries. In 1978, Al Sadat City was conceived, designed by Marcel Breuer and built North-West of Cairo on the way to Alexandria, planned initially as a new administrative nucleus for Cairo as well as a business centre.

In 1979 the ‘New Urban Communities Authority’, part of the Ministry of Housing was formed announcing several new cities over the years tallying up to 27 new cities as of 2018. Tax exemptions were put in place to support investors and encourage businesses and industries in the cities. Ironically the Ministries planning this new city refused to relocate to their new buildings upon completion and therefore contributed to their catastrophic failure, Sadat City was completed after the assassination of Sadat and was officially inaugurated by President Hosny Mubarak who’s goals did not particularly align with Sadat and therefore, with a new ministry, did not fully embrace the shift to the new administrative nucleus. Al Sadat city currently has a population of 150,000 residents versus the forecasted 500,000 residents it was supposed to host and functions mostly as an industrial city with several agrarian projects rather than an administrative nucleus. Upon the announcement of the new administrative capital by Al Sisi in 2015, sceptics visited Al Sadat city noting that the ministries complex in Sadat city remains ‘signposted showing the location of different ministries which after 30 years remain empty shells or have been used for other purposes’.

52- Ibid.
55- Ibid.
56- Ibid.
57- Ibid.
Al Sadat City was the beginning of the concept of decentralization from the core of the old city and the expansion away from the Nile River and into the desert surrounding Cairo, a strategy that was continued by Mubarak although with a different focus and then redeveloped by Al Sisi in support of relocating the capital to the new administrative capital. Along with the 10th of Ramadan, Al Amereya and Badr City, this was the first generation of the satellite cities, although initially planned as independent from the main cities in their vicinities such as Cairo, Suez and Alexandria, they were never able to become self-sufficient or meet the target population.

The goals of the New Urban Communities Authorities (NUCA), established according to law 59/1979, as mentioned on their governmental website, aims to aid in:

- “Create new civilized centres for achieving community stability and economic prosperity.
- Redistribute inhabitants far from the Nile valley
- Develop new attraction areas beyond the existing cities and villages.
- Extend the Urban Axis to the desert and remote areas to decrease the Urban extension on the agricultural lands
- Plan the new cities using the latest new system
- NUCA assures on the availability of housing units for the low Incomes, aiming to raise the standard of living for this level and to emphasis on supporting low income, it has launched several effective housing projects that suits the different levels and with many facilities.
- To continue the strategic plan of the New Urban Communities, the most appropriate sites have been chosen for the new cities with different economical basis…”

Understanding the goals of the NUCA allows for an understanding of the government’s approach to decentralization and the arguments released to the public of the social and economic benefit of the new cities. What the goals don’t explain, is how the government plans to maintain the downtown core or the rest of Cairo’s districts upon moving to these new cities, which is the primary focus of this thesis. Planning these new cities should go hand in hand with a plan to ameliorate the living standards in Cairo and to expect and adapt to the migration of the expected population. On one hand, the lack of connection through affordable infrastructure accompanied by a safe public transportation system to these cities is one of the main reasons they repeatedly fail, on the other hand, they are planned using a top down approach ignoring the reality on the ground.

There are three main ideologies that govern the development of the NUCA cities:

- Building new houses will solve the housing crisis and decrease the informal settlements
- The Real Estate and Construction industry will create jobs and encourage investors both local and international and therefore stimulate economic growth
- Land sales will finance the budget deficit since land is primarily owned by the government and the military and if they sell the land to developers and own shares in the profits then the government stands a chance at mitigating the budget deficit and can make profit in the long run.

What these ideologies, aims and policies lack is the social and cultural aspect of economic growth impacting the overall development of an emerging economy in a country who’s history spans thousands of years. When focused merely on growth and economic profit, culture, traditions and identity are lost in the process. This was accelerated in Mubarak’s reign with a neo-liberal focused growth outlook selling developments to the highest bidder and the highest margin of profits. This combined with the soar in local production of concrete, glass and steel as commercial building material lead to the loss of articulation in architectural expression and lead to the transition into Cairo becoming a concrete jungle surrounded by gated villas with manicured lawns scattered in between ghost cities in the desert with architectural styles inspired by the West and not reflecting Egyptian architectural identity or responding to real contextual housing and social needs for the mass population or environmental concerns responding to a desert climate.

Hosny Mubarak became president in 1981, after Sadat’s assassination until the 2011 revolution that ended his rule throwing Egypt into mass political and economic turmoil and leaving the presidency seat up for grabs. Like his predecessors, Mubarak was military trained, and the leader of the Air Force strike responsible for victories in the 1973 war with Israel, he was hand-picked by Sadat to be his successor and officially sworn in after a referendum upon Sadat’s death. He was a member of the National Democratic Party which benefited greatly during his presidency. In his first speech to the People’s Assembly, Mubarak outlined that Sadat’s Open Door policy would continue on the economic front circumventing the restrictive era under Nasser’s rule.

He encouraged production in the context of benefiting all members of society and not just the wealthy few which garnered support from the mass population and ensured that food subsidies would continue and opposition parties would be allowed. He also ensured that the peace treaty with Israel would stand as Egyptians will benefit from the return of the Sinai peninsula under its control.

Mubarak’s aims for the country was to develop a middle ground between Sadat and Nasser’s policies and to encourage economic growth focusing on the construction and industrial sectors. Under his rule several cultural projects were initiated including the maintenance and developments of the pyramids and several historical sites in Luxor and Aswan to encourage the tourism sector which boomed under his rule seeing unprecedented profits. A 20-year tax holiday was imposed specifically targeting developers building the new satellite cities to help encourage the construction and real estate industry and the flow of money as a new wave of satellite cities were announced by NUCA under...
the title of the second generation. Bureaucracy and corruption in government entities remained and increased which in turn created a loose application of the building policies and regulation in place to ensure a healthy urban growth of the city. A rise in informal settlements created a red brick border of the old city as people were building to suit their housing needs with limited government supervision using the cheapest most affordable building material.

Developers began expanding into the desert’s to the East and West of Cairo supported by NUCA, building primarily gated communities catering to a Westernized vision of residences surrounded by golf courses and club houses with a focus on sports and luxurious amenities to encourage people to move outside of the city. International schools, sporting clubs, shopping malls and business districts were planned in both New Cairo located in the East and 6th of October city located in the West to support the urban growth of the satellite cities and the overall vision of a new, safe and private community on the outskirts of the city.

The biggest issue with this vision was that it catered primarily to a very small segment of the population who can afford such luxuries and with very limited regards to affordable housing and business opportunities for growth and community development using an equitable vision. This in turn increased the discrepancy in the classes and encouraged urban segregation and a very ‘gated’ approach to growth rather than an urban vision encouraging social mobility and economic opportunity.

The development of the new ring road around the old city of Cairo and its pre-1980s district created a strict divide in the urban fabric further segregating the gated communities of New Cairo and 6th of October City from the old city and further highlighting the class divide and work opportunities with no clear public transportation infrastructure to support residents without cars to work in these new cities further limiting opportunities and focusing solely on a limited number of residents. According to CAPMAS, Egypt’s Central Agency for Public Mobilization and Statistics, 2.3 million people had licensed vehicles, 90% of which are privately owned in Cairo and Giza Governates as of 2016 out of a population of 100 million, which is a very minute percentage that have direct access to these satellite cities, noting that the official number was much less ten years previous during the era being discussed in this section.

This further reiterates the misalignment between the urban expansion of the city resultant from top down planning approaches to the reality on the ground. With the lack of effective and efficient public transportation accessing the new cities, a rise in isolation between the classes is further enforced, expanding the gap as well as creating a barrier in work opportunities to limit only those who can afford transportation. As the government focused on developing new cities, education development was stunted leading to a decrease in public schooling standards and

access to high quality, affordable education while private language schools and international schools increased further widening the gap between the classes through access to education. This created a distinct gap in the workforce highlighted by a language barrier required for all the multinational companies encouraged by the government to create their Middle Eastern headquarters in the new business hubs around Cairo. This in-turn reinforces the poverty cycle and limits work opportunities while further expanding the class divide and eliminating class mobility and socialization which eventually lead to the end of Mubarak’s era. Police brutality coupled with a rise in corruption across all government entities lead to a shift in societal norms and social unrest creating the build-up for the revolution.

A DISTANT FANTASY

In 2008, the government announced the realization of the Cairo 2050 Vision, a collaboratively designed project created by international and local consultants with the intention of modernizing Cairo and addressing the growing issues of housing and countering the city’s informal urbanization 70.

“This was the regime’s ‘urban dream’: With skyscrapers and luxury developments replacing all the informal neighbourhoods, and their working-class residents shunted to the desert, the busy historic heart of Cairo, home to plenty of crumbling, informal housing of its own would be remade as a sanitized tourist park” 71.

The project, supported by UNHabitat, was circulated on their website expressing a vision of a clean Cairo with pedestrian streets in central districts, two ring roads providing access to the first and second generation of satellite cities as well as a redeveloped downtown district catering for businesses. This vision included the excavation and demolition of several informal settlements which house Cairo’s blue-collar population. In the study it is mentioned that no eviction would occur without providing a financial alternative or an alternative housing scheme 72.

The slogan for the Cairo 2050 vision was ‘Cairo : Global – Green – Connected’ 73, a simplified reverie that seemed distant from reality for the mass Egyptian population. Since many of these informal settlements where in close proximity to downtown, it was prime location for access to service jobs on one hand, as well as prime real-estate land that had high financial potential that wasn’t being capitalized in favour of the government.

In line with the objectives of this thesis, Cairo 2050 also envisioned a revitalization...
of Khedival Cairo, commonly referred to as downtown Cairo. In order to align with the image of a Global city, renders of axial streets in the city referencing the Champs Elysees in France were included in the report. The plan also included a masked gentrification of the artisanal boutiques in the district through removal of local shops and a ban on public markets and street sellers further increasing the loss of identity, culture and tradition under the mass umbrella of globalization. The images do not correlate with the reality on the ground where people were struggling from the removal of subsidies, lack of employment, congestion, lack of supporting infrastructure for utilities and many more issues that affected everyday life. Mubarak’s neoliberal approach to capitalizing lands further sparked the fire that was already building up in all social classes due to the diminishing quality of life and the constant increase in bureaucracy and corruption. Although one could argue that the concept of decentralization and decongestion of the capital was the correct course of action, the top down approach in planning did not respond to the common good of the masses and only benefited the elite few.

THE REVOLUTION

On January 25th millions of Egyptians took the streets to Tahrir Square in a protest to demand ‘Bread, Freedom and Social Justice’. Within their demands, the people called President Hosny Mubarak to step down and for democratic elections providing opportunities for civilians to take place. After 18 days of protests and clashes between the police and the civilians, the president stepped down and an interim government was created to ensure political and economic continuance. The impact of the first wave of protests on the economic, political and social fronts can still be seen today, with the tourism industry being the most affected. Construction was halted for most projects and businesses were shuttered awaiting economic and civil stability and security. Families were also confined to their homes in a state-imposed lockdown.

On June 2012, Mohamed Morsi, a member of the Muslim Brotherhood was sworn into presidency. He was Egypt’s first democratically elected president with a total of 51.7% of the votes. Morsi’s presidency was short-lived due to threatening decisions made by his government to the constitution given him absolute right in any and all decision making regarding the state as well as superseding the judicial system. In a continued disturbance to social normalcy, protests scattered across Egyptian cities calling for Morsi to step down and were later backed by General Abdel Fatah El Sisi and the Egyptian Military. In a staged Coup D’états, Morsi was forced to step down and a military sanctioned government was formed as an interim ruling party until further elections. Within a year, El Sisi won the elections for presidency running almost unopposed, appealing to the victory over the Muslim Brotherhood Party and the hearts of the people embodying the idea of a protector to the people’s rights.
With the military back in power, hopes of a civilian lead revolution with freedom of expression as its backbone disappeared. Political arrests were tried in State Security Courts where decisions cannot be appealed, human rights violation reports rose, arbitrary arrests and enforced disappearances were continuously reported and ignored, all in an attempt to hush the opposition under the slogan of fighting terrorism and ensuring State continuance. According to Human Rights Watch (whose website is blocked in Egypt); Egypt’s Freedom of Expression remains one of the worst in the world ranking 161 out of 180 countries.

Under the new regime, Anti-Cyber and Information Technology Crimes laws and Media Regulation laws were introducing giving the government broader power over freedom of speech and limiting any opposition online even in the form of satire with several arrests conducted due to Facebook and Twitter posts.

With a strong military background and a strict discipline El Sisi’s political agenda began to focus on the economic scene. On one hand, the military began manufacturing and competing in the commercial and real-estate market at prices well below market competition forcing many businesses to struggle. On the other hand, the development of the New Administrative Capital (NAC) to advertise Egypt as a new post-revolution city with global prospects with a ruling iron fist ensuring its political security. The NAC was part of the Cairo 2030 plan announced as an accelerated version of its predecessor with a broader reach into the desert, a higher budget, and a new wave of third generation cities, supported by NUCA, in the desert.

As David Sims notes in his book Understanding Cairo: The Logic of a City Out of Control:

“In a way it seems that government planners enjoy going through a rosy design exercise in which they can conveniently forget the reality that is present-day Cairo and over which the government has so little control. It is much simpler to look so far into the future that nasty details need not besmirch the vision.”

The NAC is designed by American firm Skidmore, Owings and Merrill (SOM) and urban designer Daniel Ringelstein as a vision of a new “Dubai” in the middle of the desert about 75km from Cairo’s downtown. The renders show high glass (slightly louvered) towers, a big stadium, an obelisk set to replace the original Cairo Tower and aimed to be one of the highest towers in the world, a series of monumental government buildings drawing from their ancient Egyptian ancestors in grandiose architecture combined with a modern medley of materials. In an exaggerated attempt to become a world leading city, plans for the biggest minaret and steeple are already on their way, accompanied by a presidential palace that is 8 times the size of the White House, an airport larger than Heathrow, 2000 schools, 21 residential districts, 4 million sqm of commercial space and a defence ministry complex shaped like an octagon. The city itself is set to be 700 sq km, roughly the size of Singapore.
PHAROS, TEMPLES, CONCRETE JUNGLES AND A MIRAGE IN THE DESERT

As tempting as it may be to debate the series of issues arising from creating a ‘green, connected, global’ city in the middle of the desert or planning to uproot one of the world’s oldest capitals in the world and to transform it into a gentrified, globalized tourist hub, that is the reality on the ground and with a military regime controlling the narrative despite of a much needed democracy, there is no changing the course of the development of the new cities. Only time will tell whether this city will succeed in attracting its 7 million inhabitants or will become another ghost town added to the long list of empty concrete structures surrounding the city.

Egypt is not the first country to attempt to relocate its administrative nucleus or create new cities in a resolution of it issues. Brasilia stands as a ‘cautionary tale for urban dreamers’.

Although planned initially as a utopia by Oscar Niemeyer and then Lucio Costa, Brasilia today has failed to live up to its initial plan due to its disconnect from both urban and land economics. The city was a symbol of a post-colonial era and a tribute to form, metaphorically, much like the design of the NAC of Egypt today. While other cities such as Corbusier’s Chandigarh stand tribute to the potential success of a planned city which now houses more than its intended population and provides a lesson for future urban planners.

As seen from the diverse history Cairo, with each ruler, new buildings were commissioned either in place of the old ones or alongside them creating new districts each with their own identity, infusing old with new commemorating history and identifying with a brighter future. 1 in 4 Egyptians live in Cairo, with the population rising yearly, expansion from the core is inevitable, but satellite cities in the form of gated compounds and rigidly planned districts is not the answer. According to Sims, 60% of the first- and second-generation new cities remain vacant or unfinished. Moreover, there is an acute shortage of affordable housing in cities and an imminent problem of overcrowding as Egyptians only live on 5% of the total available land. As of 2006, 25% of housing units were vacant in Cairo and 32% in Giza.

“The benefits of urbanization accrue disproportionately to a small segment of Egyptian society, while the burdens are disproportionately borne by poor people and marginalized groups in Egypt.”

This poses the question: Does the government really need to build a new city the size of a small country? Is the investment being pumped into these new cities not more beneficial in upgrading the infrastructure of the city? After the government completes its plans of building the desert mirages, what will become of the thousand-year-old city?

Understanding the historical, political and economic impact on the architecture of the city was the first step in developing context for this thesis. On one hand it allows the development of a backdrop for the proposed project, on the other hand it highlights the importance of considering social and political factors when understanding a site and developing it for future use in a city that is ever-changing in character without losing its identity. The timeline on the following page was developed to highlight and conclude the important events that shaped the city.

Exploring the history explains the plethora of architectural styles that can be found in Egypt, and explains how they are all tied together and how the language of architecture in the city has evolved, and perhaps, how it can continue to evolve and develop. While this chapter focused on the history of the city and the government’s plans for the future, the next chapter will introduce the immediate site, Downtown Cairo.

“Cairo is a city often captured by stereotype: its unruly traffic, pollution, slums, decay, and general chaos, framed as an insult to the legacy of the Pharaohs.”

Figure 2.27: An Advertisement of a New Compound in a Satellite City on the Periphery of the Ring Road.
CHAPTER III

PARIS ON THE NILE
In a city whose memory is engraved with thousands of years of history, evolution and change is always challenging and risky. As the city grows, so does its residents, their cultures and traditions which evolve with time reflecting back on its architecture and on the occupancy of space. This chapter will focus on the area of downtown Cairo, the immediate contextual district of the chosen site through a first-hand exploration of its streets and buildings documented in a photographic tour and an urban analysis identifying the site. It will also explore the evolution of Tahrir Square from a central node in Haussmann’s plan of Cairo to a space of perceived liberation and civil power. The aim of this chapter is to identify the different typologies and architectural styles surrounding the square and recognize a pattern enabling one to create a design parti and framework of design and new functions for the re-use of the vacated buildings post vacancy.

Since in modern day Cairo the downtown area is saturated with buildings occupied by governmental services through nationalization as well as intended design, it is the perfect site to explore the effects of a potential immigration of government entities to the new administrative capital without creating an economic domino that leads to the urban and social deterioration of the urban capital. There is no publicly available plan of what is to become of the buildings once they are vacated except. Some renders can be seen in the modified Cairo 2030 project insinuating that the area will be transformed into a sanitized tourist hub with no real reference to the breadth of its history or commemoration of its architectural legacy. Over the years, there have been several movements and projects attempting to ‘revitalize’ the area of downtown Cairo and study the buildings and identify some of them as heritage buildings but only few have been successful in transforming the space and none have attempted to address any urban issues or evaluate the micro-urban environment that thrives in that area.

One of the most recent development attempts was introduced by CLUSTER ( Cairo Lab of Urban Studies, Training and Environmental Research) through a series of lectures and community studies done in collaboration with local universities to explore and understand the informal economies inhabiting the downtown area under the title of Creative Initiatives: Economic Impact on Downtown Cairo 90. The challenge in studying this site lies in the lack of availability of sources studying the current version as well as the limitations imposed by the intensified security patrols after the 2011 revolution. Since many of the buildings are classified as governmental, it is frowned upon and sometimes illegal to photograph or observe a specific building for too long and undercover policemen will quickly respond to photographers creating a security concern while completing an in-person analysis of the site.

In the early 1800s, the area known as downtown Cairo today was cultivated land separated by rubbish dumps segregating it from the Medieval Ottoman city91. Development started circa 1850s to the 1940s and in that time, Cairo had slowly emerged from its medieval walls into new developments and an urban plan that identified that time as the Belle Époque 92.

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92-Ibid.
and distributed for free to anyone committed to building a house surrounded by a garden in a maximum of two years. While some of these houses remain today, most have been nationalized during Abdel Nasser’s time and have been transformed to schools, government entities and embassies. In 1867, Baron Haussmann held the Exposition Universelle in Paris where, Ismail Pasha, who had spent most of his adolescent life learning in France and had just returned to Egypt to take the throne, was invited to attend by Napoleon III. After his trip, he was determined to transform Cairo into a European style city to further solidify its presence in the international world. He invited Hausman himself, Jean Pierre Barillet Deschamps, and Bois de Bologne to begin designing Cairo.

After realizing that the streets of the medieval city were narrow and overcrowded and left little room for intervention, the development was steered to the Western banks of the Nile. The concept of the city surrounded notions of luxury and extravagance. As the elite were invited to support the new development and move into their new European inspired homes and apartments overlooking the Nile, the city began to divide aggregating the rich in the new districts as the poor remained near in the medieval markets. The separation of the city by class clusters is the same transformation developing in Cairo today as the tale of two cities continues to evolve and with it, any hopes of social class mobility.

Within a few years, the medley of architecture styles that were brewing in the district began to materialize creating the eclectic city whose remnants are seen today. The buildings can be described as pertaining to an infusion of styles including Art-deco, Rococo, Ottoman, Neo-Classical, Baroque, and French Renaissance. Within each buildings different Islamic and Ancient Egyptian design motifs can be spotted enticing a link to the existing culture as it tries to merge into the new foreign architectural language. Haussmann’s inspired version of Cairo created tree lined boulevards surrounded by Cinemas, Art Galleries, Cafés and Restaurants, creating a new social scene for the residents of the city and introducing a new lifestyle surrounding the arts and culture scene which was a dominant aspect of the social and economic scene of the area. This new city vibe attracted residents from all of the European cities who began to bring with them a wave of new art styles, traditions and cuisines that slowly spread all over Egypt. In her book Paris Along the Nile, Myniti notes that: “It was a time when the corner grocer was Greek, the mechanic Italian, the confectioner Austrian, the pharmacist English, the hotelier Swiss, and the department store Jewish”.

In the heart of the new district lies Tahrir square, meaning Liberation Square in Arabic but then known as Ismailiya Square after the Khedive. Designed initially as one of the main axial nodes in the new urban plan, the square was surrounded by prominent buildings such as the Egyptian Museum of Antiquities and several palaces of prominent Egyptian elite which have been nationalized into government entities such as the old Ministry of Foreign Affairs building now only used for events. Ismailiya Square was renamed colloquially after the 1919 revolution protesting the British occupation of Egypt and Sudan and then officially after the 1952 revolution which transformed Egypt from a constitutional monarch into an Arab republic.

95- Ibid.
96- Ibid.
In the early 1900s the square housed a training ground for the military and was surrounded by barracks which were destroyed immediately after the revolution as a symbol of space reclamation and the Arab League and the Nile Ritz standing today were built in place overlooking the Nile. Below the land behind the hotel, a 6-storey deep public parking has been built to suit the traffic needs of modern-day Cairo. The square has a busy traffic circle in the middle leading into several main roads, Qasr El Nil Bridge which crosses the Nile and 6th of October bridge which links Cairo from the North to the South connecting to the ring-road leading to the new satellite cities. The square is also home to several underground viaducts creating safe passage for pedestrians crossing the busy traffic circle as well as several underground metro stations linking to the rest of the capital through an affordable means of transportation. In close vicinity, lies Ramsis Station, the main train station linking Cairo to the remainder of Egyptian cities.

Being the heart of downtown, over the years the contested space of Tahrir Square claimed the occupancy of protests and revolutions and was a voice to social and civil unrest as well as a venue for celebration and commemoration of events. In 2011, the square became the flare that ignited revolutions all over the Arab spring when it saw millions of Egyptians crowd to call for the end of Mubarak’s reign and then again in 2013 to call for the end of Morsi’s presidency. Nowadays, walking around the square could have you subject to an investigation and a potential arrest if you have a camera and don’t look like the “typical tourist” as per this author’s experience and observations.

The square has always been a mirror reflecting the issues of Egyptian society and a direct correlation can be drawn from its transformations over the years to the evolution of governmental strategies and freedom of expression. In an effort to revitalize the square, it is currently undergoing renovations and the middle of the traffic circle is set to host an obelisk bearing the Egyptian flag and four statues of mini sphinxes transported from Luxour temple surrounding the flag and looking to the East, West, North and South of a City⁹⁹. The sphinx being a symbol of protection and power serves its metaphorical purpose perfectly guarding the square although contradictions about desecrating an ancient historical site to move the statues from their original location to a modern traffic circle still remain a valid reminder for what the lack of appreciation and sanctity of historic architecture can create.

The following layered map documents an exploration of the modern-day district noting the cultural venues of interest for this thesis and exploring the varying architecture medley of style surviving in the city today. The map highlights the route explored with a photographic journal organized according to the different typologies of space occupations that could be deduced observation and knowledge of the site.

The second section of this chapter highlights a more in-depth analysis of the building typologies in the site. Through the aid of Google Earth and observations for the site visits, the following typology map was created with a detailed breakdown of each of 379 buildings on the site assigning them to the different categories highlighted in the chart on the following pages.

The photography compilation above includes various moments in the site study that highlighted different typologies and uses of space categorized in the aforementioned pages into common themes.

For the purposes of this thesis and since there are no documents released by the government detailing the real data of what will happen to the buildings after 2020, it will be assumed that the buildings highlighted in red pertaining to governmental entities will be vacated. With the functions no longer relevant in the site, and employees working in the new buildings in the desert, the opportunity to develop a new functional program for the various buildings arises.
Table 1: Table Identifying Typology of Buildings Correlating to Numbered Map (continues until page 110)

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<td>Intercontinental Cairo Semiramis Hotel</td>
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<td>Old Ministry of Foreign Investments (Unoccupied; Renovated and vacated)</td>
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<td>Garden City House Hotel</td>
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<td>Golden Hotel Cairo</td>
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<td>Lotus Hotel</td>
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<td>Gmb Al Ahli Bank HQ</td>
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<td>Cleopatra Hotel / Hotel Tahrir</td>
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<td>City View Hotel</td>
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<td>Goethe Institute</td>
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<td>Canadian Hostel</td>
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<td>Parking</td>
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<td>Parking &amp; Storesys Underground</td>
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<td>139</td>
<td>The Arab League HQ</td>
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<td>140</td>
<td>Old NDP Building (Burnt down during revolution)</td>
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<td>141</td>
<td>Egyptian Museum</td>
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<td>Franciscan Catholic School</td>
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<td>Infancy Saving Association</td>
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<td>Egyptian Night Hotel</td>
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<td>145</td>
<td>Various Hostels</td>
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<td>146</td>
<td>Mashraba Gallery of Contemporary Art</td>
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<td>Franciscan Catholic School</td>
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<td>Residential with Commercial Podium</td>
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<td>Steigenberger Hotel</td>
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<td>QNB HQ</td>
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<td>Sarwa Capital Offices</td>
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<td>QNB HQ</td>
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<td>Contemporary Art Gallery</td>
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<td>159</td>
<td>Residential with Commercial Podium - Groppi</td>
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<td>160</td>
<td>Atelier du Caire</td>
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<td>164</td>
<td>Residential with Commercial Podium - Café Riche / Estoril</td>
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<td>Armenian Catholic Church</td>
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<td>Development Library</td>
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<td>Residential with Commercial Podium</td>
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<td>SAID HALIM PACHA PALACE</td>
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<td>DM212 THEATRE</td>
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<td>TOWNHOUSE GALLERY</td>
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<td>TALAAT HARB MALL</td>
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<td>Residential with Commercial Podium</td>
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<td>Residential with Commercial Podium</td>
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<td>CINEMA RADIO</td>
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<td>TALAAT HARB SCHOOL</td>
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<td>TALAAT HARB SCHOOL</td>
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<td>NATIONAL BANK OF EGYPT</td>
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<td>354</td>
<td>Khedive Ismail High School - Educational</td>
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<td>355</td>
<td>El Shargia Sports Club</td>
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<td>356</td>
<td>Ministry of Military Production (Al Intaq Al Harby)</td>
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<td>357</td>
<td>Ministry of Military Production (Al Intaq Al Harby)</td>
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<td>358</td>
<td>Ministry of Military Production (Al Intaq Al Harby)</td>
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<td>359</td>
<td>General Administration of Education</td>
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<td>Ministry of Education</td>
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<td>Residential with Commercial Podium</td>
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<td>362</td>
<td>Orouba Parking</td>
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<td>363</td>
<td>General Authority of Urban Planning</td>
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<td>General Authority of Urban Planning</td>
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<td>365</td>
<td>Ministry of Higher Education</td>
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<td>General Authority of Urban Planning</td>
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<td>General Authority of Urban Planning</td>
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<td>368</td>
<td>Ministry of Supply and Internal Trading</td>
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<td>369</td>
<td>Ministry of Supply and Internal Trading</td>
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<td>370</td>
<td>Ministry of Higher Education</td>
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Due to its central location, one of the most prevalent building typologies after governmental and cultural are hotels and inns. With the decline of tourism and the development of several hotels in the new satellite cities, it is a waste of resources to convert the vacated buildings into more hotels. A use that has been commonly advertised in Egyptian Media. The remaining buildings on the site are divided into cultural entities including museums, art galleries, cinemas, recording studios, educational entities including schools and universities, offices and banks and markets and residential apartment buildings. Architecturally, most of the buildings have a podium style approach where the first two floors are for commercial purposes. Several boutiques selling antiquities can still be found lining the streets of downtown core accompanied by bars and restaurant and artisanal shops selling a variety of crafts.

The typology of a multi-purpose use building serving a cultural program where education and production is combined is non-existent in the area with the exception of the American University’s old campus which has been transformed to a start-up hub serving several art and media related agencies as well as collaborative office use spaces, a theatre and continued education classes with opportunities in the related fields in the offices it houses. This provides the base of the building typology for the redesign of the chosen building.

To continue to spatialize the site and understand the context, a physical and computer 3D model was created using Google Earth and observations from the site. Due to building height restrictions and the building capabilities of the era in which most of downtown was constructed, building heights can be observed starting from 3-4 stories to a maximum of 15 in the renovated areas. Due to the lack of official drawings of the site and the unavailability of maps, all drawings were composed using estimates of average floor heights, street widths, and floor plate sizes from aerial views. The drawings produced serve a conceptual purpose for the study conducted in this thesis rather than a real exact translation of the existing reality.

Rejuvenating the area of downtown Cairo is a project that has been explored by several entities recently including the government as well as Al Ismaelia for Real Estate Investment which has been quietly buying out buildings (cumulating up to 21 structures to date) and drawing up plans for their re-use. The mission statement outlines a goal to “revive downtown Cairo and create a destination for all Egyptians to live, work, shop and socialize (…) The project is designed to revitalize the center of the capital city through preserving the architectural grandeur of downtown while celebrating Cairo’s dynamic urban fabric.” Contrastingly, the project spokesman explains that many of the small artisanal craft shops no longer have use in the space and should be relocated. A contradicting perspective that poses the question of where the line is drawn between preservation of space and the commercial viability of a business in a capitalistic global world. Some of these shops include metal and wood working workshops, tailors and artist’s studios as well as antique shops, most of which have informal agreements with the landlords with no formal contract claiming their right to the space. On one hand it is important to note that the efforts of planning and investments by such companies are pertinent to the development of the space, on the other, it is also important to understand the values of such crafts that are dying out and the importance of keeping them alive in a central location as to not succumb to complete gentrification of the space. This is one of the goals that will be explored in the following chapters while developing the parti.


101-Ibid.

102-Ibid.
Figure 3.67: Balconies Overlooking Tahrir Square
Figure 3.68: Open Food Market
Figure 3.69: Residential Podium Building
Figure 3.70: Talaat Harb Square
Figure 3.71: Governmental Building
Figure 3.72: Walk Boulevard
Figure 3.73: Old Building of Ministry of Foreign Affairs
Figure 3.74: American University in Cairo- Old Campus
Figure 3.75: Al Moggamma Governmental Building
Figure 3.76: Residential Buildings overlooking the Square
Figure 3.77: Omar Makram Mosque
Figure 3.78: Tahrir Square
Figure 3.79: Nile Ritz Hotel
Figure 3.80: National Democratic Party Building after burning down
Figure 3.81: Shops and Offices
Figure 3.82: Egyptian Museum of Antiquities
Figure 3.83: Cinema Posters
Figure 3.84: Cinema Metro
Figure 3.85: Cafe Riche
Illustration 3.5: Computer Model of the Site
3D PRINTED SITE MODEL 1:2000

Figure 3.87: Site Model 1:2000

Figure 3.88: Site Model 1:2000  Western View

Figure 3.89: Site Model 1:2000  Talaat Harb Square
3D PRINTED SITE MODEL 1:1000

Figure 3.90: Site Model 1:2000 Residential Area

Figure 3.91: Site Model 1:2000 Tahrir Square

Figure 3.92: Site Model 1:2000 Governmental Area
LASER CUT SITE MODEL 1:1000

Figure 3.93: Site Model 1:1000 Tahrir Square

Figure 3.94: Site Model 1:1000 Immediate Site Extents

Figure 3.95: Site Model 1:1000 Eastern View
CHAPTER IV
A SYMBOL OF BUREAUCRACY
“The city is perceived as a complex set where past, present and future converge; a dynamic entity that embodies the social narrative and the attempts to govern its social interactions and spatial distribution, i.e. urban development” 104

Latour explains that “all human, social and technical elements symmetrically treated within a system contribute to dynamic, perpetual networking, where an understanding of phenomena (including social ones) lies in the associations between them” 105

After exploring the historical, political and economic elements attributing to the relevance of downtown Cairo as a site for this thesis as well as the urban factors that explain the social environment and context. Al Moggamma Building was chosen as the building for the redesign proposal. This chapter will explore the building as it stands today and identify the micro-urban environment that contributes to the development of the parti.

The Mogamma Complex was the result of a series of master plans for the Qasr el Nil area. Al Mogamma in Arabic translates to complexe or collective, a name symbolic of its many functions. In 1945 when King Farouk ordered the demolition of the barracks upon the departure of British troops from the area, a series of urban planning proposals ensued106. The idea for a centralized, all-in-one administrative building emerged from the 1945 plans. Construction began in 1946, and ended in 1949. The building’s style aspirations of previous art-deco government buildings such as Buffalo City Hall107. A towering building complex, with a centralized government function and a highlighted classical inspired arcade entrance. The building was designed by Mohamed Kamal Ismail who attributed its architectural style to a “simplified Islamic style”108, at the time the building was designed to host only 4000 employees, a number that has grown exponentially to a tally of almost 25-30 thousand employees to this day109. It stands today serving as a reminder of the style medleys that developed during that time.

The building is known for being a symbol of Egyptian bureaucracy due to its function and layout, it is also one of the most hated buildings in Egyptian pop-culture due to its long queues and endless requirements and infamous corruption style and the bribe required for any facilitation of document retrieval110. In every floor, there is a different department processing paperwork needed for

105- Ibid.
110- Ibid
everyday life. Retrieval and creation of any documents ranging from visas, IDs, ownership documents, licenses, tax adjustments, public school and university documentation, travel verifications, security checks, etc, occurs primarily in this building, although over the years some of its functions have been supported by other government establishments local to the different districts. There are approximately 20-30 thousand employees that work in the building on a daily basis, accommodating about 60-70 thousand visitors per day. As there are no official numbers of traffic released by the government due to the nature of the building, several accounts of numbers have been estimated by various sources, the latter being one of the more conservative versions found in an online newspaper in an article familiarizing the people with the functions of the building. To put this in perspective, it is the population of Milton in Ontario visiting the same building in one day, every day, from 8:30am to 3pm.

The floor plate accommodating that number is approximately 3000 sqm per floor over 13 floors with an extra 2000 sqm of landscape fronting the arc shaped building. The building is home to 1310 offices densely populating it.

The drawing on the following page outlines the functions of the buildings as collated from various sources and reflected into the drawings.

Over the years, it has become surrounded by a small urban village only identifiable by its visitors and workers that is required for its daily sustenance. The ‘village’ is embedded within the surrounding quarter of downtown, operating mostly in the hours of the Moggamaa. It includes several bookstores with photocopying capabilities, travel agencies ready to book that last minute flight required as proof for travel documentation and cancelled later at a fee that profits the agency, banks and insurance companies and a plethora of coffee shops and restaurants providing entertainment in the long waiting hours as the documents are processed inside the building. The ‘village’ occupies the podium levels of several of the surrounding buildings, as well as more recently the corridors of the Moggama itself where you can find several passer-bys keen to help you with your task for a little extra fee on the side illustrated in some of the sketches on the following pages.

The Mogamma is interesting because of its scale, its function as well as the gap it will create once its workers and visitors are forced to relocate elsewhere. The surrounding urban village will not be able to sustain itself as its functions also depend on the building and its residents. The design explorations of this thesis will aim to identify the gap created and explore different ways in how to fill that with productive functions and activities that will maintain and create life in the square as well as the neighborhood. The current plan of the area provides endless possibilities of social interaction that could benefit and inform
the design to create a new neighborhood within Cairo’s downtown reflecting its history, art and culture.

Due to the nature of the building being a governmental entity, it is illegal to photograph the building’s interior as well as some exterior parts. The building has no public plans and drawings but has been featured in several new articles and online blogs as well as in Egyptian drama. In Egyptian cultural works, the building was the central setting in the movie ‘El Erhab wal Kebab’, Terrorism and Kebabs, a 1992 satirical, black-comedy film about an average Egyptian man trying to get district enrolment papers for his children to be able to switch schools112. He is accompanied by thousands of people marching throughout the building and waiting in endless queues to finish their tasks. He gets sent away several times and eventually, amidst a scene of accidental violence, he ends up with a policeman’s weapon and takes the whole building under siege.

Eventually, the hostages become his acquaintances as they discover that they all have things in commons although they come from different social backgrounds and classes and a common frustration with the current state of the country and its police. While the hostage negotiators and the policemen outside slowly transform to become the antagonists in the plot, the ‘terrorist’ becomes the man of the people as they are able to identify with him more than the ‘protectors’ outside. When asked for his demands for the release of the hostages, the main character asks for Kebabs for all the hostages, a reference to the Egyptian staple food usually characterized with celebration as meat is a relatively an expensive commodity. The movie was a commentary of Egyptian bureaucracy and the large gap between the people signifying the lack of social mobility, the governmental workers being closer in character to the common people, and the police and ministry officials, those in power become a distinct separator. The movie gives this research a secondary window into the relationships of the users and the staff and movement and circulation in the building as well as characteristics of the building’s interior otherwise inaccessible 113.

The movie stills shown on the following pages were used as captions to aid in the modelling and sketching of the building as-is to enable future design. A detailed 3D digital model was created to be able to spatialize the building and provide plans and sections to aid in the design. All dimensions were estimated based on a scaled aerial map and estimates extracted from personal observations, photographs and stills from the movie. One of the most interesting discoveries from the movie only confirmed by social anecdotes is the top floor being used as a holding cell for crimes of prostitution and offices for the police officers processing the papers. In the movie, the desks are pushed to the side and used as beds and seating for the detainees awaiting transfer.

Using the movie and online blogs as a framework of exploration, the Mogamma can be explored through the lens of the stories and accounts of its visitors and their interactions with the building and its hosts. This provides the background framework for future designs of the buildings as it would allow a development of the current situation in the building and provide a problematic to work with. By exploring the relationships of the users in the

113- Ibid.
Figure 4.4: Congestion Around Atrium

Figure 4.5: Different Characters representing Different Social Layers

Figure 4.6: Office of High Ranking Official

Figure 4.7: Corridors in between Offices

Figure 4.8: 3 Desk Office

Figure 4.9: Shoe Cleaner, a famous ‘resident’ of the Mogama

Figure 4.10: Congestion Around Atrium

Figure 4.11: The Roof with Informal Additions

Figure 4.12: Double Legged Staircase

Figure 4.13: Office on the final floor transformed into a holding cell.

Figure 4.14: Scale of Main Actor in one of the Buildings

Figure 4.15: Office of High Ranking Official

Figure 4.16: Corridor Empty of People

Figure 4.17: Main Atrium Looking Down

Figure 4.18: 4 Desk Office

Figure 4.19: Main Atrium Looking Up
building with each other as well as with the building a social commentary could begin to emerge highlighting different aspects of Egyptian bureaucracy and the current political and economic state of the country. This exploration aids in the understanding of the building on the architectural level, as well as on the urban level while identifying its connections with the outside world as well as its social and cultural place within Egyptian society.

Bunschoten argues that in order to understand a site, the researcher must consider two scales of lenses, the global scale and the microscale\textsuperscript{114}. The analysis is therefore grounded from the smallest scale of the interaction of the human with the street to the largest scale of the political, social and economic dynamics of the country with the world. ‘Converting specific information about actual sites into abstract notations then makes it possible to compare, manipulate and shape the material studied.’ \textsuperscript{115} This approach is also supported by Peter Neal in Urban Villages and the Making of Communities where he argues that the most efficient way to understand a building is by creating a movement framework for the users in its surrounding context and understanding the circulation and the socio-economic reasons behind them \textsuperscript{116}. The following series of sketches were developed on site focusing on the people and their interactions with the space. One of the most interesting observations was that the area of landscape at the front of the building had no seating elements and a minimal arrangement of trees such as palm trees, for shading yet people were sitting on the edges of the pavements and planters waiting for their services inside the building. Another observation was that the ground floor of the building was turned ‘inside-out’ as people were

\textsuperscript{115} Ibid.
queuing outside the windows in the breeze (and the sun) to avoid standing in the crowded corridors while the workers were servicing them through the windows rather than from inside the offices.

The entrance of the building is grandiose in its architecture featuring five pointed arches highlighting the symmetry of the landscape and breaking the strict pattern of the rectangular windows lining every bay. Each side entrance is also encased by a smaller, less ornamented version of the main arcade. There are 6 entry points to the building equally spaced throughout with the public entrance currently used being only the one at the front. Due to security concerns the entrance is lined with officials and a metal detector and a strict warning to limit the use of phones inside. Showing a form of ID and informing the officer of the intent of visiting grants access to the building. Past the gates are a set of double back stairs lined with railings embellished with artisanal metalworks remnants of an older era with motifs to the pointed arches outside. Across, is a set of elevators with a man guiding people to the needed floor.

Walking inside the building amidst the crowded office ensues a claustrophobic feeling due to the lack of lighting and congestion of the corridors from haphazardly placed seating, to vending machines, to office boys running to and from different offices carrying documents to be processed along the queues of people waiting. Most of the work is documented in physical paper and in between every few offices there is a converted room where an archive

with series of shelves overcrowded with unsealed folders falling at the seams can be found.

There are four main courtyards in the building open to the sky above ventilating the thirteen floors through heavily barred open windows. It seems that over the years they have been used as a dumping site as plastic wrappers can be seen lodged in the bars and floating below. Two circular atria enclosed with perforated domes shine a glimmer of light on the people below. After the production of the movie, the atria no longer span to the ground floor due to security concerns and are closed off with a concrete ceiling at an intermediary level. The atria signify a design intent of a passive ventilation system that can support a building of this scale with no mechanical air circulation. On the outside scattered AC units can be seen lodged on the windows signifying a collaborative effort from the employees to combat the Egyptian heat by installing AC systems as part of renovations to their offices.

Offices vary in layout depending on rank. The highest officials have an office with one large, dark wooden desk, a printer that hasn’t been serviced in years used as a shelf for extra storage, a three-seater couch and some side chairs accompanying the antique desk. Other offices have 4-5 metal desk with drawers lined with documents, open metal bookshelves lining the walls, and sometimes and extra seat or two along the desk for the impatient visitors being serviced. Old desktop computers with archaic monitors can be seen on
some of the desk signifying a hope for an electronic transition from the paper system still widely used for documentation.

Some corridors on the edges of the buildings are converted into prayer areas with rugs spread out during prayer times halting all services for the duration of the prayer in that zone. Finally, some rooms seem to have diverged from their intended initial design with a semi demolished wall serving as a counter topped with bars extending to the ceiling separating the government employees from the people’s queues with papers being exchanged in between the bars.

The drawings and illustrations on the following pages are a product of forensic architecture and observations and sketches attempting to recreate the space and highlight the architectural features and design elements that can be found throughout the building. They are an approximation of the reality and are created for educational purposes to aid in the conceptual re-inhabitation of the building.
Illustration 4.19: Axonometric Plan of Level 5 - Representing a Typical Floor Plate
Highlighted in the plan above are different office furniture layout examples extracted and drawn from observation on site as well as still from the film. The plans show that offices can be very crowded with furniture, even without visitors. The higher the rank of the officer, the more spacious the plan of the office is to accommodate visitors. Through site observations, it is interesting to note that these are the least visited offices and there is a higher traffic rate on the smaller offices.
Illustration 4.29: Short Section Through Eastern Leg of Building
Illustration 4.30: Long Section Through Building Atrias
Illustration 4.35: Sketch of Main Entrance Arches
Illustration 4.37: Sketch of Western Leg
Illustration 4.38: Sketch of the Front Entrance Showing the Barred Windows.
Illustration 4.39: Sketch of Western Entrance
Illustration 4.42: Sketch of Interior Atrium Windows

Illustration 4.43: Sketch of Back Corner Entrance

Illustration 4.44: Sketch of Tiered Top Floors Approach

Illustration 4.45: Sketch of Tiered Top Floors Approach B
Part of preserving history and celebrating it is documenting it, understanding it and evaluating how it can blend in to suit the needs of modern day society by extracting the lesson learnt. The purpose of this chapter was to create an in-depth public documentation of a historic building whose drawings are not available to the public. As part of the design framework being developed in this thesis, it is as important to document and commemorate the building in its existing condition and understand how it is used as it is to develop a new program function and re-design it to suit a more current reality with an updated narrative.
PART 2

A BEACON OF HOPE
CHAPTER V
MOGGAMMA EL TAHRIR

Figure 5.1: Render of the Moggamma Complex
Cairo is a city in transition and has been since the age of its inception. A series of contested spaces and districts overlooking its ever-growing population and shifting societal needs. With the move to a new administrative capital, opportunities in building re-use arises all over the city. The aim of this chapter is to illustrate how a design framework can be created to develop a part of new functions, that can benefit the users of the community and create a community building that serves different economical sectors and aims to rejuvenate the surrounding micro-urban environment. There are approximately 76 buildings that are assumed to vacate according to the typology study in the previous chapter, in the area and creating a framework for design applied to the Moggama can serve as a starting point for future interactions with the surrounding buildings and a canvas for future supporting functions. This chapter will focus on that transformation and explore through design how the building can be transformed to a building benefiting the community and ameliorating the micro-urban environment by providing opportunities for learning and working.

Due to the abundance of existing hotels with high vacancy rates, it is concluded that transforming the Moggama into a hotel does not serve a function that will benefit the community or the economy. Focusing on culture, education and revival of crafts is the design intent for this building through creating a multi-purpose cultural hub that can economically self-sustain and functionally revive the area post-migration paying tribute to the initial urban intent as a district for the culture and arts. As seen from the urban analysis in the previous chapter, there are several cultural buildings and educational institutions remnant from a previous era that could benefit from a community hub in this scale reviving the cultural arts scene and encouraging artisanal crafts and arts as well as providing a business platform for them.

Since the building is fronting Tahrir Square, it is also important to celebrate the revolution and provide a monumental tribute to the important, unrealized goals of the revolution: Freedom and Social Equality.

The aim for the building is to provide activities and socialization spaces for all members of society equally giving them a chance to interact and create networks encouraging social mobility and opportunities for growth and development. On the other hand, freedom of expression through the arts in all its mediums and creating spaces of performance will create a venue where freedom can be enjoyed rather than controlled and censored. a venue where minds meet and brainstorm and create reaching a renaissance in thinking, a revolution of a different form.

By creating a space for collaborative working offices that could support the arts sector or the start-up scene that is rapidly emerging in modern day Cairo, an opportunity of intersection could be created for collaboration on art projects commercially. The offices in the adjacent old campus of the American University are already full and there is a consistent need for accessible temporary office space for start-ups in the city that could be catered for through this building.

Re-iterating the importance of the atria and the courtyards in the building in a design aligned with environmental consideration celebrates the intent of the original architect while re-purposing their functions to suit the new building program.
MANIFESTO

“Social activities occur spontaneously, as a direct consequence of people moving about and being in the same spaces. This implies that social activities are indirectly supported whenever necessary and optional activities are given better conditions in public spaces.” 117

Jan Gehl

Buildings can survive through the ages without human interaction while the opposite does not hold true. Although a building might deteriorate with time, a primitive human need is shelter and perhaps that is the simplest justification of why buildings are important and preserving them is part of preserving a culture and its history and identity.

Architecture is a reflection of society, their traditions, their history, their culture, their lifestyle and even their social well-being. Inspired by HCMA’s Manifesto in their book: Places : Public Architecture 118, an alternative, more contextualized Manifesto was created to provide a framework for the design parti and help identify key strategies that can be applied to all the buildings that will be vacated due to the migration and not only the Moggama.


1- ALL PUBLIC BUILDINGS HAVE A ROLE TO PLAY
2- EVERY SITE AND SITUATION IS UNIQUE
3- INVOLVE THE COMMUNITY IN DECISION MAKING *
4- DESIGN FOR LIFE NOT FOR GLORY
5- SIEZE THE OPPORTUNITY FOR SOCIAL SPACE
6- INNOVATE
7- LEARN AND EVOLVE THROUGH HISTORY
8- DELIGHT AND SURPRISE THE USERS
9- MAINTAIN FOCUS ON THE COMMUNITY
10- PRESERVE, RE-USE, ADAPT
11- CREATE MALLEABLE SPACES
12- DERIVE FUNCTION FROM CONTEXT
13- INVITE A SENSE OF BELONGING THROUGH CULTURE AND IDENTITY
El Moggamaa provides the perfect opportunity to celebrate the re-use of a governmental building and transform it into something else. It provides the medium for a public building to serve a different, non-bureaucratic function while preserving its architecture as a reminder of what it once was.

It is sometimes easier to demolish and start over on an empty canvas, an approach that is repeatedly used in Egypt as seen from the studies in the previous chapters and highlighted in the Cairo 2050 and 2030 plans. It requires a refined skill set to organize a functional program with the constraints of a pre-existing building.

There are many benefits to re-using space that include saving on the cost and production of material, preserving heritage and architectural identity and creating an opportunity to innovate and evolve. By not erasing the past and building within it and over it, there is an opportunity for history to recount its tales to future generations and remind them of the lessons learned.

Creating an adaptive building that is malleable to host several programs current with today’s needs as well as changeable for those in the future is the design intent supporting the growth of this building.

The scope of this thesis does not allow for an analysis of the structural integrity or viability of the proposal but it is assumed that due to the solid concrete structure already existing and the high ceiling spans and relatively compact grid, there is room for re-enforcing that will allow the following program to be accommodated with future planning.

Illustration 5.1: Site Map Highlighting the Building
The following diagrams show the thought process in developing the design parti of this building. In alignment with the manifesto, several interdependency diagrams were created to allow for the exploration of what is important to address in the design development program and integrate into the functions of the building.

The building will become a cultural hub with a multi-use purpose addressing a variety of needs in the area and providing space for creation, socialization, innovation and development while constantly reminding its users of the important of history and context through elements of patterns used throughout that aim to delight and surprise the user.

**ELEMENTS OF INTEREST/ STATEMENT**

- **Open Courtyard vs. Green Architecture**
- **You Don’t Have to Tear Historic Buildings Down to Make New Functional/Profitable Buildings**
- **Old vs. New Ornament vs. Architecture**
- **Context Matters**
- **Innovative Materials**
- **Memorial of History and Revolution**
- **Sustainability / Environmental Awareness**

Illustration 5.3: A Place where...

Illustration 5.4: A Statement

Illustration 5.5: Functional Program
DESIGN PARTI

The program developed consists of four different elements: Showcase, Learn/Work, Live, Profit. In order to ensure a cyclical development of the building in the future and maintaining its commercial viability it was important to create a program that allows the building to function as a whole entity in perfect harmony with its users, catering for their needs.

In order to revive the crafts and the arts sectors that are dying out, the program was developed with learning and creating elements at the core. The Learn/Work program provides maker spaces for glass, wood, pottery, tapestry and jewelry making workshops. A place where a school can be set-up inviting artisanal craftsmen to teach as well as create a living for them. The teaching hours can be limited so that the studios serve the primary function of a space for creation. Filmmaking, Photography, Drama and Theatre Arts also have a home in the Makerspaces as a tribute to the revolution through expressive arts which create the medium for freedom of expression. This program stems from the context studies of this area where many cinemas built in the 1960s still survive longing for home-bread content to display.

The Start-Up Hubs provide the office space and potential expansion space for the maker spaces. It makes the building a catalyst for business opportunities through its connection with the socialization spaces and its ability to overlook and be seen by all programs in the area.

The Learn/Work program is linked to the Showcase, Live and Profit through function. The Showcase spaces which provide galleries, performance spaces, the ‘Green- Lung’, all serve as an outlet for the productions created in the maker-spaces and start-up hubs. It creates the architectural spaces that can accommodate events, performances, lectures, business and investments summits, etc. The Profit program element creates a bazaar and a series of restaurants and boutiques providing a place to sell the crafts and a market medium to sustain everyday traffic exposing the products to the rest of the
city. The Gastronomy element creates a pull-factor for passersby as well as a showcase opportunity for Egyptian cuisine. The Live Program provides a variety of lodging opportunities for the people working and learning in the building. Imagine a collaboration project with the New York Film School where a cohort is invited to work and teach locals the importance of using film making as a medium for expression, or a visit from the Swiss School of Culinary Arts teaching a term of how to run and manage a successful business and proudly showcase food, or Google holding its annual conference in the Middle East in the variety of multi-purpose use spaces found in the building.

The cyclical nature of the program elements feeding into each other pays tribute to the original architect’s intent and brief of creating a central government building that can sustain itself through its functions and interact with the surrounding micro-urban environment.

**DESIGN DEVELOPMENT**

In order to accommodate the new program into the existing architecture it was important to develop a strategy to introduce new floor space and opportunities for growth. The strategy developed are part of the design framework that could be applied to the rest of the buildings that could be vacated and adapted to their form and new functions.

Highlight: The first strategy was to highlight the main entrance and carry the ribbon across sectionally. The module would include a demolition of the façade in that zone breaking away from the repetitive pattern of windows in the building and providing opportunity for new language and materials to be introduced while highlighting the Showcase program element within the exposed façade.

Addition: The second strategy was to introduce an addition of several floors that would accommodate the Live program while retrofitting the rest of the building as is with the rest of the program elements, the element would be raised by an external exo-structure framing the building that could support it. On one hand it addresses the housing crisis plaguing the city, on the other hand it provides an ulterior solution to displacing and relocating people to the desert cities.

Combination: The third strategy was a combination of the two strategies aforementioned where one leg of the building would be demolished and retrofitted with the Work/ Learn program that feeds into the remainder of the functions of the building. This allows for a contingency plan in case the structural integrity of the building has been compromised and creates room for the introduction of new materials and structure that could contrast and reflect onto the building showcasing the evolution of architectural language and how old and new could co-exist in harmony reflecting back to the eclectic nature of the city explored in the previous chapters.
Modular Growth: The fourth strategy addresses a modular growth stemming from the program. This is the strategy that was used and developed to redesign the building while learning from the previous explorations of the aforementioned strategies. Responding directly to the existing building plans and sections that were producing and assigning the different program elements to the buildings through linkages of the atria, allowed the program to grow organically in the building adding extra structure and space where needed and highlighting specific elements to create connections with the surrounding context as directed by the program space. This strategy allowed the development of the concept of a building within a building where each program element was confined in its own zone but also linked through a series of circulation elements and interconnected spaces. This strategy pays tribute to the ever-growing informal settlements surrounding the cities and allows for a different perspective on how organic growth can be used to define architecture.

The following images display the thought process involved to spatialize the different strategies and understand how the building would formally interact with the site. Through the creation of 3D digital and physical models, the shape of the building evolved and developed to host its new functions.
FUNCTIONAL PROGRAM

By creating the program section through the building seen on the following page, the different elements where placed in harmony providing opportunities where they can coexist and others where they can be privatized to cater for their individual needs. The sectional diagram allowed for the development of the plans and the sections of the building to create a wholesome, functional space that provides the opportunities needed for growth to develop the additive elements and to identify the areas that should be highlighted.

The following pages show an exploded axonometric drawing of the furnished plans allowing for a further understanding of the new program and an explanation of how the building works. The remainder of this chapter will break down the building into the separate program elements and through a series of drawings will explain the new design and its opportunities for growth and interaction with the surrounding environment.
The Gastronomy program elements provides a large pull factor to draw potential users to the building. It is located on the western leg of the first two floors as well as in two added platform floors highlighting the building. The base provides exposure to the surrounding streetscape and a link with the urban context inviting users into the building and enticing a feeling of curiosity and exploration when expose to the atria. The top, invites users to experience the circulation elements in the building giving them access to views through the atrias of all the different program elements and a forced access into the galleries showcasing the products of the building program and paying tribute to the 2011 revolution through a permanent display of some of the graffiti walls that used to decorate Tahrir Square during that time. It serves as an exploration as well as a reminder of this design’s intent and manifesto.

The structure on the base consisting of the concrete columns was maintained while the barred windows where demolished being replaces with double height curtain walls inviting the users into the space. On the interior, the restaurant layouts consist of a combination of seating arrangements that promote socialization as well as expose the kitchens to continue the concept of connection and transparency in all elements. Subtle hints of patterns extracted from different elements in the old building reinforce the reminder of the past and invite a creative mind to a potential concept of how to re-use simple elements in design. By allowing the users to explore the space through the various views, it creates a feeling of belonging as well as ownership of the public spaces. The following drawings show how the different restaurants are exposed to the surrounding program elements as well as provide a potential layout of how they function and serve their purpose.
Illustration 5.16: Layout Option 1 for GF Restaurant

Illustration 5.17: Layout Option 2 for GF Restaurant

Illustration 5.18: Layout Option 3 for Second Level Restaurant

Illustration 5.19: Layout Option 4 for Upper Level Restaurant
Illustration 5.20: Outdoor Restaurant
Illustration 5.21: Outdoor Restaurant: Inside-Outside Connection
THE GALLERY

The galleries are the main element of the Showcase program element. By placing them in the central atrium and making the ground floor element the main entrance feeding into several other program spaces, it highlights their importance in the sustenance of the cyclical program nature of the buildings.

The open layout with demountable walls allows for an opportunity to continuously transform the space according to need and function. The central atrium is highlighted on the exterior through a break in the pattern of the fixed windows by a curtain wall spanning the full height of the building embedded in the pre-existing façade columns and framed by the existing reliefs and decorations that embellish the exterior.

As the gallery serves tribute to the revolution, a permanent exhibition on the ground floor housing photographs and re-creations of the graffiti art that defined the walls of Tahrir Square during the revolution with be placed. A reminder of the past and an invitation to the future.

The main atrium with the dome will be renovated and will maintain a continued open span to the 18 floors of the building provided linkages to all the program elements and views into the different spaces. In itself, the atrium is a gallery to the different programs of the building topped with the panoramic views provided by the Gastronomy programs on the top floors. A reward at the end of the journey.
Illustration 5.25: Renovated Main Atrium

Illustration 5.26: Third Floor Axo

Illustration 5.27: Fourth Floor Axo
Illustration 5.28: View From Upper Level of Gallery to Tahrir Square

Illustration 5.29: Fifth Floor Axo

Illustration 5.30: Sixth Floor Axo
THEATRE

This program elements consists of a series of performances spaces on the outside as well as the inside of the building and taking over the base of one of the open courtyard atriums. In the exterior, a recessed stage provides an amphitheatre for public performances and events that connect the production inside the building to the surrounding context. An invitation to the building through the performance arts. Large scale awareness campaigns and business summits could also find home in the provided spaces.

On the interior the building grows in area over a span of four floors exposing it to two atrias. The first houses another outdoor performance space exposed to the floors above with balconies protruding on all floors overlooking the stage. This theatre provides an interconnected space allowing the users of this program to experience the event as well as provides an insight to the programs above through patterned windows that showcase the different programs. The shear walls provide a home for Green Walls which will be further explained in the following sections of this chapter. The second space provides a triple height black box to be used for more private events and can accommodate up to 400 people with a stage linked to several backstage service spaces that allow this space to be used in several functions and events.

The program is also home to a costume making workshop and sales outlet, ticket offices exposed to the exterior on the ground floor, and a series of bars and socialization spaces scattered around the top floors providing entracte entertainment and an opportunity to network. The following pages contain a series of drawings that highlight the different features of this program elements.
WORK + MAKER SPACES

This program element is the largest spanning over a series of stepped spaces across 8 floors and is connected to all the different atrias and circulation elements to provide a clear dispersal of elements throughout the other programs it feeds and that feed into it. It is connected by a seated stair element within the program that provides space for continued private circulation as well as socialization spaces with balconies protruding towards the atria as well as the street and side facades.

Contrary to the initial design, the offices and workshops are laid out through a series of open plan workstations providing an open kitchen and lounge on each floor. Each workshop is interconnected over two floors by a private staircase providing a more intimate element for circulation and collaboration. Several glass meeting rooms are spread across the programs to provide an added layer of privacy.

The patterns used in the glass and on atrium walls provide a wayfinding element as well as added character and shading maintaining interest, curiosity and surprise. Due to its nature of being the main feeder of the other functions, the program grows throughout the plans overtaking more floor space and control of the atrium until it reaches the span of the entire floor area in the upper levels.

The following series of drawings further elaborate on the different potential uses of the space, highlighting its interconnectedness to the atrium, the exterior as well as within its own different program functions.
Illustration 5.44: Third Floor Axon

Illustration 5.45: Fourth Floor Axon

Illustration 5.46: Fifth Floor Axon

Illustration 5.47: Sixth Floor Axon
Illustration 5.52: Meeting Rooms and Socialization Spaces

Illustration 5.53: Old Atrium Blending with new Glass Separations

Illustration 5.54: Open Office Layouts overlooking Internal Courtyard

Illustration 5.55: Open Office Layouts overlooking Internal Staircase
Illustration 5.56: View from the Upper Levels of Maker Spaces looking down on Seating Stairs
Illustration 5.57: Open Break Area Overlooking Workstations

Illustration 5.58: Seating Staircase Detail View

Illustration 5.59: Formal Open Office Layout

Illustration 5.60: In-Formal Open Office Layout
Illustration 5.61: View to Balcony and Stairs
Maintaining with the cyclical nature of the program in the building. The Souk/Bazaar provides a market where craft goods could be sold and displayed. These will include tapestries, glass and pottery accessories, wooden crafts including furniture and mashrabeyas, jewelry, and costumes created in the theatre program and the maker spaces (which the Bazaar is connected to in plan and through circulation). The Space is laid out in the drawings as a series of moveable hubs providing easy access routes for material to be moved and exchanged and so the space remains malleable for future uses as well as functions efficiently as a market.

The space can also be configured for career fairs or investment fairs pertaining to the Work/Learn program Element continuing the connection through function of different programs as well as through visibility. As the bazaar is exposed to several different programs in the building as well as the entire eastern leg, several additions including balconies overlooking the atrium and the street creating hubs for small boutiques were created to ensure connection and moments of interaction.
Illustration 5.68: Protrusion
Balconies Showcasing Bazaar Products
Population growth and lack of accessible housing is a continued problem facing Egypt and as explored in previous sections, the solutions provided do not always suit the specific needs of the mass population. Although within the scope of this thesis this problem will not be directly addressed, the Liveable spaces program provides a design framework for how an old building intending for a different use can be retrofitted to provide spaces for lodging of temporary and permanent natures. This program addresses the needs of the design parti and occupancy brief design for the purposes of this thesis. It provides a lodging opportunity for visitors, students as well as creates a potential live-work environment consolidating the city in the building.

Spanning the full length of the building, the liveable spaces provide views into all the different program elements in the building through the atria as well as views to the exterior contextualizing with the urban realm in a series of moments through the windows which are remnants of the old design and only replaced with curtain wall in the socialization spaces. The program is divided into Services Apartments for temporary short-term residences through 2-3 bedroom flats and studios, Residence with Amenities, for long-term residences of teachers or business owners using the building as well as a Hostel for visitors and students coming for events and courses. Located in the top floors of the building, this program benefits from the stepped back, tiered approach in the initial design creating opportunity for multi-use spaces, exterior elements as well as a more intimate space as the floor area is greatly reduced.

The following series of drawings portray the potential uses of the space as well as demonstrate its connection to the exterior context and the interior of the rest of the building. It provides a modular plan with a simple layout and several varied configuration that could inspire the design framework and inform replicating this strategy to the rest of the buildings soon to be vacated.
Illustration 5.76: Fourteenth Floor Axo
THE ATRIA

The atrias provide the lungs of the building and showcase its program elements to the different users highlighting the multi-purpose environment. It is private from the exterior environment and maintains the element of surprised to the users and the explorers invited through the other programs.

The atrias are generally composed of four sides as seen in the following drawings. In the old building, they consisted of heavily barred windows disconnecting them from the tight circulation corridors of the offices. To contrast and highlight a different use, the atrias will have two glass walls with protruding balconies from the different programs providing transparency and connection as well as acoustic separation. The curtain wall frames will be custom shaped to pay tribute to the old patterns found in the previous design elements in the building through a modernized functional look providing shading and accessibility. One wall will be preserved with the old windows maintain a reminder of a previous use and sheltering more private interior spaces, the bars will be removed and the windows will be updated with glazing suitable to control a comfortable living environment on the interior.

The last wall, and other walls remnant from the non-rectilinear shapes of the exit stairs and circulation corridors will be retro-fitted with living green walls showcasing the building as a living, evolving, growing element with non-static elements of architecture reflecting the society it serves. The vertical gardens provide vibrancy, colours and introduce an eco-friendly concept of design foreign to the area where the sun never stops shining. Due to the weather in Egypt, the environment is very well suited for maintain living walls and integrating them with the building elements. The wall can help purify gray water from the various programs as well as add a layer of insulation sheltering the building from the harsh summer heat and maintaining the hot air inside during winters. Using such systems helps improve the air quality and filter the air absorbing the toxic pollutants remnant from the busy traffic around the site.
The following series of drawings explore the different atria highlighting the patterns, the green walls, the potential uses as well as the mixed-program environment.

The first set of drawings highlight how the patterns are used for way-finding and defining different program elements with close proximity to the circulation elements.

Illustration 5.79: Upper Floor Circulation Corridor

Illustration 5.80: Middle Floor Circulation Corridor

Illustration 5.81: Ground Floor Circulation Corridor

Illustration 5.82: Patterned Close Balcony

Illustration 5.83: Patterned Open Balcony
Illustration 5.85: View onto Double-Legged Stairs From a Side Atrium into the Main Circulation Atrium
Illustration 5.86: Living Wall near Theatre Atrium
Illustration 5.87: Atrium View Looking Up (Similar to Previous Chapter Old View)
Illustration 5.88: Worm’s Eye View of Atrium Exposing Balconies
Illustration 5.92: Building Section Through Theatre
Atrium

you can give a man a fish or teach him how to fish .. etc.
Illustration 5.95: Ground Floor Plan
Illustration 5.97: Third Floor Plan
Illustration 5.104: Tenth Floor Plan
OUTDOOR EATING AREA AND EVENT SPACE

GAMES ROOM

Illustration 5.107: Thirteenth Floor Plan
THE EXTERIOR AND SURROUNDING SITE

The following section will explore how the building contains its planned program as well as integrated with the existing architecture and develops a new language on the façade. Each protrusion on the exterior is carefully planned responding to the needs of the functional program and increasing the availability of socialization spaces throughout the plan. The protrusions are characterized by a series of developed patterns stemming from the simplification of various door, railing and stair ornamentation and identify the different programs translucent behind the windows.

The first two levels maintain the arched entrances but break away from the rigid pattern of the barred windows and introduce embedded curtain wall elements that showcase the enclosed public programs. The walls step in and out breaking free of the confinement of the old plans and creating colonnades allowing the user to peak into the space inside and inviting an interaction with the outside environment. Fronting Tahrir Square, a vertical curtain wall element spanning to the top highlights the arched entrances and frames the existing windows containing their programs and providing views inside and outside to increase the exterior to interior relationship.

The back entrance is highlighted by a series of small modular balconies supporting the design framework informing the development of all the other buildings. It is the design element that can link all the renovated buildings with a unified style without impeding too much on the existing architecture while maintaining continuous, playful moments of transparency between the interior and exterior environments.

The Exterior landscape was designed to create an open series of gardens, performance spaces and outdoor seating to reflect the inviting nature of the encased program. The intervention to the exterior facade while minute in the buildings surface area provides a clear design intent to the treasures that lie within and the potential of the re-use of such a large scale building.
Illustration 5.111: Northern Axonometric with Site

Illustration 5.112: Southern Axonometric with Site
Illustration 5.116: Fifteenth Floor Open Restaurant

Illustration 5.117: Eastern Façade Perspective

Illustration 5.118: Tiered Eastern Leg Existing, Versus New Tiers
Illustration 5.119: View from 15th Floor to Amphitheatre

Illustration 5.120: View from 15th Onto Tahrir Square

Illustration 5.121: View from 12th Onto Tahrir Square
Illustration 5.122: Patterned Façade Over Entrance
Highlighting New Versus Old
Illustration 5.123: Northern Side
Recess in Lower Podium and Colonnade
Illustration 5.125: Amphitheatre View
Illustration 5.127: Theatre Entrance Perspective
Illustration 5.129: New Clearstory Carrying Dome
A CITY THAT CAN BE SAVED

The Moggamaa is one of the most hated buildings in all of Egypt due to its history of corrupt bureaucracy, long waiting times, congestion and the political powers it reflects. Terrorism and Kebab, the movie used for the development of the drawings highlights that all members of society regardless of financial ability, position of power, religious beliefs and social status are responsible for supporting the notion of bureaucracy and governmental totalitarian control and refusing change. The building is a reflection of a Kafkaesque environment empowered by the government as well as the people. The 2011 with all its dreams and hopes was supposed to change that, and although one can argue that it did, the building is being dismantled and functions are being decentralized, the question arises: What Happens Next?

This thesis explored the history of Cairo over its lifespan and evaluated how the future can change. It is a Tale of Two Cities, recounted over the ages, time and again under a different name. Two cities separated by class, by history, by religion, by government, by desert, by Nile, by money, and by people. A clear urban segregation between the districts and their streets illustrates that story through the maps of the city and its peripheries. Unfolding the political and economic factors that have shaped the city into what it is today allows for a conceptual design exploring its development into the future. By starting from a macro-scale study of the city, narrowing in on Downtown Cairo and Tahrir Square and then an in-depth analysis of El Moggamaa, the program evolved to create a beacon of hope for a brighter future.

The aim of the design framework and the Manifesto is to set a precedent for a new revolution in design thinking and approaching historic buildings in Egypt. By creating a multi-use program with malleable elements the possibilities are limitless and the potential to maintain and celebrate history as well as learn from it opens the doors to endless application in the city of almost 30 million people.

Longing to create mirages in the desert does not provide a clear solution, eventually people will outgrow these cities too if they ever become fully inhabited. Learning to deal with what exists and to adapt it and re-use to suit the needs of society is the key to the progression of civilization. Cairo is a city of thousands of years of history embedded in its walls, it is time to respond to the call of the city longing to be saved.
Illustration 5.130: A Beacon of Hope


egypt-stops-privatising-state-owned-firms.


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