Architectural Identity In Contemporary Cairo

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ARCHITECTURAL IDENTITY
IN CONTEMPORARY CAIRO

Thesis of Masters of Science Degree in Architecture

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Abstract

Cairo: the urban legend, is one of the most ancient, multifaceted of cities. Seat of pharaohs, sultans and kings, prize of conquerors from Alexander to Saladin to Napoleon, “The Defeater” has never stopped reinventing herself. The very nature of Cairo has ever reflected polycentric ensembles of urbanism and architecture that belonged to different user group, with different perspectives, conceptions and aspirations towards their city life. Sorrowfully over the past few decades, the city has lost most of its acquired identities for reasons beyond the scope of this research. Evidently, the city has undergone, and still undergoing, a process of urban and architectural change. Today, evidences of a general loss of its architectural identity are overwhelming to the extent that could be considered as “a city out of control”!

The research at hand tackles the topic of Contemporary architectural identity of Cairo. What are the features and considerations for designing today? The aim is to introduce new theoretical approaches for understanding contemporary Cairene architectural identity with a practical application in a design project that aims at revitalizing one of Cairo’s belle-epoch features: Al-Azbakiyya area. The methodology is based on review of the cultural turning points and their reflection on the urban transformations and architectural identity of the city along its history. Following, is a discussion of the opportunities and threats of creating an authentic-yet contemporary- design in today’s Cairo.

Moving to the area of study, the research reaches its conclusion by introducing conceptual key aspects for designing in the twenty-first century Cairo.

Il Cairo, la leggenda urbana, è una delle città più antiche e multiforme. Trono di faraoni, re e sultani, premio di conquistatori, come Alessandro Magno, Saladino e Napoleone, “La vincitrice” non ha mai smesso di reinventarsi se stessa. La natura propria Del Cairo ha sempre riflesso enclavi policentrici di urbanesimo e architettura che apparteneva a diversi gruppi di usuar, diversi atteggiamenti, concessioni e aspirazioni verso le loro vite in città. Purtroppo, attraverso le ultime decine, la città ha perso molte delle sue identità architettonica acquistate attraverso il tempo per motivi che sorpassano lo scopo della presente ricerca. Evidentemente, la città ha vissuto, e vive ancora, un processo di cambiamento architettonico ed urbano. Oggi, le evidenze di una perdita generale di identità architettonica e- incontrovertibile, e porta alla possibilità di considerare Il Cairo come una “città fuori controllo”.

La presente ricerca esplora il tema della identità architettonica contemporanea del Cairo. Quale devono essere le caratteristiche e considerazioni a tenere conto per progettare oggi? L’obiettivo è introdurre dei nuovi approcci teorici per capire l’identità architettonica contemporanea del Cairo con una applicabilità in un progetto architettonico che punta alla revitalizzazione di uno delle ... Del Cairo della Belle Epoche: l’area di Al-Azbakiyya. La metodologia si basa sulla revisione dei punti di inflezione culturale e le loro riflessioni nelle trasformazione urbane e l’identità architettonica della città attraverso la sua storia. In continuazione, si trova una discussione delle opportunità e minacce di sviluppare un progetto tanto autentico quanto contemporaneo nel Cairo di oggi. Spostandosi all’area di studio, la ricerca arriva alle sue conclusioni introducendo dei punti concettuali fondamentali per progettare il Cairo del XXI secolo.
CHAPTER 1
URBAN BACKGROUND
ABOUT GREATER CAIRO
1.1 Introduction

Cairo is located in the northern part of Egypt, 17 km to the south of the meeting point of the Nile’s branches (Delta). It’s the political and economic capital of Egypt. It’s considered as the largest metropolitan area in Egypt and the largest urban area in Africa. Cairo is divided between three governorates (provinces) Cairo governorate, Giza governorate and Qalyubia governorate. It expands 27 km to the east of the Nile River and 34 km to the west. According to the last official population count performed by the Egyptian central agency for public mobilization and statistics (CAPMAS) in 2006, Cairo has a population of 17.8 million inhabitants, on the other hand according to the last estimate of CAPMAS in 2012 Cairo has approximate population of 20.5 million inhabitants. Cairo is divided into 67 districts (municipalities), which is the smallest local unit in urban communities in Egypt. Each district is divided into sub-district or neighborhood to facilitate the district management.\textsuperscript{2}

Cairo is a city with a very rich architectural legacy, through the history since its birth, it gained a very strong urban identity which was kept for centuries. The city passed through lots of phases of change, which enriched and drew its identity. The biggest question of all, can we conceive this identity now? Or it became such monumental places which doesn’t define the whole metropolis. In the this research, light will be shed on the urban growth of the city along ots history. We will try to find out if it’s possible to retrieve the city’s strong identity again, or creating a new identity for it, and how could be the means of doing so.

1.2 Climate and Geographical Background

Cairo is located at latitude of 30°6’ N and longitude of 31°24’ E at an altitude of 75 m above sea level. It lays along the banks of the Nile River where it splits into two branches at the south of Delta. Cairo is surrounded by fertile agricultural land at North, West and South borders and a deserted land at the East border. Cairo is located 173 km south to the Mediterranean Sea and 128 km west to Suez Canal\textsuperscript{3}. The topography of the city is almost flat land except for some hills at the south of the city (Al-Moataz) which was the southern borders of the old city. The climate of the city is mostly dry and hot in summer and moderate in winter with some rare showers. Cairo has highly fertile land thanks to the silt that is carried all the way from Lake Victoria\textsuperscript{4} by the Nile River. Natural disasters rarely

\textsuperscript{1} CAPMAS is considered under presidential decree no. 2915 of 1964 the official source for data and statistical information collection, preparation, processing, dissemination and giving official nature of the statistical figures in Egypt.

\textsuperscript{2} Heba Adel Ahmed Hussein (2011), Crime and Urban Planning in Egypt: Case Study: Greater Cairo, Ain Shams University, Cairo.


\textsuperscript{3} The Suez Canal is a 163 km long canal that connects the Mediterranean Sea with the Gulf of Suez, a northern branch of the Red Sea.

\textsuperscript{4} Lake Victoria is largest lake in Africa and chief reservoir of the Nile, lying mainly in Tanzania and Uganda but bordering on Kenya.
occur in Cairo. Nevertheless the earthquake of 1992 and the partial fall of Moqattam had some effects in the urban growth of the city, as large amount of individuals and families lost their homes and the government was responsible of providing new houses for them, the government started providing temporary housing areas for the families which by time became permanent because of the lack of attention of the government which led to leave a very big mark in the urban growth of the city. Lack of rain and existence of sand carried by wind affected the architecture in Cairo and in the whole Egypt throughout history. Nevertheless in the last sixty years of Cairo’s urbanism was mostly influenced by political reasons and influenced by the western architecture.6

1.3 History of the Urban Development

1.3.1 Medieval Cairo (647 A.D. – 1798 A.D.)

In the 7th century Arabs arrived Egypt where they had to face the weakened Roman army. They established there first military camp along the east band of the Nile not too far to the south of Delta. Not too long after that, Romans retreated and Egypt fell under the control of the new comers and Al-Fustat army camp eventually developed into a permanent city. Al-Fustat witnessed the final struggle between Umayyads and Abbasids, where the Umayyad Caliph was killed at Al-Fustat when he fled there to evade his pursuers. In the struggle, much of Al-Fustat was burnt. The seat of the Caliphate was moved from Damascus to Baghdad marking Abbasids as the new rulers of the Islamic world and with them Ikhshids as the new rulers of Egypt. In 868 A.D., Ahmed Ibn Tulun, who had come originally from Iraq, was assigned as deputy for the Abbasid governor of Egypt. He added a new inland of the existing conurbation of Al-Fustat, where he assigned separate ethnic groups to form his army, he employed architects who followed Byzantine-Coptic traditions to build his mosque which stands now as a masterpiece in the southern part of Cairo, marking the location of his long vanished town.
1.3.1.1 Fatimid Cairo (969 A.D. – 1171 A.D.)

Fatimids were the first family which took the rule of Egypt to themselves separating it from the Islamic Capital in Baghdad. In 969 A.D., Jawhar Al-Siqilly, the general of the followers of the Shiite branch of Islam arrived to Egypt from Tunisia and overcame the resistance of the previous ruling Ikhshids. He proceeded to lay-out a new rectangular, more glorious princely city on the flat land north to Al-Qata'i and named it Al-Qahira, Cairo (the defeater). This well planned walled city was divided into four main quarters by 2 intersecting main routes. The North-South route, named after the Fatimid Caliph, l-Muizz Ledin Allah, stretched from the middle of the northern wall to the middle of the Southern wall where he built the palace of the ruler. The East-West route led from the gulf to Al-Azhar mosque which was destined to be the world’s first university.

1.3.1.2 The Two Cities

During the 11th century we can recognize two thriving cities, Al-Fustat, the larger of the two cities whose northern limit was Ibn Tulun mosque, with no protecting walls around, it was occupied by the indigenous population and devoted to commercial and industrial activities. Visitors from 10th to mid.11th centuries reported that it completed in grandeur and prosperity with the greatest Islamic cities of the time. According to Al-Muqaddasi the high-rise buildings of Al-Fustat resemble familiar minarets. According to Nasir Khusraw, a Persian traveler of the early 11th century, some of these buildings climbed as high as 14 stories up to roof gardens complete with ox-drawn wheels for irrigating them. Khusraw dedicates long descriptive passages to the city’s thriving markets, and finally confesses:

I have seen so much wealth in Al-Fustat that if I tried to list or describe, my words would not be believed. I found it impossible to count or estimate it.

Al-Qahira instead, was a well-designed community serving the needs of a large and complex courtly society. It was divided into 10 separate quarters, containing gardens, palatial residences and mosques. According to Nasir Khusraw, he said:

I saw a series of buildings, terraces and rooms. There were twelve adjoining pavilions, all of them square in shape… There was a throne in one of them that took up the entire width of the room. Three of its sides were made of gold on which were hunting scenes depicting riders racing their horses and other subjects; there were also inscriptions written in beautiful characters. The rugs and hangings were Greek satin and more woven precisely to fit the spot where they were to be placed. A balustrade of golden lattice work surrounded the throne, whose beauty defies all description. Behind the throne were steps of silver. I saw a tree that looked like an orange tree, whose branches, leaves and fruits were made of sugar. A thousand statuettes and figurines also made of sugar also placed there.

12 Fatimids are a political and religious dynasty that dominated an empire in North Africa and subsequently in the Middle East from A.D. 909 to 1171, and tried unsuccessfully to oust the Abbasid caliphs as leaders of the Islamic world. It took its name from Fatimah, the daughter of the Prophet Mohamed.

13 Philip Jodido (2004), Cairo: Revitalising a Historic Metropolis, Aga Khan Trust for Culture

14 A medieval Arab geographer, was author of the work Ansar an al-Taqasim fi Ma`rifat il-Aqalim (“The Best Divisions for Knowledge of the Regions”). He composed this work at the age of forty after having undertaken a long series of voyages through all of the countries of Islam.

15 A Persian poet, philosopher, Isma’ili scholar, traveler and one of the greatest writers in Persian literature.

1.3.1.3 Death of Al-Fustat

During the late 11th century huge military campaigns started striking the Middle East (crusades), aiming to control Jerusalem and most possible lands around. They started there invasion in Egypt that’s when Shawar the vizier ordered the unprotected Al-Fustat to be burnt in 1168 to prevent it from being captured by the invaders and becoming a siege point for Al-Qahira, it kept burning for 54 days, the smokes rising from the city drove the crusaders army away. All the inhabitants ran away to take shelter at the nearby walled Cairo. The remains of the city were eventually absorbed by nearby Cairo which became the new capital of Egypt and had been transformed from a princely city into overflowing metropolis. Today, Al-Fustat is part of Old Cairo, with few buildings remaining from its days as a capital.
Salah Al-Din arrived Egypt during the war against crusaders through his campaign to unite all Arab provinces to stand against the crusaders. Although he was never to spend much time in Egypt, because his campaign demanded constant attention abroad, he planned to strengthen and expand Cairo’s walls, extending the northern wall all the way to Al-Maqs. He also built the Mountain Citadel on the spur of Al-Moqattam hills. The construction of the citadel attracted settlements in the area between the existing southern walls and the approaches to it. As Salah Al-Din was following the Sunni branch of Islam unlike Fatimids who followed Shi’ite, one of his missions was to spread the Sunni beliefs in the country, such mission which had a big influence on the architecture of Cairo. As much military buildings he had built to protect the city from crusader’s attacks, he also built lots of new mosques and schools to spread his religious beliefs, removing and converting palaces of Fatimids into mosques and schools to serve his cause. Due to the expansions he had done with the walls of Cairo, the city had witnessed major urban expansions pursuing the new boarders which were marked by the new walls. After the death of Salah Al-Din, his family started the Ayyubid dynasty and ruled Egypt. During the next few decades, Cairo expanded into a world Capital, becoming the most populous city of the world outside China.

17 (1137 A.D. – 1193 A.D.) Muslim sultan of Egypt, Syria, Yemen, and Palestine, founder of the Ayyubid dynasty, and the most famous of Muslim heroes. In wars against the Christian Crusaders, he achieved great success with the capture of Jerusalem (October 2, 1187), ending its nearly nine decades of occupation by the Franks.
18 A Muslim dynasty of Kurdish origin, founded by Salah Al-Din and centered in Egypt. The dynasty ruled much of the Middle East during the 12th and 13th centuries.

Fig. 10: Map Showing the wall extensions of Salah Al-Din
1.3.1.5 Mamluks Dynasty (1250 A.D. – 1517 A.D.)

In 1250 A.D. Mamluks took control over the country and started the Mamluk dynasty. Cairo expanded on all of its sides, restricted by some rules. Mamluks focused lots of effort on developing the road leading from Bab Zuwayla to the citadel and its royal palaces. Some other natural circumstances had its role in shaping the city. The Nile’s borders had shifted to west in the 14th century, transforming Bulaq Island to a port on the eastern bank of the Nile, and leaving Al-Maqs port far inland. The gulf was feeding some ponds in the western outskirts, when the Nile flooded, it fed its ponds with water, leaving it green spots of land after the flood. The beauty of these ponds attracted Cairene people to found summer resorts there, as well as many princely residences, especially Birkat Al-Fil, and Al-Azbakyya Lake, where residing and promenading became "en Vogue" in the late Mamluk period, and remained fashionable under the Ottomans. Cairo witnessed the biggest movement in urbanism, architecture and art. Many Bahari and Burji Mamluk buildings are still standing today as a proof of how architecture in the Mamluk dynasty was rich with new techniques that’s Cairo has never witnessed before. The city started to grow outside the walls during that dynasty, the following map is showing Cairo's expansion at the time of Sultan Al-Nasser Ibn Qalawun.

1.3.1.6 Ottomans (1517 A.D. – 1798 A.D.)

In early 16th century a war started between Mamluk Sultanate and Ottoman Empire over taking the control over Egyptian territory. The Mamluk Sultanate fell and the Ottomans took control over Egypt transforming it from one of the most important cultural capitals in the world and one of the most important destinations of scholars to just another province of their large Empire. Cairo lost most of its importance as science, art and cultural capital and fell into a long political conflict between Ottomans and Mamluks who dug deep inside the skeleton of the society.

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20 Mamluks are slaves brought in Egypt from Europe whom the royal Ayyubid family used them as soldiers in their armies and they started occupying high rank position in the army until they took control over the country and started their own dynasty.
21 Philip Jodido (2004), Cairo : Revitalising a Historic Metropolis, Aga Khan Trust for Culture
1.3.2 Modernization of Cairo (1798 A.D. – 1952 A.D.)

The French campaign which came to Egypt in 1798 A.D. under the command of Napoleon Bonaparte is considered as one of the biggest and first step of the fall of the Ottoman Empire in Egypt. The invasion ended into a big failure after three years. However, during their campaign, French did the first attempt of drawing maps of Cairo, which they called Le Caire, brought from Al-Qahira, the name was later transformed to Cairo by British. These maps are the only maps that are archived, and could be found as a proof of the urban situation of Cairo in the late 18th and early 19th century, before any attempt of modernizing the city. In 1801 A.D. the Ottoman Empire sent troops to Egypt to re-occupy the country under the command of Sarechesme Halil Agha whom second commander was Mohamed Ali Pasha. Mohamed Ali used his loyal Albanian troops to work with both sides, gaining power and prestige for himself, he allied with Egyptian Arab leader Umar Makram and the Sheikh of Al-Azhar University. During the infighting between the Ottomans and Mamluks between 1801 A.D. and 1805 A.D., Muhammad Ali carefully acted to gain the support of the general public. In 1805 A.D. he became Wali, and self-declared Khedive of Egypt and Sudan with the Ottoman’s temporary approval.

22 (1769 A.D. – 1849 A.D.) Pasha and viceroy of Egypt (1805–48), founder of the dynasty that ruled Egypt from the beginning of the 19th century to the middle of the 20th. He encouraged the emergence of the modern Egyptian state.

23 A university in Cairo, Egypt. Founded in 970 or 972 by the Fatimids as a center of Islamic learning, its students studied the Qur’an and Islamic law in detail, along with logic, grammar, rhetoric, and how to calculate the lunar phases of the moon. By bringing together the study of a number of subjects in the same place it was one of the first universities in the world and the only one to survive as a modern university including secular subjects in the curriculum. It is today the chief center of Arabic literature and Islamic learning in the world. It is the oldest degree-granting university in Egypt. In 1961 additional non-religious subjects were added to its curriculum.


Fig. 13: Map showing the different neighborhoods in Cairo after the Description De L’Egypte

Fig. 14: Map of Napoleon’s Cairo after the Description De L’Egypte
Fig. 15: A picture of Cairo showing the skyline of the city before any attempt of modernization.
1.3.2.1 Mohamed Ali Pasha and the First Attempts of Modernization

In the period of Mohamed Ali Egypt witnessed its first days of being modernized where he started the first urban expanding outside the borders of Old Cairo. He formed an agency in the city of Alexandria, under the name of Maglis tanzim Al-Mahrusa, or Commissione di Ornato, which was borrowed from the Italian commissions set up in early 19th century, the name was to be changed later by British to Commission of Ornament. This commission was responsible for modernizing the cities of Cairo and Alexandria. Nevertheless, it was obvious that Mohamed Ali always was modifying the suggestions and advices of this commission, to fit with the Egyptian society and needs. The most significant touch that Mohamed Ali left in the urban development in Cairo was, first, the improvement and straightening the streets of Old Cairo, followed by the relocation of cemeteries, the cutting of new streets through the old fabric, and the creation of monumental plaza and some regular divisions. Second, the restoration of the houses and resorts along the ponds, which were burnt during the riots against the French. Followed by filling the ponds and leveling its lands, which became the opportunities for his successors to start and found the new modern Cairo. He Mohamed Ali sent lots of scholars to Europe and brought the press technology to Egypt. Scholars who went to continue their education in Europe came back bringing with them a new experiences which the country never new about for almost one millennium.

After the death of Mohamed Ali, The planning history of modern Cairo appears to have followed rather paradoxical or unexpected paths, at least when compared to that of other cities of the periphery. These developments took place during three distinct political situations: The reign of Khedive Ismail (1863-79), The British Colony (1882-1922), and the so-called ‘Liberal Age’ (1922-52). The great works carried out from 1868 onwards, partly modeled after the Parisian example, represent a first major shift in the development of the city.

Mohamed Ali’s successors started the new dynasty, where Egypt became unofficially independent from the Ottoman Empire. Nevertheless it took its complete independency in the last 15-30 years of Mohamed Ali’s Family dynasty to become a kingdom. During this dynasty Cairo doubled its area and expanded rapidly where several districts were founded and gained new architectural identity.26

25 The Khedive of Egypt and Sudan from 1863 to 1879, when he was removed at the behest of the United Kingdom.
26 Mercedes Volait (2003), Urbanism : Imported Or Exported?, Wiley-Academy, West Sussex.

Fig. 16: Map showing transformations happened in Cairo During Mohamed Ali and Khedive Ismail periods
1.3.2.2 Khedival Cairo

The major changes that happened in the layout of Cairo took place in the period of Khedive Ismail, where he assigned the responsibilities of drawing new urban layout of Cairo to his talented chef engineer Ali Mubarak, who was strongly influenced by Haussmann's re-planning of Paris after his visit there. Architecture was strongly influenced by French architecture in the 19th century where most of the Egyptian scholars were sent to Paris to continue education. Khedive Ismail was famous for his obsession about the beauty of Paris, and his will of transforming Egypt to become a part of Europe. During his reign, in less than a decade, new quarters, gardens and promenades were created at the edge of the old city, streets were cut through the old urban fabric. These improvements vast more significant than anything implemented in any other capital at the time. In other words, after his visit to Paris, and after he saw the work of Haussman there, He intended to Haussmanize Cairo.

Ismail's first attempt of modernizing Cairo, was by founding Al-Azbakiyya and Ismailiya quarters. The first was a new urban design, done by a French planner, Jean-Antoine Cordier Bey (1810-73). It was built in the area of the old Azbakiyya Lake, which was transformed into a park during the reign of Mohamed Ali. Particularly, in 1848. The quarter consisted of a smaller garden with octagonal shape, designed in the center (Al-Azbakiyya Garden), bordered from north by attached residential buildings, holding commercial arcades, from south and west by ministries, grand hotels and entertainment facilities, and from east by the old city.

Ismailiya quarter, known nowadays as Wust Al-Balad, or Downtown, was founded to the east of Azbakiyya quarter, reaching the Nile's eastern bank. The quarter was planned with a network of streets made up of orthogonal grid, attached to a star-shaped pattern, both centered on a circular square. The quarter was divided into blocks (2000 to 5000 m² each), which were occupied by large town houses surrounded by gardens.

Followed by that, Khedive Ismail gave the responsibilities of planning two other quarters, Bab Al-Luq and Shaykh Rihan quarters, in 1871, to Pierre Louis Grand (1839-1918), a French engineer, under the supervision of Cairo's Ornato Council. These quarters were founded to the south of Al-Azbakiyya quarter.

Bab Al-Luq was centered on a large esplanade at the intersection of two diagonal roads. The pattern was denser than that of Ismailiya quarter, as it was divided into blocks (400 to 3000 m² each). On the other hand, Shaykh Rihan quarter was a simple orthogonal grid, denser than that of Bab Al-Luq, divided into blocks (50 to 300 m² each). These two quarters unlike Azbakiyya and Ismailiya, were founded on old suburbs, thus construction required some demolitions.

It's clear, there was an obvious hierarchy emerges from the totality of these suburban creations. The gradation from Azbakiyya to Shaykh Rihan quarters is increasing in the sense of functional specialization (from mixed use to pure residential), in the sense of the planning decisions (from a monumental ordering to a simple gridded pattern), as well as, in the sense of urban fabric density.

Khedive Ismail also gave attention to creating public and private green space, the same as the ones he saw in Paris. He had demanded to see the plans of Parisian gardens, to get the inspiration for his interventions. In addition to Al-Azbakiyya Garden, he created an enormous botanical park over 60 hectares of land of the Island of Al-Gazira, known nowadays as Al-Zamalek. This park contained a big variety of plantation species, artificial rivers, service kiosks, a zoo of African animals, an aquarium, and a series of shaded promenades, some leading to the Pyramids. He also created numerous private gardens on his properties, including that of the Giza palace, on the west bank of the Nile, nowadays, the site of the zoo.

The last intervention that Khedive Ismail proposed was cutting 5 main streets across the fabric of all the old quarters, such an intervention which required a lot of demolition. When
Horeau came to Egypt during the celebrations of the opening of Suez Canal, Ismail took the advantage to review the new plans with him. The plans faced sharp opposition from his side, due to the necessity of demolitions. According to Horeau:

Of all the ideas I expressed in Cairo, this was the one where I encountered the most adversaries, and certainly the most potent ones. What I was told, you want to Haussmanize Cairo? ... Is it not vandalism to wish to make into a European city the oriental city par excellence?

After Horeau's statement, lots of Ismail's original plans for the old city started to change. Nubar Pasha, the Armenian foreign minister of the Khedive, who was famous for his love of Cairo, right down to its ruins, stepped up with the voice of the opposition to the Khedival plans. He suggested a huge project of restoration and preservation of old Cairo's monuments. After long political struggle between opposers and supporters of the Khedive's original plans, a compromise solution was reached. The new plans were to cut two long streets starting at Azbakiyya, one of the ending at Misr railway station (Mohamed Ali street), and the other (Clot bey) ending at the citadel, the seat of Khedival power at the time.

Mohamed Ali Street was to be completely straight according to the original plans, nevertheless, it had to turn at midway to prevent the demolition of one of the properties of the Coptic patriarchate. It had to turn as well at the end to spare one of the most ancient mosques of Old Cairo.

Fig. 18: Map showing all interventions done in Khedive Ismail's period

Fig. 19: Map showing Ismailiya quarter

30 Hector Horeau (born in Versailles in 1801, died in Paris in 1872) was a French visionary architect, he is known for his projects great iron and glass halls, one for the halls of Paris in 1844.

31 Mercedes Volait (2003), Urbanism : Imported Or Exported?, Wiley-Academy, West Sussex
1.3.2.3 Cairo in the Colonial Period (1882-1922)

In 1882 A.D. in the period of khedive Tawfiq, the British army successfully occupied Egypt, where it became a British colony (1882-1922). British didn't leave a conceivable touch on the shape of the urban fabric in Cairo during the Colonial period, as they were more concerned about improving the infrastructure of the irrigating system to improve agriculture. As well as improving the streets network in the old existing fabric of the city. According to the statistics done by authorities, the average percentage of the street's area to the total area of each quarter was 25%, reaching to 11% in some denser quarters. Although the tanzim council dictates that it should be 30% at least in each single quarter of the city. The project of the British authorities was to widen and straighten the streets in the old city. More than 230 hectares were to be expropriated. It was very seen that British authorities weren't concerned about planning new quarters, as much as they were concerned about intervening in existing neighborhood. Nevertheless, there existence as the ruler of the country encouraged lots of private investors to invest in Egypt, as they saw it is a politically stable market.

Garden Cities

Most of the urban expansions happened in the colonial period were done by individuals and private investors, without any control from the authorities. Many new neighborhoods were established during this period by private corporations, such as Garden City suburb by Charles Bacos through his Nile Land and Agricultural Co. in 1906, Qubbah Gardens in 1908, Heliopolis by Edouard Empain in 1909-10, and Ma'adi residence gardens in 1906.

Qubbah Gardens

Qubbah Gardens were established north-east from the downtown. Due to the low price of the land in this area, planning and building regulations were somehow different than those of Garden City. It expressed generosity in open space. Portion of the estate was reserved for commercial and industrial buildings. The building regulations dictated maximum built area of \( \frac{1}{3} \) to \( \frac{1}{2} \) of the plot's total area, while the building had to step back 6 m from the street.

Garden City suburb

Garden City suburb was established south-west to Ismailiya quarter over 28 hectares, touching the eastern bank of the Nile. Designed by Joseph Lamba, featuring the systematic curving of the road network, the area was classically divided into 272 building plots, without center or community facilities. The plots were to be sold to individual owners whom were responsible for the construction of their own houses. The local regulations of the neighborhood dictated that each building had to be maximum \( \frac{2}{3} \) of the total area of the lot, with 18 m maximum height, minimum 2 m reassess from the street, and that fences should not be plain.

Heliopolis

Heliopolis was established at the eastern desert of Cairo on 240 hectares of land. It contained dense tenements of two to three-story apartment buildings, with balcony access, arranged in parallel rows. The neighborhoods plan was far from Garden City's ideals of Howard and. Greenery played an essential role, the neighborhood is regarded as denser than other neighborhoods advocated by British movement, as it was regarded closer to the grand designs in the Beaux-Arts.
Ma’adi Suburb

Ma’adi suburb was established at the south of Cairo, on a desert-like plateau overlooking the Nile. It is considered as the neighborhood which had the greatest influence of the British concepts of garden cities in Cairo. The plan was developed using a pattern which divides the area into 1000 m² lots, to obtain maximum density of 10 houses per hectare. As all the garden cities at that time, plots were to be sold to individual owners. Regulations dictated that buildings should exceed 15 m of height. Property borders were marked by hedges rather than masonry or iron fencing. To protect the suburb from desert sand, a massive planting program was begun in parallel to construction, so all streets would be eventually tree-lined. The main standard of choosing the species of the trees was their capacity to provide shade as on duration and color of their blossoming. The project rapidly attracted the members of small British colony in Cairo, they often bought four adjacent plots to increase the size of their gardens. They made the project into success, and a sort of long-term British district within Cairo. Hence Ma’adi is to provide the closest example of British planning principles.

In summary, during Colonial period, public interventions were limited on remodeling of existing quarters, while private projects played the biggest role of the urban development and expansion of Cairo in this period.\[32\]

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\[32\] Mercedes Volait (2003), Urbanism: Imported Or Exported?, Wiley-Academy, West Sussex
1.3.2.4 Cairo in the Liberal Age (1922-1952)

In 1922 A.D., three years after the revolution of 1919 and the political movement of Sa’d Zaghlul Pasha, Egypt got its independence and became a Kingdom, with elected governments and parliament. This political change did obvious effect on the urban development of Cairo, and the policies that were held by authorities. Unlike the British authorities in the Colonial period, the Egyptian government were much more involved in the urban planning and development of the city. They worked in three main axes, they had plans of remodeling the old urban fabric, they took over controlling regulations and maintenance of the new suburbs created in Colonial period, and they took the responsibility of planning of completely new residential districts, mainly on the west side of the Nile.

Remodeling

The change was first reflected in 1923, starting with the project of cutting new roads across the old quarters, such as Al-Azhar Street and Al-Gaysh Street, which were completed on 1929. As well as widening the major thoroughfare, Khalig street (Gulf street). They also stood responsible for the restoration of many historical mosques, including Ibn Tulun mosque which was completely restored between 1925-26.

Controlling

The government was looking forward to plan the evolution of the city and control its expansion. They created a public planning body, Al-Tanzim Higher Advisory Council, in 1929 A.D., which was to control and lead the activities of the municipal affairs. The first actions were to be taken with the new formed council, were towards Heliopolis. Though Heliopolis was still considered as the most remarkable and important enterprise in the modern town development to be undertaken in Egypt. Nevertheless, its initial regulations were seen outdated by authorities. The movement of change was specifically directed to the inadequate provision of public gardens and open spaces, over-concentration of buildings in many areas, irregular heights of blocks, and defective zoning. After two years of negotiations, in 1931 A.D., agreements were finally reached for the new regulations, where the most important of them was setting 48% of the total area of the district to be given up for roads, parks and playgrounds.

Expanding

As Al-Tanzim Higher Advisory Council was taking actions towards controlling regulations and maintenance of existing neighborhoods, it also gave attention to the planning of new residential zones. The biggest and most important of them was the residential district created on the western bank of the Nile, over 680 hectares of land, called Al-Muhandesin nowadays. As well as the creation of new working-class housing, the most important of them was Imababa district, which was established to the north of Al-Muhandesin over 140 hectares of land.

Al-Awkaf City

Al-Awkaf city was established on the western bank of the Nile. The plans were originally done by Mahmoud Ryad, an Egyptian engineer trained in England. He submitted the plan in the year 1930 to authorities, which approved it by 1932. The plan of Ryad was mainly organizing the area around a vast central park and surrounded by a park belt. Due to political instability in the government during this period, the project was delayed. Not until after 1936, when Mustafa Al-Nahhas Pasha became the prime minister, the project was brought back to life, with new plans done by Mohamed Sabri Mahbub, and Egyptian engineer trained in England as well. This new plan was not so different than that of Ryad, as it bore the mark of modern British urban planning. This was reflected in the semi-circular streets, large parkways and U-shaped quadrangles of houses around a central park.
Imbaba

Imbaba housing was erected between 1947-50, on the western bank of the Nile, to the north of Al-Muhandesin, on 140 hectares of land to host 1100 units. The original project was actually something completely different. Al-Tanzim Higher Advisory Council decided a decade earlier to remodel some of the slum areas of Cairo, especially Bulaq area. To do so, they decided to demolish all existing buildings except mosques and churches. They decided to relocate all the inhabitants of Bulaq, who were mainly workers in different workshops, especially the workshops of the railway station. The plan was to establish new working-class housing district to relocate these inhabitants, one of these new districts is Imbaba. Nevertheless, during the period of political instability, the project of remodeling Bulaq was archived, leaving the new districts to be erected as planned.

The plans were designed by Ali Al-Meligi Mass'ud, an Egyptian engineer trained in England. The project adopted the model of the back-to-back two-story row housing. The project was of a very dense pattern, as much as 140 residents per acre rather than 100, the standard maximum, called for in England by Dudley report.

We can summarize from the above that the movement of modernizing Cairo was always held by locals, whether they were rulers, investors, or professionals. Although this movement was referencing from European experiences of Planning and architecture, especially from France and England.

1.3.3 Cairo in the Contemporary Times and the Loss of the Identity (1952-Present)

Cairo have witnessed big political changes through its whole history, nevertheless, one of the biggest and most effective one was in 1952 when the army cooped against the king, with the support of majority of Egyptian people, the army was successful in removing the King. The last British soldier to leave Egypt was in 1954. In the same year Egypt became a republic for the first time in its history and Gamal Abdel Nasser declared himself a president after long struggle with Mohamed Naguib (the elected President of the Revolutionary Command Council). Egypt has faced a huge political change that had the biggest effect on Cairo’s urban expanding and its architectural identity. Since after the revolution of 1952 A.D. Abdel Nasser started converting the country to become a socialist country, and he held all the power to himself and all his army close colleague’s hands. Cairo became the only economic, political and cultural center in the country which led to massive amounts of domestic immigrants to move to Cairo from all the rural areas in the country. In the last 50 years Cairo multiplied its population almost 9 times, while the population in 1950 A.D. 2.4 million inhabitants it grew to become 20.5 million inhabitants in 2014 A.D. Due to the huge amounts of out comers, the government started to meet their needs of accommodation. They started building social housing in a very economical way with flat facades and concrete buildings conquering the agricultural lands, which led to losing the architectural identity of the city which was kept for more than one thousand years.

In 1956 A.D. an expansion into the east and west deserts was planned. Nasr City (Madinet Nasr) neighborhood project was launched to be constructed in the eastern desert of Cairo in 1958 A.D., followed by further urban expansions in Heliopolis, Ain Shams and to south Maadi and Helwan. Nasr City neighborhood started with strict control for the construction regulations and heights of the buildings. Although the government didn’t invade all the areas of this neighborhood with their social housing, owners who have no any architectural awareness found the governmental housing as an example for them to construct their own buildings.

Cairo put its first step to the west bank of the Nile river in the 60th expanding the city to the area of Dokki, Mit Akaba and Al-Haram, this was the first merge between Cairo and Giza governorates to form the Greater Cairo region. However in 1967 A.D., Arab Israeli war started and subsequent events had the crucial effect of freezing formal types of developments in the city by government. However, although urban plans where archived temporarily for the moment, the continuous need of residential buildings led to the vast
increase of the informal ways of expansion, by breaking heights limits and construction regulations such as what happened in Nasr City, Al-Haram and even Old Cairo itself. Also by squatting governmental land in desert, slums started appearing in Cairo for the first time. In early 70th lots of slum areas appeared such as Matareya (which was once full of farms and villas of aristocrats), An-Shams, Bulak, and Al-Warrak Island appeared. Eventually due to housing shortage, the illegal sector became so large that the government turned a blind eye to much of its activity.

After the death of Abdel Nasser in 1970, Mohamed Anwar Al-Sadat became the president of Egypt. He had completely different policies than Abdel Nasser as he was a Capitalist, after the 1973 war, Sadat freed the economy and announced the open door policies. As a result Cairo experienced massive urbanization, at the west of the city, 6th of October city was established in 1979 A.D. with some residential and some industrial zones, to the north east of Cairo 10th of Ramadan city was established in 1977 A.D. with some residential and some industrial zones. Mainly the residential zones were constructed as social housing but lately in 6th of October city, some luxurious residential compounds were built.

After the death of Mohamed Anwar Al-Sadat in 1981, Mohamed Hosni Mubarak became the president of the country, he did not have certain political believes, corruption was growing and the only policy was benefiting close businessmen and getting benefits from them, which led to a new route for the urban growth of Cairo. The need of planning new settlements or building new neighborhoods was according to the will of the businessmen close to the regime and their benefit. New Cairo which is the biggest urban growth happened in the history of Cairo was established according to a presidential decree in 2000 A.D. being divided into 5 settlements, only 1st and 2nd settlements were decided to be constructed as social housing for poor families, nevertheless it met a big failure due to the lack of services and facilities and it only achieved less than half the population expected for these settlement, most of them are occupied by workers of construction working in neighboring areas. 3rd and 4th settlements were sold as empty lots to individual buyers and private investors and was built as semi-luxurious housing or administrative buildings. 5th settlement which has an area almost as big as the eastern half of Cairo was only built as high luxurious residential compounds with golf courses and giant villas importing and mixing different architectural styles from west in each single building. As it stands, 5th settlement is regarded as one of the biggest contributors of the loss of the architectural identity of Cairo and stood as a witness on how big is the gap between rich and poor in the Greater Cairo region.

36  (1918 A.D. – 1981 A.D.) Egyptian army officer and politician who was president of Egypt from 1970 until his assassination in 1981. He initiated serious peace negotiations with Israel.
37  (1928 A.D. – Still alive) Egyptian military officer and politician who served as president of Egypt from October 1981 until February 2011, when popular unrest forced him to step down.
Discussion and Conclusion:

Since the beginning of time, the Egyptian capital was an amalgam of diverse cultures (and nationalities). Multi-layered and multi-faceted identities are the reality of Cairo throughout its entire history. Relating to any of Cairo identities is accepted: “Islamic Cairo”, “Modern Cairo”, “Old Cairo”, “Contemporary Cairo”, etc- as cultural conceptions not as geographical locations. Any reference to one category of Cairenes urban identities should always be framed/specified within the context of the subject matter at hand. From its naissance, Cairo was built where there were already subcultures presenting the subgroups of the Egyptian capital (Madinet Masr). While the historical part of the capital amalgamation of history, nationalities, and therefore, cultures, fall beyond the scope of this research, yet, it is worth reminding. Cairo’s particular urban identity is indeed a true fallacy. However, with the highly politicized cityscape of modern and contemporary Cairo, it has reached a perplexed state that made her face major political, economic, social and cultural challenges. This has resulted in a lack of identity at all. The socio-urban topography of contemporary Cairo can be summarized in the following description of each district-category, based on location, dominant activities, type of residents, and status:

• The Historical Districts: User groups: the troops of the “balady” locals and workers in the nearby downtown. Naturally deteriorated due to age, lack of maintenance and urban governance. Most of the historic buildings currently suffer from collapse-threats that might lead to their total loss.

• The Nineteenth Century Districts: User groups: low-middle class. Mostly governmental employers and some tradesmen.

• Turn of the Century Districts: Each was dedicated to a user group, ethnicity, or nationality. Either in villas with gardens, or apartment buildings, all districts were elegantly designed with different European. With the social mobility that accompanied the nationalization and centralization, the user groups, the land uses, and the urban fabrics have changed dramatically. Many of the old buildings are destroyed to accommodate high-rise ones. Densities have exploded. Most of these districts have repelled their original residences and their current social structure cannot be categorized.

• Twentieth Century (Modern) Districts: Built on the new town-planning schemes, models of modernism are dominant in grid-iron urban fabrics and high-rise buildings, and newly building types. Home for the newly centralized governmental institutions, with modern architecture. Included modern activities required by the emerging user groups, clubs, shopping centres, parks, schools, day-care centres, etc.

• New Urban Settlements and Gated Compounds: Divided into two categories; satellite cities and attached cities, and gated compounds. After 1973’s victory, a decision to decentralize the economy and industry was intended to protect the city from the overpopulation as well as to protect the left agricultural plots of the city from the crawling of urbanism. Linked with ring-roads and/or highways. Built on planned infra structure and services, to house low-income residents of the big city, as well as newly-weds. Mostly designed as workers cities for the low-middle and low income. A second type of urban settlements (gated compounds) was started in the nineties, after the original districts of the city became repellent. Including all types of luxurious aspirations of entertainments. Buildings are with very low density and highest percentages of areas are left for greenery and public spaces. Types of users of this type are mainly the business men and the newly crème of society.

• Informal Areas: Capitalized over the past three decades, scattered within and outside the city peripherals, covering more than 50% of Cairo’s face, are considered as the instant solution for the homeless. They house very high densities, reaching 90% building densities, up to five floors. Mostly deprived of infra structures and services, as well as public spaces. The user groups of those settlements are the socially marginalized and the least-income inhabitants of the big city.

CHAPTER 2
UNDERSTANDING THE ARCHITECTURE OF CAIRO
In the previous chapter, the history of the urban development of Cairo was reviewed. We can obviously conceive that it could be divided into three main periods, the medieval period (647 A.D. – 1798 A.D.), the modernization period (1798 A.D. – 1952 A.D.) and the contemporary period (1952 A.D. till now). In this chapter, light will be shed on the architectural identity of each of the previously mentioned eras, with an attempt to understand the philosophy behind its various architectural styles.

2.1 Medieval Period (647 A.D. – 1798 A.D.)

This period started with the birth of the city of Al-Fustat under the command of Amr Ibn Al-A'as in 647 A.D., and ended with the arrival of the French campaign under the command of Napoleon Bonaparte in 1798 A.D. The period witnessed many different political trends that gave different architectural identities. However, mostly associated with the term "Islamic Architecture".

Many of the remaining buildings of the medieval period in Cairo are religious buildings, yet there are some other remaining examples. However, there are many other building types, as follows:

1. Mosques: A place that requires a space in which people can gather for prayers while facing the direction of Qibla (Mecca). First mosque to be built was the courtyard of the prophet's house in Medina; that was a "community center". It had no architectural refinements except a shaded area at one end. Later on, mosques were required to accommodate larger amount of people for Friday prayers and for other educational and domestic needs. As a result, mosques became grander and different, and each mosque became the center of its neighborhood.

2. Madrasa: A school of law and theology where scholars were to be trained for administrative functions. It was first introduced by Salah Al-Din to suppress Fatimid Shi'ism. Madrasa can be divided into two types.
   - The cruciform madrasa, consists of four great vaulted iwans. Dormitories for teachers and cells for students were hidden in the corners between iwans, behind courtyards and facades. It tend to rise vertically in a number of stories, as opposed to mosques which required flat large space for multitude of people in the same level.
   - Qa'a form, is modified from cruciform madrasa, where the east and west iwans were shrunk, central courtyard was reduced and covered by wooden roof with a central cupola, and the building extended vertically. This type of madrasa appeared due to the lack of urban spaces left in the city.39


4. Mausoleum: A domed chamber containing one or more tombs, either freestanding or a part of a larger complex.

5. Wikala: A place for travelling merchants built around a courtyard, with stables and warehouses in the ground level and living accommodations above.

6. Sabil-Kuttab: Two-story (or more) buildings with a public water dispensary at the ground level and a Quranic school for boys (mostly orphans) above. Enormous underground cisterns stored and provided water.

7. House: Houses were usually for extended families, required privacy, security, coolness, and minimum of exterior ostentation.

8. Fortifications: It includes walls, gates, towers and citadels.

In the following few pages, a quick review of the features and advancements in each medieval era will help typify its architectural precedents, and hence The Cairene architectural identity of the time.40

2.1.1 Early Islamic Period – Umayyad, Abbasid, and Ikhshidy Dynasties (661 A.D. – 969 A.D.)

The architecture and the architectural decoration of the Muslim world in Al-Fustat during the first three centuries of its existence are the result of the encounter of the new Muslim faith and state with the ancient traditions of the place. New constructions had to be meaningful to the Arabs from Arabia as well as to the old settled population of the area and to reflect the needs and aspirations of the former and the competencies of the natives. Initially this art depended entirely on the technology and craftsmanship available locally. Craftsmen drafted by powerful patrons, artisans established on their own in new areas of employment.

The most famous remaining buildings belonging to this era were Amr Ibn el Ass and Ahmed Ibn Tulun mosques. Amr Ibn El Ass mosque had no special features. It was merely inspired by the house of the prophet: Basic model of mosque architecture. A place for gathering performing rituals, discussion and negotiation of religion, life and community issues. It had both a religious and a social function. While walls were of mud and brick construction, roofing was with palm tree trunks. Columns were later brought in from earlier temples and churches, Qible Riwaq aisles are more than all other mosque isles. Courtyard was the large area with arcades on rectangular piers. The mosque was later developed and renovated. As for the Mosque of Ibn Tulun. Its inspiration came from Samarra, near Baghdad, the ninth-century capital of the Abbassids. It has brickwork piers, pointed arches, and a magnificent coating of carved stucco ornamentation. The brick piers were imitated later in the Fatimid Mosque of al-Hakim, and the pointed arch and carved stucco later became important features of Cairo architecture.41


Philip Jodido (2004), Cairo : Revitalising a Historic Metropolis, Aga Khan Trust for Culture
As for the architecture of the residential buildings we can easily realize that it was a reflection of the society of the city itself, Al-Fustat city was described as the main metropolis of the capital at the time. Houses rose up for 4 stories, it was described by Khusraw that it rose up till fourteen stories high during Fatimid period before it was burnt. Residences had sewage system, roof gardens, water wheels and wells. Mashrabiyā was one of the most prominent elements that were used in the residential architecture in Al-Fustat that contained ornamental work done on wood with small repetitive openings to allow sight to the people living inside. Abbasids had an advanced sewage system based on water wheels wells. The houses were designed on the “majlis” plan type. Public baths (hammans) were also introduced in Egypt. Hospital (Bimaristan) and the Nilometer were also developed.

This period also left us with some public buildings, such as, Hammam Amr, Bimaristan, and Nilometer which is the oldest building which is remaining in its original state, yet the pointed roof of the building was added later in the Ottoman period.

The architectural features of the Abbasids/Tulunids reflected direct influences by the building culture of the country of origin of the rulers; such as Ibn Tulun mosque’s stucco decorations/floral arabesques, geometric patterns, the floral Kufic Calligraphy, brick constructions, etc. Hence, architecture in the early Islamic period had an obvious image of Islamic architecture, yet it didn’t have a taste of its own, it was a result of mixture between the new religious beliefs and the local heritage and old techniques, which was not yet mature as we can see later on.

Fig. 31: Sketch showing the common facades of the Cairene residential buildings in Al-Fustat

Fig. 28: Picture showing the Mashrabiyya on the facade of one of the Cairene houses.

Fig. 29: Picture showing interior view of Mashrabiyya at the house of Zaynab Khatoun in Cairo.

Fig. 30: Cufic decorative inscription of the frase (No God But Allah)

Fig. 32: Picture showing the Mashrabiyya on the facade of one of the Cairene houses.

Fig. 29: Picture showing interior view of Mashrabiyya at the house of Zaynab Khatoun in Cairo.

Fig. 30: Cufic decorative inscription of the frase (No God But Allah)

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42 Mashrabiyya is a type of projecting bay window, enclosed with carved wood latticework located on the second story or higher of a building.

43 'Arabesque is a form of artistic decoration consisting of surface decorations based on rhythmic linear patterns of scrolling and interlacing foliage, tendrils or plain lines

44 Earliest extant Islamic style of handwritten alphabet that was used by early Muslims to record the Quran


Philip Jodidio (2004), Cairo: Revitalising a Historic Metropolis, Aga Khan Trust for Culture

2.1.2 Fatimid Dynasty (969 A.D. – 1171 A.D.)

After their conquest to Egypt in 969, Fatimids started a huge program of building; they founded the princely city of Al-Qahira with its luxurious palaces and enormous mosques. Most of the architecture of the Fatimids revealed their religious beliefs; starting with the names they gave to their mosques “Al-Azhar”, Al-Hakim – Al-Anwar”, “Al-Akmar, all referring to the members of the house of the prophet. Through all their decorative elements that accentuated on the concept, Religious authority was the right of the imams (descendants of the prophet) actions had hidden dimensions; Prophet: receiver of the message, and Aly: explains the message. Buildings during the Fatimid period can be divided into three groups, religious, secular and defensive.46


The typical plan of the Fatimid mosque was usually based on prayer halls divided into aisles, surrounding a large courtyard from three sides, having axes aligned to the direction of Qibla, yet in later times they introduced using double grids in order to align the prayer halls to Qibla direction while respecting the direction of the street’s façade, such technique can be only found in Islamic architecture of Cairo. In the Fatimid mosque, Qibla riwaq has an elevated ceiling that ends by a dome on squinches, with clearstory windows and two domes on the end piers. Timber roof was used, mabkhara (minaret) with pylonic additions, stucco windows, introduction of majaz47. Religious buildings also included Mashhad Al-Juyushi, Mashhad Rouqya; Abataba Al-Ikhshidy Al-Saba’ Banat Khadra Al-Shafia. Secular buildings of this period were mainly composed of series of palaces built within the walls of the princely city of Al-Qahira, none of them remained, yet they were described by historians for their glory, luxury, gardens and fountains. Nevertheless, there are some remaining mausoleums; unlike the other buildings they were so simple with minimal decorations, usually square plan with openings at one, two or three sides. Built with bricks or stones or mixed together, with a dome in the middle.48

47 Street alignment vs. qibla orientation in Al-Aqmar mosque.

Residential buildings included the Eastern and Western palaces, creating a trend of luxurious living: “the houses of Cairo are built with so much care and luxury, built with precious stones with cast and bricks. All the houses are detached, so that the trees of one do not encroach on the walls of the other. The result is that everyone can demolish and rebuild his house without that the neighbor was to suffer”. Cairo in the XI century by the traveller Persian Nasir Khusraw. Qahira: Mansions and gardens.49

The third group of buildings that Fatimids contributed within the fabric of Cairo is the defensive buildings. It mainly consisted of the walls surrounding the princely city with eight gates, two on each side. The walls were originally built of bricks, nevertheless, years later, they were reinforced and built again in large stone bricks by Badr Al-Din Al-Jamaly. It was only slightly larger than the original one. The architecture of these walls was more concerned with effectiveness rather than beauty. Many of the Pharaonic temples were destroyed in order to use its stones in the construction; we can find the ancient Egyptian inscriptions on parts of these walls. The walls were built in three levels where the lowest one was just made with solid façade; the second one consists of vaulted halls, with slim opening for archers and larger openings towards the city. The third level was an open corridor, interrupted with towers for protection reasons.50

Defensive brick walls were first introduced by Gawhar Al-Sakilly, followed by stonewalls of Badr El-Jamaly. City gates had special symbolism; transition form outer less sacred to inner more sacred. Spaces between gate towers were either cross vaults or domes emphasizing the Byzantine Influence that the Fatimids have experienced before coming to Egypt. Semi circular arches, crenellations construction methods, using shields as signs, reviling their superstitious beliefs (the existence of rams head) are all argued to be multiple hybrid influences; of Cairene Architecture at the time. Stucco decorations, woodcarving, brick and Stone construction, introduction of the hanging mosque as an urban solution, city as castrum Romanum design and street alignment are the most striking precedents of Fatimid Architecture in Cairo.51

It is argued that Fatimid architecture differs from Umayyad and Abbasid in its grandiose and keeping attention to details. Architecture in Fatimid dynasty had a big influence from architecture of North African territory, the home of their religious leader; nevertheless, the techniques they borrowed were highly developed and evolved. It is evident that buildings of the Fatimid dynasty are famous for their architectural decorations, although themes and styles may differ considerably from one mosque to another. In Al-Azhar for an example, its vegetal decorations done by stucco panels on the walls were to cover the whole surface, while we find decorations of Al-Hakim mosque, mix of vegetal and geometric style, and are made of stone in mostly horizontal and rarer vertical panels just to emphasize the openings and the minarets.

We can conclude that Fatimid architecture was more concerned with glory and beauty, yet their city represented elite people of Cairo who took the rule of Egypt during this period, unlike Umayyad and Abbasid periods. Yet their princely city was to be the core of the medieval metropolis of Cairo later on.52

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2.1.3 Ayyubid Dynasty (1171 A.D. – 1250 A.D.)

With the Ayyubids in Egypt, a shift back to orthodox Islam (suni) over heterodoxy (shi'i) took place. Sunni teachings then were taught in Aly zhar mosque, which was founded mainly as a shi's center. A commemoration of great theologians was achieved through mausoleums. During the Ayyubid era, the introduction of Sufism was accompanied by the introduction of the khaneqah. The religious and educational important advancements of the time was seen in the iwan school for teaching both the life sciences and the theology. The iwan school type shows influence of Persian architecture (ashur, Parter palace, Kteseiphone, 6th century). Residential buildings were the same as earlier Fustat and Tulunid houses. Defensive architecture was another advancement of the ayyubids, due to the military nature of the era Salah El-din walls, gated, two fortresses (Qal’at al-jabbal an –mountain fortress hosted the rulers, commanders and other key persons in the state. While Qal’at al-bahr (sea=nile river fortress) for other military divisions. T -shaped from samara ibn Okhaidar. Hence, the individual building shape transformed into complexes for more than one function (mosques/madrasa/mausoleum/sabil/student dorms/ khaneqah and sufi cells all in one complex) general features development in mosques plan, form and construction of minaret and dome.

As builders, the Ayyubids were a transitional dynasty. While they continued Fatimid styles (the use of stucco, keel arches, stalactites), they also brought in new influences from Syria: marble for decoration, the madrasa, the khanqah, and the mausoleum. The Ayyubids introduced a more flowing script; the “Naskhi” style, which partially replaced the angular Kufic script in calligraphic ornamentation. They also used the keel arch with ribbing on the tops of minarets, which gave them an outline like an incense pot, hence the name mabkhara.

Political circumstances had its influence on architecture in Ayyubid Dynasty rather than social ones, as Salah Al-Din's religious beliefs differs from the Fatimid's, we can find the influence of this on types of buildings he focused his efforts on, as he introduces the madrasa for the first time in Cairo so the Sunni branch of Islam would be taught to people instead of Shii. It was the first time for Cairo to witness a multiuse buildings, such as mosques that have a sector of madrasa and student residences in the higher floor, also mosques that are attached in the same complex with mausoleum.
Also Salah Al-Din took the control on Egypt during the peak time of the war with Crusaders, so we can see how he gave priority and importance to defensive buildings, as he decided to merge both Al-Qahira and the abandoned Al-Fustat into one metropolis and belting it with one defensive wall, which he didn’t have the time to finish before he leaves to fulfill his conquest against Crusaders at Jerusalem. The Citadel stands as the most glorious and important monument this Dynasty left us nowadays. The Citadel was built on a higher ground over the hills of Muqattam for military reasons, as it was meant to host the ruling family as their residence as well.

Some of the architectural features that distinguish architecture of Ayyubid Dynasty include using iron grills in the outer part of the windows for protection, which evolved in the terms of decoration by time, wood work in the interior was used more widely, they emphasized the entrances of their buildings with different forms of decorations above the gateways, also this feature changes appear in the inscriptions used for interior decorations on stucco and wood, ad Ayyubids used a different kind of calligraphy art called Naskhi or Cursive instead the Kufi inscription that Fatimids used in their decorations.56

2.1.4 Mamluk Dynasty (1250 A.D. – 1517 A.D.)

It is because of the Mamluks that there are some that identify medieval architecture in Cairo as "Islamic Architecture". From which are: love of splendor, wooden ceilings, muqarnas, decorated minaretes, stone carved domes (geometric/floral/both together) Tiraz bands, marble incrustations, wood and stone carvings, ablaq masonry, interlocking polychromed- marble, qa’ plan, cruciform plan, wooden ceilings over iwans were used instead of vaults, use of colors, specially golden geometric and arabesque in decorated surfaces. The Mamluk Dynasty is usually divided in history books into two periods, Bahri Mamluk and Burji Mamluk periods, yet in our discussion, it will be divided into early, middle, and late Mamluk periods, as follows:57

Early Mamluk (1250 A.D. – 1350 A.D.)

The beginning of the Mamluk period was a glorious time for Cairo architecture and urban wise, as Cairo became a huge metropolis which was one of the biggest and the most beautiful of the world at the time, also architecture of Mamluks reached a different level in understanding the volumes and in the decorations and the materials used for construction. This was an era of experimentation, with many innovations. It was during this period that the cruciform madrasa was developed. The domes, in brick and plaster, were usually ribbed and followed a pointed arch curve as opposed to the keel arch curve of the Fatimids. The result resembles a jelly mold. Other innovations were the monumental doorway with stalactite decorations, which became a characteristic feature of Mamluk architecture, the development of the minaret from a square to a more slender shape with octagonal and round stones, approaching what has become the typical Cairo minaret, the gradual replacement of carved stucco with colored marble and mosaics, the decoration of arches and entranceways with thin panels of marble, cut in jigsaw shapes and set into the stone, and the common use of ablaq masonry, alternating courses of colored stone, often red and white. It can be argued that the architectural identity in the early Mamluk period was more about “statement of power and wealth”. Messages were delivered through the grandeur and through borrowing or imitating elements of earlier older architecture of significance. Baybars mosques is a valid example for that. In Qalaoun complex, one finds Gothic influences, recessed double walls, Qibla riwaq imitating the great mosque of Damascus with its basilica style central nave, two side aisles and clerestory windrows. Dome of the Rock Rotonda precedents were also imitated in the mausoleum/Khanqah. We can also argue about more features and influences from the crusaders, Persians, Andalucians, Moorish stucco decorations and many more.


In the reign of Sultan al-Nasir Muhammad who was an architecture enthusiast, many new neighborhoods were built with a new point of view of urban planning and architecture. Sharia Saliba Street, as well as the long street called Al-Darb Al-Ahmar, were initiated and developed, and these new routes brought forth new urban considerations. Buildings were planned with vistas in mind, such as how the exterior would be best viewed. Cardinal orientation, the site on the street, and the arrangement of its components also became important. For example, could the mausoleum have both a visible placement and be on the qibla side of the building?58


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Fig. 52: Plan of the mosque of Sultan Al Zaher Baybars

Fig. 53: Plan of Qalaouin complex (Creswell)
Middle Mamluk (1350 A.D. – 1430 A.D.)

During this period, which spans the end of the Bahri and the beginning of the Burji Mamluk periods, the Burji style continued on with the Bahri precedents. The use of stone for the domes of major structures became widespread. The stone dome began to receive its first somewhat tentative decoration, as in the zigzag lines on the domes of Barqouq’s desert mausoleum. The sabil–kuttab became part of the larger mosque complex. This period produced a masterpiece of Mamluk art, the Madrasa of Sultan Hasan.59

Late Mamluk (1430 A.D. – 1517 A.D.)

Urban and architectural mutualism continued. When city builders such as ‘Amr, Ibn Tulun, and the Fatimids built mosques, they had a lot of free land at their disposal. By the time the Mamluks came to power, Cairo was built up, and new buildings often had to be squeezed into irregular spaces between existing structures and streets. Fatimid mosques are almost uniformly rectangular, but later, Burji Mamluk buildings within the town are almost as uniformly irregular in ground plan, although considerable thought and effort was often given to making the building look regular in shape. The search for rectangularity, even on irregular lots, became something of an obsession. The result was a number of jewel-like pieces, such as the beautiful Mosque of Qijmas Al-Ishaqi near Bab Zuwayla, which is built on an irregular wedge of ground but still appears rectangular to the casual observer on the outside. The reign of Sultan Jaqmaq initiated a change of style. The economic instability of the period and Jaqmaq’s own personal piety led to a diminution of the monument’s size, as well as of its decorative richness. Marble panels gave way to stone carving in high and low relief. This is especially noticeable in mihrabs. The period, however, ends with a flourish in the constructions of Sultan’s Qaytbay and Al-Ghuri. The crafts of decoration in marble and stone reached their peak. The delicate arabesques on the dome of Qaytbay’s mausoleum are the finest example of this art. Other crafts, such as wood inlay and joining and metal sheathing, are also noteworthy.

Fig. 54: The stone dome of Amir Aytmish al-Bajasi

Fig. 55: The domes at the religious-funerary complex of Sultan Barsbay.

Fig. 56: The domes at the religious-funerary complex of Sultan Barsbay.

Fig. 57: A 7 pointed Star. B 12 pointed Star. C 8 pointed Star. D 12 pointed Star.

Fig. 58: A 10 pointed Star. B 12 pointed Star.

Fig. 59: A 16 pointed Star. B 10 pointed Star.

Fig. 60: Wikalat Al-Ghouri

Fig. 55: The domes at the religious-funerary complex of Sultan Barsbay.

Fig. 56: The domes at the religious-funerary complex of Sultan Barsbay.

Mausoleum structure also changed; dome square bases are transformed to octagonal ‘neck’, then transformation through squinches to muqquarnas, a belief that domes over the mausoleum represents the celestial globe. The sabil-kutab also appeared as an independent building type and remained attached in some cases remained attached (in the corner) to a school or a khaneqah; provided with water basins for horses, camels, donkeys, etc. The Walls of sabil are always rendered differently than the rest of the building. Walls colored marble, Tiling, Change of opening sizes, protrusion of kutab balcony, use of wood, hanging wood cornice on the utmost upper edge, geometrical coloured marble flooring. Wood ceilings engraved and inlaid with gold, stone or marble seal in front of the sabil window, carried on stone or marble cantilevers, iron rods and decorated grills and covered by golden copper plates, or alabaster. It can be argued that late Mamluk architecture in Cairo reveal an authentic identity; refined proportions, homogeneous styles, consolidation rather than daring innovations. During this era, a true leap in plan and layout took place. Especially on the vacant urban developments outside of the original city boarders. During this era, we can also observe the advancement in stone carvings, and marble works on facades undisturbed by new or foreign ideas. The cruciform school plan was much refined, with the center court covered by a wooden decorated ceiling with a central "shokhsheikha". Glass industry, wooden inlay with copper and silver stone masonry. Use of Ablaq became a dominant feature. Residential buildings included houses and palaces, such as Alin Aq, palace Al Nasir Mohamed Ibn Qalaoon palace, Gouson palace, Moheb El deen Qa’a, Taz palace Bisthak palace, Shaker Ibn El, Ghannam Qa’a and many others, who adopted the q’aa plan type.60

The end of this period saw a transition to Turkish styles, notably in the shapes of domes, which became flatter. There was a switch to less-contrasting stone for ablaq masonry, a combination of white and soft yellow replaced the earlier red and white. There was also some experimenting with minarets, returning to the early Mamluk square style, with two or more finials on top, as seen in the minarets of the Mosque of Sultan al-Ghuri.61

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60 Doris Behrens-Gouze (1990), Islamic Architecture in Cairo: An Introduction, The American University in Cairo Press, Cairo.
2.1.5 Ottoman Period (1517 A.D. – 1798 A.D.)

When Ottoman Empire ruled Egypt, the role of Cairo politically has been reduced enormously, hence urban development and architecture itself didn’t play a big role in the society neither it was getting strong influences and having its own Cairene taste’s before. Nevertheless, we can still see monuments of the period standing till now yet carrying the Turkish taste of architecture, sometimes mixed with some features of the Mamluk period. The late Turkish mosque is a variation on the congregational mosque plan. Two types predominate, the metropolitan Turkish, in which the sanctuary arcade is enclosed and covered by a large dome while the lateral arcades around the courtyard are reduced to a simple portico such as the mosque of Malika Safiyya, and the indigenous square or rectangular in shape such as the mosque of Mahmoud Pasha, with four central pillars suggesting a courtyard covered by a roof. Many mosques also show creative combinations of both Ottoman and Mamluk features. They also tend to be modest in size and decoration since the revenue from Egypt was sent to Istanbul and Ottoman patrons did not have the wealth of earlier Mamluk patrons. The Turkish minaret is pencil-shaped, thin and tapered at the top. Many mosques had centralized plan, smaller domes surrounding smaller domes around a courtyard lined with portico covered with domes too. Khaneqah became Tikeya; a courtyard (with a fountain) and four arched galleries all around with covered porticos as well, covered again with small domes and with a sabil attached. Marble works during the Ottoman period in Egypt were typically imported, specially the use of white marble (sometimes compensated by the use of alabaster). Cairene Ottoman Islamization of Byzantine architecture occurred slowly, with the introduction of the use of concrete and bricks. Iznik tiling techniques, domes more round and squat. Residetial houses became more luxurious, and had a prototype of majaq courtyard-takhtaboush-salamlek-haramlek-hammam on different layouts according to location and size of land plots.62

The medieval architecture in Cairo precedents have entirely changed in the building culture of the city and the entire country. Starting with the usage of word ‘manara’ in the beginning instead of ‘me’thana’ firstly appeared in Egypt. Adopting the foreign influences within the local building traditions such as the Fatimid minarets that looked like Syrian church towers. Development of wall design started from high thick walls with no openings, fortress-like exteriors to colored masonry with squinches and with a variety of solid-to void ratios, and with varied use of openings and the stone decorations with muqqarnass. Balconies, portals, openings and squinches since the Fatimids are witnessed in the Agmar and Al-Saleh Talae’ mosques. Colored ablaq on the facades, inspired by the Syrian architecture. Orbitas started as openings in walls; then decreased in number; but not in qibla riwaq (Ayyubid), then became only one in Mamluk time. Mamluk openings are famous with the trefoil arches that ends with ahalf a dome. The placement of a window on top of the mosque with portal medallions have started with the Fatimids. Building corner treatments, arabesque geometric patterns, illustrations and scultpure; font and calligraphy, marble cladding, mosaic and marble tiles are some of many vocabulary of medieval architecture in Cairo.

On the architecture identity: Mutual influences of Islamic and western medieval architecture is regarded as a feature of early globalization of culture and architecture; a natural consequence of trade, crusades, etc. together with the saturated building culture since the ancient Egyptian, passing by the Greco roman and then Coptic architecture, altogether have resulted in the advancement of architectural identity of Cairo along the eras. Despite the fact that many architectural precedents were not originated in Cairo, however, they are argued to be “Egyptianized” and “Caironized”. These successive Islamic eras introduced several architectural forms that carried their original belongings; all forms were quickly Egyptianized, reaching the epic with the late mamluk architecture. In the later medieval eras, both rural and desert local identities were developed, while the formal architecture identity line started to drift away from its origins. As a result of the Europian Renaissance and the industrial revolution afterwards, the French occupation, then Mohamed Aly’s ambitions that were accompanied by existence of western delegations.

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2.1.6 Evolution of Islamic Architectural elements

Fig. 64: Types of plans

- Congregational mosque
- Cruciform madrasa (Early Mamluk)
- Cairene qa’a madrasa (Late Mamluk)
- Domed sanctuary (Ottoman)
- Enclosed interior (Mamluk–Ottoman mix)

Fig. 65: Types of minarets and external dome supports

- Ayyubid and early Mamluk
- Middle Mamluk
- Late Mamluk
- Ottoman

Fig. 66: Types of minarets and external dome supports

- Ayyubid and early Mamluk
- Middle Mamluk
- Late Mamluk
- Ottoman
Fig. 66: Types of arches and windows

Fig. 67: Types of internal dome supports
2.2 Modernization Period (1798 A.D. – 1952 A.D.)

By the arrival of Napoleon Bonaparte on the head of the French Campaign to Egypt in 1798 A.D., the power of the Ottoman Empire over Egypt had come to an end. As mentioned in the earlier chapter, after French left Egypt, and after the long conflict over power, Mohamed Ali became the Pacha of Egypt in 1805 A.D., and with him came the first thoughts of modernizing Cairo, and transforming it from a medieval city to a city that competes the beauty of European cities. Mohamed Ali’s touches of modernization were clearly obvious in how he dealt with the urban fabric of the city, yet the architecture he used was a bit old fashioned and mostly copied from Turkish architecture.63 Khedive Ismail’s ambition to westernize Egypt with a French reflection. Afterwards Egypt was home for Greeks, Italians, before it was under the English occupation in 1882, where it brought Belgium, French, Swiss, German and American business and tradesmen. Until the mid twentieth century, and despite the fact that the Egyptian architectural identity was numerous sub-categorized according to the factors previously mentioned, yet, it was the climax of those various identities. There was then the rural architectural identity, the desert architectural identity, and the urban identity with its multi faceted features and signatures. At that time, a new school of architecture has evolved, pioneered by the two great Egyptian architects; Hassan Fathy and Ramsis Wissa Wassef. Their call was to revive the local Egyptian identity against the imported and the hybrid.

63 Mercedes Volait (2003), Urbanism : Imported Or Exported?, Wiley-Academy, West Sussex
Accompanying the political and economic upheavals was a social turmoil after the 1952 revolution and its accompanying nationalization and centralization processes, and passing by a series of wars 1967-1973. Then came the open door policies in 1974, with all its accompanying political, economic and social chaos. Several factors have lead to a deterioration of the Egyptian architectural identity(ies). From which are: Growth and over-densification, disbelief and mistrust in the local material, interference of building contractors and the marginalization of the role of the architect, ignoring any local development, the appearance of nouveau rich societal sector after the wealth in the oil countries, and the influence of the hybrid image brought in to the Egyptian house through the television. Several economical shifts since the eighties of the twentieth century have helped the private sector to take the lead in the building and real estate projects that have added ready-made images of elite gated compounds to the peripherals of the capital and greater cities. The hybrid images also covered the commercial and business centers. The identity given to such projects reflect the current societal search for identity, with an eye on the "global icon". And with some entourage here and there; linking some of them distantly to postmodernism. Post modernism as referred to here comprise trials of historical revivalism, eclecticism, and critical regionalism. In fact, a closer look on the modern and contemporary architectural identity confirms that we have passed through the same path of world architecture.64

Fig. 71: Katameya hills, example of the architecture used nowadays for the elite gated compounds and the image of luxury and beautiful architecture for the Cairene society nowadays

64 Mercedes Voltai (2003), Urbanism : Imported Or Exported?, Wiley-Academy, West Sussex
CHAPTER 3
CAIRO IN THE TWENTEEH CENTURY AND THE LOSS OF THE ARCHITECTURAL IDENTITY
The term "identity" is used to refer to the meeting point of suture, between on the one hand the discourses and practices which attempt to speak to us or hail us into place as the social subjects of particular discourses. Cultural identity, accordingly, is a matter of "becoming" as well as of "being". It belongs to the future as much as to the past. It is not something which already exist, transcending place, time, history and culture. Cultural identities come from somewhere, have histories. However, like everything that is historical, they undergo constant transformation. Since its foundation in 969AD, Cairo has never been entirely expressive of one culture. Perhaps some dominant culture, now or then has reigned, and then was subjected to change with the changes of its influences/dictates. From its naissance, Cairo was built where there were already subcultures presenting the subgroups of the Egyptian capital (Madinet Masr). While the historical part of the Capital amalgamation of history, nationalities, and therefore, cultures, fall beyond the scope of this paper, yet, it is worth reminding. As previously mentioned in the introduction, that Cairo has been the baby of various foreign parents (Fatimids, Ayubids, Mamluks, Ottomans, the French occupation, Albanian Mohamed Aly and his ancestors; Khedive Ismail on top, and the British occupation), each of which had his own maternity concepts and deeds. Hence, Cairo was already born as an amalgam of diverse cultures (and nationalities) waiting for direction and/or molding.

3.1 The Epilogue of the Twentieth Century Cairo

The primary education has been already shifted from "kottab" system to schooling, high schooling and specialized educational institutions were already introduced. Mohamed Aly has sent delegations to European universities started with a number of 28 students in all fields and were counted as 1846 students in the days of Khedive Ismail. European architects and engineers were already brought for the new urban projects. Real estate banks were already established to support and urban investments (Own-Heliopolis oasis, Maadi, Qubba gardens and others). Hence, the turn of the nineteenth century witnessed paradigmatic changes in the fields of education, industrialization, agriculture, transportation (Suez Canal, train and metro), tourism, sports and entertainment (Zamalek included the horse race arena, gardens, Gezira and Ahly clubs). The twentieth century turning points of cultural changes are regarded as:

1. WWI, 1919 Revolution, WWII, 1952 Revolution
2. 1950’s and 1960’s Centralization and Nationalization, 1967 War, 1973 War, and the

66 RAYMOND André, 2001, Cairo: City of History. American University in Cairo Press, Cairo
Open-door policy 1974

3. 1980's and 1990's Privatization, The reign of Globalization and the Turn of the Millennium. World War I was not a remarkable turning point in itself, but it was an alert for the Egyptian revolution promoted for philosophy of "Egyptian-ism" as prolongation of either the ancient Egyptian civilization or the Islamic civilization. The literal contribution to this paradigm by the national elites was their support of the local economy, protecting the local market. An aspect that resulted in an era of prosperity to the extent that the local bourse was globally categorized the second. The urbanization of Cairo can be summarized in:

- Separation between minor groups and foreign delegations from one side and locals from the other side, and internal segregation between the two parties according to the socio-economic standardization.
- Attraction of the CDB for business and entertainment.
- Variation in identity appeared in each district's dominant activities, building types, built up and population densities, urban fabric, architecture and overall image.
- The introduction of "the international style" in the 1930's was consciously intended to be the "architecture of globalization".
- This period was termed: La belle epoch (1850-1950).

After the 1952 revolution, a centralization and nationalization process for the entire paradigm has resulted in a social mobility within the previously mentioned subgroups. Foreigners, minor groups, and the elite-rich Egyptians have vanished. Meanwhile, a rise happened in the educated middle class because of the new education policies, and the foundation of syndicates. Urban wise, an imposition of residences for the newly emerged social groups stamped the supreme districts of the previous phase. Farmers who owned the newly distributed agricultural lands immigrated to reside in the big city, causing another social imbalance in the cosmopolitan. Industrial centralization resulted in an increase of internal immigrants to Cairo from all around the country to Helwan, Shoubra El Kheima, Giza, Imbaba, Abo Za'bal, El Hawamdeya, Manial Shiha, El Badrashin, and another social imbalance in the cosmopolitan. The effects are political, economic, social, managerial, or urban-physical, or a bunch of all the preceding. The explanation can be summarized in the following points:

- The political variables dictate their influences on all aspects of urban life; allowing the emergence of new activities and uses that did not exist previously, demanding a new type of urban-cultural form to represent it.
- The economic variables form the base that enables the new ideologies to become tangible, guaranteeing the protection of change/development and supporting the newly evoked features.
- The social variables change the people's self-concepts of living in a certain place, and with certain life forms.
- Finally, the administrative variables –presented in laws, legislations and standards, the auditorial bodies that guarantee the protection of change/development and supporting the newly evoked features.

immigration from districts of Azbakiyya, Kasr El Nil, Mosky, Abdin, Sayeda Zenaib, Darb Almard, Baulak, Rod El Farag, Old Giza, Waly, etc, to Zeiton, El Khalifa El Maimoun, Nasr City, Haddaak El Qubba, Pyramids, Nozha, Maadi, Aqouza, Imbaba, Dokky, etc. (from 19th century districts to 20th century ones). Rivalry between socio-economic classes was extreme, and the result was an instant heterogeneous city. The urbanization of Cairo of this period can be summarized in:

- The old notion of cultural homogenization the "melting pot" that has ever blended diverse cultures has been largely supplanted by advocacy of pluralism "the fruit salad".
- This period was termed: The urban decline (1950's-1970's)

When the socio-economic reform regime was initiated in 1981, and passing through privatization, the urban face of Cairo has changed and its peripheral has swollen because of the developmental projects of infra structure, roads and transportation, sewage and drainage, and a greedy reign of the local private sector and global investment resulting in a crux of deterioration in all fields. In the districts, an over-population has accompanied the economic inflation and has swept the remainder of any urban identity. Sharing the houses between more than one family became a common feature in many old exhausted districts. Moreover, new types of shelter were introduced; rooftops, boats, tin, cloth and leftover-material structures, kiosks, and even the pavements of streets. As for the squatters, they increased in number and in volume, crawling on the city surface, linking between one another and imposing themselves on the loose ends of the districts. Leading to a climax of Cairo’s urban and architectural enigma (2000+).

On the urban level, several studies in this domain have attempted to analyze the factors that have lead to these dramatic changes of Cairo urbanism. Conclusions of such studies revealed that the urban growth of Cairo is regarded as changeable, not developmental, representing the inability of locals of performing their original activities previously planned. The effects are political, economic, social, managerial, or urban-physical, or a bunch of all the preceding. The explanation can be summarized in the following points:

- The political variables dictate their influences on all aspects of urban life; allowing the emergence of new activities and uses that did not exist previously, demanding a new type of urban-cultural form to represent it.
- The economic variables form the base that enables the new ideologies to become tangible, guaranteeing the protection of change/development and supporting the newly evoked features.
- The social variables change the people's self-concepts of living in a certain place, and with certain life forms.
- Finally, the administrative variables –presented in laws, legislations and standards, the auditorial bodies that guarantee the accuracy or divergence of such laws and legislations. As for the features of change, they are either formal or conceptual. The formal change is

represented in the change in the urban fabric on the master plan, and the change in the visual features. As for the conceptual and ideological changes, they are represented in the change of land use, densities, capacity, and efficiency of services and infrastructures, transportation, or the change in human behavior from the everyday and face-to-face interactions, leading to a total behavioral morphosis.70

3.2 Modern Cairo's Architectural Shifts

It is hypothesized that the beginning of the urban change in Cairo goes back to the late forties of the twentieth century due to two external factors, which are the increase of the fluency of foreigners to Egypt, and WWII. Cairo remained attractive until the mid century with the break of the 1952 revolution. The epoch before the revolution is considered as the corner stone for the Cairene urban change, either its dimensional growth on the map, or its demographic-socio-economic change.

Therefore, a factor of the Cairene urban growth is preliminary due to the raise in number of foreigners in Egypt, attracted by the investment opportunities in the Capital and the big cities, until then, the concept of centralization was not applied. In addition to the change in number of internal immigrants from rural areas to work in the newly provoked opportunities. However, the number of Cairene residents did not indicate an over population. The increase in number of inhabitants was evenly distributed along the geographical map of Cairo, with respect to distribution of natural resources and the location of industries.

After WWII, the after-effects have resulted in an inflation in the land values and building costs as well as the wages of craftsmanship. Internal immigration then, constituted the first housing conundrum for the middle and low classes. The poor districts went from pathetic to miserable. For the first time in Egypt, cemeteries hosted living inhabitants and acted as housing areas. The number of Cairene inhabitants doubled in only ten years (1939-1949).

The metro project that has started in 1905 to link the capital downtown with the new suburb of Heliopolis has expanded to reach and link most of the city's districts. The increase in using motor private and transportation vehicles and the introduction of the bus as public transportation in 1935 in the newly paved urban roads have resulted in the expansion and maturity of the suburbs (Heliopolis 1905, Maadi and Hadeek El Gubba 1908, Dokki 1922). New urban suburbs were planned on modern aspects of urban design: Al Awkaif city, Mokkattam, New Helwan, and Nasr City. The older districts have also swelled with the break of the 1952 revolution. The epoch before the revolution is considered as the corner stone for the Cairene urban change, either its dimensional growth on the map, or its demographic-socio-economic change.

Cairene urban status was then described as spontaneous or 'improvised' or 'ad-hoc'. As a result, an unexpected deficiency occurred in the entire number and classification for all inhabitants' social classes. This deficiency was met by a large speedy construction movement all over Cairo like nowhere else in the world, even those deteriorated or destroyed as a result of WWII. On the other hand, a quick deterioration has spanned along the original old districts of the city because of over population, and lack of maintenance and renewal projects.

The 1952 revolution quickly laid hands on several private projects (nationalization), as means for the country's independence from long colonization. Centralization process was the government's fundamental regime has resulted in an unpredictable enlargement of the city master plan. The results of this regime is basically witnessed in the socioeconomic change of the Cairenes. The claim of eradication of the socioeconomic buffers has resulted in an allocation of the elite, and an advancement of the middle and lower middle classes, causing unsteadiness in the demographic map of Cairo. A door was then open wide in front of the rural immigrants, poor, and youngsters and unqualified as a socioeconomic class extensively working in the capital. Their percentage has much increased, living on the margins and the peripherals of the city, composing the early urban slums and squatter settlements.

In the late sixties and early seventies after the 1967 Arab-Israeli war, the same inflation of WWII was repeated and due to alike factors. However, the results were more intense because of the centralization and the migration of the canal cities habitants during the six years of war. The new regime of the open-door policy that has started after the 1973 victory has shifted the administrative orientation towards capitalism. Coinciding with the exploration of oil in the gulf countries has resulted in a new reconstruction of the social classes and urban configuration of the city. A shift in the formulation of the middle class was witnessed. Neaveau-riche constituted a new social class, which has contributed to a new urban irrelevancy in the new districts and suburbs with their comeback from oil countries for homing upgrade. Apart, was a vast investment movement empowered by the political decision, contributing to a tremendous inflation and the emergence of new residential districts with new housing cultures.

In the eighties, the gaps between socio-economic groups have widened and the demographic structure has mingled. The housing projects could not cope with the pace of the housing need, leading to an entire urban deterioration all over the city. The squatter settlements then were estimated as an 85% of the entire housing in Cairo. Blocks of flats in place of private villas, or adjacent to villas after parts of the gardens were sold.

In the early nineties, and after the political regime shifted its economy towards the privatization, the investment sector has swept like a flood, building its own residential
compounds outside the borders of the city. Creating opportunities for the building sector to flourish and the demand of the out-side-the city new residential compounds to increase, creating a new inflation in the land prices, building costs and craftsmanship wages. From retrospection, the demand for houses for the poor classes became merely a need for shelter, which has resulted in the swelling of the older squatter settlements and the development of newer ones.

As for the transformation of the twentieth century ‘modern’ districts to what can be described as repellent, is basically due to the urban mismanagement, the defiance of laws and legislations and the defacement of urban standards, with respect to criteria and ratios of solid to void, distribution of activities, the over-height, the denial of maintenance, deconstruction of older buildings and building new ones without any urban reference, raise in building and population densities with over pressures on the actual infra structure, lack of parking lots, disappearance of walkways, and, what we are suffering from currently, the exaggerated un-tolerable urban traffic jams, and, environmental and visual pollution and the loss of identity. As for the social structure, an undesired combination now dominates the entire urban districts of Cairo. Reflecting unease and dissatisfaction among heterogeneous user-groups. Differences in value systems and behavioral patterns seem to be the most prevailing problem. Lack of privacy, lack of sense of belonging are two negative aspects resulting of heterogeneity between individuals, and have resulted in the absence of the sense of community, solidarity and cooperation, leading to more deterioration of the built environment.

With this fragmentation and variety of urban images representing the different social groups, can one expect a unified or a collective identity to reflect in the environmental context, to verify a particular culture of place? I believe not. Consequently, if we have reached this agreement, then the answer to the research question on a Cairo particular cultural identity is indeed a true fallacy. Multi-layered and multi-faceted identities is the reality of Cairo throughout its entire history. Relating to any of Cairo identities is accepted: “Islamic Cairo”, “Modern Cairo”, “Old Cairo”, “Contemporary Cairo”, etc- as cultural conceptions not as geographical locations, without falling in the pit of generalizing an identity over the rest. Any reference to one of the identities should always be framed/specified within the context of the subject matter at hand.\footnote{Safey Eldeen, Heba, 2015. I Am My City: Rethinking Cairo as a Contended City. Proceedings of RealCorp’20: Plan Together, Right Now, Overall: From Vision to Reality for Vibrant Cities and Regions. Ghent, Belgium: May 2015}

If we were to frame a Cairene identity through which we can indicate globalization effects on its change or loss, it would take volumes to discuss. Moreover, a comprehensiveness of historic, political, economic, and social issues would be derivatives. However, and on casual basis, I argue that the status of Cairo features a total loss of any of its previously prescribed identities. I further argue that the intact Egyptian cultural scene is piteous. For over hundreds of years, Egypt has gone through flips of its entire systems structures, and as previously showcased, mocked. Except for only a few architects that have been able to strike the balance and introduce what can be argued as contemporary Egyptian architectural identity, a summary of the “loss of architectural identity” factors is pointed out as follows:\footnote{Giraud, Michel. (1994). Silhouette Urbaine: L'exemple du Caire. Institut d'Amenagement et d'Urbanisme de la region d'Ile-de-France.}

- Weak sense of belonging.
- Reign of the un-cultured capital.
- Tendency to follow the “western” other as icon and idol.
- Uncontrolled and unplanned growth of people and building industry.
- Centralization in Cairo and greater cities.
- Idle economy after a series of wars.
- Economic and social problems.
- Negative of the socialist regime and the nationalization process.
- The inflation of land value and the shift towards the verticality in buildings.
- Immigration from rural areas to the big cities.
- Lack or weakened building laws, rules and regulations.
- Shifting architectural education towards the western models and theories.
- Dominance of engineering and contracting over the architectural profession.
- Lack of aesthetics and beauty as values.
- Gap between architecture and art in the education and practice.
- Lack of criticism courses.
- Overall deterioration of the entire educational system.


Fig. 72: Drawing by architect Taher Said
3.3 Architectural Types

Pointing out that, Egyptian architecture, due to the varied environmental regions, and due to its long cultural and civil and civilized history, is indeed unique. This clarified three main architectural types on the overall built up area of Egypt, each expressive of its environment and society.

1. **Formal Traditional Architecture**: displaying the special attention architecture representing almost 10% of entire architecture in Egypt: Presents the flashy architecture of the elite or the rulers. Offered all financial and technical potentials. Influenced by the dominant political influences, as well as the religious and the imported influences. Sometimes exemplifies its environmental and/or beliefs appropriateness if the designer was aware and conscious, this architecture is taught within schools. It is the type that clarifies the successive styles.

2. **Public- Middle Class Architecture**: existing in the majority of cities and representing around 30% of the entire architecture in Egypt: Presents the architecture of the middle class, with lots of resemblances. Offered a lot of potentials. Temporarily influenced by imported political, artistic, scientific and economic factors. Sometimes exemplifies environmental appropriateness, in case the designer was aware of the architectural heritage imperatives and its culture. This architecture is taught in schools, and influenced by reciprocates.

3. **Dominant Popular Architecture**: can be described as the Egyptian under-soil water and represents around 60% of the entire Egyptian architecture. This type includes the informal areas and presents the architecture of the simple modest potentials. Emerges from the direct place culture spread among the regions, with the local material. Also found in the old parts of the old cities, with characteristics that continued along ages. Practiced through direct acquisition between the leader builder (mo‘alem) and associates and craftsmen on site, not within schools.

3.4 Cairo: The "Mental Image"

Cairo, knowing the city too well, in the words of Naguib Mahfouz, like meeting your beloved in old age, then was I to tell about her wrinkles, her bad breath and worse taste, and her unfortunate habit of shouting at servants? The city, is changing, and what it was changing through disturbed me. I felt increasingly estranged from what was becoming a harder, more impatient, less tolerant city of ugly new buildings, a place far removed from other Cairo's I had known. Crowding squeezes Cairenes out of their homes. There are precious few garden spaces, until a recent study of the city stated there were only five square inches of parkland per inhabitants, which is to say less than the area covered by the sole of one. The pressure of people touches every aspect of life in Cairo. It drives the price of land as high as $500 a square foot, making millionaires out of speculators while stifling youthful dreams of independence. It overburdens public services and so litters thoroughfares with uncollected waste, but it also limits crime by cluttering getaway routes. Crowds draw in business, creating a rich and varied market that generated money to embellish the city with the facilities and monuments which sustain its sense of greatness. But this forces compromises: to relieve traffic, concrete flyovers brush past medieval walls; to provide housing, apartment buildings supplant gardens. Rather than standing live flamingos, Cairenes take themselves out to the streets. They turn sidewalks and roadways into zones of commerce and entertainment, converting them piecemeal into playgrounds and restaurants and open-air mosques. The street is where some 2 million homeless sleep, and where all the people of Cairo engage in combat with the city’s millions motor vehicles and thousands of donkey carts. The crowding makes for noise and stress, pollution and social tension. Cairenes complain, yet secretly, complicitously, we are by and large addicted to living cheek by jowl with a never-ending spectacle. Combined with the dust that blows off the desert, heavy use gives the city a cosy patina of age. It burnished knobs and handrails to greasy smoothness, cracks tiles into shards, and tint wallst o a uniform dun color that ignites into gold in the soft, slanting light of late afternoon. Sidewalks buckle under the weight of feet. Staircases in grand beauxarts buildingd sag, their marble steps eroded into slippery hollows. Advertising tattoos everysurface with Arabic’s elegant squiggle. Neon spangles rooftops, mingling with antennae and the upturned domes of satellite dishes. The air itself is saturated with the things of man. Deep-frying oil and fresh mint overlie the musk of freshly slaked dust. The human urge to be noticed floods the completely sound spectrum noise, from “Allahu Akbar” blasting off every mosque megaphone to insults hurled from the other end of the...
challenges therefore needs a humanistic design manifesto that advises some strategies for achieving its urban calmness. On top of such strategies is to break down bigness. A focus on the present is to prioritise particular areas, spots or locals, rather than targeting wider geographical areas, scale of homogeneous areas, small enough to allow people to be aware of others. Telling the truth about politics and economy, and their consequences on the cultural attributes and social implications should be discussed with city dwellers. Learning to listen to people would thus prioritize feelings over forms (form follows feeling) and would guarantee social inclusion, neighbourhood scale-suitability and a strengthened sense of community; and hence a strategic of people empowerment would be endorsed. Fighting for environmental justice is yet another determinant component of this manifesto. Endorsement of public transportation and freeing pedestrians, together with sufficient connected public spaces are strategies that will have positive outcomes for social cohesion, lessening the behavioural gaps between Cairo subcultures, reducing environmental pollution, and helps noise alleviation. That is to say, most strategies are centred on extending the design process, and abolishing physical monopolies over values and ethics.

For the case of today’s Cairo, drawing-up any values or visions for its contented future compiles an emphasis on its heritage conservation. By heritage I mean both tangible and intangible for what both hold of values. On one hand, intangible heritage is defined as embracing all forms of traditional and popular culture, i.e. collective works created in a given community and based on traditions. It is transmitted from generation to another, constantly recreated by communities and groups in response to their environment, their interaction with nature and their history and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity. It demarks usage and societal needs for life, including knowledge and skills to be enhanced and passed on from one generation to another. It demarks traces of human achievements through time from the ancient archaeological ruins to the hydraulic lifts, from simple country cottage to vast urban zones. It is everything created as the product of human intelligence and creativity, which allows and intangible heritage is all the surviving physical values and social values. On the other hand, tangible heritage is all the surviving physical traces of human achievements through time from the ancient archaeological ruins to the hydraulic lifts, from simple country cottage to vast urban zones. It is everything created as the product of human intelligence and creativity, which allows and intangible heritage is all the surviving physical traces of human achievements through time from the ancient archaeological ruins to the hydraulic lifts, from simple country cottage to vast urban zones. It is everything created as the product of human intelligence and creativity, which allows for knowledge and skills to be enhanced and passed on from one person to another and from one generation to the next. It demarks usage and societal needs for life, including economic values, urban values and function values. In that sense, drawing-up Cairo’s developmental objectives are to include community renewal, revitalization and continuity, education, identity, nationalism and appreciation of the past, pleasure, recreation and increased quality of life, diversity tourism, profit and economic development.

3.5 Designing in Cairo Today

The question of designing in Cairo today and developing a contemporary architecture identity is mainly concerned with the enhancement of quality of life of the residents rather that its urban form, size or area. According to Jan Gehl, life of people come first, then comes spaces, and then comes buildings, the other way around never works. This means that some values should be implanted for any planning or design of our city centered. Such values revolve around the human, such that human life of the Cairenes can continue indefinitely, humans of Cairo can flourish, Cairene multiple/various cultures can develop. This calls for a vision based on the following considerations:

- A strict connection with the social dimension should be enforced, namely to the relationships among the different groups and cultures.
- These relationships are based on the idea that the welfare of the individual in the community is linked to the welfare of the system itself.
- Multiplicity and differentiation should not build invisible walls in human life. Meanwhile conflicts, individuality, isolation, and plurality should be replaced by concepts of cooperation, and participation.

The vision for a Cairenene Contemporary Architectural Identity would then be argued as pivoted around the enhancement of quality of life of its humans; bringing together different people in self-sufficient settings, with variety of activities and amenities that guarantees safety, proximity, accessibility and interest for all. The solution to Cairo’s urban and architectural

It is suggested that designing in Cairo today requires referring to global contemporary urban and architectural concepts, about liveable, sustainable, happy and smart architecture as follows:

<table>
<thead>
<tr>
<th>Liveable referring to the people</th>
<th>Sustainable referring to the place</th>
<th>Happy referring to the social context</th>
<th>Smart referring to the governance system</th>
</tr>
</thead>
<tbody>
<tr>
<td>comfort, health, safety, well-being, walkability, provision of recreational facilities, accessibility, ...</td>
<td>environmental-responsibility, connectivity, diversity, access to employment, productivity, resilience, ...</td>
<td>community engagement, custodianship, living-affordability, cooperation, inclusion, ...</td>
<td>leadership, participation, productivity, planning, management, monitoring, ...</td>
</tr>
</tbody>
</table>

### Design Issues to be addressed

- comfort, health, safety, well-being, walkability, provision of recreational facilities, accessibility, ...
- environmental-responsibility, connectivity, diversity, access to employment, productivity, resilience, ...
- community engagement, custodianship, living-affordability, cooperation, inclusion, ...
- leadership, participation, productivity, planning, management, monitoring, ...

### 3.6 From Theory to Reality

Based on the preceding, many questions where then evoked: What project to choose for achieving the goal? Which area to choose in Cairo for the project? Why would that particular project be successful? And how should it be designed?

So the criteria for selecting the building type and its area were determined and driven by:

- A place and an activity that would revive the multi-cultured Cairo, creating a place for a community renewal while revitalizing and appreciating past cultural tangible and intangible heritage. Observing Cairo map, the answer to the question was there: the Azbakiyya area, for what it holds of opportunities and inspirations.

- A central location on Cairo map (accessibility).
- A Place with history (Al Azbakiyya pond in Medieval times or little Venice in Cairo, then Al Azbakiyya garden in Modern Cairo, the socio-cultural and artistic beaker of “Paris of the East”, then a pivotal transportation and trading locality in contemporary Cairo).

Hence, rejuvenating Al Azbakiyya promenading pond with its green surrounding in the midst of the crowded urban fabric, while creating a musical center almost in the same spot of the burnt Khedivial Opera house, are sought as the most suitable activities to offer to the entire Cairo society.

![Fig. 73: Location of Azbakiyya and its relationship with main surrounding roads, transportation spots, and metro stops](image)

![Fig. 74: Azbakiyya Pond](image)

![Fig. 75: Azbakiyya Park](image)

![Fig. 76: Azbakiyya Today](image)