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Egyptian Historical Parks, Authenticity vs. Change in Cairo’s Cultural Landscapes

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Abstract

As a historically intense country, Egypt’s built environment has always been the focus of plentiful urban research. However, the natural component in the urban fabric of Egyptian cities has been undermined and understudied in between all the numerous ideas and data. In a historical city like Cairo, layers of history are illustrated in its parks and gardens. Left unearthed and neglected, these vital spaces are subject to negative change and decay under the pressure of land use demands, among various other challenges. Many of Cairo’s parks and gardens date back to the 19th and 20th century, containing endless gestures from the cultural essence of this time era in their design. This paper discusses ten public parks and gardens in Cairo founded in the 19th and 20th centuries, and survive to our present day (whether completely or partially). Viewing the initial design and development of these parks in comparison with their current state is rather intriguing to investigate. These historical parks and gardens are worthy of identification for preservation. With resourceful and directed management, these spaces can dramatically change the view of Cairo as a suffocating dense urban tissue, to a more perforated and engaging urban experience for its community.

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1. Introduction

Historical parks and gardens are a nonnegotiable part of a city’s memory, culture, history and future. They are widely considered to be urban as well as architectural jewels worthy of recognition and conservation. However, in a historically rich city like Cairo, such a fact does not come highly recommended, and the city’s chronicles lying in its

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gardens and parks are deteriorating and fading away under pressures such as low maintenance, absence of a strategic plan for conservation, and time. This is uncompensated by any efforts from either the community or the municipality to save such historical places, yet it's worth mentioning that there are several attempts -though small-scaled- to raise awareness and mobilize the community towards the issue. Even though the dispute of appropriate management of historical landscapes is a vital issue pursued globally with numerous efforts with an inclusive vision for the protection and conservation of not just buildings, but rather whole settings (Lipský and Romportl 2007), this issue remains poorly tackled in Egypt, especially considering gardens and parks. This research focuses on shedding the light on the most important historically valuable gardens and parks in Cairo, established in the 19th and 20th centuries, and how the origination of these gardens versus their current status, passing by all the transitions and alterations. It is quite interesting to investigate and identify these parks and gardens as growing (or rather aging) entities that are affected and mostly pressured by urban growth of the city around them.

Nomenclature

CAPMAS	Central Agency for Public Mobilization and Statistics
CLR	Cultural Landscape Report
QoL	Quality of Life

2. CAIRO - Contextual Analysis

As the capital city of Egypt, Cairo the home of seventeen million people and has an approximate portion of 25% of Egypt's population (Nippon Koei Co. Ltd and Katahira & Engineers International 2008), it is also the economic engine of Egypt and the largest city in both Egypt and the whole continent of Africa (Sims 2012). The layers of history carried within each and every archaic part of Cairo have been proven manifold by nearly all researchers and pioneers in the fields of Architecture, Archaeology, Egyptology and other relevant disciplines. As described by Nezar AlSayyad, "the city of Cairo has been more than twenty-five centuries in the making" (AlSayyad 2011). This adds to its contemporary importance to the Egyptian community in numerous ways. These reasons and many more accentuate choosing Cairo for this research that represents all that research is trying to implement.

Cairo is a continuously expanding city. For this reason, it is vital to identify a boundary and scope of study on an urban scale for the sake of this research. Foreseeably, this scope includes the historical part of the city, which indicates the area where all the historical parks and gardens belong. As well as this, this scope should be strictly speaking "formal" in terms of legislative and city approved part of the city. According to David Sims, the urban context of Cairo until 1950 as a whole was considered completely formal, including the old city center, which extended over a thousand years, with its own rules and legislative frameworks, which qualifies as firmly formal (Sims 2012). The scope of study is referenced from Sims' image and division of Cairo city. "Central Greater Cairo", as described by Sims, is the proper border of the old and formal part of Cairo building up until 1950. This area includes all Cairo governorate, Giza city (part of Giza governorate), and Shubra Al-Khayma city (part of Qalyubiya governorate). These areas not only represent the older part of the city, but also the main zone of metropolitan agglomeration in terms of the urban sector in greater Cairo according to the 2006 census of the Central Agency for Public Mobilization and Statistics (CAPMAS) (Sims 2012).

3. Overview of Historical Parks and Gardens in Cairo

To assemble a coherent and comprehensive inventory of all urban green spaces classified as historically significant cultural landscapes in Cairo, there was a process of reviewing and identifying these historical spaces, taking into consideration various indicators and resources in order to make sure that the list is reliable and inclusive of all parks in this category. Some parks were more "famous" than others in the sense of being mentioned (and sometimes studied)

in different resources, by researchers or municipal/independent organizations. Others that were not as lucky had less attention and consequently less information and/or mention in the scope of parks and gardens with history, which in some cases reflects on the deterioration rate of a given park or garden.

As the capital city, the parks and gardens that are most known and studied in Cairo are generally those most used by citizens, and/or those that relate to a well-known place or contemporary event. This doesn't necessarily reflect on the true value or historical significance of the park as a constituent of the heritage of the city. For example, Azhar Park is considered the most famous park in Cairo (and arguably in all Egypt), even though its lifetime doesn't exceed 20 years in total (AlSayyad 2011). Despite the fact that Azhar park is undeniably the most successfully managed and community engaging park in Egypt, it is not a historical cultural landscape considering the definition of the expression. As Cairo historians all agree, the land on which the park was constructed has been used from half a millennium as the city's garbage dump (AlSayyad 2011), and for this criterion, Azhar Park is excluded from this research as per the choice measurements.

Other parks however are given less attention, management resources and funding, while in fact they carry layers of the city's heritage and culture. These include but are not limited to Azbakiya garden, Orman botanical garden, Giza Zoo, and many more gardens and parks that are more than 200 years old in average. Examples like these parks are those considered for the means of this research, emphasizing the importance of the merge between cultural and historical significance with user enjoyment and contemporary use and management.

3.1. Indicators for Choice of Parks and Gardens

For the sake of fair comparison and receiving precise results for the theoretical proposal, the choice of gardens/parks for this study was based on the following factors:

- **Geographical Factor**

The first is the geographical existence in the selected cities and urban boundary chosen for the study. Historical parks that were geographically outside the scope of study were excluded from the research.

- **Historical Significance:**

This related to the foundation date of the park, as well as its relation to historical events, significant historical figures as well as its development over time. Contemporary gardens and parks such as Azhar Park were excluded from study.

- **Current Existent Park:**

The last factor for choosing the studied parks is that the park still presently exists, even if only a small part of the garden survives (such as the Azbakiya garden in Cairo).

- **Public Use:**

All the chosen parks are for public use. Even if some are currently closed for renovation or has low visitation rate, it is still included in the study. Sites excluded from the study according to this factor are parks that are restricted to the public due to its current and future land use. Accordingly, Qubba Palace garden for instance was excluded from the study, as it is currently a presidential palace, which means that it is restricted entrance for the public in the present and probably in the future.

3.2. Studied Historical Parks and Gardens

The list of historical parks and gardens in Cairo has been gathered from different resources that include municipality and government data, independent researches and theses, as well as descriptive books of Cairo's urban and architectural nature from different perspectives. The list is described as in the following figure.

Table 1. Historical pubic parks and gardens in Cairo

	Park/Garden	Year Founded
1	Orman Botanic Garden	1873
2	Giza Zoo (Formerly: Giza Palace Gardens)	1890
3	Aquarium Grotto Garden	1871
4	Azbakiya Garden	1872
5	Andalus Park + Horiya Garden, Zamalek	1929 - 1935
6	Merry Land	1910 (1960)
7	Zohria Trial Gardens, Zamalek	1868
8	Shubra Garden	1809
9	Prince Mohamed Ali Palace Garden (Manial)	1899- 1926
10	Baron Palace Garden	1907-1911

4. Historical Parks and Gardens in Cairo

“Gardens and landscapes of the past serve as an endless source of possibility and inspiration”
(Boults and Sullivan 2010).

In terms of garden design styles and directions in Egypt in general and in Cairo in specific, the Egyptian parks and gardens that survived and continued to exist within the urban growth of modern cities date back to specific time periods. Mostly, gardens and parks as defined by contemporary standards, were designed and created in Egyptian cities starting the late 18th century all through the mid 20th century, which coincides with the era of Muhammed Ali Pasha and his successors till the end of Royal ruling in Egypt. It is safely evident that this time period has shaped a lot of the gardens and parks that we see today in the major Egyptian cities. The design principles that governed most of these designs were influenced by French ideologies since the most renowned landscape designers and master gardeners in Egypt at the time were Frenchmen hired by the Khedive to design the palaces and their surrounding areas and gardens (Wilkinson 2014).

For this reason, it is quite important to review the design principles and attributes affiliated to the garden design of the 19th century, in order to analyze and understand the ideologies behind most of the gardens in Egypt today, and how this shall affect approaching these gardens and parks.

4.1. Orman Botanical Garden

Orman Garden was originally a part of the Giza Gardens, designed by Des Champs and executed by Delchevalerie starting 1868. In 1869, Delchevalerie recorded that there were two palaces; one in the center and one in the south of the grounds; Salamlik and Haramlek. Khedive Ismail bought this estate from one of his sons, altered and re-built the palace during his reign. The Salamlik garden was constructed according to the design of Barillet Deschamps, but was constructed by Delchevalerie due to Des-Champs's death. Orman Garden was established in 1873, to supply the Khedivial palaces with vegetables and fruits introduced from the Sicily Island (Rim Hamdy et al. 2007; Delchevalerie 1899). In 1919, Orman garden was converted by the Ministry of Agriculture into a botanical garden known at that time as the “Lemon Garden”, with a total area reaching 58 Feddans. Recently, the area of the garden has been diminished to 28 Feddans, as 28 other Feddans were given to the Zoo garden, Cairo University and its street, Authority of the Survey of Egypt and the Giza Security Department (Rim Hamdy et al. 2007).

The development of the Layout and footprint in reference to the original area of the Giza palace is illustrated in the following figures.



Fig. 1. Historical map showing Giza gardens before official design of Orman Garden and Zoo (Delchevalerie 1899).



Fig. 2. Historical map showing the Giza gardens before splitting into the Zoo and the Orman gardens (Survey of Egypt 1929) (Scale 1/10.000).



Fig. 3. Google Earth layout of Orman Garden and Giza Zoo, 2014.

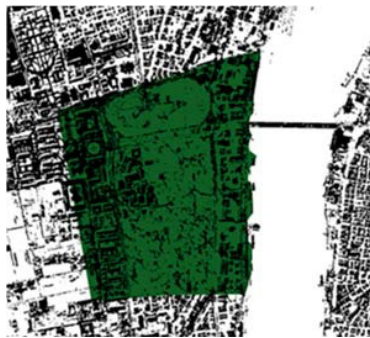


Fig. 4. Original Area and Footprint of Giza Palace (Orman + Zoo Gardens). (By: Author)



Fig. 5. Footprint of Orman Garden starting 1919. (By: Author)



Fig. 6. Current footprint of Orman Garden. (By: Author)

As for the characteristics of the Orman garden, its topographical terrain is mostly flat, excluding small inclinations along the sides of the artificial lake between the bridges crossing the lake (Omar 1999). The garden includes the richest collection of plant species as compared to all other botanical gardens in Cairo (Rs Hamdy et al. 2007). In reference to the land use and activities, botanical plantation experimentation, as well as public entertainment, are the most common uses of the garden. The main cultural event that takes place in Orman garden is the annual Spring Planting Exhibition that is highly known and visited by the neighboring community.

The garden contains a few buildings, which are; the administration building, cafeteria building, and public toilets and amenities. The design of these buildings is quite simple and might date to the mid 20th century or later. The most historically valuable elements in the garden are landscape features such as the main steel gate and outer steel fence, as well as the marble fountain at the vista of the entrance. Other elements were replaced along the years, such as the bridges crossing the artificial lake. The original design was naturally arranged wooden logs, while the current design features systematic modern cut wooden blocks representing the mass production style of the era of communism in Egypt. It is also noticeable that the artificial lake's source of water is not renewed periodically, thus the water is stale and green (posing both aesthetic and health concerns), in addition to the waste dumped into the lake on social events like the annual spring exhibition.



Fig. 7. Original vs. current status of the Orman Garden

Left: Original Bridge in 1945 (Source: <http://www.masrmotors.com/vb/showthread.php?t=110368&page=51>).

Middle: Current Bridge and handrail design (Source: Author, 2014)

Right: Waste dumping in the artificial lake during Spring Exhibition (Source: Author, 2014)

4.2. Giza Zoo (Formerly: Giza Palace Gardens)

Giza Zoo was also a part of the Giza Gardens, designed by Deschamps and executed by Delchevalerie starting 1868, with the two palaces; Salamlik and Haramlek. The Salamlik garden was constructed according to the design of Barillet Deschamps, but was constructed by Delchevalerie due to Des-Champs's death. In 1875, the Giza Palace construction was finished, but not the garden. The completion of the garden construction was entrusted to Delchevalerie, along with European assistants and the chief Egyptian native gardener Ibrahim Hamooda (Rs Hamdy et al. 2007; Wilkinson 2014).

The location of the Zoo was formerly occupied by a small house and garden that belonged to Saeed Pasha, which were demolished for the sake of Khedive Ismail's Giza Palace (Rs Hamdy et al. 2007). In 1890, 50 Feddans of the 200 Feddans of the Giza Palace gardens were dedicated for establishing the Zoo (Rs Hamdy et al. 2007; Flower 1903). In 1938, Cairo University Street was constructed, hence taking 29 Feddans from Orman Garden to be added to the Zoo (Rs Hamdy et al. 2007; El-Tarabily 2003). Part of the current-day Zoo was the Haremlik garden. Traces of the original design still exist.



Fig. 8. Original Area and Footprint of Giza Palace (Orman + Zoo Gardens). (By: Author)



Fig. 9. Footprint of the Zoological Garden starting 1919. (By: Author)



Fig. 10. Current footprint of Giza Zoo. (By: Author)

The original topography of the Zoo contains simple slopes, which become slightly steep at the area adjacent to the Nile bank. However, there are significant artificial level differences utilized in the Zoo design through steps and ramps. Areas with high level difference are emphasized by connecting bridges (Omar 1999). The water features and artificial

lakes are not directly related to the Nile River (which is quite near by), hence resulting in current maintenance and water renewal issues, which in turn lead to water pollution and negative aesthetic image.

The Zoo consists of 70% green areas (Omar 1999). The function that occupies most area (besides green open spaces) is the areas for animal habitats. These differ in shape, treatment and design according to animals' requirements. The Zoo contains more than 30 permanent built structures, and more than 20 of which are historical buildings or at least carry a historical value. These comprise different type of functions including: *buildings* such as VIP rest house (1949), Zoological Museum (1914), Administration Building (1898); *Entertainment structures* such as the Japanese Kiosk (1899), the Tea and Marble Islands, Candle Grotto (approx.. 1869) and 3 Indian-style wooden Pergolas; *Original animal habitat structures* like the Elephant House (1901) and Dear House (1896); as well as *designed structures* such as the suspended steel bridge designed by Gustave Eiffel in 1911. There are also public services like WCs, as well as entertainment services like the 3D cinema building (Giza Zoo Garden Administration 2014). The original Main gate, constructed for the Giza Palace in the 19th Century is not standing in front of the Egyptian Museum in Tahrir. The current Main gate was placed in 1936 (Wilkinson 2014).



Fig. 11. Some Historical Structures in the Giza Zoo

From Left: *a. The Suspended Bridge* by Gustave Eiffel - 1911 (Source: <https://www.facebook.com/media/set/?set=a.798290606868888.1073741885.262242883806999&type=3> , 2014);

b. The Japanese Kiosk - 1899 (Source: <https://www.facebook.com/media/set/?set=a.798290606868888.1073741885.262242883806999&type=3> , 2014);

c. Wooden Pergolas (Indian Style) with onion shaped ribbed wooden domes (Source: Author, 2014);

d. Elephant House – 1901 (Source: <https://travel.maktoob.com/vb/travel213759/> , 2014)

The pattern and frequency of usage of the Zoo can be described as a “three-tiered ladder of usage” (weekday, weekend , and festival day) representing a gradient of frequentation in time (Battesti 2006). During the highest season for the Zoo (Eid El Fetr, following Ramadan), large numbers of inhabitants visit the Zoo. Microbuses and packed carts discharge young boys (from six years of age) into the zoo, without parental control. The Zoo becomes a vast playground. Many families also come to stroll there: married couples, fiancés or the not-yet-engaged, alone or circulating among many. An entire class of the city’s inhabitants seems to show up with no precautions whatsoever (Battesti 2006).

In reference to the changes that came over the different elements of the Zoo, it’s worth mentioning that the outer fence is not the original one, yet it is respectively old since it dates back to at least 1938 with the re-division of Orman and Giza Zoo). As well as this, the design of the bridges is original, each representing a certain trend/style. The flooring materials and landscape furniture treatments are mostly original, however, they are worn out and decaying, with no or little maintenance. The Zoo contains various seating designs fixed into the ground. They all date back to the 19th or early 20th Centuries. However, they also suffer the decay and wearing effect over time. In general, the Zoo management has altered some of the landscape furniture over time, with less than professional or functional objective. The changed elements are probably deserted and not used by the public. Some changes are left unfinished, thus not satisfying its original function nor performing a new one.



Fig. 12. The condition of various elements in Giza Zoo today

Left: Poor Maintenance of plantations and over-cutting trees (Source: Author, 2014).

Middle: Path flooring 2007 vs. 2014. The design is original, dating back to the 19th C. Material: Black stone flags imported from Trieste. Technique: Arabesque and Roman Mosaic design. Current Condition: design barely visible (Source: Author).

Right: Original design of built-in seatings. Material: Masonry. Condition: Medium and needs maintenance. (Source: Author, 2014)

4.3. Aquarium Grotto Garden

The Aquarium Grotto garden was created in 1871 by well known rockery-makers from Paris; Combaz and Dumilieu. In the early 1900's, Captain Stanley Flower constructed the Fishes Garden. He added aquariums in the old grottos of the garden. The Grotto is one of the only gardens created in the 19th century that was actually designed to be a public park (Rs Hamdy et al. 2007). The Grotto became home of a rare collection of African fish and reptiles, inhabited in 24 especially constructed water tanks (Rs Hamdy et al. 2007; CairoScene 2014).

The construction rockery technique used by Combaz to imitate stalactites was first to make sure of the firmness of the blocks by fixing in the vault pieces of iron sticking out in specific lengths. These rods were joined together at an angle making a pyramid, and were connected by a mesh of iron wire into which liquid cement was injected by means of a pump, layer by layer, until a homogeneous block was formed. Rock-workers used colors to finish the surface of the cement with which they lined their grottoes. The colors were made from iron and copper oxide and red and yellow ochre.

The Grotto is one of the lucky gardens that didn't lose part of its area to urban growth. It's original 10 Feddans area still stands till today. However, its condition has worsened over the years. It has been closed for the past few years for renovations and maintenance.



Fig. 13. 1910 Map of Aquarium Grotto. (Source: <http://www.egy.com/zamalek/96-02-10.php>)



Fig. 14. 1920s Map of Aquarium Grotto. (Source: <http://www.egy.com/zamalek/96-02-10.php>)



Fig. 15. Google Earth Imagery 2014

The Grotto was a well-known place for entertainment and romantic outings. It was even featured in various movies in the 20th century for its unique scenery and exceptional aesthetic qualities.



Fig. 16. Aquarium Grotto Highlights.

Left: Rocky-nature featured design of the Grotto, surrounded by Pine, Casuarina and Palm trees.

Middle: Fish tanks installed into rocky walls (original design from early 1900s).

Right: The Grotto was home for romantic movies and dating in the 20th Century (Movie: *El Hob Leh Ahkam*, 1956).

4.4. Azbakiya Garden

The site of Azbakeya dates back to old Cairo in the 15th Century. Before 1459, the area was an empty land with two mausoleum buildings, then it was linked to Fom-Al-Khaleeg stream which required a crossing “kantara” to be established. Seats (or: “dekkak”) were provided for the new Kantara, which was the reason behind naming it: “Kantaret kom el dekkak”. In 1459, Al Mue’z Al Atabiki Azbak started establishing halls and houses the area. Azbak dug a lake in the area in 1475 (Rs Hamdy et al. 2007). The lake was one of the biggest in Cairo at the time, second only to Berket El-Feil (El Kadi 2012). Azbak gave care to the lake, as it was recently supplied by water from Al-Nasery stream and was strongly defined by a pavement around its sides.

Starting 1480, these transformations in the area made the site an attraction point for the rich to build their palaces. Thus, the area started its growth and became a separate district, which encouraged Azbak to continue providing it with services like a great mosque, baths, bakeries...etc. The area was named after Azbak after his death and known as Al-Azbakia city. Unfortunately, Azbak’s death was a strong reason for its deterioration thereafter. The deterioration of Al Azbakia continued after the French Expedition 1798 -1801, whereas some of the mosques in the area were destroyed. After the departure of the French Expedition, in 1805, Egyptians went to Al Azbakia square to support

Muhammed Ali as the ruler of Egypt instead of the Ottoman khilafa. Thus, Muhammed Ali transformed the center of authority of Egypt to this area. He started constructing a wall surrounding the area to preserve it from flood, and a canal was dug on the external side of this wall to keep the water supply to Azbakiya Lake during dry months (El Kadi 2012).

It was in the reign of Khedive Ismail that Azbakiya was drained and a garden was established in its place (El Kadi 2012). The Khedive instructed Barillet Deschamps to design the Azbakiya garden on the style of Parisian gardens. Hence, the Azbakiya garden resembled the octagonal shape of Parc Monceau in Paris (Andariah 1933; Rs Hamdy et al. 2007) with its 4 gates. The park was open to the public in 1872 (Rs Hamdy et al. 2007). The Azbakiya garden contained various landmarks, including an artificial grotto with water falls, a small cultivated mountain, a marble fountain decorated with botanical motifs, from which the water would flow in a short canal ending with a small lake in the garden. There was also a music kiosk (Rs Hamdy et al. 2007). It's worth mentioning that the area of Azbakiya has been reduced over time in a rather disturbing manner. The original area of Azbakeya lake was about 45 Feddans. When it was reconstructed into a park, its area was reduced to 20 Feddans. During the 20th C. century Azbakiya garden has been (and still is) loosing area to buildings, construction projects, and lately the new metro line construction. Its current area in 2014 is only 4 Feddans. As per the figure below, it is evident that the Azbakiya garden lost more than 80% of its original area to urban developments and buildings around it.

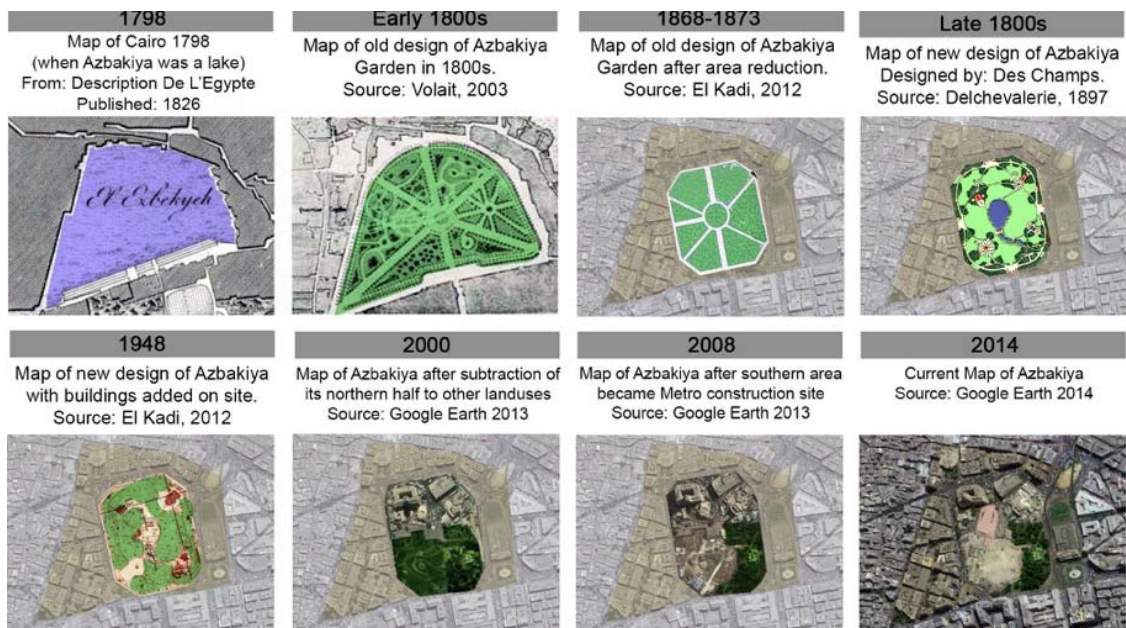


Fig. 17. Layout development and area loss from Azbakiya Garden
(Source: (El Kadi 2012), developed by Author)



Fig. 18. Historical Scenery of Azbakiya Garden over different time periods

Left: Azbakiya Lake in the late 1700s

Middle: Azbakiya Garden in 1870

Right: Azbakiya Garden Aerial view in 1904

4.5. Andalus + Horiya Gardens

The borderline of Zamalek facing Kasr ELNII Bridge was all designed to be woodsy gardens for the Gezira Palace in the 19th century. The Andalus and Horiya Gardens are basically 2 parts of the same garden, split by the bridge and the statue of Saad Zaghloul (ElShahed 2011). Andalus Garden was designed and opened in 1935 by Mohamed Zul Faqqar during the reign of King Fouad I. Its design was meant to imitate Andalusian gardens at the time (Mahran 2012). Andalus Garden is known for its romantic memories, as many romance movies from the 1950s and 60s were shot there, as well as musical concerts of Abdel-Halim Hafez, Farid ElAtrash and Mohamed Fawzy. Fairuz was the last to perform in Andalus Garden. Andalus Garden consists of 2 parts, the South part (Arabian Eden or Al-Ferdaws Al-Arabeya) and the Northern part (Pharonic garden) (Mahran 2012).

The Horiya Garden was primarily called the Kubri ElGezira Garden. It was expanded in the 1950s northward along the Nile. The Garden became more adorned by statues and busts of Egyptian and South American nationalist figures, most probably all the work of Mahmoud Mukhtar the famous Egyptian Sculptor whose museum was built in 1962 in the park. The museum is now separated from the park and has its own entrance from Al-Tahrir Street directly opposite the old Museum of Egyptian Civilization in the opera complex (ElShahed 2011).

Both Andalus and Horiya Gardens are in good shape today. They are being maintained and in good condition. However, there is no major public attraction towards these parks. The number of visitors is not much, and nearly no public or cultural events take place in these parks anymore. It is worth mentioning that the Horiya Garden is now nearly one third of its original area, as part of it (one third) became the Cairo Club, and another third became occupied by military police (ElShahed 2011).



Fig. 19. Horeya Garden. Statue of Ahmed Shawki dated 1960 (Author, 2014)



Fig. 20. Map of Zamalek in 1933
By: Alexander Nicohosoff
Original Scale: 1:15 000
Published by: Arts Graphiques

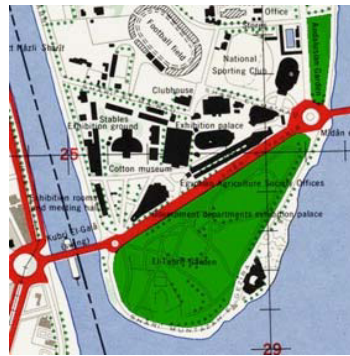


Fig. 21. Map of Zamalek in 1958
By: Army Map Service,
US Army
Original Scale: 1:10 000



Fig. 22. Google Earth Imagery
Zamalek 2014

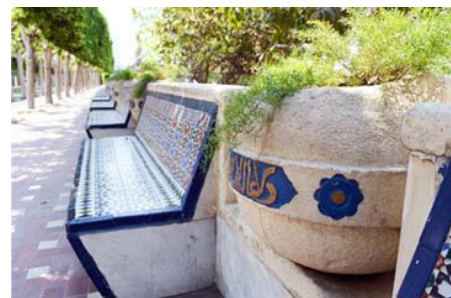


Fig. 23. Highlights from Andalus Garden in their current condition

Left: Arabic Eden in Andalus garden. Artificial Leveling (Author, 2014)

Middle: Fountain at rare end of the Arabic Eden garden. Andalusian design (Author, 2014)

Right: Arabic Eden in Andalus garden. Built-in seatings with mosaic Andalusian design (Author, 2014)

4.6. Merry Land

The Merry land plot was originally used as a horse racing club and track (Hippodrome) between 1910 and 1911. This racing track was one of the various luxurious entertainment facilities created to attract the elite to the newly constructed Heliopolis in the early 1900s (Louche, Borgne, and Pradal 2005). In addition to the horse racing events, the hippodrome was used for holding aviation celebrations as well. In 1960, the Hippodrome was transformed to Merry Land Park. During reconstruction, the old track stands area was reused for the newly established Granada Cinema at the time (Louche, Borgne, and Pradal 2005). Those stands are currently abandoned. In the redesign of the Hippodrome to be a park in 1960, more than half of its area was lost to other land uses (mainly residential units, streets, and commercial).

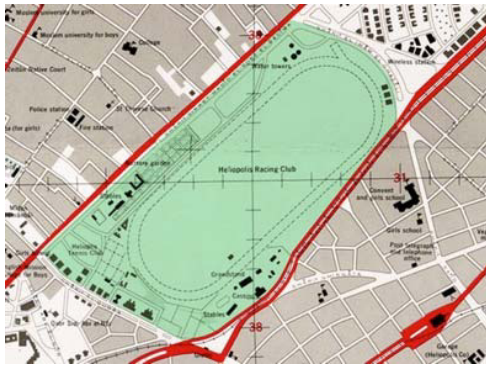


Fig. 24. Map of Heliopolis in 1958
By: Army Map Service, US Army
Original Scale: 1:10 000



Fig. 25. Google Earth Imagery, 2014.



Fig. 26. The Hippodrome status in the early 20th century vs. its current condition

Left: Hippodrome in the 1930s

Right: Abandoned Hippodrome stands in 2014

4.7. Zohria Trial Gardens

The island of Gezira Boulak contained palaces and gardens for Mohamed Ali Pasha and his descendants since the early 19th C (1805 and later on). When Khedive Ismail became the ruler of Egypt, he rebuilt and refurnished his grandfather's Gezira palace facing the water to match the style in France back then. For the garden and park, he employed Barillet-Deschamps and a team of gardeners from Paris (Wilkinson 2014). Little information survived about the style of the original gardens dated in the reign of Mohammed Ali, and his son, Ibrahim Pasha. A plan of 1858 shows a rectangular enclosure with a round point at the center of what are probably avenues of trees (Wilkinson 2014).

The Zohriya (in Arabic= Vase or flower vessel) garden was established in the southern side of the Gezira Island in order to supply the Khedivial palaces and nurseries with sufficient plants and flowers. In 1917 this garden was affiliated to the Ministry of Agriculture to be a station for acclimatization and propagation of plants as well as a place for horticultural exhibitions. The garden is divided into six quarters: the Mango, the Quercus, the Cupressus, the Cassia, the Chorisia and the administration. Its current area has been reduced from 49 Feddans to only eight Feddans. It contains 13 green houses for plant acclimatization, eleven of which date back to the time of its establishment with many coral reefs inside (Rim Hamdy et al. 2007).



Fig. 27. Map of Zamalek in the 1930s

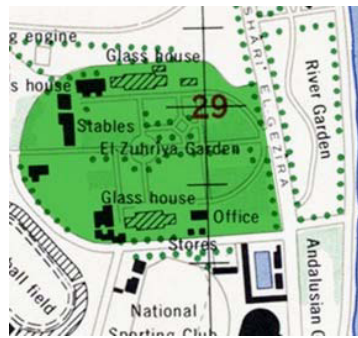


Fig. 28. Map of Zamalek in 1958
By: Army Map Service, US
Army
Original Scale: 1:10 000



Fig. 29. Google Earth Map of Zamalek 2014



Fig. 30. Highlights from Zohriya Garden in their current condition

Left: Aerial view of the garden showing the street splitting the garden, the focal point in the southern part of the garden, and heavy vegetation of part of the garden near to the Nile. However, the original design is worn out from the current image of the garden.

Middle: Currently the Zohriya Garden is split with a street in the middle.

Right: Old trees that used to be inside the garden are now splitting the street, as they are too big to be cut down.

4.8. Shubra Garden

Shubra Palace was built from 1806 and is considered one of the most significant structures in Shubra. In the early years of his reign (1805-49) Mohammed Ali appointed both Turkish and Armenian architects to design a new palace similar to the existing palaces and styles that prevailed in Turkey (Delchevalerie 1899; Rim Hamdy et al. 2007). In 1810, Shubra Palace was highly affected by the Nile flood, and in 1812, water wheels (saqqiya) were constructed to raise water from the Nile to the Palace and its garden (Rim Hamdy et al. 2007). The first building constructed on the site was the main residence, El Salamlik, along with other buildings for the palace employees and guards and an anchorage for Nile boats. In 1820, Mohammed Ali employed the French architect Pascal Coste to enlarge his residence in the style of a small Versailles with stretches of water surrounded by pavilions and galleries. One addition was the Fountain Court or El Faskeyya, which was completed in 1822. Around the palace, Mohammed Ali ordered the creation of a geometric garden of sixty feddans (Rim Hamdy et al. 2007). In 1833 Mohammed Ali bought 100 feddans of land

beside the Palace to cultivate exotic and crop plants, following European systems, i.e. by using new machines, water wheels, and horses to pull wheels and carts, in addition to agricultural experimentation (Rim Hamdy 2010).



Fig. 31. Historical Elements from Shubra Palace

Left: Original Palace Gate

Middle: Shubra Palace and Garden in 1890

Right: Palace Fountain original design vs. current condition.

In 1832, Mohammed Ali transferred the Agriculture School to the Palace, and in 1837, he transferred the Veterinary School. This was to make a research centre for agriculture and veterinary science. During the reign of Khedive Ismail (1863-79) Delchevalerie and Barillet-Deschamps reintroduced certain plants into the garden, as well as drew a sketch of the layout of the premises (Rim Hamdy 2010). In 1930, part of the palace garden was destroyed during the construction of the Cairo-Alexandria Agricultural Road (El-Aref 2005). From 1935, King Fouad used Shrubra Palace as a temporary residence for some members of the royal family, but after the 1952 Egyptian Revolution (when it was given to the governorate), the site became the premises of Ain Shams University's Faculty of Agriculture and parts of the garden were turned into a farm and research laboratories and the cultivated areas were used by students for experiments (Rim Hamdy 2010). This unfortunate decision led to the neglect of the Palace and its gardens over the subsequent decades and many of the original features were lost (Iskandar 2009). Out of thirteen buildings, only three remain: the Gabalaya Kiosk, once used as a separate area for guests; the Fountain Kiosk, El Fäskeyya, used for receptions and festivals; and the water wheel building. Today, the Palace grounds are now separated from the university area and were opened to the public in 2007 (Iskandar 2009).

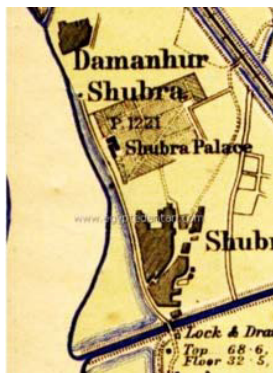


Fig. 32. Map of Palace and gardens in 1891

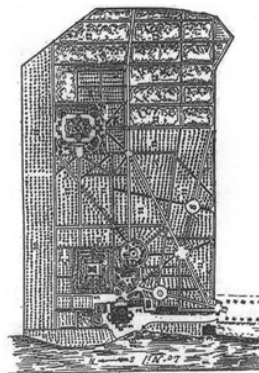


Fig. 33. Map of original Palace and gardens, 1899, By: Gustave Delchevalerie.



Fig. 34. Google Earth Map of Zamalek 2014

4.9. Prince Mohamed Ali Palace Garden (Manial)

In 1830, Ibrahim Pasha (ruler of Egypt between July and November 1848) laid out a garden cultivated with cedars, royal palms and Indian rubber trees at the site of the Manial Palace. After his death in 1848 the garden was abandoned and given up to agriculture and market gardening. During the rule of Khedive Ismail (1863-79) part of the site of the old garden was taken over by the Due d'Aumont and then by Aristide Gavillot, Director of the Egyptian Journal, until in 1899 it became part of the present garden of Prince Mohammed Ali (son of Khedive Tewfik, the first cousin of King Farouk and the younger brother of Khedive Abbas Helmy II) (Rim Hamdy 2010).

Manial Palace was built between 1899 and 1929 (Egyptian Museums Website 2012). The design was inspired by various traditional Islamic designs, decoration and materials (Rim Hamdy 2010), including Ottoman, Andalusian, Persian, and European Rococo (Egyptian Museums Website 2012). The complex consists of six structures. Among these structures is a museum in which King Farouk's hunting trophies are found, the prince's residence and furnishings and a museum in which some of the family's memorabilia are found (Egyptian Museums Website 2012).



Fig. 35. Historical Elements from Manial Palace

Left: Original Palace & Garden Gate , Middle: Garden Design containing kiosks , Right: Port overlooking Nile facing downtown

The Palace and garden were beautifully and carefully designed and constructed as per the wishes of Prince Mohamed Ali. Following the partial completion of the Palace in 1900, the Prince and his head gardener travelled to Iran, Iraq, Syria, India and even Zanzibar in search of new species to enrich the Palace gardens (Rim Hamdy 2010). Even though the prince died in exile in Geneva, he had left strict instructions regarding the palace and garden to make sure they are well taken care. In the early 1930s, the childless prince decreed that the palace and its newly added private museum were to be turned into a Wakf (a trust) with the intention that after his death its entirety should serve as a museum of antiquities. Similarly, the garden would become a public park. Year round maintenance of palace, museum, garden and annexes were also taken care of with guaranteed annual revenue from the prince's vast agricultural property at Kfour Naga. However, the palace and garden deteriorated under the reign of the republic in the 1950s (Egyptian Museums Website 2012).



Fig. 36. Map of Manial in 1958, By: Army Map Service, US Army, Original Scale: 1:10 000



Fig. 37. Google Earth Imagery, 2014.

4.10. Baron Palace Garden

1905, Belgian Businessman Baron Edouard Empain started building the “Heliopolis Oasis”, with a vision of creating a green oasis in the middle of the desert. The Palace was one of the first buildings in the Heliopolis, starting 1907 and finalised in 1911 (Louche, Borgne, and Pradal 2005). It was his own private residence in Heliopolis (Capresi 2010). The Palace design is quite distinctive, inspired by Cambodia's celebrated Angkor Wat temple, which makes it a unique landmark for Heliopolis. The Palace is known as the “Baron Empain Palace” as well as the “Palais Hindou” (El-Aref 2012). As a garden in the desert, the Baron Palace garden wasn't distinct for its horticultural variations, but rather for its leveled platforms and its site sculptures that match the Hindou architectural style of the palace. The garden and palace have deteriorated over time after the death of the Baron and the first generation of his family that lived in the palace. Currently, the site is closed with the exception of public events on certain dates. There are various myths that associate with the palace. These include rumors about the rotating tower of the palace, a secret tunnel beneath the palace and garden, an enchanted room inside the palace, Helena Empain's death (the Baron's sister) stopping the tower from rotating... among other myths that all revolve around the idea that the Palace was haunted (Ashour 2010).

Since it has always been a private property, protected by a known boundary and fence, the Palace and its garden have not been negatively affected by growth of land use in the area. However, the land uses around the palace site were changed over time, with high building heights and no relation in terms of architectural style to the palace. Thus, this affected the palace negatively as it lost the advantage of being a vista for Heliopolis and the highest building among its surroundings. It is worth mentioning that the palace and garden are now used for public events and there is a plan for adaptive reuse of the site as a cultural facility for the public.



Fig. 38. Baron Palace Layout and development of urban environment around it over the years

Left: Historical Aerial view of the Palace 1911

Right: Google Earth Map 2014



Fig. 39. Authenticity of Main Gate and site design (1911 vs 2010)

5. Comprehensive Analysis of Studied Parks and Gardens

From the park profiles presented previously, various data and analysis could be concluded. A primary representation of the collected data is shown in the table below. This table represents a summary of the basic data for each park, including the year of foundation, relevant historical figure, landscape designer/master-gardener, original area of the park, as well as the current area of the park (hence the change in area, whether positive or negative, can be easily deduced).

	PARK/GARDEN	YEAR FOUN DED	ORDERED BY	GARDENER / DESIGNER	ORIGINAL AREA (FEDDANS)	CURRENT AREA (FEDDANS)*	% LOST AREA (FEDDANS)
1	Orman Botanic Garden	1873	Khedive Ismail	French gardeners (Gustave Delchavalerie)	95	20	79%
2	Giza Zoo (Formerly: Giza Palace Gardens)	1890	Khedive Tawfik	Des Champs and Delchevalerie	50	80	-60%
3	Aquarium Grotto Garden	1871	Khedive Ismail	--	10	10	0%
4	Azbakiya Garden	1872	Khedive Ismail	Des Champs, Delchevalerie & Stamm	20	4	80%
5	Andalus Park, Zamalek	1929	King Fouad I	French gardeners + Gustave Delchavalerie	2.25	2.25	0%
6	Horiya Garden, Zamalek	1935	King Fouad I	French gardeners + Gustave Delchavalerie	23.5	6.8	71%
7	Merry Land	1910 (1960)	Khedive Ismail	--	124	49	60%
8	Zohria Trial Gardens, Zamalek	1868	Khedive Ismail	Des Champs, Delchevalerie & Gaby	16	9	44%
9	Shubra Garden	1809	Mohamed Ali Pasha	Turkish, Greek gardeners, Trial & Bové	150	30	80%
10	Prince Mohamed Ali Palace Garden (Manial)	1899- 1926	Prince Mohamed Ali	--	14.4	14.4	0%
11	Baron Palace Garden		Baron Empain		6	6	0%

* Current area estimated from Google Earth for each park

In reference to the historical timeline, nearly all the studied historical parks and gardens were established in the 19th and early 20th centuries, which corresponds to the Royal Era of Mohammed Ali Pacha's family in Egypt at the time. During the 19th Century, the main historically renowned landscape designers in Egypt were Jean-Pierre Barillet Deschamps and Gustave Delchevalerie (French landscape designers and master-gardeners). These two names in particular shaped and/or designed nearly all the historical parks and gardens in Cairo.

The loss of area in Cairo's gardens is substantially large, rising up to 80% in the cases of Azbakiya and Shubra gardens. This trend poses a serious threat to the other parks and gardens that might be facing the same aggressive urban erosion.

While Cairo may contain many parks and gardens with historical significance, the area of each park/garden is very small as related to the size of urbanism in the city. Nearly all the studied historical parks and gardens relate to historical events or characters, or contain a historical monument.

6. Discussion

From the analysis of the parks and gardens separately and comprehensively, it is clear that there is a deprioritization of parks in Cairo specifically, and in Egypt generally. This is quite obvious when reviewing the existing situation of the parks today versus the original design and quality of establishment. This aspect can also be interpreted in terms of the gap between the percentile of parks and gardens in major cities around the globe in comparison to for instance Cairo. This gap is apparent in quantity more than historical value. However, some Egyptian parks that were studied in the research exhibited extraordinary historical values as compared to similar sites elsewhere. The difference that has been found is the deterioration that is resulting from lack of methodology and proper care.

7. Conclusion

It could be concluded that Cairo's historical parks are worthy heritage sites that ought to have the utmost priority when it comes to preservation and maintenance. This is particularly vital since their condition in the past decades has deteriorated immensely and evidently. This is an issue that should be addressed by the community, activists and authorities alike, specifically when the current situation in Egyptian cities is in grave need of usable open spaces. This research is simply an attempt to shed the light on the value and historical importance of these parks and gardens, and to highlight the changes that have come upon these parts in time, with less or no maintenance and care.

References

- AlSaiyyad, Nezar. 2011. *Cairo, Histories of a City*. Cambridge, Massachusetts, and London, England: The Belknap Press of Harvard University Press.
- Andariah, R. 1933. *Cairo, the History of City*. Cairo.
- Ashour, Shaimaa. 2010. "Myths of the Baron Palace."
- Battesti, Vincent. 2006. "The Giza Zoo: Reappropriating Public Spaces, Reimagining Urban Beauty." *Cairo Cosmopolitan: Politics, Culture, and Urban Space in the Globalized Middle East*, 489–512.
- Boults, Elizabeth, and Chip Sullivan. 2010. *Illustrated History of Landscape Design*. New Jersey, USA: John Wiley & Sons, Inc.
- CairoScene. 2014. "Park Life."
- Capresi, Vittoria. 2010. "Baron Palace Project Website."
- Delchevalerie, Gustave. 1899. *Les Promenades Et Les Jardins Du Caire*. France.
- Egyptian Museums Website. 2012. "Manial Palace." http://www.egyptianmuseums.net/html/manial_palace.html.
- El Kadi, Galila. 2012. *Cairo, Centre in Movement*. Marseille: IRD Editions.
- El-Aref, Nevine. 2005. "Brought Back to Life." *AlAhram Weekly Online*.
- . 2012. "Heliopolis' Baron Palace to Be Put Back on Egypt's Tourism Map." *AlAhram Weekly Online*.
- El-Tarabily, A. 2003. *Ahiala of the Great Cairo, El-Tarabily Plans*. Cairo.
- ElShahed, Mohamed. 2011. "Andalus Park, Part 1." *Cairoobserver*.
- Flower, S.S. 1903. *Zoological Gardens. Plan and Guide Book*. 2nd Editio. Cairo.
- Giza Zoo Garden Administration. 2014. "Giza Zoo Guide Map." Cairo.
- Hamdy, Rim. 2010. "A Study of Plant Distribution in Nine Historic Gardens in Egypt." *Garden History* 28 (2): 267–314. doi:10.2307/1586350.
- Hamdy, Rim, M.M. Abd El-Ghani, T.I. Youssef, and M. El-Sayed. 2007. "The Floristic Composition of Some Historical Botanical Gardens in the Metropolitan of Cairo, Egypt." *African Journal of ...* 2 (11): 610–48. <http://www.cabdirect.org/abstracts/20083062741.html>.
- Hamdy, Rs, Mm Abd El-Ghani, Tl Youssef, and M El-Sayed. 2007. "The Floristic Composition of Some Historical Botanical Gardens in the Metropolitan of Cairo, Egypt." *African Journal of ...* 2 (11): 610–48. <http://www.cabdirect.org/abstracts/20083062741.html>.
- Iskandar, Lara. 2009. "Muhammad Ali's Shubra Palace." <http://www.touregypt.net/featurestories/alipalace.htm>.
- Lipský, Zdeněk, and Dušan Romportl. 2007. "Classification and Typology of Cultural Landscapes : Methods and Applications."
- Louche, Denis, Gael Le Borgne, and Francois Pradal. 2005. *Memoires Heliopolitaines*. Cairo: Commercial Ahram Press.
- Mahran, Nesrin. 2012. "Andalus, Romantic and Historical Garden." *AlAhram*, December 23. <http://digital.ahram.org.eg/articles.aspx?Serial=1142513&eid=840>.
- Nippon Koei Co. Ltd, and Katahira & Engineers International. 2008. "The Strategic Urban Development Master Plan Study; The Arab Republic of Egypt." Vol. 1.
- Omar, Reham H. 1999. "Landscaping as a Tool for Giving a Specified Character of Urban Space : Public Parks." Cairo University.
- Sims, David. 2012. *Understanding Cairo*. Cairo: AUC Press.
- Survey of Egypt. 1929. "Historical Map Of Orman and Zoo Gardens in Cairo." Cairo.
- Wilkinson, Alix. 2014. "Gardens in Cairo Designed by Jean-Pierre Barillet-Dechamps" 38 (1): 124–49.