

The Architecture of the City of Cairo: Between Tradition and Modernity, in the Azbakeya Park

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The origins of Azbakeya (أزبكية) date back to the Mamluk Era, where the receding edge of the Nile opened opportunities for urban expansion of Cairo, passing through the Ottomans until it assumed the connotations of a place of recreation in the fifteenth century with the excavation of the lake. In 1798, Azbakeya was still a large body of water, and only in the early 1900s, following its burial, was it redesigned as an octagonal French garden. The story of the Azabkeya Park reaches up to the present day, becoming a project site for the students of the architectural design studio engaged in the conception of a Book Market Hall. The research aims to analyse the works carried out at the German University in Cairo (GUC) both from a methodological point of view on how to approach and conduct a design process and a critical reflection on the project. A review on the teaching of a way of confronting the art of building in a context, Cairo, is full of significant elements, but at the same time, critical of the reading of the city, of the references and how to make them effective in designing the new artefact. The new Book Market Hall arises from the need to redefine the identity of a place distorted by the construction of the underground line below in an attempt to give new life to the original park. However, Azbakeya still represents an element of natural transition between the urban fabric of the Islamic city to the east side and the Haussmannian plan of Downtown to the west side. Finally, what design strategy can lead the interrupted discourse towards a new city architecture? The answer is in its knowledge or the study of reality along the still visible layers of history.

Introduction

Cairo is a city in the making. The *forma urbis* of the most crowded capital of the African continent is far from being, in the present time, re-composed in an intelligible design, if not as a project of summation of indistinct parts. The cacophonous aggregation of discontinuous fragments¹ rapidly leads to a megalopolis architecture representing its history's geography. After the densification process along the Nile banks, the so-called Great Cairo experienced a development by satellite nuclei that started between the end of the 20th century and the first decade of the 21st century (Figure 1). This development outward of the usual boundaries is spreading the neighbouring desert areas with new settlements. Hassan Fathy defined development in a 1978 interview as disrespectful of the true nature of the Egyptian capital, which has always been oriented only towards the north and east direction along the

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1. Rowe, C., and F. Coetter. *Collage City*. Cambridge: MIT Press, 1979.

Nile River². In the third year of the Architecture and Urban Design program at the German University in Cairo³, the design laboratory saw students mending two urban flaps that bring attention to the delicate relationship between architecture and the city in a site that is part of its history: the park of Azbakeya. Indeed, the Azbakeya Park occupies in the imagination of the inhabitants of Cairo the memory of a physical and metaphysical transition between the *Haussonian* plan for the district called “Downtown” and the so-called Islamic city, a place made of history where history continues to rewrite itself over the time. Azbakeya, as well as being considered a mere metro stop, called Attaba, which means threshold, a non-random name given its position at the gates of the ancient city, must recover its role as a pivot between the Downtown district and the Islamic city as an interlude capable of re-composing the lost harmony. The projects developed by the students for a book market have as their primary objective the re-appropriation of a disused public space by the city or the community, restoring its shape and recognisability. Furthermore, the work on Azbakeya seeks to put the discussion on the relationship between architecture and the city back in the wake of the urban tradition, evoking a critical approach on the part of the students to the past, present and future context.

The paper explores the events that led to the construction of Cairo as an essential centre in the North Africa and Middle Eastern regions, from being an extension of a Roman military compound to counting more than 20,000,000 inhabitants nowadays. A history that has always been associated with the flourishing green areas spotted along the Nile River, and Azbakeya was one of these, reaching the condition of an abandoned yard in the crowded built environment. Azbakeya is analysed under a historical lens as a superimposition of different layers. The lake first and the park later were surrounded by some of the central most luxurious hotels, palaces, and prominent public functions such as the Opera House and the National Theater. The students were guided through a methodological approach based on the assumption that everything has a precedent and the understanding of the city as an architecture that builds itself over time⁴. Analogies allow us to recover memory, redirected to the past and primarily projected to the future. The design of the group projects was supported and corroborated by typologically and morphologically identified case studies. Architecture became the masterly, correct and magnificent play of masses brought together in light⁵ and under the Egyptian sun. The proposals for the Book Market Hall in Azbakeya have also been intended as a physical response to the need to reinstate the park into the urban context. Therefore, special care has been given to the design of an artefact in a recovered flourishing nature and its ability to enhance overall sustainability. Reshaping a portion of Cairo is an academic exercise and an awareness of the challenges that await the present and the

2. The 1978 interview was conducted by the Institut National de l'Audiovisuel and collects Hassan Fathy's reflections on the state of the Islamic city and the conditions of modern living: "Il ne suffit pas que Dieu soit avec les pauvres".

3. The German University of Cairo (GUC) is a private university located in New Cairo and the Department of Architecture and Urban Planning is part of the Faculty of Engineering. The students of the ARCH504 architectural design course who worked on the project for the new book market were enrolled in the 5th semester AY 2022-23.

4. Rossi, A. *The Architecture of the City*. Cambridge: MIT Press, 1984.

5. LeCorbusier. *Towards an Architecture*. Los Angeles: Getty Publications, 2007.

future generations, especially in complying with the targets embedded into the 11th SDG (Sustainable Development Goal), titled “Sustainable Cities and Communities.”⁶

Figure 1. The Great Cairo and the Azbakeya Park Location

Source: Image by Manlio Michieletto.

The Early History of Cairo

The history of Cairo dates back to the period of the pharaohs. Located slightly south of the Nile Delta, the area was attractive from a strategic point of view. In the 7th century CE, General Amr, the leader of the Arab troops, found near the small fortress of Babylon, built under the emperor Diocletian, the town of al-Fustat (camp), which mainly included constructions and barracks for the army. Al-Fustat flourished and expanded towards the east until it became the nucleus of Africa, where trade grew for more than a century. Parallel to the increased importance of al-Fustat on the global scale. The city of al-Qahira (The conquerors), Cairo, was conceptualised by the Fatimids; it was initially set around a *Bustan*, which, in modern terminology, is the equivalent of a park and rapidly overcame the former capital established by the Romans on the Mediterranean coast, Alexandria. The chosen area was almost two miles north of the then capital of al-Fustat, east of the Bustan al-Kafuri, and laid out the royal enclave that came to be known as Cairo; the new city was to be a seat for the new ruling class, the Fatimids until the late 1100s. The Bustan al-Kafuri was a sizeable *Jardin de Plaisance*, a restoring green spot between the Nile River and the desert.⁷ The Bustan al-Kafuri was soon

6. SDG 11 aims to transform urban centres into sustainable cities through access for all populations to adequate, affordable and safe housing, essential services and means of transport, especially for the most vulnerable. Furthermore, the future cities will have to be green, an objective that can be achieved by reducing negative impacts on the environment, and enhancing green areas and safe and inclusive public spaces, with specific attention paid to the urban suburbs. Finally, preserving the common artistic and cultural heritage must be guaranteed.

7. Bianca, S. and P. Jodidio. *Cairo: Revitalising a Historic Metropolis*. Turin: Umberto Allemandi

incorporated into the Fatimid Western Palace, built by Caliph al-Aziz (975–996), where it approximately maintained its function as a *Jardin de Plaisance*. After the fall of the Fatimids in 1176, the palace enclosure was parcelled out and built over by the Ayyubids. Under the Ayyubids and Mamluks, the city finally centred between the Citadel and Bab al-Futuh,⁸ and Al-Fustat started losing importance as an economic centre through the shift of markets from Fustat north to the area between Cairo and Fustat until it finally settled in Cairo. In 1168, the area of al-Fustat was burned and subsequently abandoned, thus moving the city boundaries east from the Nile and north toward the Citadel. The Mamluks contributed to the urban construction projects also bringing new infrastructure to the centre of the city as well as multi-story buildings occupied by rental apartments, known as a *rab'* (plural *ribā'* or *urbu*), which became common and continued to be a feature of the city's housing during the later Ottoman period. The most active sultan in architecture was al-Nasir Muhammad (1293-1341), who built monuments and encouraged amirs to act accordingly. Under Ottoman control, Egypt was transformed into a province, and Cairo did not substantially grow in terms of limit extension.

The Birth of a Megalopolis

Relegated to a secondary political place after the arrival of the Ottoman Turks, who took the city in 1517, Cairo saw its population stagnate while continuing to embellish itself with mosques and palaces. After the brief chapter written by the French colonisation under Mohammed Ali Pasha, who created an independent monarchy in Egypt in 1805, the city regained its status as the capital. More changes came into Cairo's urban structure under Isma'il Pasha's vision of developing it as a European metropolis. Westernised neighbourhoods appeared at the end of the 19th century, composed of the central axis, broad avenues and squares (*maidans*).

The Downtown quarter fits into this plan, and as said, the Studio Design site project of Azbakeya is the last memory or fragment of the old city and, at the same time, the first of modern Cairo. Garden City, Zamalek and Heliopolis continued the urban expansion supported by new infrastructures. The population explosion occurred above all during the 20th century, especially after the construction of the Aswan dam and the reduction of the floods of the Nile. The population growth records an agglomeration that in 1882 counted 347.000 inhabitants, in 1947 around 3.000.000, and today over 20.000.000.⁹ Therefore, the Islamic heart of Cairo has been gradually surrounded by areas of expansion of different eras. During the phase of urbanisation of the city between 1863 and 1900, the new neighbourhoods of Shubra, Abbasyia, and Mounira, such as Zamalek, Kasr El Nile, and the Garden City district,

& C. for Aga Khan Trust for Culture, 43-53.

8. Caroline Williams, *Islamic Monuments in Cairo*. The practical guide, Cairo: AUC Press, 2008

9. From 2.23 million in 1947, the population is doubled within twenty years, reaching 5.08 million of 1967 and maintaining high growth rates, around 2.5%, also in the following two decades, almost going 7 million residents (8 million according to other estimates) in 1976. During the 1980s, the population exceeded 9 million of units (9,312,000 according to the 1986 census), with growth rates are still high (around 2.7%), so much so that, at that time, among policymakers and journalistic commentators the idea was widespread of an unstoppable growth that would have brought the city, on the threshold of the new millennium, to reach 15-20 million inhabitants.

were built During the first half of the twentieth century, the new suburbs, such as Heliopolis (northeast of the Islamic heartland) and Maadi (south), were designed with explicit references to European urban models to accommodate a bourgeois class, native but also coming from abroad, which could not find accommodation in the areas of Zamalek and Garden City. While the 70s were characterised by deconcentration represented by the construction of new towns and satellite cities, the policy of implementation of neighbourhoods of planned expansion around the inner city was resumed in the early 1980s, with the forecast of construction of ten new settlements connected with the ring road of Cairo and placed at a variable distance between 500 m and 1 km from the ring. Of the ten planned settlements, the five located in the arc east of the city constitute the planned expansion area of the largest Cairo, whose development has also led to the progressive cancellation of the project of Green Belt, which was supposed to separate Cairo from the settlements in the eastern sectors. Suburbs no. 1, 3 and 5 initially constituted as three distinct and separate units. They are later developed in a single body called “New Cairo City” (Figure 1).

The polycentric strategy adopted at the end of the 20th century is still applied in the development of the Great Cairo, including the realisation of a New Administrative Capital on the far eastern side of the city. The new city will be located in Cairo governorate, 45 kilometres east of the current capital and just outside the Second Ring Road of Greater Cairo in a largely undeveloped desert area, halfway to the port city of Suez. According to the plan, the city will become Egypt's new administrative and financial hub, housing the central government offices and ministries, the seat of Parliament and foreign embassies.

The History of Azbakeya

Historical maps from the 15th century show Azbakeya as a public space in Cairo¹⁰. It was a previously uninhabited area outside the walls of the Islamic city. In the second half of the 1000s, under the command of Al Mue'z Al Atabiki Azbak, the site was occupied by digging an artificial lake and building the first residential construction along its banks.¹¹ The lake, fed by the Al-Nasery stream, was the largest in Cairo and soon became the most coveted site for the construction of palaces, mainly due to the favourable environmental and climatic conditions compared to the dense and chaotic urban plot (Figure 2).

10. Abu-Lughod, J. *Cairo: 1001 Years of the city victorious*. Princeton: PRINCETON UNIV Press, 2018.

11. Abdel-Rahman, N. H. “Egyptian Historical Parks, Authenticity vs. Change in Cairo’s Cultural Landscapes”. *Proceedings of Social Behaviour Science* 225 (2016): 391-409.

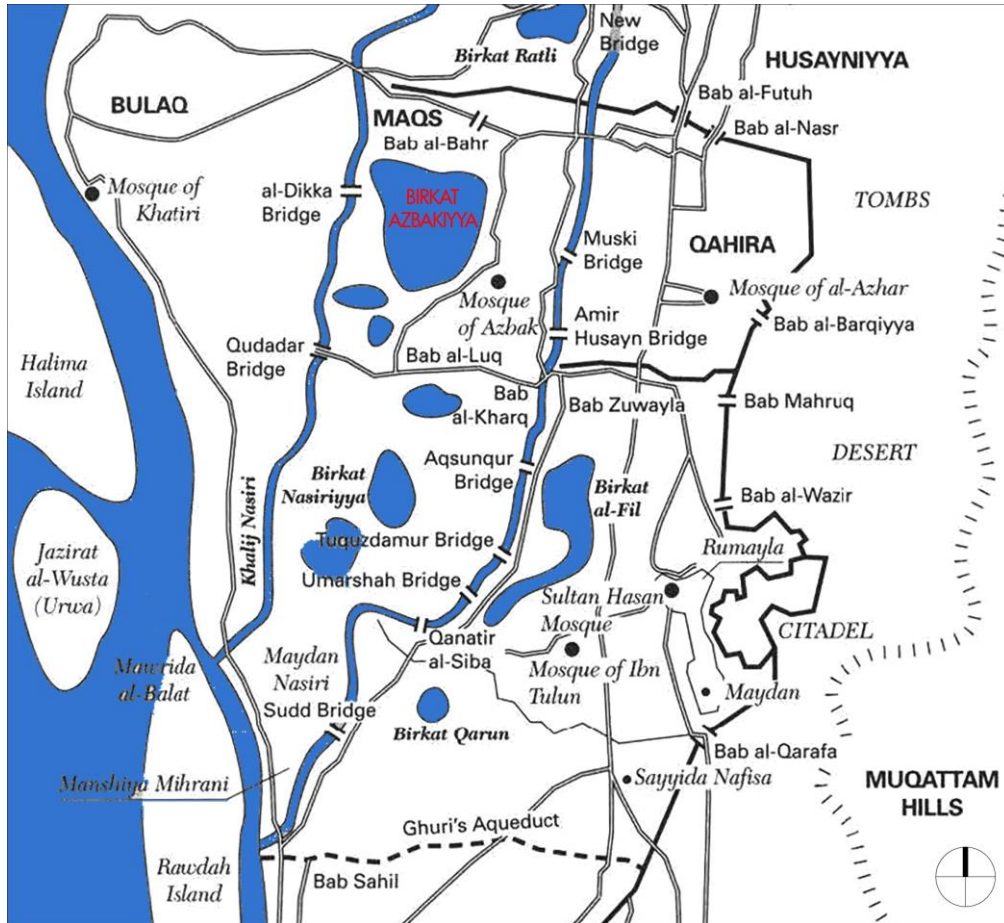


Figure 2. Cairo in the Early Fifteenth Century. The Map Shows the Birak, singular — Birkat, which are the Lakes of Cairo. Due North is Birkat Azbakiyya.
 Source: Drawing by Manlio Michieletto.



Figure 3. The old Azbakeya Lake with the Existing Cairo in the Background
 Source: Collage by Manlio Michieletto.

This urbanisation process will subsequently trigger the construction of public services such as mosques, baths, and commercial activities,¹² helping to increase the interest and value of the area. Upon Azbak's death, the new part of the city was named in his honour Azbakeya under the rule of Muhammed Ali Pasha, who assumed the role of centre of the Ottoman government authorities, a character also emphasised during the French occupation. With the rise to power of Khedive Ismail, just back from Paris, the lake was drained, and a French-style park was designed in its place, entrusting the task of creating it to the architect Jean-Pierre Barillet-Deschamps. The Azbakeya Park can be inscribed in the extended green areas that have characterised Cairo since its dawn. The *Jardins de Plaisance* were placed outside the city property, forming a green belt between the Nile and the city's western boundaries and around the Citadel. They were constantly the first victims of urban expansion between the thirteenth and the end of the nineteenth century when the city grew towards the receding river and its southern satellite, al-Fustat. Except for a few cases, they had long been gone when the urban expansion was redirected towards the desert to the north and east or across the Nile to the west in the twentieth century. No ample open green space existed in the urban core of medieval Cairo, and to some extent, this was true of most cities of the central Islamic land between the eighth and nineteenth centuries. This is partly due to the prevailing arid climate in the Middle East, which made maintaining and irrigating ample green space difficult and costly. In medieval Cairo, which was situated three miles east of the river Nile, long aqueducts (*majari*) had to be constructed, and wells had to be dug at various intervals to provide the Mamluk *mayadin* with water.

The octagonal park of Azbakeya was officially inaugurated in 1872,¹³ and each cardinal direction is identified by a main entrance that seeks alignment with the surrounding context (Figure 4). The composition of the park revolves around the central element, a small body of water that reconnects past and present in the sense of representing its historical memory. A cave, a bandstand, and a botanical garden with 114 different species complete Azbakeya. If the lake initially occupied an area of 45 Feddan (1 Feddan = 4200 m²), the park covers just under half of it or 20 Feddan.¹⁴ Nowadays, the construction of the subway and the placement of various buildings inside it, such as the National Theater, have eroded the available greenery up to its current condition as an urban element disconnected from city life, a fixed natural scene on which it has descended, momentarily, the curtain.

12. Behrens-Abouseif, D. *Azbakiyya and its Environments from Azbak to Ismail, 1476–1879*. Cairo: Institut français d'archéologie orientale, 1985.

13. El-Kadi, G. *Cairo. Centre in movement*. Marsiglia: Ed. IRD, 2012.

14. R. S. Hamdy, M. M. Abd El-Ghani, T. L. Youssef, and M. El-Sayed. "The Floristic Composition of Some Historical Botanical Gardens in the Metropolitan of Cairo, Egypt". *African Journal of Agricultural Research* 2(2007): 610-648.

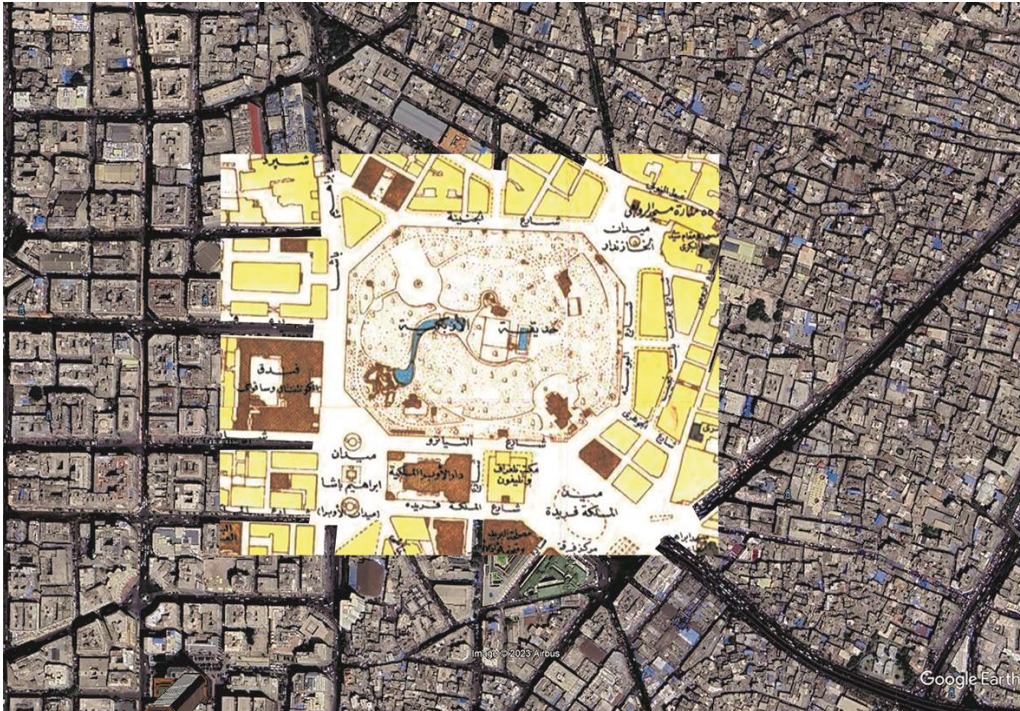


Figure 4. *The Original Octagonal Layout of the Azbakeya Park in the Existing Context*

Source: Drawing by Manlio Michieletto.

Main Public Building in Azbakeya

The establishment of the old Opera House was closely related to the inauguration of the Suez Canal under the reign of Khedive Ismail, a lover of the arts. This is the reason it was named the Khedivial Opera House. Its location was selected so that it would be central to two of the most important districts of Cairo at the time, the Azbakeya district and Ismaileya district.

In 1869, Khedive Ismail decreed the establishment of the Opera House in the capital during the inauguration ceremonies, providing the city with an architectural masterpiece comparable to others worldwide. The exterior complies with Neoclassical principles, and the interior, on the other hand, was decorated in Rococo and Baroque styles with immense luxury and grandeur, with seating places for 850 people¹⁵ (Figure 5).

The Opera was surrounded by other monumental buildings like the El-Ataba El-Khadra Palace, and on the east side of the project area is the Cairo National Theatre, and on the west side, the Shepherd Hotel and the Grand Continental Hotel represented one of the main attractions in the Azbakeya area.

The original Shepherd Hotel was built in 1841, about 28 years before the inauguration of the Suez Canal. The journey from Europe to India and the Far East would take months during those days. Travellers, therefore, preferred to stop in Cairo for a while before resuming their destination voyage. It is worth noting that

15. Azab, K. *Memory and Future of History*. Alexandria: Bibliotheca Alexandrina, 2015.

modern Cairo was beginning to emerge in those times, and foreign communities started occupying a district which is today's Mouski and Attaba Square.

Overlooking downtown Cairo's Opera Square and Azbakiya Gardens, the Grand Continental Hotel (also known as the Continental-Savoy) was built in the 1860s as part of the country's modernisation projects, including constructing the Suez Canal.

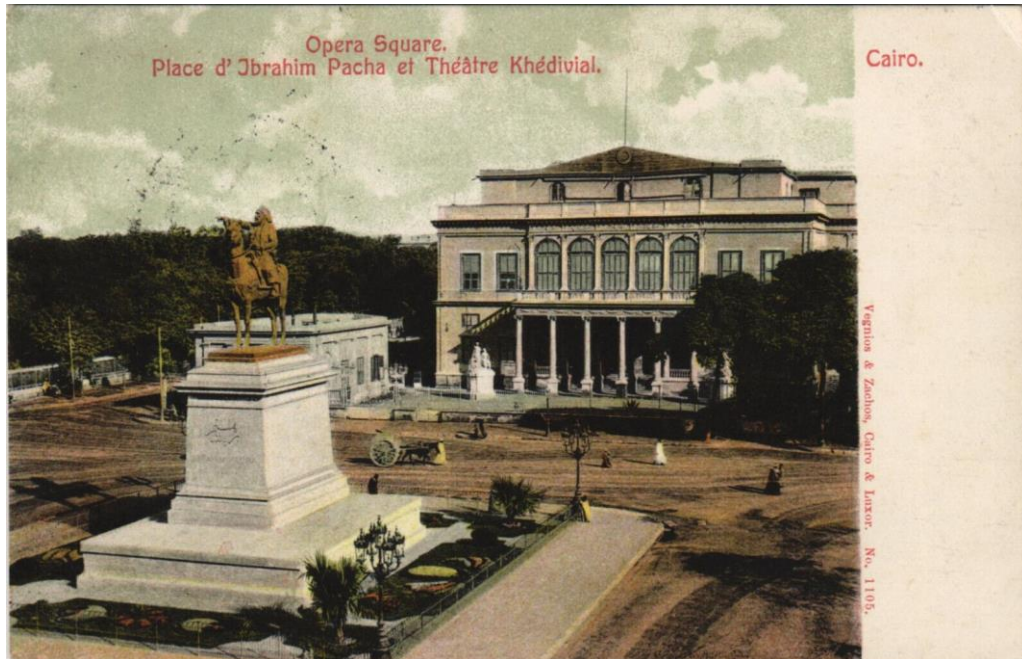


Figure 5. Postcard Depicting the Opera Square with the Mohamed Ali Pasha Statue and the Azbakeya Park in the Background

Source: <https://www.delcampe.net/>.

Discussion – The Azbakeya Book Market Hall

The Analysis of Azbakeya Park

The city's vision as a place of social representation and, therefore, as a stage for a life that the wealthier classes translate into the need for recreation and entertainment brings to Cairo an urban element, the park, already in vogue in European capitals. Azbakeya Lake has become a park precisely because of its value as a public space where the city shows off and recognises itself. However, the "void" does not exist except as a construction of solids or artefacts that demonstrate its existence. Here, then, the importance of Azbakeya was confirmed by the palaces, hotels, theatres, and public offices that the authorities in different eras decided to erect there. Today, not only has the subway construction site created the "void," but the architecture of the city that built its spaces is missing.

In the 20th century, Cairo moved its social centre of gravity more and more towards the Nile to live and experiment in the last decades with a development model for satellite nuclei and the so-called cities in the desert. However, the city

object of the design laboratory in the third year at the German University is to be understood as an architecture that inevitably continues to build and write its history through the project. Therefore, the latter becomes the consequence of the study of Cairo as a stratification of consolidated urban plans and strategies over time and subsequently considering the project site's morphological evolution. Azbakeya, as well as being considered a mere metro stop, called Attaba, which means threshold, a non-random name given its position at the gates of the ancient city, must recover its role as a pivot between the Downtown district and the Islamic city as an interlude capable of re-composing the lost harmony. Hence, the idea of implementing the book market, already present outside the park, by moving it inside and outlining a renewed relationship between architecture and nature.

The Integrated Design Project ARCH504

As part of the courses planned in the 3rd year of the Architecture and Urban Design programme, the Integrated Design Project (IDP) has been run during the winter semester of the 2022/23 academic year. The topic reflects the requested module outcome of designing a public building, providing architectural answers from the urban scale to the construction technology details. For this reason, the Design Studio is integrated with the Building Technology ARCH505 course, providing the necessary knowledge on the project's structure, materiality and tectonics.

The topic of a Book Market Hall located in the middle of the Azabakeya Park reveals the nature of the project that, at the same time, has to reinstate a public function in Attaba, triggering not only the regeneration of the old green spot but also the entire area returning to be a nodal point in the urban structure of the built and unbuilt community.

The park, therefore, covers a strategic position of confluence and influence due to different cities enclosed in a multicultural identity that still distinguishes Cairo today.

Design Founding Principles

With metaphysical analysis through a "Nolli" plan considering the ground floor connection of several significant buildings in the area, namely the High Court and nearby commercial Waqf Gamalian Building,¹⁶ one can trace the continuity of architectural tradition. A further design premise was identified in the desire to consider the park as a building material, in symbiosis with the building, necessary for its location in that place. Hassan Fathy reminds us that architecture can be considered as such only when it responds adequately to the characteristics of the context and becomes such a constituent part of it that it cannot be conceived or transported to any other environment. The Egyptian architect has also suggested the groove to route the Azbakeya book market, given that the climate marks human life and defines the living spaces.

Right from the start, the choices for a bioclimatic architecture capable of

16. Elshahed, M. *Cairo since 1900. An Architectural Guide*. Cairo: AUC Press, 2020.

exploiting the sometimes-extreme conditions of Cairo were shared by proposing a vocabulary of appropriate architectural elements and principles. For example, the orientation of the building with the prevailing winds from the north must be articulated along the east-west axis in such a way as to allow constant natural ventilation, which modern *malqaf*¹⁷ (wind catcher) must guarantee, and the spaces affected by direct solar radiation need continued protection. Moreover, the students have been asked to deal as much as possible with the use of local materials, thus not just seeking a sustainable project but also rediscovering the identity of the locus.

A series of lectures has been complemented by the Egyptian architect Ramy El Dahan invited for a lesson entitled “Towards the future of the past”, which helped to recall the inseparable link between architecture and memory. His work at the beginning of his professional career at Hassan Fathy’s studio certainly contributed to shaping an approach to design that was more in keeping with the built and unbuilt environment of the Arab country for the construction of elementary architecture.

Another design aspect discussed from the beginning of the course concerns the identity of a context, as previously mentioned, in which the artefact should be an epiphany and which does not reside in the imitation of past styles but in the re-proposition of materials, spaces, and atmospheres of the genius loci of Attaba. On the north side, the buildings inspired by the Italian neoclassical style, characterised by a row of arcades and a vertical sequence of orders on pilasters (Figure 6); on the south side, a monumental garage has taken the place of the Khedival Opera by Pietro Avoscani from Livorno (Godoli, 2008).¹⁸ The Opera House, built entirely in wood in 1869, managed to resist for over a century, leaving a trace of its permanence in the statue dedicated to Mohamed Ali Pasha, which, since the 19th century, has dominated the space in front of it. On the east side of the project area is the Cairo National Theatre, which recently reopened after a destructive fire burnt it down. Upward, the Theatre, a mosque and an existing second-hand book market, the main inspiration of the design studio subject, complete the surrounding built environment. On the west side, the fronts of the urban blocks are made up of buildings in height that transgress the vertical order historically dictated by the minarets alone.

17. The *malqaf* is a type of opening placed above the roof plane oriented towards the direction of the prevailing wind, in the city where they blow breezes at low altitudes. In the city of Cairo, there are many facilities of this type in order to capture the sea breezes coming from the north (where it comes from also a source of diffused natural light), and represent not only a technical element but they are inserted within the distribution scheme of the *qa'a*;

18. Godoli, E. *Architetti e ingegneri italiani in Egitto dal diciannovesimo al ventesimo secolo*. Firenze: Maschietto Editore, 2018.



Figure 6. Photo of One of the Buildings on the North Side of Azbakeya Park
Source: Photo by Manlio Michieletto.



Figure 7. Geometrical Patterns Retrieved from the Existing Book Market in Azabakeya
Source: Drawing by Manlio Michieletto.

Project Design Process

The students, divided into 23 groups of 2, 3 and 4 components, first worked on defining a strategy capable of supporting the project through the analysis of case studies, examples not functionally analogous to the theme of the laboratory but about the typological choice obtained from reading the context. From an initial morphological analysis, the courtyard-type building re-emerges forcefully from the city's history and indelibly marks most public and private functions. The applied teaching and learning methodology based on the analogue approach has seen the students working on various references. The studied and redesigned architectures have made it possible to familiarise the students with the market spaces, tectonics and typological matters: courtyard, patio and linear buildings. In terms of tectonic, for instance, the Crown Hall by Mies Van der Rohe and the São Paulo Museum of Art by Lina Bo Bardi provided valuable options on the use of specific construction materials and their strength in dealing with the design of size spaces freed from any intermediate support. The Museum of Contemporary Art in Kanazawa by SAANA and the on the other hand the Louvre Abu Dhabi by Jean Nouvel questioned the students on the canopy idea or the “house under the roof” concept rediscovered by the Slovenian architect Jože Plečnik¹⁹ (Figure 8).

Referring to the peculiar morphology of the park, which has been suggested to the students, two more examples link to the idea of bridge building: The Bridge House by Amancio Williams and the unrealised project for the Convention Palace in Venice by Louis Kahn.



Figure 8. *Physical Models of some Case Studies Proposed to the Studio Design Students*

Source: Drawing by Manlio Michieletto.

19. Ferlenga, A., S. Polano. *Jose Plecnik: Progetti e Città*. Milano: Electa, 1990.

A series of activities related to disseminating reading have been added to selling books, such as conference rooms, an auditorium, a temporary exhibition, and a library dedicated exclusively to children. Therefore, besides the typical market made by spaces for retailing and wholesaling, the infrastructure has to attract users that can transform the building into a liveable portion of the city immersed in a green park experience. A bar and a restaurant are also contemplated as services to enhance the public character of the architectural intervention.

To verify an adequate confrontation with the context, the insertion of the building in a figure-ground map was requested, emphasising the relationship between the new and the existing, in this case, with the alignment with the High Court on the prospective background of the boulevard “6th of July” (Figure 9). Most proposals place the Market Hall in the park’s centre at the convergence of the paths leading to the four main entrances identified with the four cardinal points. However, all plans consider keeping the existing market on the east side as a continuation of the new one.

Before starting the design activity, each group realised a site model on a scale of 1:500 to constantly modify the building according to the feedback and comments given during the discussions (Figure 10).

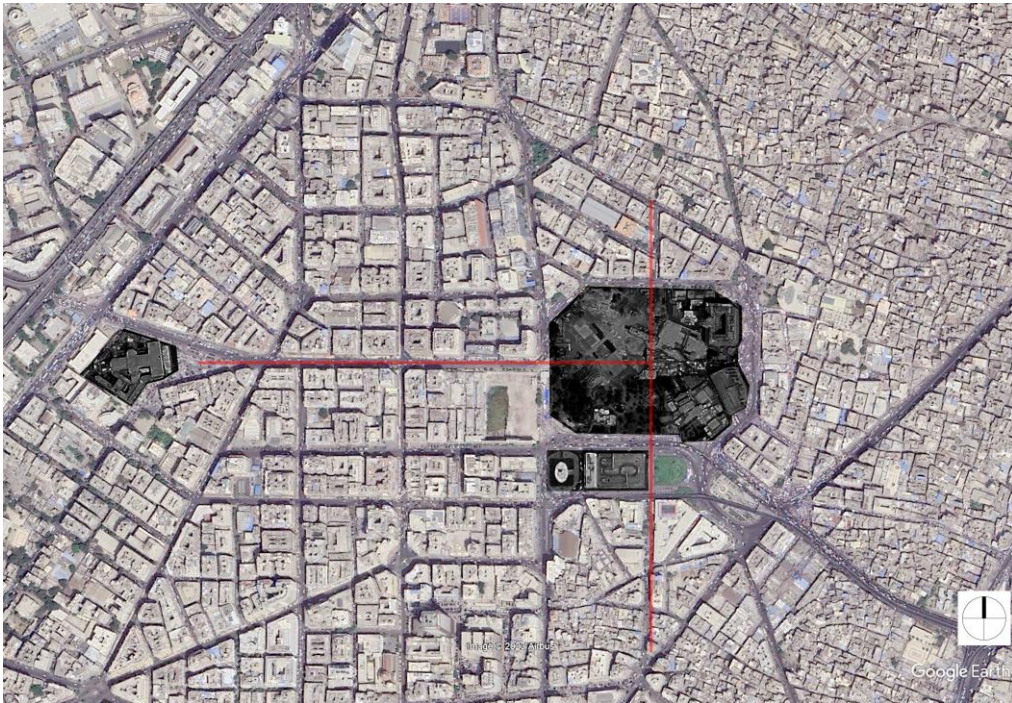


Figure 9. The Site Project in Azbakeya Park, Cairo. Southern is the Opera House, and Western is the High Court

Source: Collage by Manlio Micheletto.

Outcomes

The 23 groups have come up with different proposals that reflect the analysed case studies and the individual preferences regarding architectural strategies for

the design. The sketches, information, and research gathered during the semester provided a logical and rational basis for the project's development. For instance, some projects have focused on the tectonics of the post and beam, the trilitic system, as the main constituent part and principle (Figure 10). Other groups triggered the design from the reading of the past and the typological analyses of old Cairo (Figure 11). Also, the bridge house was developed as a structure to cross the small lake in the middle of Azbakeya Park (Figure 12).

The technical drawings that graphically describe the projects, site plan, plan views, and elevations have been accompanied by sections of the buildings reaching on the adequate scale the proper representation of the construction technologies.

Physical models have been realised at different scales targeting the composition of volumes, 1:1000, the indoor and outdoor layout representation, 1:200, and the construction system, 1:20.

In addition, features corresponding to sun protection and natural ventilation systems have been drawn, and the models were used to check the building's response to the climate (Figure 13).



Figure 10. *The Final Presentation Panels and Project Models are "Vestibule" by Esraa Sayed, Habiba Maged, and Marina Emil*
Source: Photo by Manlio Michieletto.

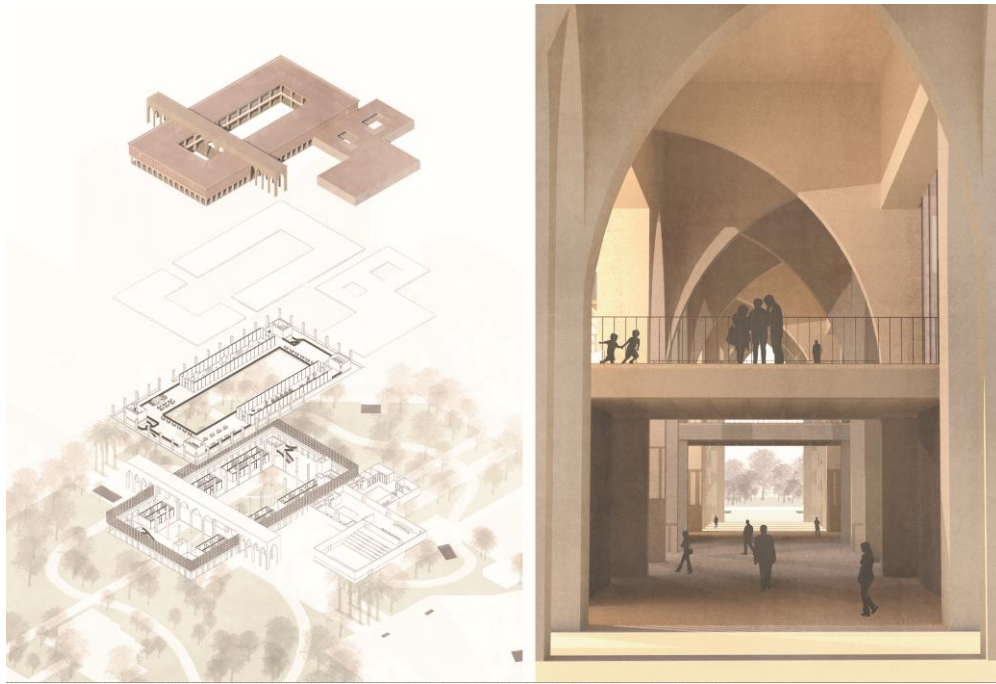


Figure 11. *The Final Presentation Panel of the Project was Named “as it was” by Sama Yeha, Sandra Maazouz, Omaima Gaber, and Mariam Mohamed*
Source: Photo by Manlio Michieletto.



Figure 12. *The Azbakeya Book Market Hall is Shaped Like a Bridge House by Alaa Mohammed, Lucia Ramses, and Ahmed Mahran*
Source: Photo by Manlio Michieletto.



Figure 13. *Physical Models Tested on Sun Protection*

Source: Photo by Manlio Michieletto.

Conclusions

The story of Azbakeya is the urban history of Cairo from the caliphate to the present day, where it has become a founding part of the project theme for students enrolled in the third year in the architecture and urban design department. The Book Market Hall project has involved a precise methodological point of view and a critical reflection on the design process. A reflection on the teaching of a way of approaching the art of building in a context, that of Cairo, rich in significant elements, but at the same time critical of the reading of the city, of the references, and of how to make them meaningful in designing a new artefact.

Therefore, the theme of designing a new building in a consolidated historical context has been solved by adopting the analogue method, referring the proposal to case studies and motivating the overall composition according to the analysis of the context, built and unbuilt, in the conviction that architectural project makes the city over time.

Reading the city as an organism that can be developed through architecture brings the relationship between architecture and the city back to the centre of the discussion, intending it as a project.²⁰

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20. Aureli, P.V. *The city as a project*. Berlin: Ruby Press, 2013.

Maged Ragaie, Habiba Mohamed Mahrous, Hana Ahmed Mohamed, Hana Ahmed Talaat, Hana Ayman Marzouk, Hana Hossam Samir, Ilaria Ashraf, Jana Amir, John Mohsen, Jomana Sami, Joumana Ashraf, Karen Hani, Karma Ahmed, Khaled Wagdy, Lina Ramez, Lucia Ramses, Malak Tamer Mohamed, Malak Yasser Talaat, Manar Yaser, Maria Zakaria, Mariam Mohamed Elsherbiny, Mariam Mohamed Ali Aboelela, Mariam Sherif Fekry, Mariam Zakaria Fouad, Marian Emeel, Mirna Mamdouh, Nada Medhat, Nadia Wael, Nadine Tarek, Nelly Adel, Noran Mohamed, Nour Ahmed Hamdy, Nour Ahmed Lotfy, Nour Mohamed Donkol, Omima Gaber, Passant Samir, Raheem Khaled Abdelrahman, Raneem Ehab Ahmed, Raneem Medhat Nafie, Rawan Abdelhamid Nasr, Rawan Ramadan Ibrahim, Salma Mohamed Saied, Sama Alaa Ezat, Sama Eslam Shiba, Sama Hani Deskouy, Sama Yehia El Baisary, Sandra Mazooz, Sara Monir, Sarah Mohamed Nabil, Sarah Tarek Hanafi, Shahd Fadi.

Bibliography

- Abdel-Rahman, N. H. "Egyptian Historical Parks, Authenticity vs Change in Cairo's Cultural Landscapes". *Proceedings of Social Behaviour Science* 225 (2016): 391-409.
- Abu-Lughod, J. *Cairo: 1001 Years of the city victorious*. Princeton: Princeton University Press, 2018.
- Aureli, P.V. *The city as a project*. Berlin: Ruby Press, 2013.
- Azab, K. *Memory and Future of History*. Alexandria: Bibliotheca Alexandrina, 2015.
- Behrens-Abouseif, D. *Azbakiyya and its Environments from Azbak to Ismail, 1476–1879*. Cairo: Institut français d'archéologie orientale, 1985.
- Behrens-Abouseif, D. *Cairo of the Mamluks: A History of the Architecture and Its Culture*. Cairo: AUC Press, 2007.
- Behrens-Abouseif, D. *Islamic Architecture in Cairo: An Introduction*. Cairo: AUC Press, 2007.
- Behrens-Abouseif, D., and S. Vernoit, *Islamic Art in the 19th Century, Tradition, Innovation and Eclecticism*. Leiden: Brill, 2006.
- Bianca, S., and P. Jodidio. *Cairo: Revitalising a Historic Metropolis*. Turin: Umberto Allemandi & C. for Aga Khan Trust for Culture, 2004, 43-53.
- Damluji, S. S., and V. Bertini. *Hassan Fathy Earth & Utopia. With Original Texts by Hassan Fathy*. London: Laurence King Publishing, 2018.
- Denis, E. "Le Caire et l'Égypte à l'orée du XXI siècle. Une métropole stabilisés dans un contexte de redéploiement de la croissance." (Cairo and Egypt at the dawn of the 21st century. A stabilized metropolis in a context of redeployment of growth.) *Lettre de l'Information de l'Oucc* 48 (1998) : 4-17.
- El-Kadi, G. "L'urbanisation spontanée au Caire." (Spontaneous urbanization in Cairo.) *Urbanisme* 204 (1987): 100-104.
- El-Kadi, G. *Cairo. Centre in movement*. Marsiglia: Ed. IRD, 2012.
- Elshahed, M. *Cairo since 1900. An Architectural Guide*. Cairo: AUC Press, 2020.
- Godoli, E. *Architetti e ingegneri italiani in Egitto dal diciannovesimo al ventunesimo secolo*. (Italian architects and engineers in Egypt from the nineteenth to the twenty-first century.) Firenze: Maschietto Editore, 2018.
- Fathy, H. *Architecture for the Poor. An Experiment in Rural Egypt*. Chicago: The University of Chicago Press, 1973.
- Ferlenga, A., and S. Polano. *Jose Plecnik: Progetti e Città*. (Jose Plecnik: Projects and Cities.) Milano: Electa, 1990.

- Hamid, A. *Hassan Fathy and Continuity in Islamic Arts and Architecture. The Birth of a New Modern*. Chicago: The University of Chicago Press, 2010.
- Hamdy, R. S., M. M. Abd El-Ghani, T. L. Youssef, and M. El-Sayed. "The Floristic Composition of Some Historical Botanical Gardens in the Metropolitan of Cairo, Egypt." *African Journal of Agricultural Research* 2(2007): 610-648.
- La Greca, P. *Il Cairo. Una metropoli in transizione*. (Cairo. A metropolis in transition.) Roma: Officina Edizioni, 1996.
- Le Corbusier. *Towards an Architecture*. Los Angeles: Getty Publications, 2007.
- Pampe, B., and V. Capresi. *Discovering Downtown Cairo Architecture and Stories*. Berlin: JOVIS Verlag, 2015.
- Raymond, A. "Cairo's Area and Population in the Early Fifteenth Century." *Muqarnas II: An Annual on Islamic Art and Architecture* 2 (1984): 21-31.
- Raymond, A. *Cairo*. Cambridge: Harvard University Press, 2000.
- Raymond, A., and W. Wood. *Cairo: City of history*. Cairo: AUC Press, 2007.
- Rossi, A. *The Architecture of the City*. Cambridge: MIT Press, 1984.
- Rowe, C., and F. Coetter. *Collage City*. Cambridge: MIT Press, 1979.
- Sims, D. *Understanding Cairo. The logic of a city is out of control*. Cairo: AUC Press, 2012.
- Tawfik, M. S., and S. Essam Ali. "Governance and Public Awareness. Dilemma in the Conservation of Heritage and Cultural Parks in Egypt." In *Proceedings of Science and Technology* 1(2018): 109-123.
- Williams, C. *Islamic Monuments in Cairo. The practical guide*. Cairo: AUC Press, 2008.

