

TRIPOLI'S CULTURAL FAIRGROUND

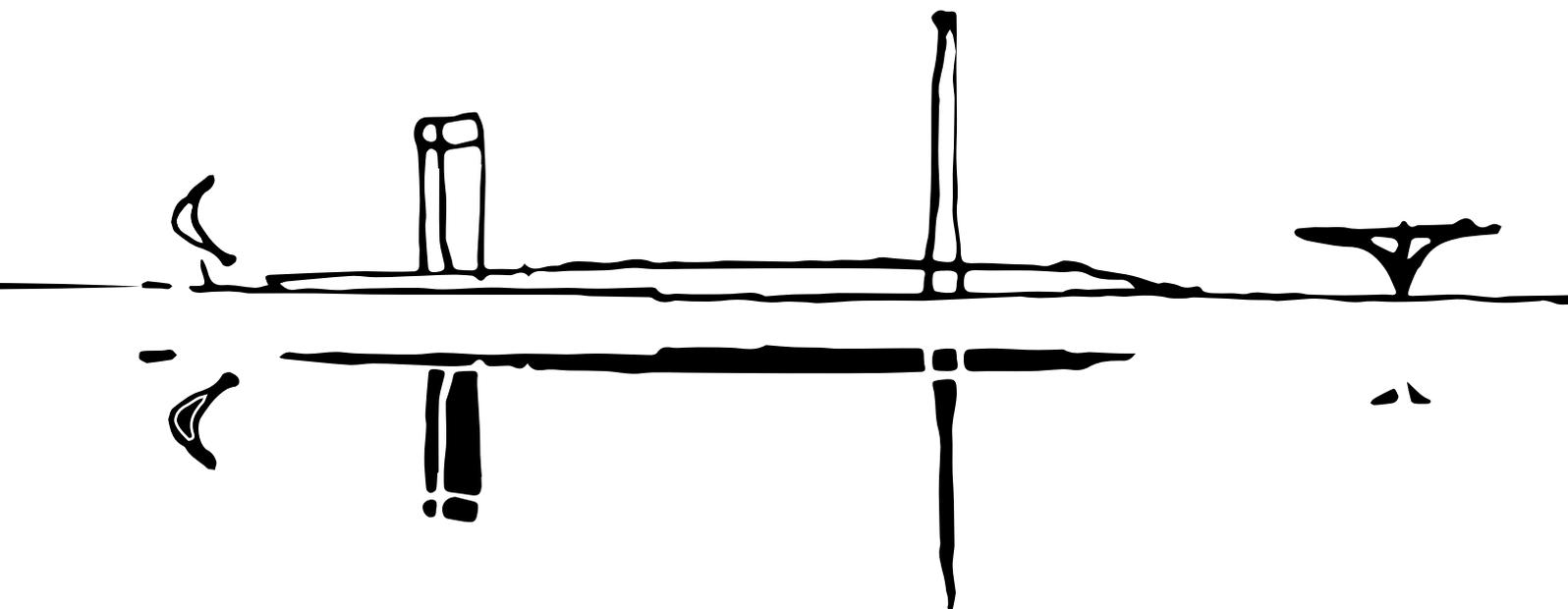
Conservation Plan and Adaptive Reuse
of Oscar Niemeyer's Rachid Karami
International Fair in Tripoli, Lebanon

Chelsea Seif

Advisor:
Collaborator:

Nour Tabet

Emanuele Morezzi
Jean-Pierre El Asmar



Tripoli's Cultural Fairground

Conservation plan and adaptive reuse of Oscar Niemeyer's Rachid Karami International Fair in Tripoli, Lebanon.

An endangered UNESCO heritage site of Lebanon's modern heritage.

Thesis Project by Chelsea Seif & Nour Tabet
December 2024

Advisor: Emanuele Morezzi
Collaborator: Jean-Pierre El Asmar



**Politecnico
di Torino**

Politecnico di Torino

Master's degree programme in
Architecture for Heritage

Kindly note that the sources of the images and diagrams in the following book have been cited. However, the copyrights remain to the original authors. The images used are only for academic purposes of the following thesis.

We would like to thank all of those who made this book possible. We would like to thank our family and friends for their endless support, our advisor Professor Emanuele Morezzi and our collaborator Jean-Pierre El Asmar for their time and dedication, and Mrs. Maya Hmeidan for her time and help. Last but certainly not least, we would like to thank our country for teaching us the power of resilience through the tough challenges of life, and the power of hope.

For a better tomorrow...

TABLE OF CONTENTS

00. Abstract	7
01. Introduction	8
02. The History of Lebanon and its Architecture during the Golden Age	10
03. Territorial Analysis of Tripoli	23
A. Historical Context of Tripoli	23
B. Current Territorial Situation	39
C. Demographics	45
D. Synthesis	48
04. Site Analysis	50
A. History	50
B. Masterplan and Architecture	68
C. Current State	91
D. State of Conservation and Decay Analysis	152
E. Conservation Policies and Laws	165
05. Concept & Masterplan	176
A. Synthesis	176
B. Concept Development	180
C. Masterplan Development	191
D. Restoration Philosophy & Techniques	202
06. Case Studies	214
A. Boomerang	216
B. Lebanese Pavilion	230
Bibliography	240
Annex	253

“What an architecture lost in time” - Oscar Niemeyer

00. Abstract

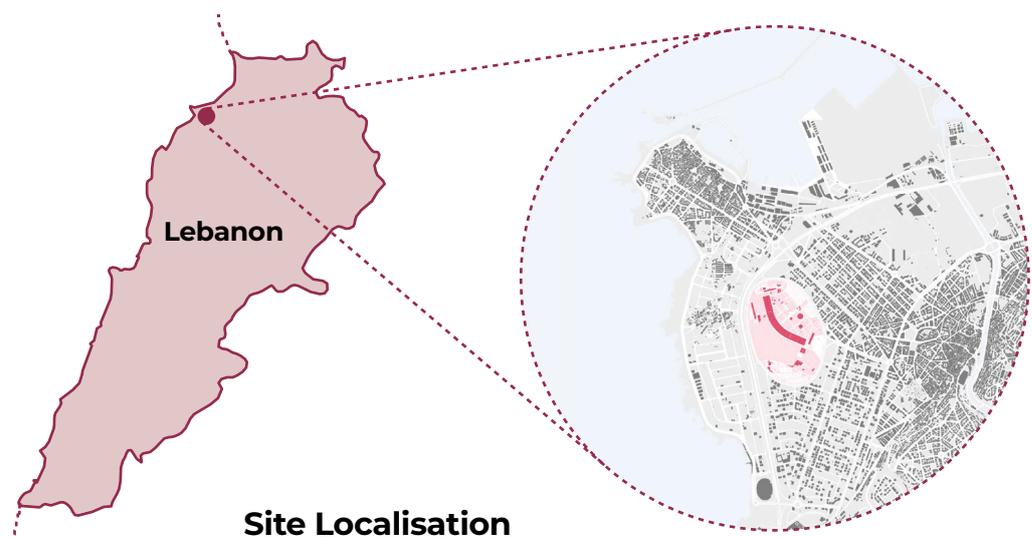
Modern heritage in Lebanon has been one of the many victims of the Lebanese Civil War. Among the sites in question is the Rachid Karami International Fairground in Tripoli, Lebanon. This site was designed in the 1960s by Oscar Niemeyer, one of the world's most renowned modern architects. Although the site is a UNESCO World Heritage Site, in 2023, this modern heritage was listed under UNESCO's "List of World Heritage in Danger". The site currently suffers from severe neglect and damage that have resulted in the collapse of parts of some structures, as well as interventions that have destroyed the site's integrity as modern heritage. The following thesis thus aims to develop a conservation and adaptive reuse plan for this endangered modern heritage. The approach used for the thesis was moving from a general overview to a more specific study relying on archival photos and documents, books, studies, documentations, and interviews regarding the different topics and subtopics at hand. The thesis initially examines the history of modern architecture in Lebanon before introducing the site and diving into Tripoli's history and territorial context. In addition to understanding the site's context, the historical events and Oscar Niemeyer's conceptual designs were studied in order to pave the way for a historically sensitive proposal. This detailed analysis was then paralleled with the as built and current situation of the site. After having established a strong understanding of the value of the site, its history, and its context, it became clear that the site needs urgent attention with regards to the different structures' decaying conditions, needs to establish a relationship with its context, to maintain its modern heritage value, to provide green public spaces for its citizens, as well as to ensure the site's longevity. This being said, it is proposed to strengthen the relationship between the site and Tripoli by turning the site into Tripoli's Cultural Fairground, merging socio-cultural spaces with craft and trade, agricultural, and wellness spaces. An overall masterplan is proposed with specific buildings taken as examples as well as proposed interventions regarding the decay of the structures.

01. Introduction

1. *Jad Tabet, 2022, p.2-5*

2. *UNESCO World Heritage Centre, 2023*

In the Northern Governate of Lebanon, in the country's second largest city, lies a monumental example of 20th century modern urban planning and architecture. Also known as "Rachid Karami International Fair", Oscar Niemeyer's International Fairground in Tripoli, Lebanon, is a 70-hectare multifunctional space that was designed to express Lebanon's high ambitions and strength internationally in its post-independence "Golden Age". The design of the project took place between 1962-1967 by Oscar Niemeyer who aimed at creating a new modern "nucleus" for Tripoli through his distinguishable urban approach and architectural style. The project thus consists of large-spanning curved structures and concrete shells with hints of what Niemeyer considered to reflect Lebanese motifs, all integrated within a masterplan that was the largest in the Middle East at the time of its design. Although the execution was in the final stage with some buildings furnished and equipped, and most of the concrete works completed, the execution of the project was abruptly terminated due to the outbreak of the Lebanese civil war in 1975. During the war time, the site was used as a camp for fighting soldiers, with several damages and thefts taking place. After the end of the war in 1990, several attempts at restoring the site were made, some of which were reversible or non-invasive while others more damaging.¹ Due to the alarming state of conservation of the site, lack of financial resources to fund its maintenance, and the risk of development proposals that could damage the integrity of the site, the World Heritage Committee performed an emergency procedure to inscribe the site. As of 2023, the site was inscribed on the List of World Heritage in Danger, allowing it access to improved technical and financial aid on an international level.²



The following thesis aims to develop a conservation and adaptive reuse plan for this endangered modern heritage. This was achieved by studying the general history of modern heritage, the history of the site,

its conception, and its context in the city of Tripoli. An overall proposal for a masterplan and restoration plan was made before diving into two case studies within the site.



View of the site as seen looking towards the West. Image Retrieved from UNESCO Nomination Text, 2022, Front Cover

The thesis first begins by introducing an overview of the history of architecture during Lebanon's golden age (Chapter 02). During that period of time, several local and international architects produced modern examples that still live on today. Unfortunately, the life of most of these examples is at stake, especially after the great damages caused by the Lebanese civil war (1975-1990). Moreover, modern heritage in Lebanon suffers from neglect and lack of awareness. One of the many sites in question is Tripoli's International Fairground, which is studied throughout this book.

The context of the site is initially studied by performing a territorial analysis of Tripoli in Chapter 03. This analysis covers the history of Tripoli, the current territorial situation, and the demographics of the area, before synthesizing the found information to what affects the site.

The focus is then shifted to the site itself in Chapter 04, by going over the history of the site, from the conception to the current situation, all while studying Niemeyer's design intentions of the site. The current state of the site is then studied with the as-built drawings of the site before they had been destroyed or looted during the war. This was directly followed by an analysis on the state of conservation and decay of the building structures as well as an overview of the conservation policies and laws concerning the site.

After an in-depth understanding of the site, its context, and its history, a synthesis is made to establish the grounds of the concept in Chapter 05. The concept of adapting the Rachid Karami International Fairground into Tripoli's Cultural Fairground was followed by a masterplan design and restoration proposal.

As a final concluding step, two of the structures on site were taken to be developed as case studies in Chapter 06, each highlighting the concept and approaches of restoration.

02. The History of Lebanon and its Architecture during the Golden Age

Prior Events: The French Mandate

After the fall of the Ottoman Empire and after the end of World War I, Lebanon was placed under the administration of the French military. Then, in 1920, the borders of Greater Lebanon were formed by incorporating Beirut, coastal towns like Tripoli, Al Beqaa as well as other areas with Mount Lebanon.



Figure 01 New borders of Greater Lebanon in comparison to previous Mount Lebanon borders. Edited. Source: Arab News by Antonio Munioz, 2020.

In 1923, Lebanon's mandate was given to France by the League of Nations. Under this administration, infrastructure, public utilities, and education were improved. Several urban and architectural changes took place, especially in the capital. Beirut thrived among the surrounding countries as a center of trade, while the country's agricultural strength started declining. With the increase of middle class in Beirut, the desire for the Lebanese to gain more independence grew.

During the French Mandate, the country's architectural style was referred to as colonial. Even though new materials and techniques were introduced to Lebanon, little effort was made to find a new architectural expression using these materials. Molded into concrete, decorative elements tried to mimic balustrades, columns, and cornices, sometimes with hints of Orientalist accents and other times using classical forms or Art Nouveau motifs. Some local architects made an attempt to find an architectural vocabulary that would fit the emerging economic, social and technical conditions. Two of these pioneers included Antoine Tabet and Farid Trad. Both these architects followed a classical rationalist approach while accentuating monumentality in projects that held important symbolic references. In their later works, these two architects' styles evolved towards a more abstract aestheticism similar to Giuseppe Terragni's modern rationalism.¹

1. Jad Tabet, 1998, p.83-88

2. The Editors of Encyclopædia Britannica, March 2022, "French Mandate"



Figure 02 St. George Hotel in the 1930's. Located at the tip of Saint-Georges bay in Beirut, St. George Hotel (1930-32) is considered one of Lebanon's modern architecture icons. It was designed by a French firm Poirrier, Lotte and Bordes alongside the Lebanese architect and engineer Antoine Tabet. Influences from Auguste Perret's exposed concrete and the rational organization of space can be seen. The hotel's modular plan was organized around an open-air courtyard. The building made use of exposed concrete including the guardrail's ornamental hollowed concrete blocks. Image source: the Fouad Dabbas Collection/Sursock Museum. Retrieved from <https://thewanderingnative.com/2020/09/30/st-george-patron-saint-of-beirut/>

Lebanon's Golden Age

After facing several challenges, Lebanon gained its independence on November 22, 1943. However, it was not until the end of World War II and not until the end of 1946 that the last British and French troops left Lebanon. With that, the Lebanese Republic had gained complete independence.²

Following these events, the country saw rapid economic growth mainly

3. The Golden Age of Lebanon mainly refers to the period between the mid-1950s to 1975, before the start of the Civil War.

4. Asher Kaufman, 2021

5. Andre Trad, 2005

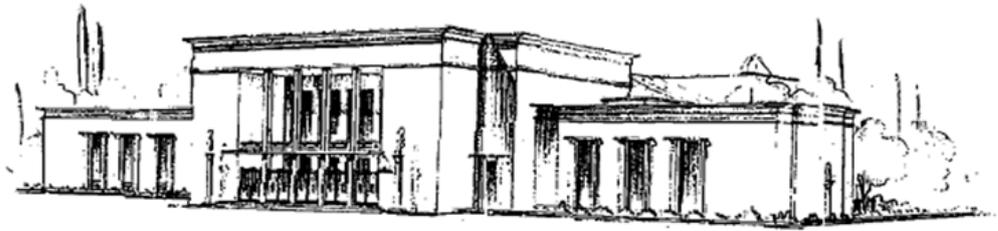


Figure 03 UNESCO Palace, perspective drawing, Farid Trad, architect, 1946. To host the third General Conference of UNESCO session in Beirut (1948), architect Farid Trad was asked to design and build the UNESCO Palace in Beirut in a very short period of time. Inspired by the beaux-arts planning, the composition follows a symmetrical axial arrangement. Trad was also inspired by the 1930's European civic monuments leading him to create a balance among the masses, to use of classical proportions in the facades, and to detail in stone and iron. Completed in 1948, the overall impression of the complex shows an attachment to classicism. Image retrieved from Jad Tabet. "From Colonial Style to Regional Revivalism: Modern Architecture in Lebanon and the Problem of Cultural Identity." Essay. In *Projecting Beirut: Episodes in the Construction and Reconstruction of a Modern City*, 86-88. New York, USA: Prestel Pub, 1998.

concentrated in the central region, in particular in the capital of Beirut. A new currency was developed and borders with neighboring countries were redefined. The increase in the production of oil in the Gulf region led to an overflow of money into the country due to Lebanon's banking system as well as the collaboration between Lebanese businessmen and oil providers. Due to the free-market economy, the country was able to thrive and act as a mediator between East and West, especially in banking and financial services. This gave Lebanon, particularly Beirut, an advantage over other countries in the Middle East who did not have the same financial services that enticed investors such as oil-rich Arab investors. With these developments, during the mid-1950s, Lebanon witnessed what is currently referred to as Lebanon's "Golden Age"³, with Beirut becoming a hub of tourism and economic prosperity.⁴

With this prosperity, the need for new types of buildings arose. These buildings included office buildings, airports, hotels, additional governmental or administrative buildings, additional campus buildings, and other such buildings. On a global scale, after the end of World War II, major technological changes took place in the global architectural scene. These changes included new techniques in construction such as the development of reinforced concrete that aided in the creation of more innovative forms beyond the typical post and beam. Several advances in the manufacturing of glass also increased its use and allowed sheets of glass to directly be used in buildings. Moreover, the development of aviation made airports essential, aiding in the connection between people. New political divisions and powers also changed the architectural scene by placing emphasis on monumentality, function, and structure and rigidity. In Lebanon, these changes, alongside national factors, played a role in developing the architectural image of its cities, particularly Beirut.⁵

In terms of architectural approach, the early 50s was characterized by a transition from the colonial architectural model that avoided modernity's strong formal changes towards an intermediate solution

between a conservative classical style and a completely radical shift. However, this approach became increasingly difficult after the end of World War II with the spread of modern models and the search for innovation and new aesthetics. In order to meet the demand for new buildings as well as match the International Style that had gained popularity around the world, foreign architects were sent to Lebanon, playing a major role in the development of the International Style in the country. Not only so, but local architects also studied abroad and imported new ideas into the country. Some of these architects include George Rayes, Theo Kanaan, Karl Schayer, and Fritz Gothelf.



Figure 04 Riad El Solh Square (1960s). When designing the Pan Am building (1955) in Beirut (building on the left), architects George Rayes, Theo Kanaan, and Assem Salam turned to a rational approach to architecture, abandoning references to classical forms. This building is distinguishable by the treatment of the corner between the southern and eastern facades with protruding solar protection elements adapted to the façade orientation. The use of controlled asymmetry, rectilinear grids, and intersecting planes is reminiscent of the modern Stijl movement. At the corner of the ground floor level is a free-standing round column that contrasts the austere façade, creating a Corbusian play between rational and dynamic elements. Image retrieved from Old Beirut (2014).

Architects Karl Schayer and George Rayes tried to find a new architectural language that would form a local adaptation of the modern movement. Such experiments picked up on different elements from modern architecture and combined them with local technical solutions and uses to create a new vocabulary. Seeing that most of these experiments took place in Beirut, this capital city became an integral part of the architectural scene. Still, architects at the time had to find ways to expand on these avant-garde experimentations while fighting against the constraints of building regulations. Adopted in 1933 and slightly amended in 1954, a building code was the only reference for architects seeing that no planning legislation existed. As a result, architects of the

6. Jad Tabet, 1998, p. 86-93

7. UNESCO, 2022, p. 9-10

late 50s believed that a new comprehensive planning policy to control the chaotic urban growth were needed. All of these experiments and concerns eventually converged during the 1960's in what Jad Tabet refers to as the "golden age of modern architecture in Lebanon".⁶

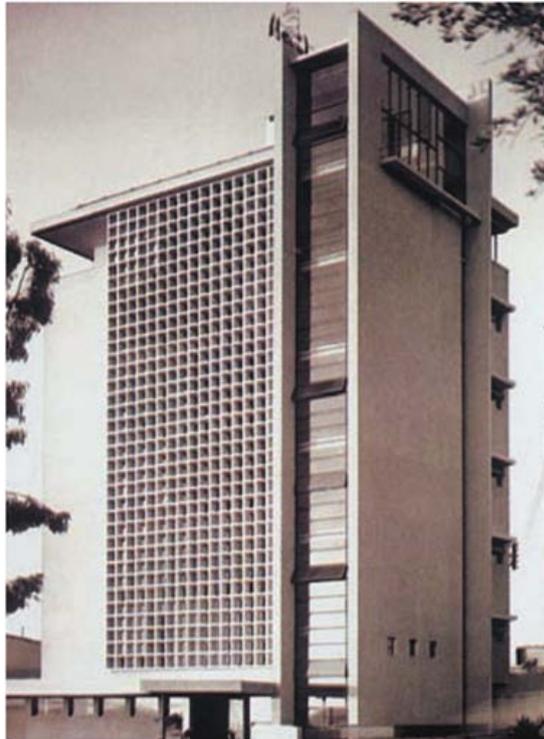


Figure 05 Following an attitude similar to that of the German Werkbund where a middle ground is found between standardization and formal invention, and between the reliance on traditional principles and the contemporary world's dexterity, Polish architect Karl Schayer designed Dar al Sayad building in Hazmieh (1954). Schayer often worked alongside German interior designer Fritz Gotthelf and Lebanese architect Wassek Adib and Lebanese engineer Bahij Makdissi. (Andre Trad, 2010, p. 6-7) Image source Dictionnaire de l'Architecture au Liban retrieved from Al Mouhandess no. 25, November 2010.

Despite this age of prosperity, peripheral regions in the South, the North, and the Bekaa valley remained underdeveloped and lacked public facilities and infrastructures. Among the influential figures of the time

was General Fouad Chehab. In September 1958, after a period of turbulence caused by regional and local instability that led to armed confrontations, General Fouad Chehab, the Chief of the Army at the time, was elected as the President of the Republic. His main objective was to limit growing inequality between Beirut's wealth and the poverty of the underdeveloped rural areas, just as new plans for Beirut needed to be developed to cope with new demands for the city. These views were accompanied by a new wave of social liberalization and modernization in Lebanon.⁷

Consequently, a new policy was created to strengthen the central state and encourage planning. In 1963, the first legislation for town planning that was applicable to all of Lebanon was adopted. With this law, all town planning matters were under the authority of the General Directorate of Town Planning aided by the Higher Council for Town and Country Planning. In addition to general master plans and detailed regional plans, new tools such as specific regulations for the procurement of land for public purposes and for the composition of mixed real estate companies were introduced for the first time.

Parallel to these developments, competitions to build schools and governmental buildings as well as large-scale projects were launched by the new government. Several Cities underwent major changes including Beirut, Tripoli, Sidon, Tyre, and Baalbek. In Beirut for example,

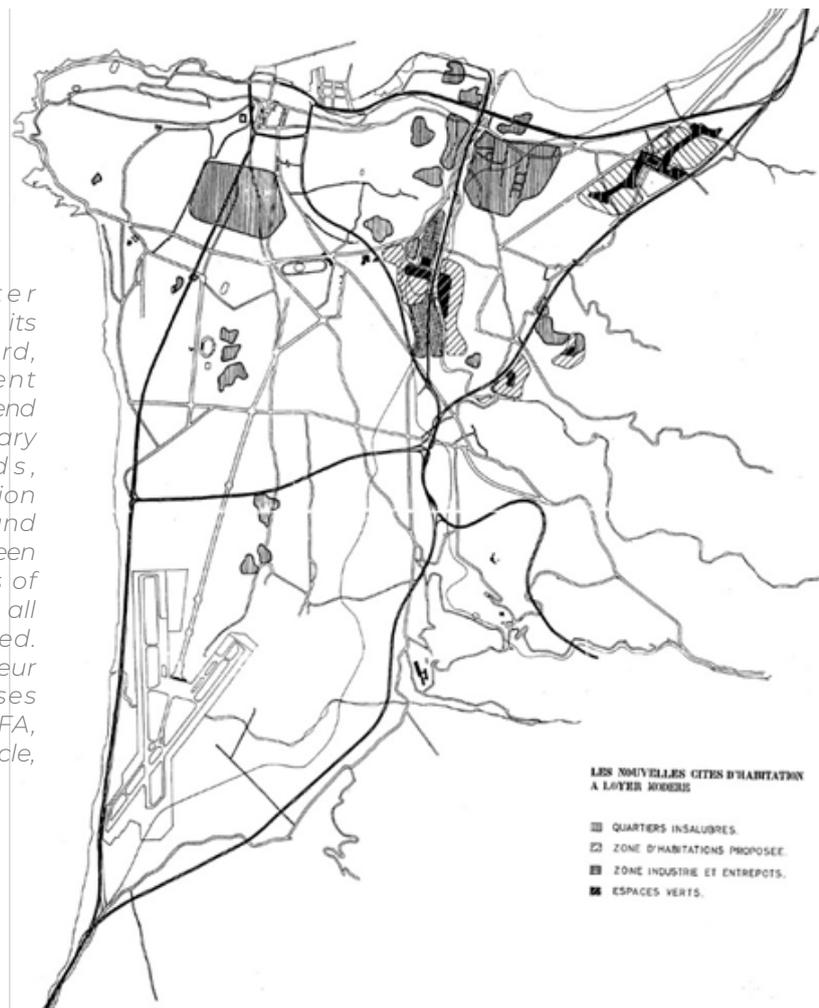
Michel Ecochard, the French architect urban planner who had previously worked in Lebanon, was called back to assist in the development plans of Greater Beirut. To avoid chaotic urban growth and substitute the city's mononuclear structure, a polynuclear structure was created around green spaces. Ecochard also suggested creating a new town on the dunes of the airport's southern suburbs to accommodate the population increase. As for the wooded hills surrounding Beirut, they were to be protected by a low density of buildings just as new constructions on beaches and in forests were to be prohibited.⁸

8. Aga Khan Trust for Culture, <https://www.archnet.org/sites/8377>.

9. The "Institut de Recherche & de Formation en vue du développement" (IRFED) is a French agency that was headed by Dominican Father Louis-Joseph Lebret at the time. During the years following World War II, this successor of social Catholicism had conducted several studies regarding the working-class families in France and had been involved in many projects of development in South America, particularly in Brazil. He was invited to Lebanon to conduct studies regarding the country's social and regional inequalities, aggravated by the developments in Beirut. He suggested a strategy based economic planning that aimed for a more balanced development between Lebanon's different regions. He thus prepared a table of facilities and amenities that aimed at strengthening regional centers. (Tabet, 2012, p.22-27).

10. Tripoli's Fairground later came to be known as the "Rachid Karami International Fair" (RKIF) after the assassination of the prime minister in 1978 during the Lebanese civil war.

Figure 06 Master plan of Beirut and its suburbs, Écochard, 1963. New low-rent housing estates. Legend (in order): Unsanitary neighborhoods, proposed habitation zones, industrial and warehouse zones, green spaces. The plans of Ecochard were not all completely realized. Source: Plan directeur de Beyrouth et ses banlieues, 1963. IFA, Archives du xxe siècle, Fonds Écochard



Seeing that one of President Chehab's main objective was to limit growing inequality between Beirut's wealth and the poverty of the underdeveloped rural areas, a decision to build an international fair in Lebanon was made. In the hope of developing the North, the site was chosen to be in Tripoli⁹, what is considered the capital of the North and Lebanon's second largest city, 85km North of the capital Beirut. The choice to construct this large Fairground in Tripoli was a pivotal decision. This choice strongly reflected president Chehab's desire for social welfare, with the intention of turning Tripoli into an economic and cultural locus outside of Beirut. It also reflected Chehab's desire to assert Lebanon's role as a leading example of modernism in the region. It was actually after prime minister Rachid Karami's¹⁰ suggestion that

11. UNESCO, 2022, p.10

12. By the 1960s, Niemeyer was an important international architect known for his modernist approach that is strongly exemplified in his contribution to the Brasilia project whose masterplan was designed by Lucio Costa. Following the "Interbau" building in Berlin (1956-57), the Tripoli Fairground was his second commission outside the American continent. It was also one of the few large urban-scale projects he designed. The only other comparable urban project that Niemeyer had worked on before 1962 was the Pampulha complex.

13. Including Art Deco, Auguste Perret's rationalism, and French modernism.

14. UNESCO, 2022, p. 28

Tripoli was chosen to be the grounds of this international fair, after the cabinets of ministers had accepted the proposal in November 1959. As such, on May 4, 1960, the Decree 4027 to build the permanent fair in Tripoli was issued alongside the decision to create "Tripoli International Fair Steering Committee." The Land Expropriation Decree was then published on November 13, 1961, before the project's cornerstone was laid in a ceremony taking place on October 1, 1963.¹¹



Figure 07 "A general view shows the Rachid Karami International Fair which was designed by a Brazilian architect Oscar Niemeyer and now inscribed on the UNESCO's World Heritage List, in the northern city of Tripoli, Lebanon February 2, 2023." Retrieved from Issam Abdallah, Reuters, 2024.

In order to achieve its goal, the Lebanese government sought out a renowned international architect. Due to his connections with the Brazilian ambassador in Lebanon as well as other personalities, world renown Brazilian architect Oscar Niemeyer¹² was chosen to take on the project, keeping in mind his position at the time as one of the most important and famous modernist architects at the time.

It is important to note that Niemeyer's architecture was an inspirational example for the new generation of Lebanese architects at the time.

From the 1930s to the end of the 1950s, various French architectural schools¹³ had been the main source of inspiration for Lebanese architects. In the early 1960s, however, the new generation of Lebanese architects had opened their eyes to Brazilian modernism, finding it more suitable for the country's climatic conditions and outdoor-oriented social life.¹⁴ This influence can be seen in many examples including the works of Lebanese architects Joseph Philippe Karam, Pierre Neema, and Maurice Hindieh. It can also be seen in works of other architects in Lebanon such as Jordanian architect Victor Bisharat or French architect André Wogensky.



Figure 08 *Electricité du Liban (EDL)*. In 1966, a competition was created for the design for the EDL headquarters. The winning design was a proposal by Pierre Neema that featured a raised form held by pre-stressed concrete columns, creating a free-flowing floor plan and a clear unobstructed view of the Mediterranean Sea. Photographed by Dalia Khamissy, 2017.

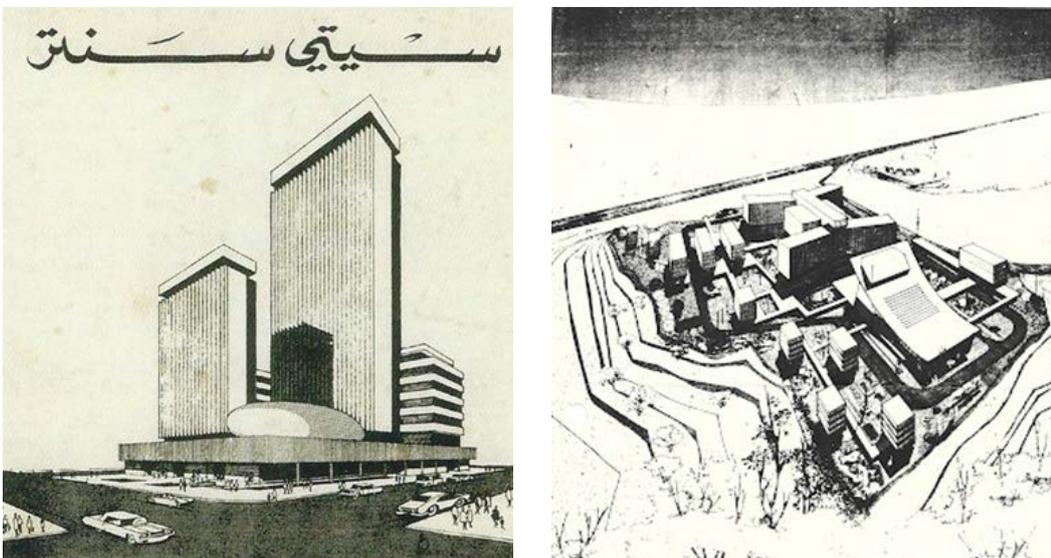


Figure 09 (Left) *City Center Complex (Brochure cover)* | 1968 Beirut. Joseph Philippe Karam. Image Courtesy of the Arab Center for Architecture and director George Arbid. (Right) *City Center Complex (Brochure cover)* | 1968 Beirut. Joseph Philippe Karam. Image Courtesy of the Arab Center for Architecture and director George Arbid.

French architect André Wogensky¹⁵ in association with Maurice Hindie, a young Lebanese architect at the time, were asked to design the Lebanese University's Faculty of Science in the late 50s in Hadath as well as the Ministry of Defense in Yarzeh, on a hill overlooking Beirut in 1967.

16. Roula El Khoury
Fayad, 2017

17. Jad Tabet, 1998,
p. 94-98



Figure 10 Koujak Jaber Building by Victor H. Bishara (1967). Beirut, 2023. Photographed by Mattieu Salvaing



Figure 11 Ministry of Defense in Yarzeh late sixties. 1968. Lebanese Army. <https://www.lebarmy.gov.lb/en/content/black-white>.



Figure 12 Sabbag Center, Alvar Aalto and Alfred Roth, 1967–1970. 2017. Image retrieved from Alvar Aalto Museo.

Finnish architect Alvar Aalto along with Swiss architect Alfred Roth and Lebanese architect Pierre El Khoury designed the Sabbag Center (1967–1970), a bank and an office building in the Hamra district of Beirut.¹⁶

As such, a new generation of Lebanese architects, some of whom, during the late 40s and early 50s, had studied abroad, played a role in Lebanon's architecture during the modern movement.¹⁷

In addition to the popularity of the international style and Brazilian modernism, new tendencies

emerged in the late '70s. Among these tendencies were the use of a Brutalist language influenced by Japanese Metabolism as well as Paul Rudolph's rough expressionism. This tendency can clearly be seen in the late works of Khalil Khoury.



Figure 13 Sabbag Center, Alvar Aalto and Alfred Roth, 1967–1970. 2017. Image retrieved from Alvar Aalto Museo.

Another tendency towards seeking a more contextual approach also emerged, preoccupied with notions of scale and meaning. Among the architects who played a role in this tendency are Belgian architect Jacques Liger-Belair and Assem Salam who aimed at blending principles of modern architecture and local traditions.

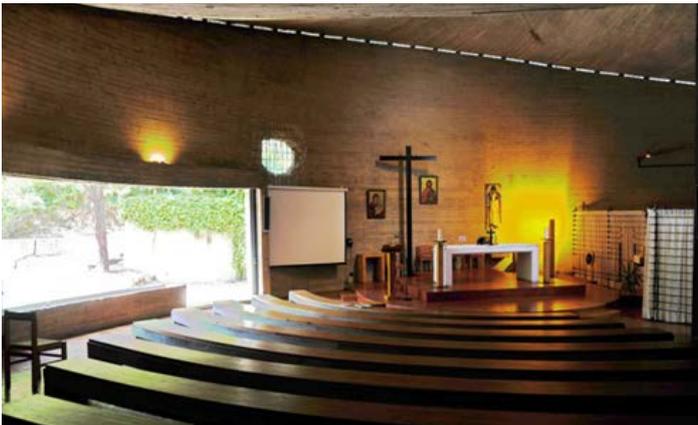


Figure 14 Jacques Liger-Belair: Clarisses Sisters Unity Chapel, in Yarzeh, Lebanon, 1967. Photographed by Johanna Mifsud 2008.

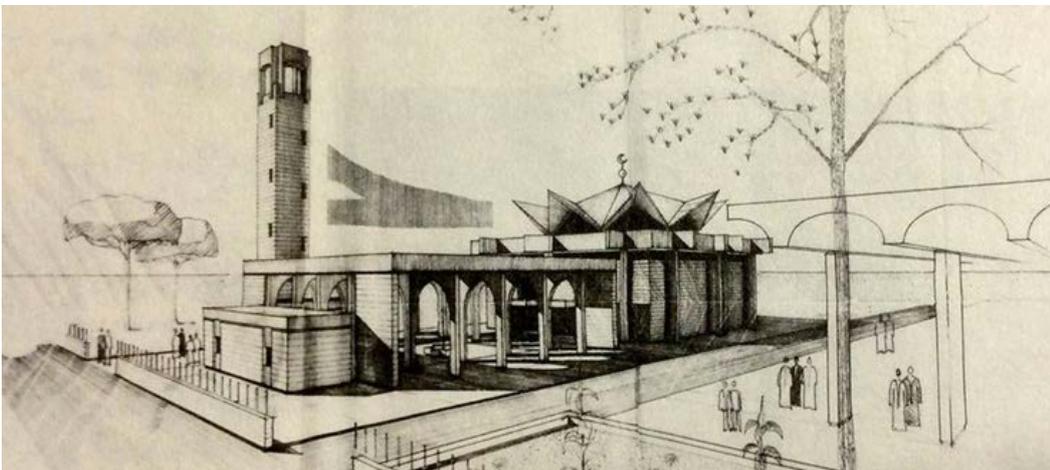


Figure 15 Plan of Khashoggi Mosque designed by architect Assem Salam in 1968. Source: Sylvia Smith, BBC News, 2015

18. Elie Haddad, 2008, p.1

19. Sune Haugbolle, 2011

20. Florence Gaubb, 2015

21. Sune Haugbolle, 2011

22. Tom Perry and William Maclean, 2020

23. Asher Kaufman, 2021

24. Andre Trad, 2005

25. Tom Perry and William Maclean, 2020

Nevertheless, the 1970s represented a period architectural “consolidation” with the use of characteristics typical of the modernist language such as the use of fair-faced concrete highly influenced by Le Corbusier’s later works as well as the works of Oscar Niemeyer and many others.¹⁸

Post Golden Age

Due to the ongoing dispute over the events of the Civil War, as well as the sensitivity of this issue, the current section will briefly describe the civil war but will not dive into in-depth details.

Unfortunately, on April 13, 1975, the Lebanese Civil War broke out. The conflict lasted for 15 years, took away over 90 000 lives¹⁹, injured 300 000 people, and led to the fleeing and emigration of nearly 1M people²⁰. The infrastructure of the country was shattered and needed rebuilding. This war was a multilayered part of Lebanese history that involved internal, regional, and international actors. Some of the issues that were ongoing in the Middle Eastern region during the time also played a role in this war. These issues played a role in this war due to the long-lasting disagreements especially over sectarian power, social justice, national identity, and Lebanon’s alliances. As such, Lebanon’s reputation for having cross-sectarian coexistence in the region was also questioned.²¹

Though the Civil War had ended in 1990, the effects of the war continued during the post war period and continue to this very day, affecting not only the politics and socioeconomic situation of the country, but also the attempts at rehabilitation.

In 1991, after the end of the civil war, the parliament passed an amnesty law forgiving all political crimes committed during the civil war.²² However, despite the end of this 15-year-long conflict, several political difficulties still plague the countries, such as corruption within the government, postponed elections, Hezbollah’s strong presence, conflict with Israel, and the influx of refugees. Nonetheless, attempts at reconstructing the country were made, with the intention of some governmental members to turn the country into an open global financial center. While governmental institutions often failed, the private sector facilitated reaching a relative economic stability and attract investment.²³ In terms of style, after the war, the architectural drive towards new modern experimentations slowly lost its momentum. It was then replaced by post-modernist approaches in the 80s before reaching a newer age of post-war architecture and developments.²⁴

Although the Bank of Lebanon cooperated with the World Bank and International Monetary Fund and managed to stabilize the Lebanese economy for a while, this stability did not last too long after the end of the civil war. On October 17, 2019, the government’s intention to tax internet calls triggered large protests across the country against the government and its corruption.²⁵ Lebanese from different backgrounds gathered

on the streets for several months to protest their leaders' corruption and government mismanagement. This exposed the government for having favored international construction and tourism corporations over local and productive sectors. Tax laws and building codes were eased and deregulated when it came of benefiting Lebanese or International corporations. This resulted in massive constructions in Beirut and its suburbs that destroying the city's past and heritage, building high-rise buildings for the upper-class and wealthy immigrants whose main lives and economic businesses were ironically outside of Lebanon.²⁶

These protests and the events that followed also exposed the Bank of Lebanon for having artificially stabilized the Lebanese Lira's in order to encourage external investment. Up until October 2019, the banks had managed to keep a façade of stability by using loans that were eventually repaid with additional loans. Consequently, Lebanon has been facing a detrimental economic crisis. According to the Consultation & Research Institute in Lebanon and the World Bank, the inflation rate for the past year (2023) had maintained a high reaching an average of 222% for that year.²⁷

The crisis that started at the end of 2019 was intensified by the COVID-19 pandemic that reached Lebanon in February 2020²⁸, followed by the tragic explosion of Beirut's port that took place on August 4, 2020. This was the result of the explosion of a large quantity of ammonium nitrate illegally stored at the port. 200 lives were lost, 6 000 people were wounded, and the city was left in ruins.²⁹ Several of Beirut's architectural heritage was directly impacted, leading to emergency interventions to rescue endangered heritage buildings. One week after the tragic event, the Director-General of Antiquities at the Lebanese Ministry of Culture and UNESCO, alongside other national and international partners, started developing a safeguarding action plan for the architectural heritage. As a result of these efforts, the importance and endangerment of cultural heritage, not just in Beirut, but in Lebanon in general, started gaining perspective and cultural awareness among the public. The issue of lack of awareness, corruption, and absence of comprehensive policies and regulations relating to heritage often led to the destruction of heritage buildings to make way for vertically dense and profitable architecture.³⁰ With an increased public awareness, the protection of Lebanese heritage gains more hope and urgency in order to rebuild.

Since 2019, Lebanon has continued to struggle with a severe economic and financial crisis leaving most of the population impoverished. Currently, tensions have increased at the Lebanese-Israeli borders with the South facing great conflict due to the neighboring situation.³¹

Unfortunately, after the end of the Civil War and with recent events, several buildings from the golden age era remain abandoned or neglected just as many heritage buildings were also demolished to make room for newer developments. Though some attempts have been made to raise awareness to this issue, the country has been facing

26. Asher Kaufman, 2021

27. Anera, 2024

28. Worldometer, 2024

29. Tom Perry and William Maclean, 2020

30. John Hanna, 2020

31. Tirana Hassan, 2024

several shortcomings such as grave financial and socio-economic problems, political instability, and corruption. These shortcomings present challenges in the face of architectural heritage. Examples of neglected abandoned architecture from Lebanon's golden age is documented in the map below. Kindly note that due to insufficient documentation regarding this issue, the following map only documents a few and not all examples.

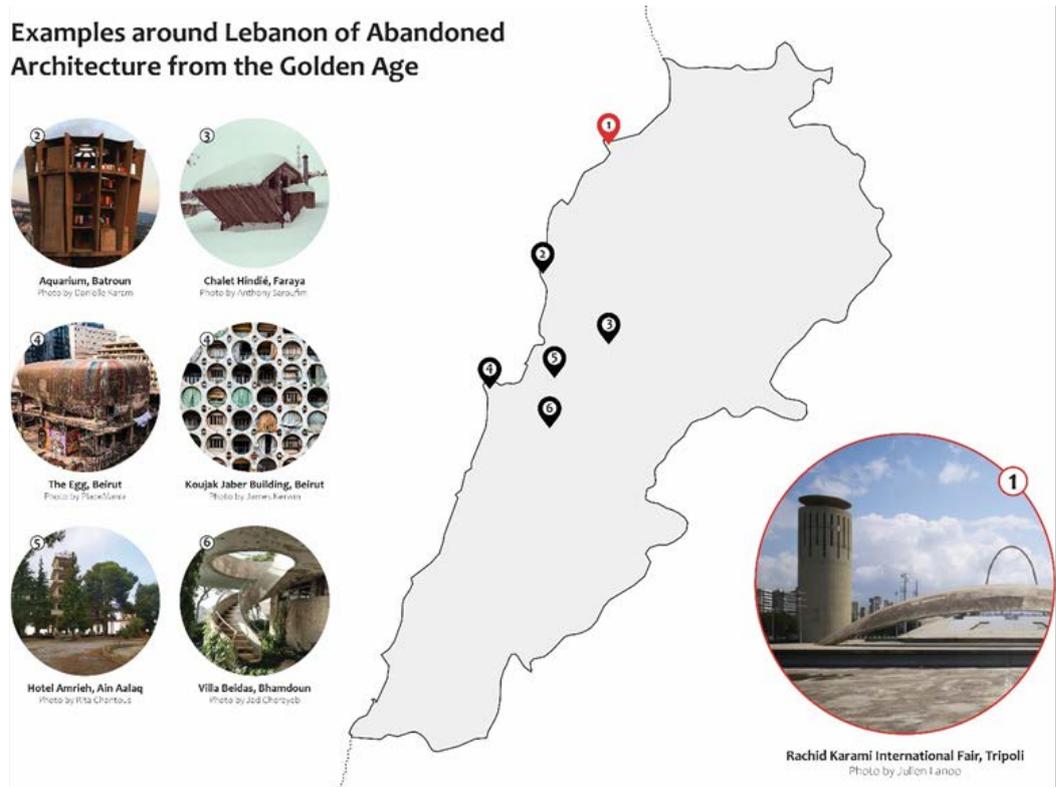


Figure 16 The following map highlights only some of the abandoned golden-age heritage sites around Lebanon. Due to lack of documentation, several sites are not documented. The Rachid Karami International Fairground is highlighted.

Among the sites that require immediate attention is the Rachid Karami International Fair in Tripoli, designed by Oscar Niemeyer in the 1960s. This site lies in one of Lebanon's largest but underdeveloped cities. The extreme state of deterioration has led the site to be added to the List of World Heritage in Danger by UNESCO in 2023. As such, the following thesis aims at preparing a plan for the conservation and adaptive reuse of this neglected legacy in the hope of advocating for the discourse of abandoned modern heritage in Lebanon.

03. Territorial Analysis of Tripoli

A. Historical Context of Tripoli

Located on the Mediterranean Sea, on the coastal strip of Lebanon, Tripoli has had a long history, going all the way back to the 8th century BC when the Phoenicians had founded the city. It is currently considered the capital of the North of Lebanon and the second largest city in the country, 85km North of Beirut. Tripoli is composed of three main municipalities: Tripoli, Mina, and Beddaoui. Though certain efforts were made to include Qalamoun as part of the municipalities, it is not currently regarded as one of the main municipalities.¹ Instead considered as part of the Al Fayhaa union of municipalities.²

1. UN-Habitat, 2016, p. 21

2. Medcities, 2024



Figure 17 Locating Tripoli on the map of Lebanon based on governates. Source: Central Administration of Statistics, 2020.

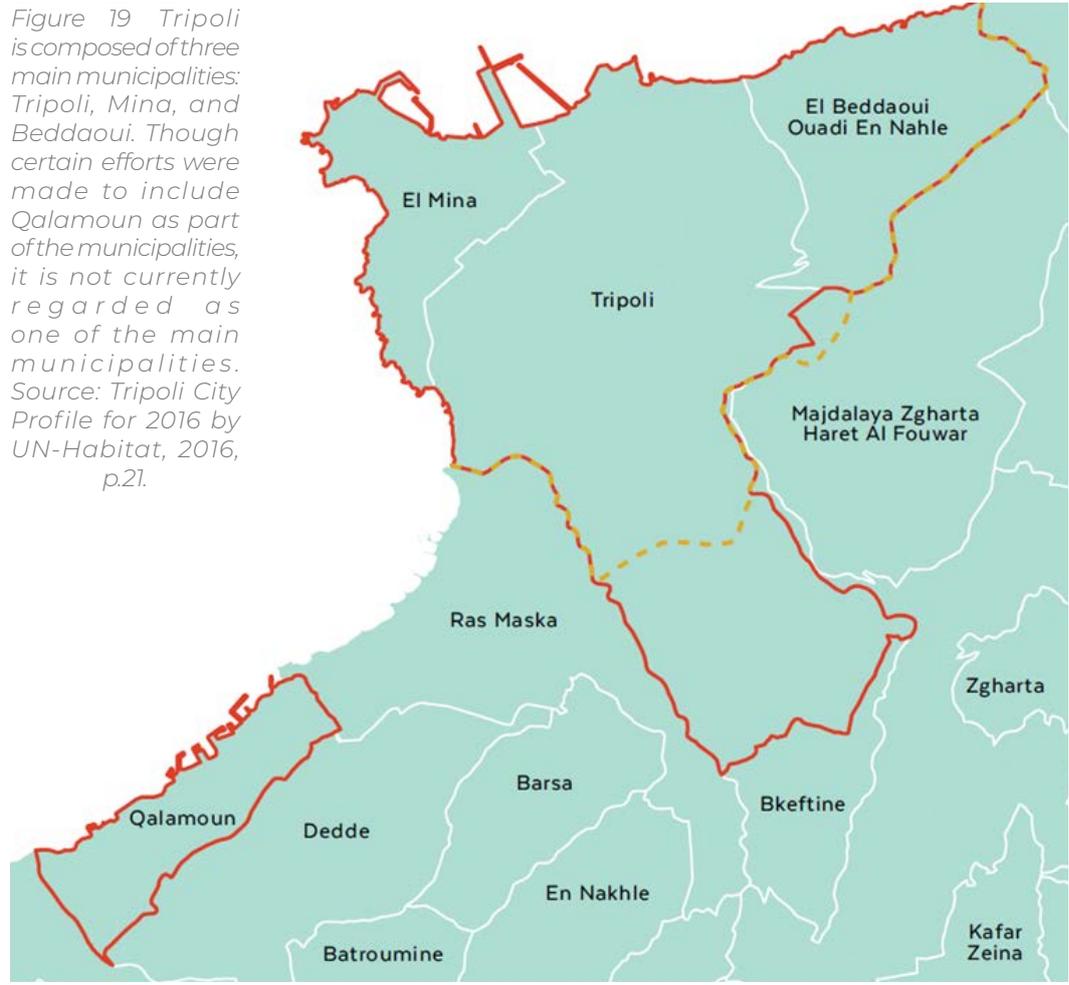


Figure 18 Locating Tripoli within the Northern governate. Source: Tripoli City Profile for 2016 by UN-Habitat, 2016, p.10.

3. UN-Habitat Lebanon, 2016, p. 2

4. Youssef Al Mezeraani, 2019

Figure 19 Tripoli is composed of three main municipalities: Tripoli, Mina, and Beddaoui. Though certain efforts were made to include Qalamoun as part of the municipalities, it is not currently regarded as one of the main municipalities. Source: Tripoli City Profile for 2016 by UN-Habitat, 2016, p.21.



The name “Tripoli” came from the word “Tripolis” meaning triple city. The name originated from Tripoli being the center of a Phoenician confederation with the Arados Island, Sidon, and Tyre.³ This confederation was maintained between 64 B.C. and 4th century A.D. during the Roman Empire that was interested in developing Tripoli as a city. The city was thus equipped by several urban facilities during that time.⁴

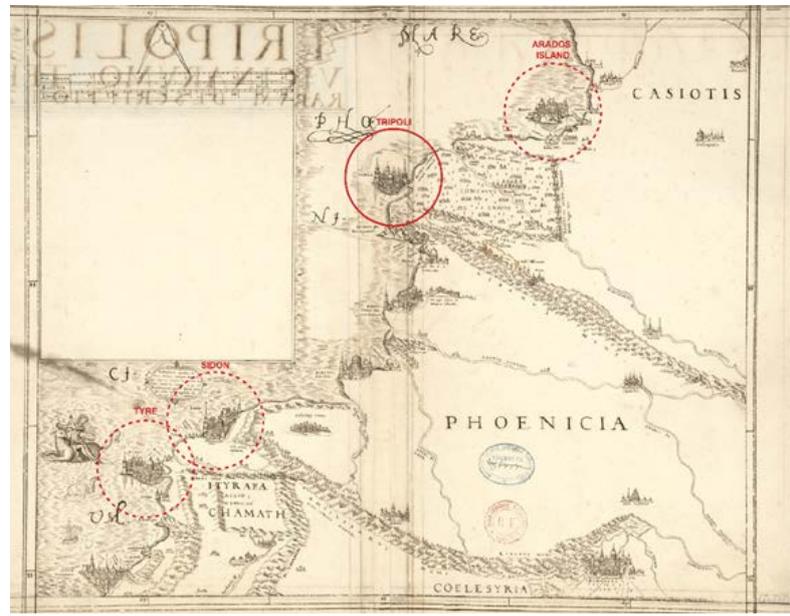


Figure 20 Edited from map showing Tripoli, with nearby description of the area. 1500-1599. Map author Jakob Ziegler (1470-1549). Source: Bibliothèque nationale de France, département Cartes et plans, CPL GE DD-2987 (10111).



Figure 21 Zoom in on Tripoli from previous map. Edited from map showing Tripoli, with nearby description of the area. 1500-1599. Map author Jakob Ziegler (1470-1549). Source: Bibliothèque nationale de France, département Cartes et plans, CPL GE DD-2987 (10111).

5. "The Tripoli Citadel, Lebanon." <https://tripoli-lebanon.org/citadel.html>

6. Medina: city. This medina is now known as the old city

7. Youssef Al Mezeraani, 2019, p. 13

In the 10th century, Tripoli experienced a cultural and commercial boom after becoming an independent province enclosing Lattakia, a city in Syria. Then, in 1109, Tripoli became the capital of one of the main Crusader states. Among the most prominent remains from the time is the crusader's castle of Raymond de Saint-Gilles.⁵



Figure 22 The crusader's castle of Raymond de Saint-Gilles. Photographed by Francis Bedford, 1862. Retrieved from Library of Congress. <https://www.loc.gov/item/2021671068/>

In 1258, after the Mamluks⁶ had defeated the crusaders, a new city had developed 2km away from the previous citadel in order to protect the Mamluks from invasion. Meanwhile, the medina with its narrow streets was designed and used to prevent military attacks. As such, the city grew separately from Al Mina port. The city of Tripoli is regarded as the second best preserved Mamluk city, following Cairo. It currently still has almost 40 medieval monuments in the old town near the citadel.⁷

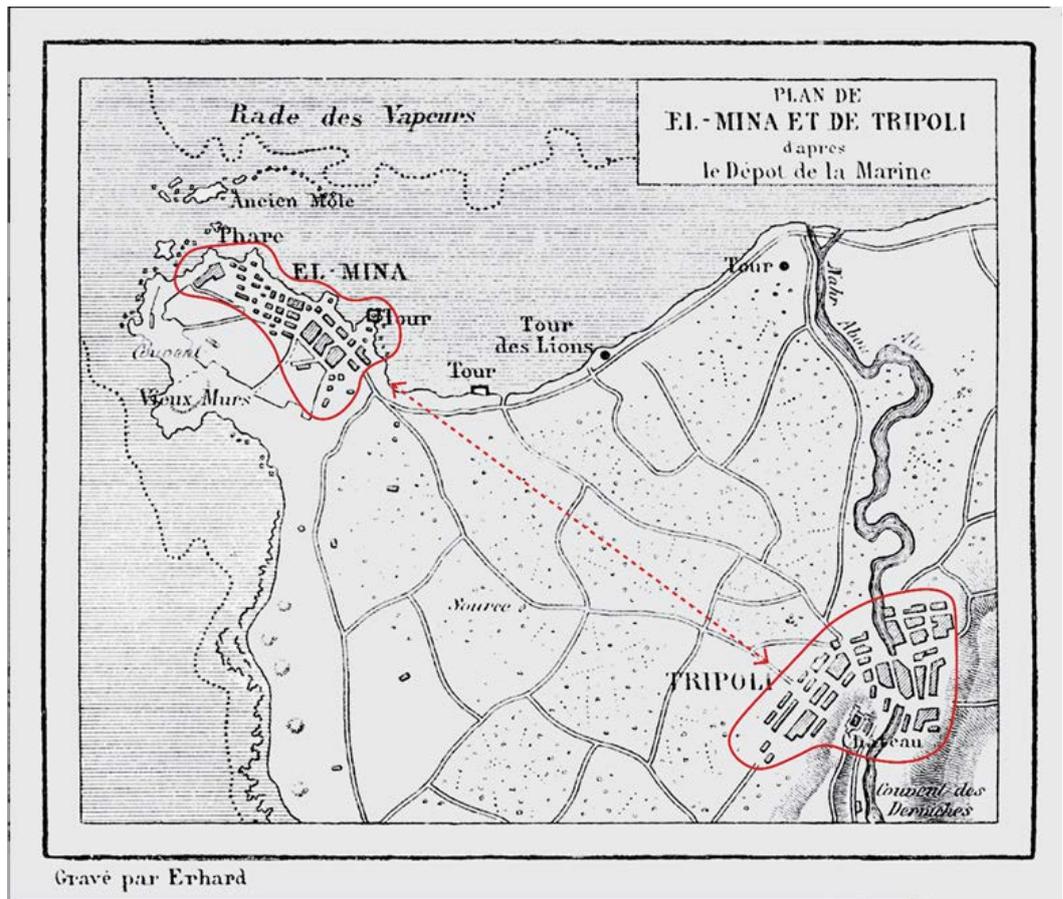


Figure 23 Map from the late 1850s edited to show the development of the El Mina and Tripoli's city center nearly 2km away from each other. Original map depicting the plan of El Mina and Tripoli, 1880. Source: Lortet, Louis Charles. *La Syrie d'aujourd'hui. Voyages dans la phénicie, le liban et la judée.* p.56. Paris, France: Hachette & Cie, 1884.

Figure 24 Street pattern of the Mamluk core documented in 1937. Source: Retrieved from "Heritage Conservation in River Corridor Cities: The Case of Tripoli, Lebanon." p.5 (Manal Ginzarly & Jacques Teller, 2016)



In 1516, the Ottomans⁸ won over the Mamluks and reinforced the citadel in Tripoli. Under this new ruling, the city continued to grow but at a slower pace. Until 1612, Tripoli was one of Aleppo's port, depending on Syrian trade and tax collection from Mont Lebanon for its economy. However it eventually became one of the empire's three⁹ main Wilayat.¹⁰ This new wilaya¹¹ not only contained the borders of modern-day Tripoli, but also included the coastal territories extending from Byblos to Tarsus. Nonetheless, Tripoli represented the capital of this governate.¹² In terms of organization, the city had maintained two main cores as had been originally developed during the time of the Mamluks with the souks¹³ maintaining their traditional role.¹⁴

8. *The Ottoman Empire* was founded in 1299 in a part of Turkey's North-Western regions and quickly started expanding. During the 15th century, it had largely expanded its territories and gained immense power after the conquest of Constantinople. During the 17th century, the empire had reached its greatest size. It was one of the largest and longest lasting empires. In 1922, after the end of World War I, the empire had lost power and ceased to exist. (Eman Elshaikh, 2020)

9. The other wilayat were Aleppo and Damascus.

10. Governates (plural)

11. Governate (singular)

12. Samir Khayat, 2021

13. Souk: market

14. Étienne Gravier, 2012

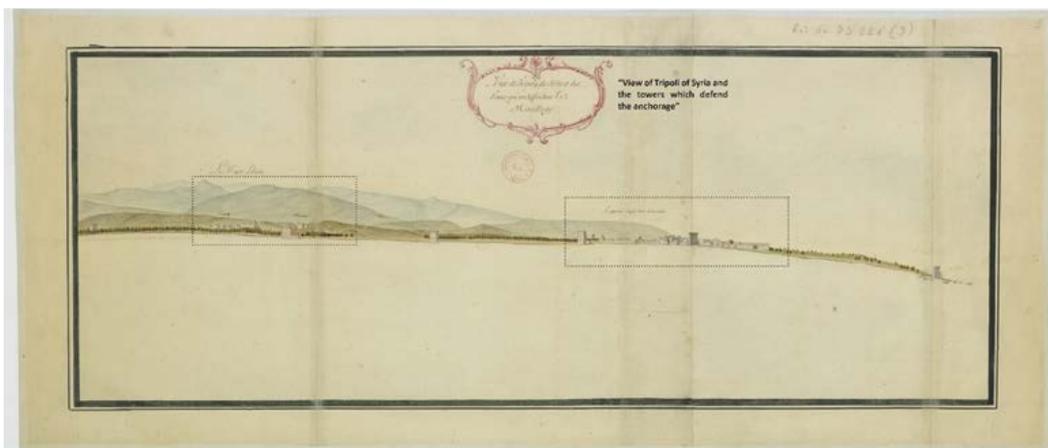


Figure 25 Edited from section of Tripoli showing the relationship between the city, the markets, and the harbor dating from 1685-7. View of Tripoli in Syria and the towers which defend the anchorage. Map author Étienne Gravier. Source: Bibliothèque nationale de France, GE DD-226 (9RES).

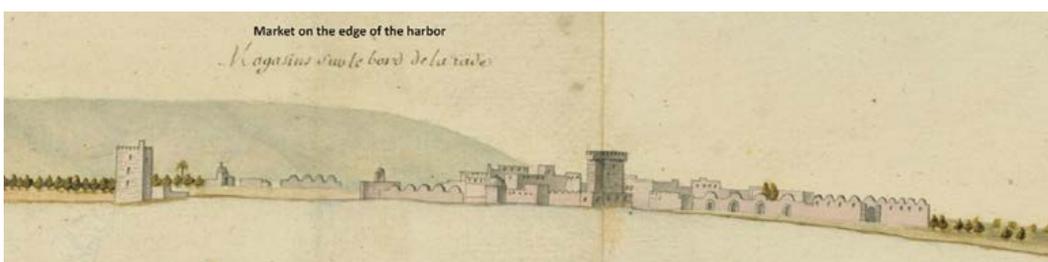
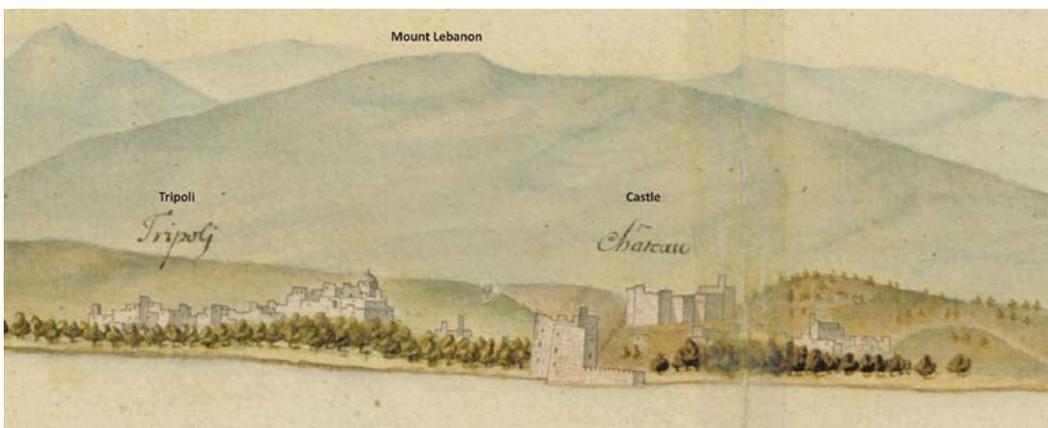


Figure 26 Zoom in on previous section of Tripoli showing the relationship between the city, the markets, and the harbor dating from 1685-7. View of Tripoli in Syria and the towers which defend the anchorage. Map author Étienne Gravier. Source: Bibliothèque nationale de France, GE DD-226 (9RES).

15. In what is now referred to as Khan al Saboun (Soap Khan)

16. "Hanging"

17. "Grinder"

18. "New Bath"

19. Samir Khayat, 2021

20. Youssef Al Mezeraani, 2019, p.15.

21. BNP Parisbas, 2023

In the 17th and 18th centuries, Tripoli benefited from the strong presence of French traders and merchants and witnessed inter-European competition for trade.



Figure 27 19th century picture of the port of Tripoli when Tripoli was still part of Syria. Photographed by Félix Bonfils (1831-1885)

Several important public works took place during the Ottoman Empire, where restoration works took place and several khans, mosques, and baths were developed and still stand to this day. These works included the Citadel's restoration and eventual modifications, the restoration of the Al Tawbah Mosque, the construction of a military barrack¹⁵ in the city center to control uprisings, the development of the city's southern entrance, the construction of the Al-Muallaq¹⁶ Mosque in 1559 and the Al-Tahhan¹⁷ Mosque in the early 1600s, and the construction of the Hammam Al Jadid¹⁸ in 1740.¹⁹

Eventually, in the 19th century, still under the Ottoman ruling, the competition between the ports of Beirut and Tripoli escalated, with Beirut dominating the scene from the 1860s. A road linking Tripoli and Beirut was eventually developed in 1909. In the early 1900s, the also Ottomans built a railway system between Tripoli, Homs and Aleppo that started operating in 1911. This in turn led to further economic development of the city.²⁰ Although the company was an Ottoman company, the headquarters were in Paris and the management was completely French.²¹

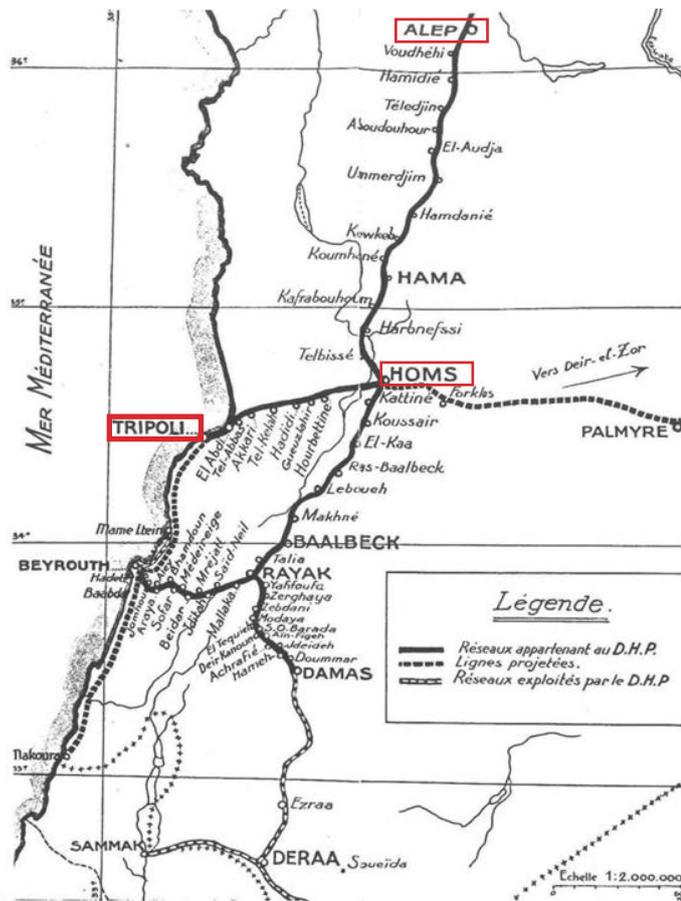


Figure 28 Railway network showing the connection between what is now Lebanon and Syria. The connection between Tripoli, Homs, and Aleppo can also be seen. Source: CGP editions. BNP Paribas Historical Archives (2023).

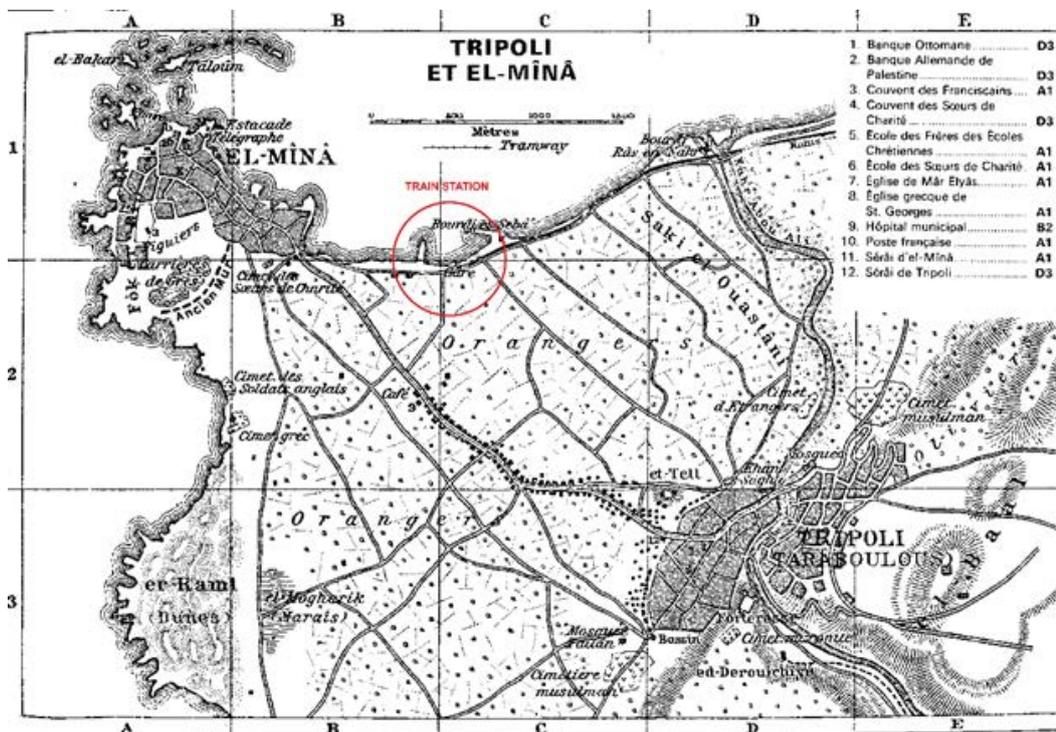


Figure 29 Edited map of Tripoli and El Mina showing the new train station that connects Tripoli to Homs and Aleppo, 1912. Map author: Baedeker, Karl/Wagner & Debes Source: « Tripoli à travers les âges », Nina Jidejian, 1969, p. 121.

22. Youssef Al Mezeraani, 2019, p.17.

23. The "Institut de Recherche & de Formation en vue du développement" (IRFED) is a French agency that was headed by Dominican Father Louis-Joseph Lebreton at the time. During the years following World War II, this successor of social Catholicism had conducted several studies regarding the working-class families in France and had been involved in many projects of development in South America, particularly in Brazil. He was invited to Lebanon to conduct studies regarding the country's social and regional inequalities, aggravated by the developments in Beirut. He suggested a strategy based on economic planning that aimed for a more balanced development between Lebanon's different regions. He thus prepared a table of facilities and amenities that aimed at strengthening regional centers. (Jad Tabet, 2012).

24. UNESCO, 2022, p. 9-10

25. Charbel Nahas, 2001

26. UN-Habitat, 2016, p.3

After the end of World War I and the end of the Ottoman Empire, Lebanon came under French ruling. During the time, the borders of Greater Lebanon were defined in 1920, including Tripoli as part of Lebanon instead of Syria as it had previously been. This rendered Tripoli somewhat isolated from Homs which had previously acted as a commercial outlet. During that period of the century, the old city of Tripoli and the neighboring port areas of El Mina started developing simultaneously. The old city, designed as a deterrent to military invasions, is a hub for commercial and craftsmanship activities and grew separate from the El Mina port. At the time, the upper-class population of Tripoli moved to new neighborhoods along the city outskirts. These new neighborhoods faced a new wave of western-style modernization with rectilinear boulevards and new infrastructure such as cinemas and cafes. As such, these areas became the liveliest parts of the city where modernization and administrative organizations were set up. Meanwhile, the city's traditional historic center maintained its traditional role.²²



Figure 30 Old abandoned train station in Tripoli After the French Mandate began, French authorities continued developing some of the infrastructural plans that had been initiated by the Ottomans, including developing the railway system. Retrieved from <https://guide.moovtoo.com/LB/en/famous-useful-places/detail/ancienne-gare-de-Tripoli-9991>. Accessed July 2024.

In 1943, during the ongoing events of World War II and after a lengthy battle, Lebanon had gained its independence from French colonizers and became an independent democratic country with the previously defined borders of Greater Lebanon. After its independence, Lebanon saw a rapid economic growth mainly concentrated in the central region, particularly Beirut. Nonetheless, peripheral regions in the South, the North, and the Bekaa valley remained underdeveloped and lacked public facilities and infrastructures.²³ This in turn affected Tripoli, the capital of the North, and hindered its development in comparison to Beirut.²⁴

During the 20th century and mid-1950s, Tripoli's population increased due to rural migration where migrants tended to settle in areas of Tripoli like the souks and Tabbaneh while some of the richer inhabitants moved out of the historical city. In 1955, the Abu Ali River flooded leading to the construction of a concrete channel and the consequent demolition of nearly 2000 residential units, with most of the displacements directed towards the historic center.²⁵ This affected the socio-economic composition of Tripoli's neighborhoods as well as deepened the socio-spatial segregation in the city.²⁶



Figure 31 Aerial view of Tripoli in 1936 with the Abu Ali River before the construction of the channel wall. Institut Français Du Proche-Orient, 1936.



Figure 32 Abu Ali River before the 1955 flood. Jisr Al Jadid with houses built on the two banks of the river. Photographed by Louis de Clercq, 1859. Source : Bibliothèque nationale de France



Figure 33 (Left) View of the orange orchards, 1950s. (Right) Tripoli in the 1950s with the Citadel in the distance. Source: @colorize.lebanon retrieved from <https://www.the961.com/rare-pictures-of-old-tripoli/>. Accessed July 2024.

27. UNESCO, 2022, p. 9-10

28. Tripoli's Fairground later came to be known as the "Rachid Karami International Fair" (RKIF) after the assassination of the prime minister in 1978 during the Lebanese civil war. (UNESCO, 2022, p. 30)

29. UNESCO, 2022, p. 10

In 1958, General Fouad Chehab, the Chief of the Army at the time, was elected as the President of the Republic. His main objective was to limit growing inequality between Beirut's wealth and the poverty of the underdeveloped rural areas. This in turn meant dedicating efforts towards developing Tripoli. As such, when the time came to choose a site for the construction of Lebanon's International Fairground, President Chehab found Tripoli to be the most suitable site, hoping this project would allow the development of other major cities besides Beirut.²⁷ The choice to construct this large Fairground in Tripoli was a pivotal decision. It strongly reflected president Chehab's desire for social welfare, with the intention of turning Tripoli into an economic and cultural locus outside of Beirut. It also reflected Chehab's desire to assert Lebanon's role as a leading example of modernism in the region. It was actually after prime minister Rachid Karami's²⁸ suggestion that Tripoli was chosen to be the grounds of this international fair, after the cabinets of ministers had accepted the proposal in November 1959. As such, on May 4, 1960, the Decree 4027 to build the permanent fair in Tripoli was issued alongside the decision to create "Tripoli International Fair Steering Committee." The Land Expropriation Decree was then published on November 13, 1961, before the project's cornerstone was laid in a ceremony taking place on October 1, 1963. Unfortunately, due to the outbreak of the war, the site construction was eventually halted.²⁹

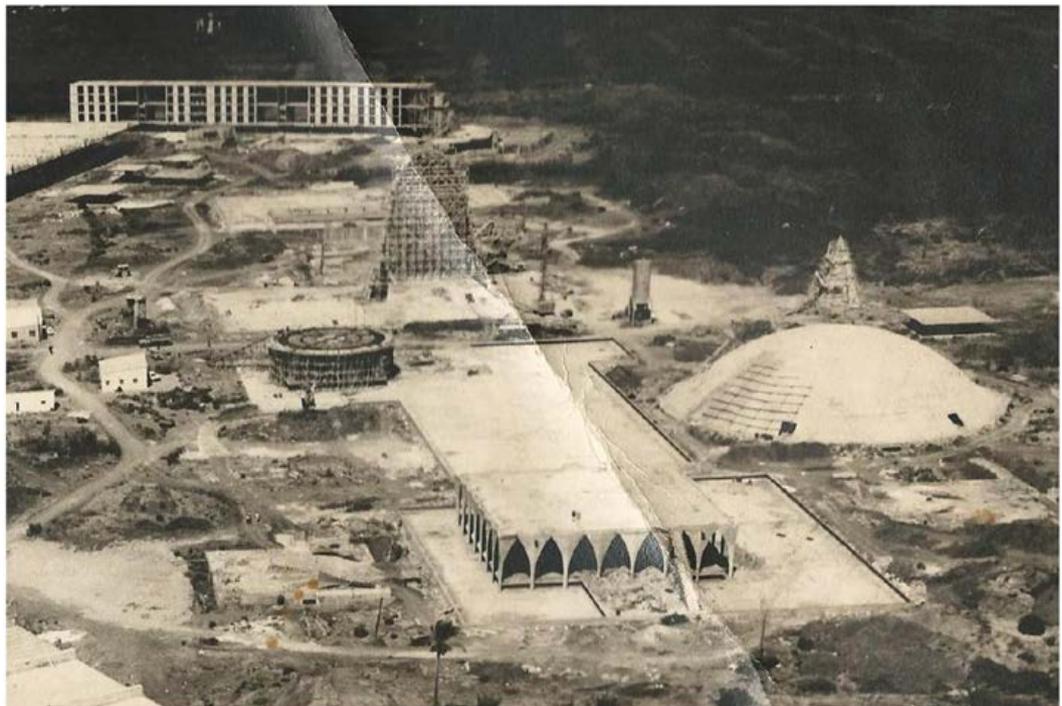


Figure 34 Grand Arch under construction, 1965. Source: Naghi, Wassim. "The Rashid Karami International Fair, Tripoli, Lebanon. The Grand Arch, Consolidation and Restoration Project. The Terms of References, T.O.R. Call For Consultants Stage." Rev. 2. p.17. Lebanon: UNESCO, January 2022.

In the 1970s, Tripoli saw gradual deindustrialization with major infrastructural services like rail connections, the International Fairground, and oil refineries ceasing to operate due to the start of the civil war in 1975. During the war, the city lost its multi-religious nature especially

with the migration of the Maronite Christians from Tripoli to the nearby area of Zgharta.

During the civil war (1975-1990), Tripoli unfortunately fell victim to massive destructions and lost its interaction with its surrounding regions. This was also due to the fact that these regions no longer meet at Tripoli for production, business, education, and communication. Instead, direct links towards Beirut have been developed, taking away from Tripoli's previous role.³⁰ In 1983, Tripoli faced one of its most intense conflicts during the war, with the areas of Jabal Mohsen, Bab al-Tabbaneh, and Qobbeh being the most severely affected.³¹ Several of the areas that had been affected during the civil war remain among the poorest and most conflict-ridden parts of the city.

30. Rachid Jamali, 2016.

31. The Centre for Social Sciences Research & Action, 2017

32. UN-Habitat Lebanon, 2016, p. 2-3



Figure 35 Neighborhoods and sub-neighborhoods of Tripoli Urban Area. Source: Tripoli City Profile for 2016 by UN-Habitat, 2017.

After the war, due to over crowdedness and deteriorating conditions, the old city's inhabitants moved towards the suburbs that were facing a boom in construction. This left the historic center to decay. The city eventually grew in population and expanded outwards towards new extensions in Qobbe, Al-Zahrieh, and Abu-Samra. As for the city's composition, it became more than 90% Sunni Muslims with the Orthodox Christians living in Al Mina and the minority Alawi faith living in Jabal Mohsen. With the growth of new neighborhoods, along the road linking Tripoli to Al Mina, a segregation between the rich "new city" and the poor "old city" became evident.³²

33. *Among the areas of Tripoli suffering from extremely low socio-economic conditions and conflicts are Jabal Mohsen, and Bab El Tabbaneh. Before the war, these two neighborhoods were intertwined. Currently, conflicts between the two often arise.* (Rachid Jamali, 2016)

34. *Irna van der Molen, 2015*

35. *Including the World Bank, the French Agency for Development (AFD), and the United Nations Development Programme (UNDP)*

36. *Rachid Jamali, 2016*

37. *By February 2021, according to the World Food Programme, the Lebanese Lira lost over 90% of its value and cost of food increasing over 600%*

38. *Maya Gebeily, 2021*

39. *Amnesty International, 2024*

40. *Maya Gebeily, 2021*

41. *UN-Habitat, 2022*

42. *UN-Habitat, 2022*

As for post-war planning, reconstruction efforts were mainly directed towards Beirut, leaving Tripoli to suffer from poverty, underdevelopment, intense conflicts, and overall neglect, with some areas affected more than others.³³ In addition to the damages due to the civil war, Tripoli continues to face tensions and clashes with political divides visible at neighborhood levels, poverty, and influx of refugees.³⁴ Political divisions throughout the country remained, affecting the situation in Tripoli. Throughout this period, particularly between 2008-2014, Tripoli witnessed several outbursts of violence in addition to citizen displacements from the critical zones such as Bab el Tabbaneh, consequent poverty of these citizens, destruction of buildings and infrastructure, and the tarnishing of the city's image resulting in further marginalization.

In 2014, the government ordered the army to put an end to the long-term violence that had taken over the area. Ever since, various organizations and institutes³⁵ tried to revive the city's economic, social, and cultural activities.³⁶

Prior to the severe socio-economic crisis that had begun in 2019, Tripoli's urban poverty rate had reached 58% with more than 25% of households living on less than three meals a day. This was the lowest rate across the country. After the crisis had begun,³⁷ Tripoli took a strong hit especially in terms of food insecurity and housing. By 2022, 80% of the population had living in an impoverished state.³⁸ Not only so, but several buildings in Tripoli are neglected, many of which are at risk of collapse. In August 2023, the municipality of Tripoli had identified 800-1000 buildings at risk.³⁹ According to Adib Nehme, an expert on poverty and development who worked with the U.N. for over a decade, Tripoli "is not a city with poor pockets like Beirut – this is a poor city with wealth pockets."⁴⁰

Moreover, among the challenges Tripoli faces is the lack of safe infrastructure as well as inclusive public spaces. Though this is a common occurrence in Lebanon, the gravity of the situation in Tripoli requires immediate action. Several attempts have been made by various organizations to improve on the situation such as the UN's work on rehabilitation of two municipal football fields, the creation of an inclusive and accessible park in the Mina area, and the rehabilitation of 19 heritage buildings in the main streets of the historic Old Mina.⁴¹

The unfortunate events following the start of socio-economic crisis in 2019 presented new challenges to the city that hindered this development. Tripoli is currently trying to move its economic wheel and develop aspects of its civic life. Its economy depends on craft industries, some small manufacturing industries, and tourism. Several projects have been developed to help with the city's progress, including the installation of solar and LED lighting on major highways and within neighborhoods, the planning and development of public spaces, and the rehabilitation of 19 heritage buildings by UN-Habitat.⁴² UNESCO has also played a role in the development of the area, with recent efforts

directed towards creating a Conservation Management Plan for the Rachid Karami International Fair, which will further be discussed in the upcoming chapter.⁴³

43. UNESCO, 2022, p. 5

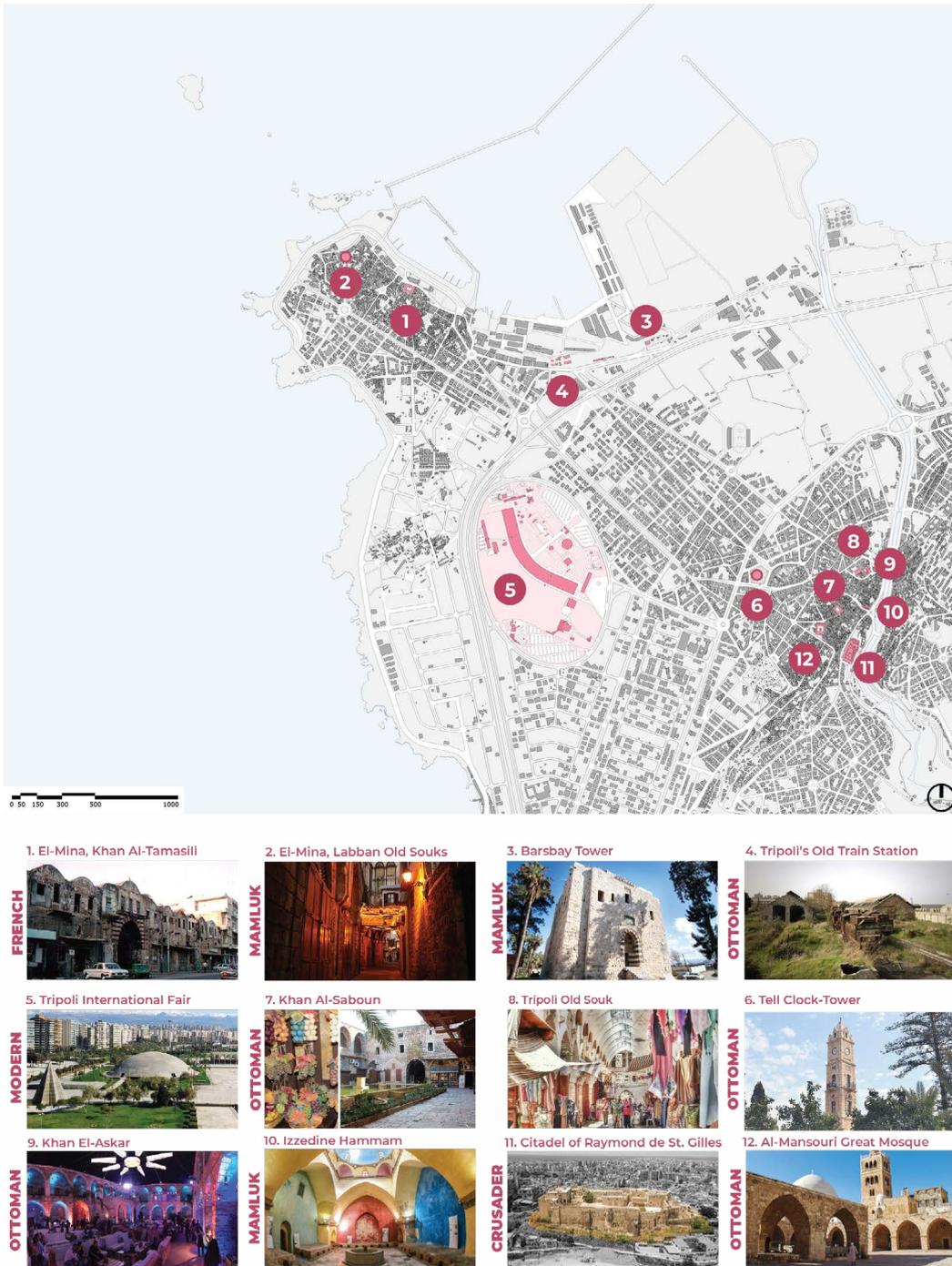


Figure 36 Map of Landmarks in Tripoli based on different historical periods. Image sources found in Bibliography under "3. Territorial Analysis of Tripoli -> Image sources -> Landmarks map picture references.

It is important to note that, as a result of this dynamic history, not only does each neighborhood or area in Tripoli have a distinct style and atmosphere, but even areas themselves present an eclectic array of architecture styles. The maps below show the different landmarks distributed around Tripoli as well as the different architectural styles and socio-economic conditions of each area.

Figure 37 Tripoli is a city of diversity with varying socio-economic situations. Different pictures and descriptions shown below explain the different impressions within the city. The following map is to be read parallel to the maps explained in the territorial analysis.

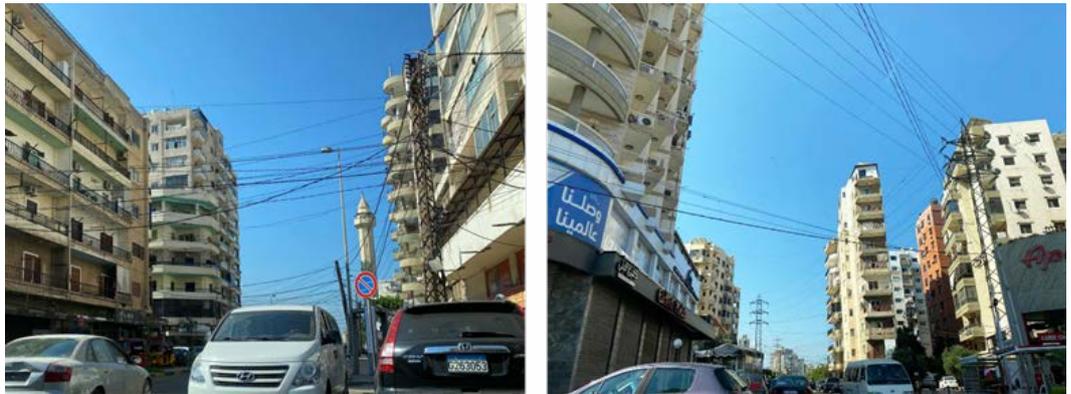
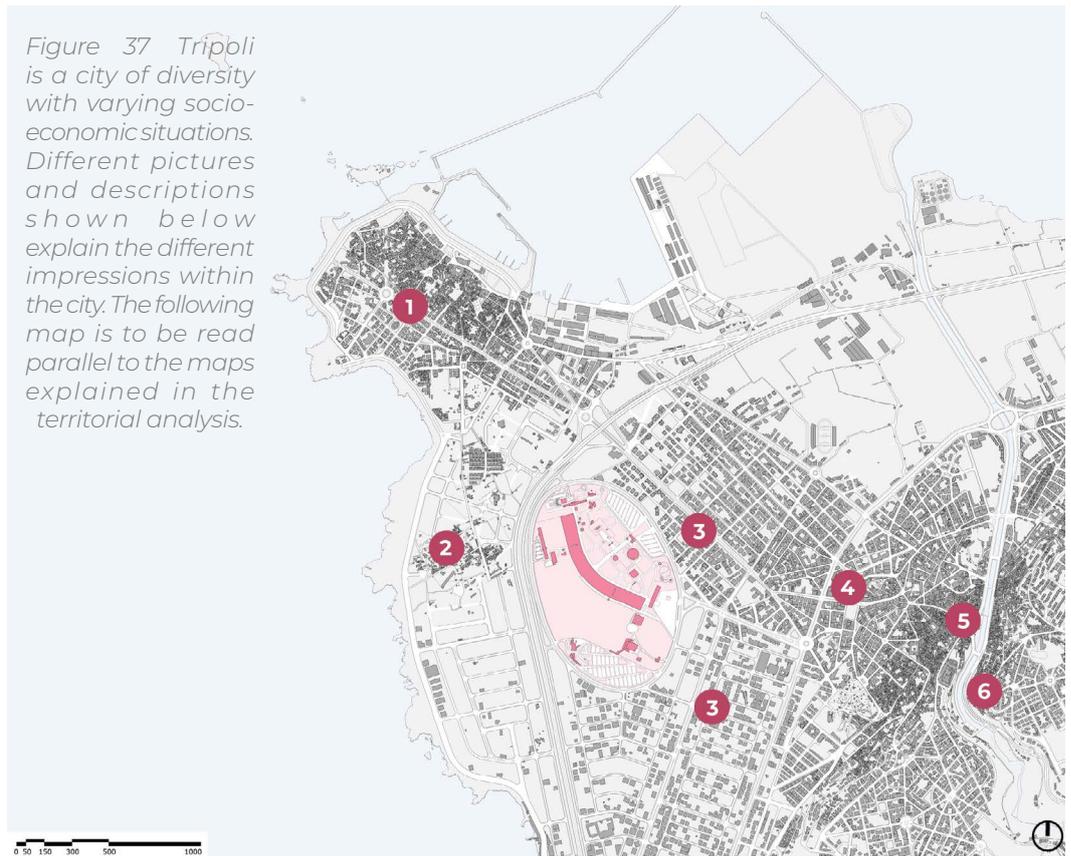


Figure 38 Area 1: El Mina area mainly consists of a mix of the historic port area as well as a mix of residential and commercial area. People in the area generally live in a middle to lower income household. Photographs taken by Nour Tabet, August 2024.



Figure 39 Area 2 consists of informal urban settlements that reflect the different problems faced within the area in terms of economic situation as well as safety concerns. Image Sources: (Left) Photo taken by Victoria C. Werling, 2021. Retrieved from <https://beirut-today.com/2021/05/03/how-uneven-aid-distribution-creates-divisions-in-hay-al-tanak/> (Right) Reuters, 2020. Retrieved from <https://english.alarabiya.net/variety/2016/08/09/Man-allegedly-suffering-financial-woes-sets-himself-on-fire-in-Lebanon->



Figure 40 Area 3 consists of the area directly facing the fairground, consisting mainly of upper- or middle-class households. The northern part of this area is more densely built while the southern part is relatively newer and less dense. The dominant function of the area is residential. Photographed by Nour Tabet, August 2024.



Figure 41 Area 4 is downtown Tripoli, reflecting the influence of Ottoman, French, and modern architecture in the area . Photographed by Mounzer Hamze, 2019.



Figure 42 Area 5 consists of the old historic center near the citadel with old souks and traditional crafts taking place. (Left) Tripoli's old souks. Photographed by Lanell Rachid, 2022. (Right) Khan el Khayatine dates back to the Mamluk era. Photographed by Mounzer Hamze, 2019.



Figure 43 Crafts in the historic souks of Tripoli include soap making, copper crafts, fragrances, traditional food products, and clothes making. Photographed by Lanell Rachid, 2022.

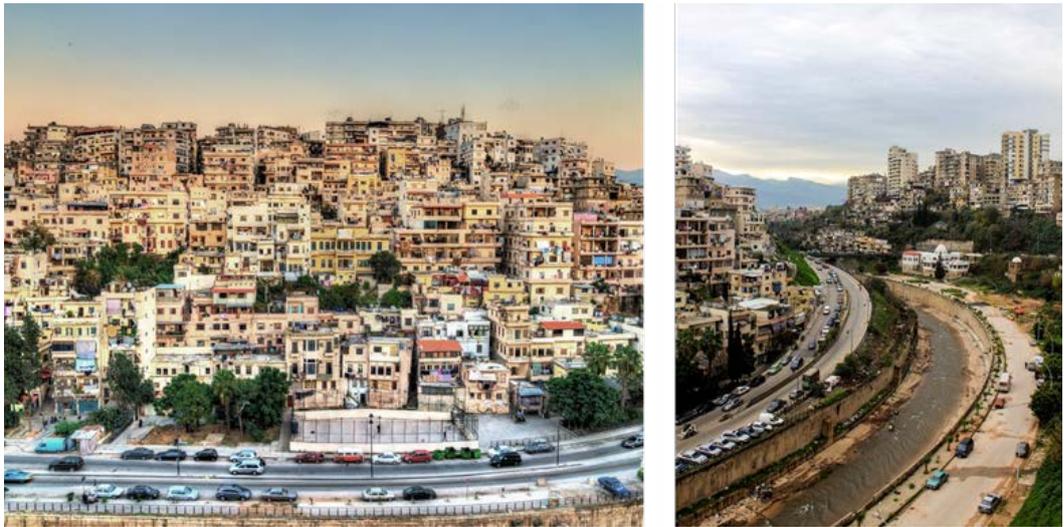


Figure 44 Area 6 reflects the area separated by the Abu Ali River. A small part of that area was developed with the historic center while the other developed at a later time and is mainly residential. The living conditions of the area vary between poor and middle class. (Left) Tripoli Cityscape, Lebanon. Source: David Zacik, mytravelation.com, 2024. (Right) The Abu Ali River runs in front of the main street facing the building clusters. Photographed by Clemens Schmillen, 2017.

03. Territorial Analysis of Tripoli

B. Current Territorial Situation

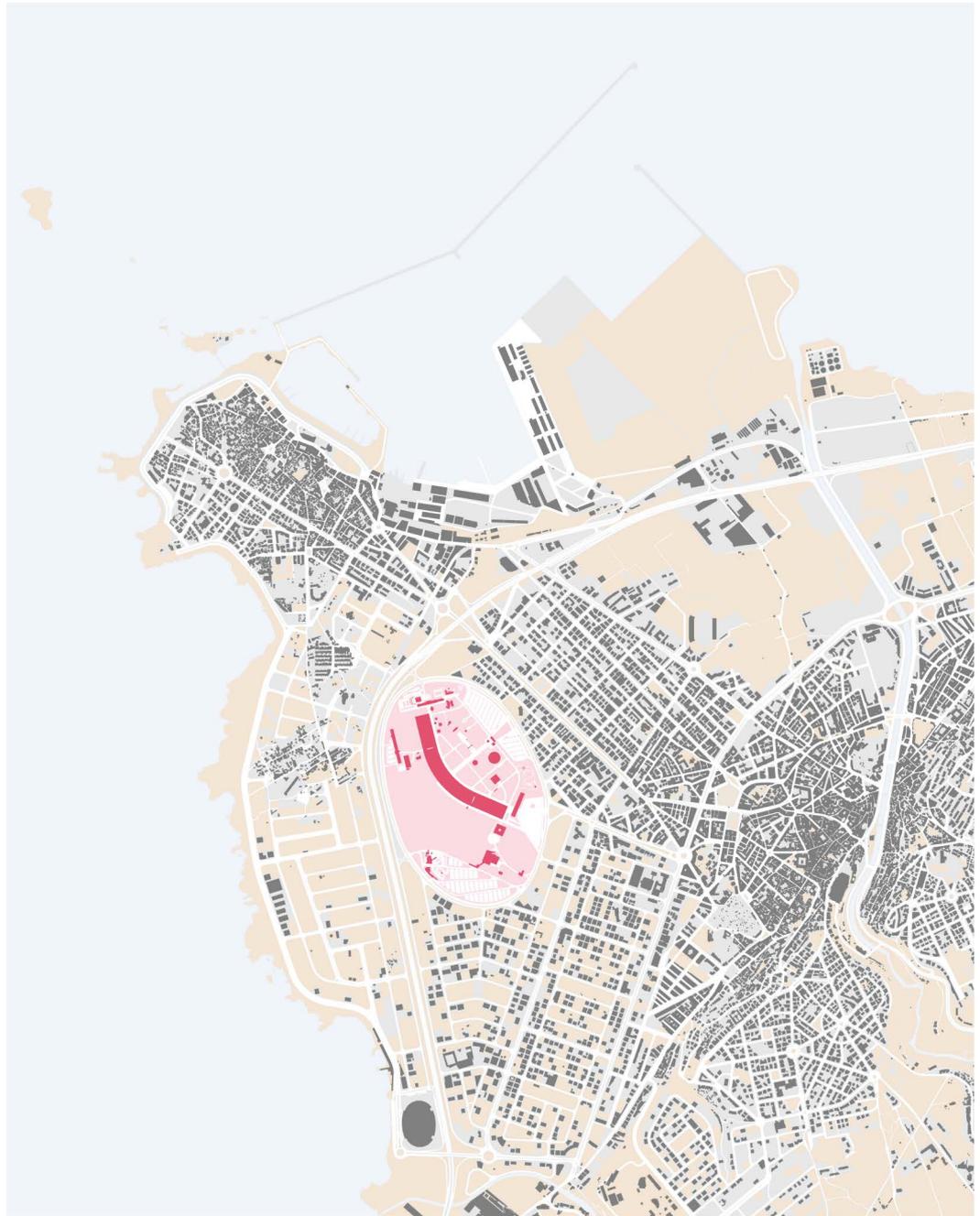
Rachid Karami
International
Fair



Built Vs. Unbuilt

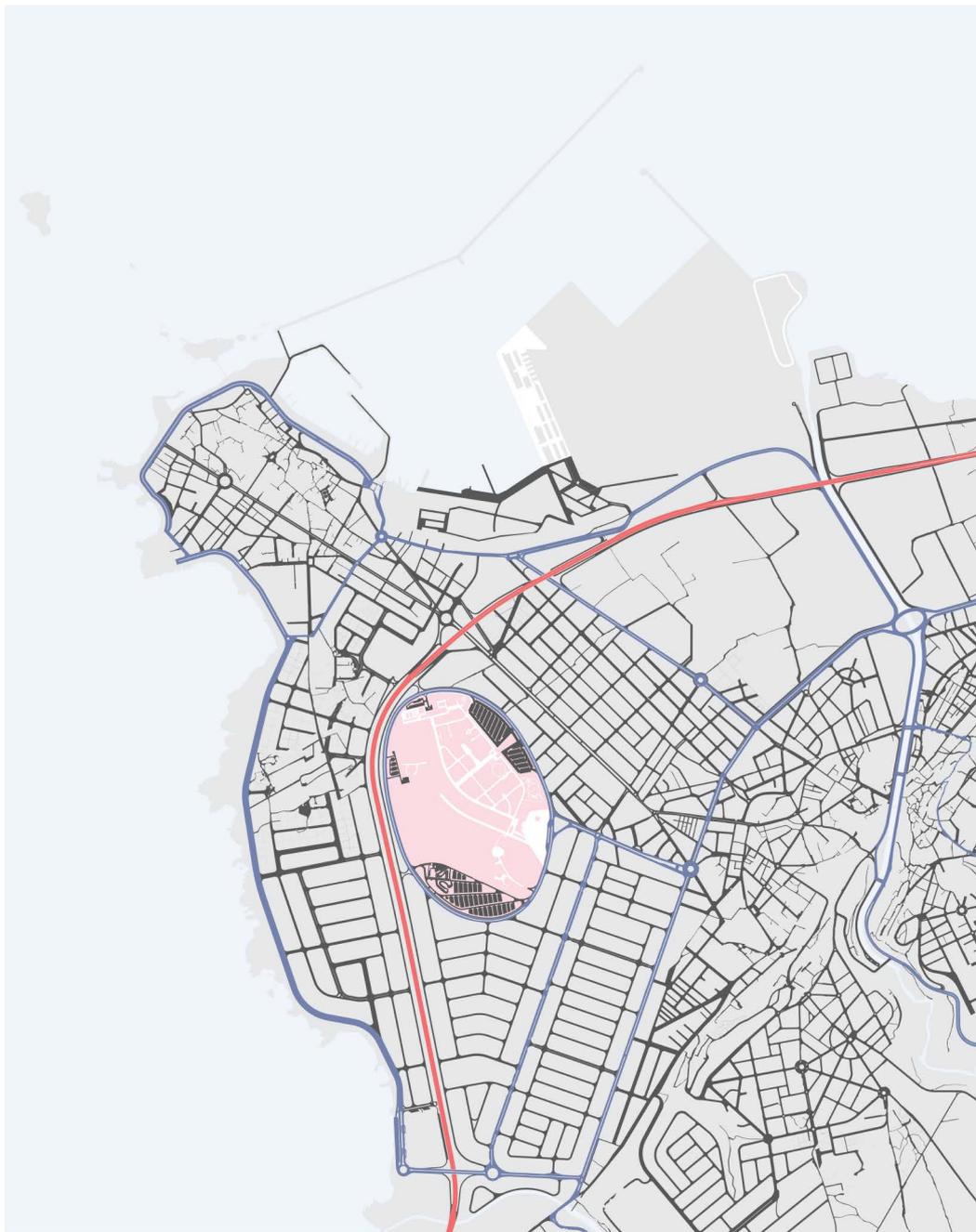
Tripoli's built density varies significantly. The densest areas being the two historical cores of Tripoli and Al-Mina, while the density decreases the further one gets from these cores. Undeveloped lands within the more recent urban expansion also contributes to the inconsistency and impact of negative spaces, as can be seen south and west of the Rachid Karami International Fair.

- Rachid Karami International Fair
- Permeable Soil

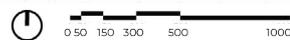


Permeable Soil

The permeable soil within Tripoli's Urban area is mostly due to the undeveloped plots of land and not due to purposeful planning. Very few of these spaces were designated for green spaces or left to balance out the effects of the built environment on the land.



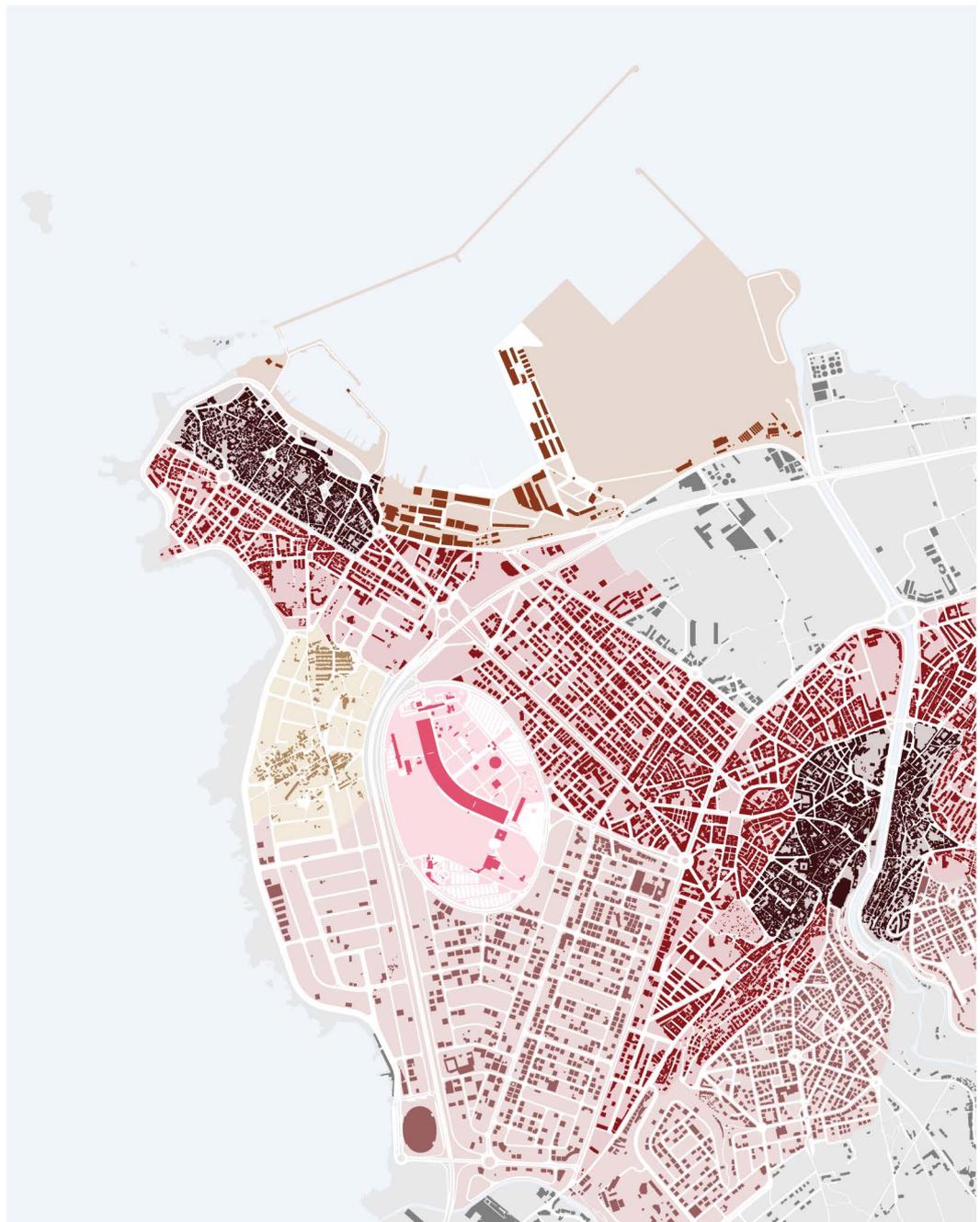
- Rachid Karami International Fair
- Current Highway
- Main Roads
- Secondary Roads



Road Networks

The road network in Tripoli varies from the organic and webbed within the historic centers to the rectilinear within the more modern areas. The Coastal highway in Tripoli which was only completed recently in 2014 creates an urban divide between the seaside Al-Mina and Tripoli, and therefore the Fair and the east side of this highway. Passing from the east to the west side of this highway, both pedestrian and vehicular, is very limited. A very notable problem in Tripoli is also the lack of pedestrian walkways, sidewalk and crossings.

- Rachid Karami International Fair
- Historic City Center
- 1st Expansion Phases
- Modern Urban Expansion
- The Port
- Informal Settlement



Urban Development

Tripoli's urban development first started with two separate cores, one at the port (Al-Mina) and the other inland engulfing part of Abou Ali River. The urban expansion continued with the Ottoman rule and the French Mandate connecting the two cores. The modern urbanization of Tripoli following Lebanon's Independence primarily began with the development of the Fair, a modern intervention characterized by very a rational and linear urban planning.

Significant throughout history, the port continued evolving with the city, but was relatively neglected in later years in favor of Beirut's port.

Informal settlements within Tripoli mainly consist of Syrian and Palestinian refugee camps that do not follow the urban layout of the city.



- Rachid Karami International Fair
- Historic City Centers
- Residential Area
- Residential w/ Commercial
- Residential
- Educational
- Commercial
- Religious
- Health Centers
- Cultural
- Sports Centers
- Governmental
- Industrial Area
- Port Area
- Informal Settlements

Building Functions

Building functions are spread sporadically within Tripoli. There are no areas with a delineated function aside from the port and the industrial areas. The area surrounding our site has a predominantly residential use. However, most residential buildings also have some commercial use, often on their ground floors.

-  Rachid Karami International Fair
-  Public Spaces



Public Spaces

Public spaces in Tripoli are limited to very small parks that are spread out rather haphazardly. These are also not very easily accessible, seeing as they are surrounded by roads with no pedestrian crossings or are even sometimes used as inaccessible vehicular roundabouts.

03. Territorial Analysis of Tripoli

C. Demographics

Kindly note that due to lack of documentation in Lebanon in general, the following information is the latest available regarding demographics.

In the first half of the 20th century, both the old city of Tripoli and port areas of Al Mina started to develop, with the economy of the city booming with the installation of oil pipelines and flourishing of industries in 1920. As such, the city expanded outwards and residents from the center moved to new parts of the city. Between the 1920-1950, the population increased from 36 000 to 115 000. During the 1950s, the city witnessed an exponential increase in population due to rural urban migration. While the rich population left the historical city to live in the suburbs, the rural population from Danniyeh¹ and Akkar² settled in the souks and Tebbaneh area. During the civil war (1975-1990), the city's demographic profile was greatly affected, increasing the physical and economic segregation within the city as well as increasing the gap between Tripoli and Beirut. This also affected the city by increasing illegal construction and expansion of poor enclaves within the city. Moreover, while the city's suburbs experienced a construction boom, the historic center was left to decay.³

1. District in Lebanon's North Governate
2. District in Lebanon's Akkar Governate
3. UN-Habitat Lebanon, 2016, p. 3-4
4. World Population Review, 2024
5. The emigration of qualified or highly trained people from a specific country.
6. Fouad Gemayel, 2024

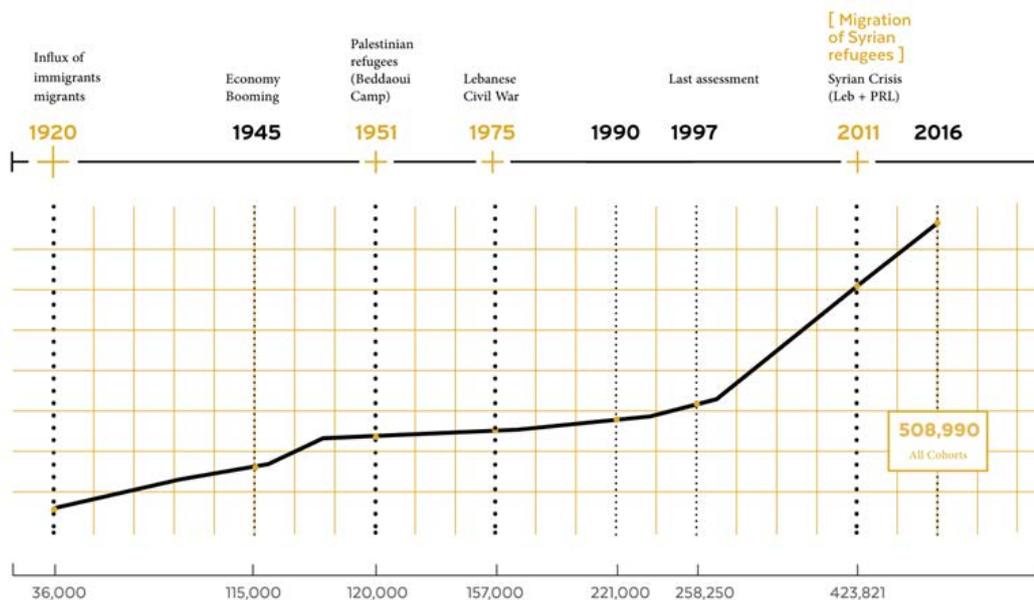


Figure 45 Timeline City Population Growth - 1920 - 2016. Source: Tripoli City Profile for 2016 by UN-Habitat, 2017.

Although the population growth between 1920-2016 was at an increase, the current population of Tripoli for 2024 has decreased to 229,398.⁴ This is mainly due to the ongoing deterioration of the socio-economic and political situation in the country, leading to the immigration of a large percentage of the population, leading to a wave of brain drain^{5,6}

7. Age dependency ratio is based on comparing the non-productive or dependent population aged 0-14 and the productive (working age) population aged 15-64. It thus helps understand the economic situation where the higher the ratio, the greater the extent of the economic burden.

8. Central Administration of Statistics, 2020

In terms of distribution, the population is nearly equally distributed between men and women. In terms of age, the age dependency ratio⁷ was at 54% for the years 2018-2019.⁸

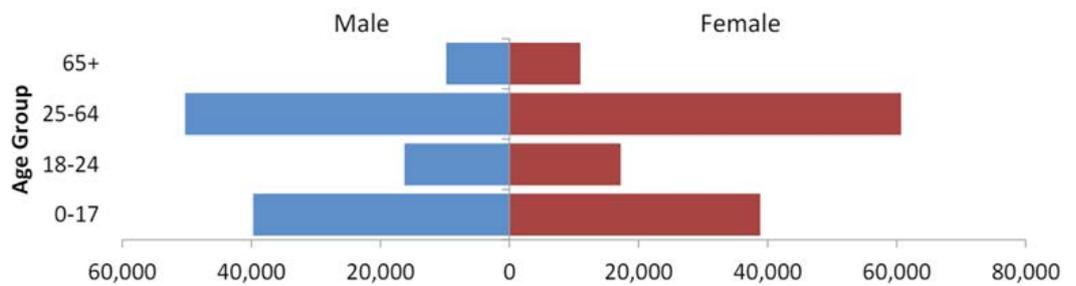


Figure 46 Distribution of residents in Tripoli 2018-2019 by age and sex. Source: Central Administration of Statistics, 2020.

Figure 47 Distribution of primary residences by type of dwelling.

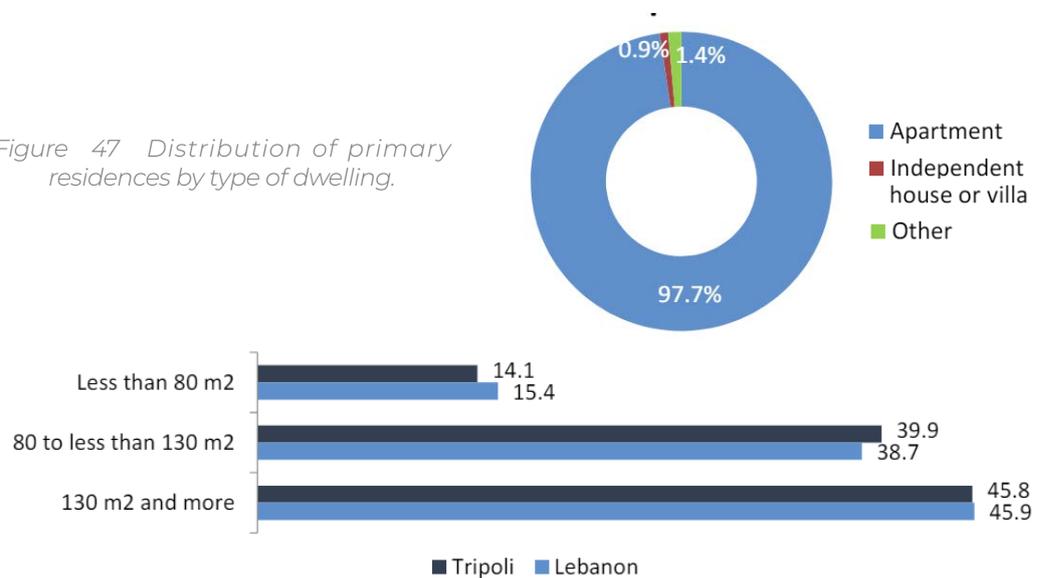


Figure 48 Primary residences by area of residence (%). Most residents live in apartments with most dwellings exceeding 130m2 or between 80-130 m2. Source: Central Administration of Statistics, 2020.

Based on this information, it is important to take note of the following when considering potential users and their interests.

- The general population trend is at a decrease due to the ongoing deterioration of the socio-economic and political situation.
- The largest percentage of the population based on age distribution is 25-64 year-olds, followed by 0-17 year-olds, 18-24 year-olds, and finally 65 years old and older.
- A large percentage of the population consist of couples.
- Most residents live in apartments with most dwellings exceeding 130m2 or between 80-130 m2

In terms of socio-economic level, Tripoli continues to suffer from economic instability and security threats, especially in particular areas that are more at risk. Although it is Lebanon's second largest city as

well as the North Governate's center, Tripoli has been facing economic challenges making it one of the country's poorest and most marginalized cities. A large portion of the population in the city struggles to afford housing and basic consumer needs.⁹

9. *Monika Potkanski-Palka, 2023*

10. *By February 2021, according to the World Food Programme, the Lebanese Lira lost over 90% of its value and cost of food increasing over 600%*

11. *Maya Gebeily, 2021*

12. *Timour Azhari and Laila Bassam, 2022*

13. *Amnesty International, 2024*

14. *UN-HABITAT, 2016, p.47.*

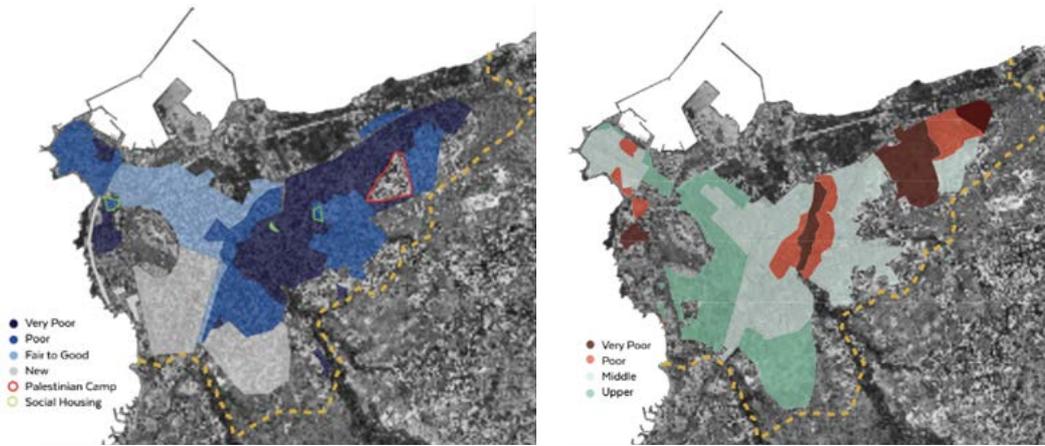


Figure 49 Situation prior to the beginning of the socio-economic crisis in 2019. (Left) Building quality map. (Right) Socio-economic groups in Tripoli metropolitan area. Data adapted from Schinder 2014. Source: Tripoli City Profile, UN Habitat, 2016, p.55.

After the crisis had begun,¹⁰ Tripoli took a strong hit especially in terms of food insecurity and housing.¹¹ By 2022, 80% of the population had living in an impoverished state.¹² Not only so, but several buildings in Tripoli are neglected, many of which are at risk of collapse. In August 2023, the municipality of Tripoli had identified 800-1000 buildings at risk.¹³

It is important to note Lebanon, as a whole, tends to economically benefit from services and trade. When it comes to the case of Tripoli, these “services” also include banking and tourism which employ nearly one fifth of the city’s working population. As for trade, more than half of the city’s working population is engaged in this sector. However, especially with the most recent economic crisis, high unemployment rates are important issues to consider. Moreover, although Tripoli is known for its local specialization in handicrafts, a skill people of Tripoli take pride in, it unfortunately employs a small fraction of the city’s active workforce.¹⁴

	% of economically active people	% of companies
Trade	54	58
Services	> 14	23
Industry	14	19
Manufacturing & Handicraft	2	< 1%
Construction	10	1
Tourism	> 6	< 1

Figures shown with '<' are inferred from the other sectoral data and are thus approximations only

Figure 50 Economic sectors in Tripoli, Mina & Beddaoui by % of economically active people & % of companies in 2016. Source: UN-HABITAT, 2016, p.47.

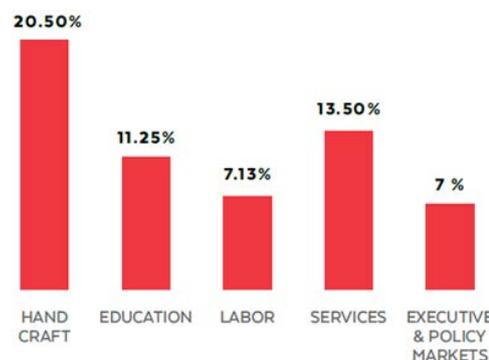


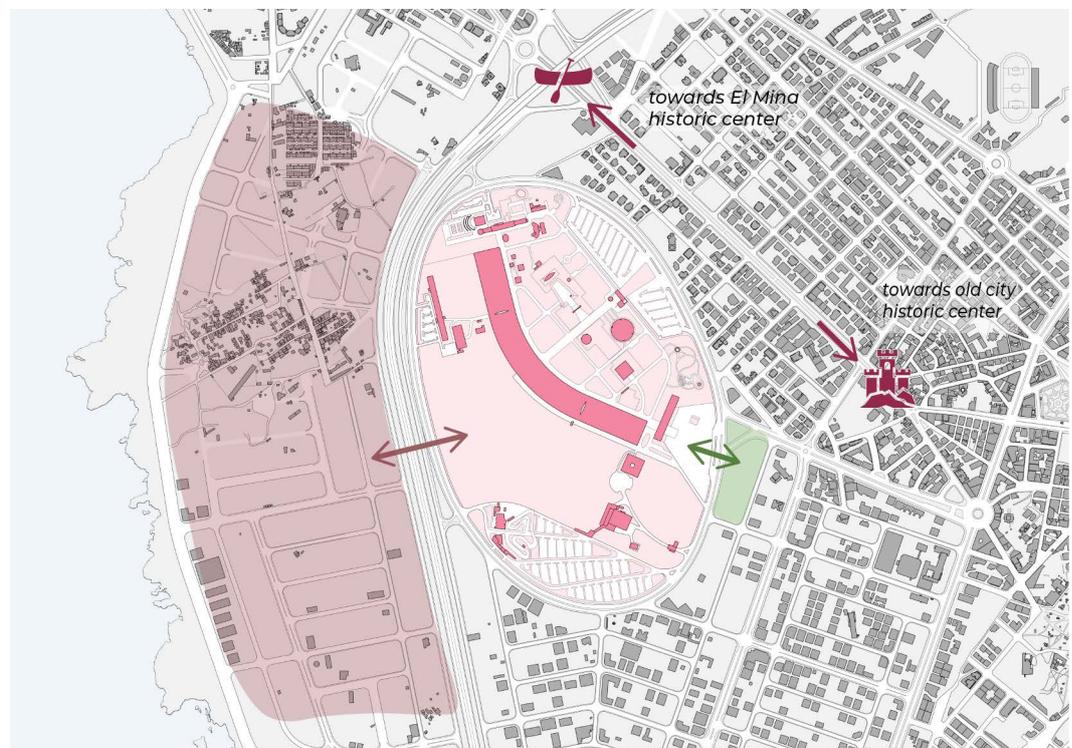
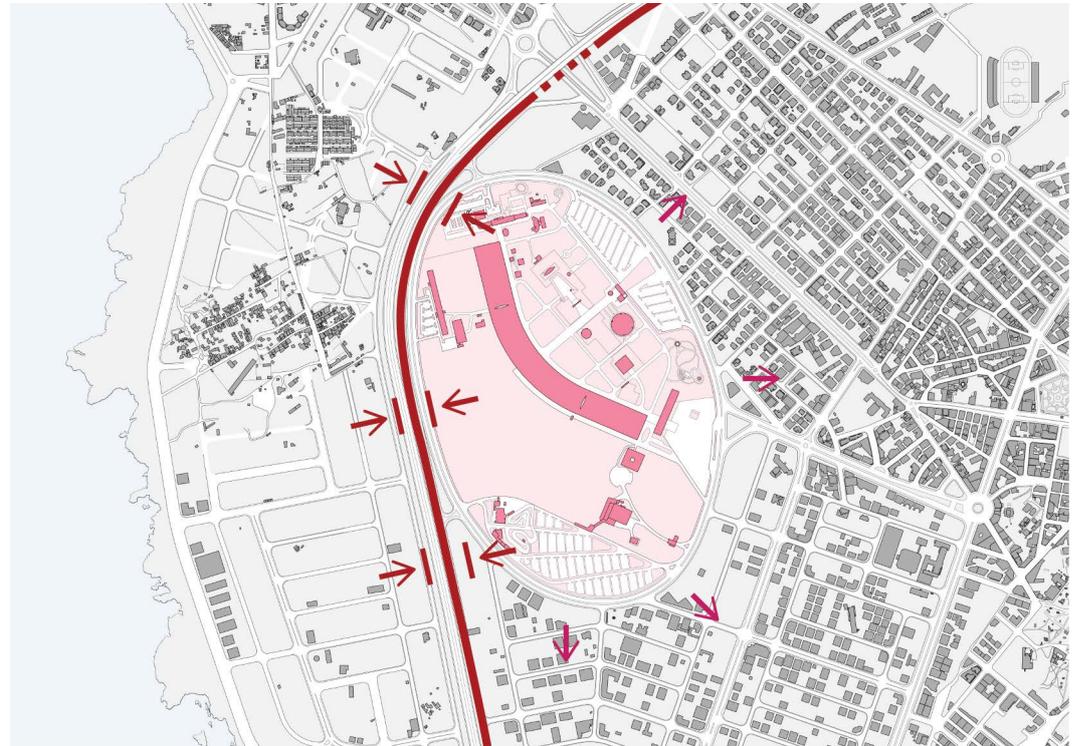
Figure 51 Main jobs distribution in Tripoli municipality. Source UN-HABITAT, 2016, p. 48.

03. Territorial Analysis of Tripoli

D. Synthesis

Site Connectivity

Although the site is located in a strategic central location, it is directly surrounded by a highway that separates it from its context. Instead of exerting an overall connectivity to its surrounding, its directionality seems more directed towards the side opposite of highway. Still, connections to the surrounding context and the city overall are missing, turning the site into an urban island.



Surrounding Context

The fairground is surrounded by a mainly residential area mixed with commercial functions. However, across the adjacent highway, towards the western side of the site, the area remains mostly undeveloped despite the plans to develop the area. Informal settlements have been developed over time in that area. The overall socio-economic situation of the site's direct surrounding varies. The site's direct surrounding mostly consists of upper and middle classes while, across the highway, due to the presence of the informal settlements, the socio-economic condition is impoverished.



04. Site Analysis

A. History

1. The “Institut de Recherche & de Formation en vue du développement» (IRFED) is a French agency that was headed by Dominican Father Louis-Joseph Lebret at the time. During the years following World War II, this successor of social Catholicism had conducted several studies regarding the working-class families in France and had been involved in many projects of development in South America, particularly in Brazil. He was invited to Lebanon to conduct studies regarding the country's social and regional inequalities, aggravated by the developments in Beirut. He suggested a strategy based economic planning that aimed for a more balanced development between Lebanon's different regions. He thus prepared a table of facilities and amenities that aimed at strengthening regional centers. (Jad Tabet, 2012, p.22-27).

2. Tripoli's Fairground later came to be known as the “Rachid Karami International Fair” (RKIF) after the assassination of the prime minister in 1978 during the Lebanese civil war.

The Beginning

After its independence in 1943, Lebanon saw rapid economic growth mainly concentrated in the central region, in particular in the capital of Beirut. Nonetheless, peripheral regions in the South, the North, and the Bekaa valley remained underdeveloped and lacked public facilities and infrastructures. In September 1958, after a period of turbulence caused by regional and local instability that led to armed confrontations, General Fouad Chehab, the Chief of the Army at the time, was elected as the President of the Republic. His main objective was to limit growing inequality between Beirut's wealth and the poverty of the underdeveloped rural areas. These views were accompanied by a new wave of social liberalization and modernization in Lebanon. As such, among the decisions taken at the time under this political, local, and regional context was building an international fair in Lebanon.

In the hope of developing the North, the site was chosen to be in Tripoli,¹ what is considered the capital of the North and Lebanon's second largest city, 85km North of the capital Beirut. The choice to construct this large Fairground in Tripoli was a pivotal decision. This choice strongly reflected president Chehab's desire for social welfare, with the intention of turning Tripoli into an economic and cultural locus outside of Beirut. It also reflected Chehab's desire to assert Lebanon's role as a leading example of modernism in the region. It was actually after prime minister Rachid Karami's² suggestion that Tripoli was chosen to be the grounds of this international fair, after the cabinets of ministers had accepted the proposal in November 1959.



Figure 52 1956. Aerial view of Tripoli. The agricultural lands between Tripoli and El Mina cities. The fair was eventually built on the western side of the city of Tripoli. Original Source: Lebanese Army Forces - Directorate of Geographic Affairs. Retrieved from UNESCO Conservation Management Plan, 2024. <https://unesco.sharepoint.com/sites/BeirutTeam/Shared%20Documents/Forms/AllItems.aspx?ga=1&id=%2Fsites%2FBeirutTeam%2FShared%20Documents%2FMedia%20and%20Digital%20Communication%2FRKIF%20CMP%2FRKIF%2DCMP%5FFull%20Report%20for%20website%2Epdf&parent=%2Fsites%2FBeirutTeam%2FShared%20Documents%2FMedia%20and%20Digital%20Communication%2FRKIF%20CMP>

As such, on May 4, 1960, the Decree 4027 to build the permanent fair in Tripoli was issued alongside the decision to create “Tripoli International Fair Steering Committee.” In the following year, Prime Minister Saeb Salam allocated a 400,000 m² plot in Tripoli for the fair to be built. A council was also established under the name of Conseil Exécutif des Grands Projets (CEGP) and set out to find international experts to aid in the planning of the fair. The Land Expropriation Decree was then published on November 13, 1961, before the project’s cornerstone was laid in a ceremony taking place on October 1, 1963.³

In order to achieve its goal, the Lebanese government sought out a renowned international architect. Due to his connections with the Brazilian ambassador in Lebanon as well as other personalities, world renown Brazilian architect Oscar Niemeyer⁴ was chosen to take on the project, keeping in mind his position at the time as one of the most important and famous modernist architects at the time. As such, thanks to the efforts of the Brazilian ambassador at the time Bolivar de Freitas, an invitation was delivered to Oscar Niemeyer’s office from the Lebanese government and the designated president of the project Amado Chalhoub. Another possible reason for the choice of architect could have been the political ties between Lebanon and Brazil, as a result of the Lebanese diaspora in Brazil.⁵ In the years that were to follow, and after becoming acquainted with his personality and career, the majority of the Tripolitan society came to perceive Niemeyer’s appointment as a gift from the Lebanese government to the city of Tripoli.⁶



Figure 53 (Left) Ferdinand Dagher (1st left) and other members of the CEGP welcoming Oscar Niemeyer (2nd left) at the Beirut Port in July 1962. Source: “Oscar Niemeyer’s International and Permanent Fairground of Lebanon: The Challenges of Conserving a Utopian Vision.” Essay. In *Keeping It Modern: Heritage Under Pressure. Perspectives from the Global South*, p. 62. 2023. (Right) Oscar Niemeyer in the Fair’s site accompanied by Lebanese officials from the Conseil Exécutif des Grands Projets, in the Summer of 1962. Source: Arab Centre for Architecture.

In the summer of 1962, at the age of 52, Oscar Niemeyer reached the port of Beirut, ready to embark on what was to be a significant journey. For Niemeyer, this commission was especially important since it was his second commission outside of the American content, following the “Interbau” building in Berlin (1956-57). Not only so, but it also expressed his willingness to aid newly independent and developing nations in

3. UNESCO, 2022, p. 10

4. By the 1960s, Niemeyer was an important international architect known for his modernist approach that is strongly exemplified in his contribution to the Brasilia project whose masterplan was designed by Lucio Costa. Following the “Interbau” building in Berlin (1956-57), the Tripoli Fairground was his second commission outside the American continent. It was also one of the few large urban-scale projects he designed. The only other comparable urban project that Niemeyer had worked on before 1962 was the Pampulha complex.

5. During the 20th century inter-war period, and due to the horrific living conditions during the end of the Ottoman ruling, a big wave of Lebanese immigrants had settled in Brazil, eventually reaching an influential social status (Wassim Naghi, 2018)

6. Wassim Naghi, 2018

7. Jad Tabet, 2015, p. 244-249

8. *L'Orient-Le Jour*, 1962

9. UNESCO, 2022, p. 11

10. *Conseil Exécutif des Grands Projets*

11. Wassim Naghi, 2018

12. *The ACE headquarters was based in Beirut and London.*

13. UNESCO, 2022, p. 28

14. *The Executive Committee for Large Projects had carefully defined all the processes in the management plan it had prepared.*

15. UNESCO, 2022, p.12-13

the Middle East and Arab region as a whole to advance in the direction of modernism and social uplift.

After his arrival in Tripoli in July 1962, Niemeyer devoted most of his time discovering the site, the historical districts, and the city as a whole. His stay lasted two months wherein he designed several preliminary proposals.⁷ On September 1962, Oscar Niemeyer prepared and presented sketches, basic drawings and drafts, alongside a 3D model of his proposal at a press conference with Rachid Karami, the prime minister at the time.⁸ Following this presentation, he published his design in his “Modulo” magazine and in the French magazine “Architecture d’Aujourd’hui”.⁹

Following the presentation, and after gaining the Lebanese government’s approval, the architectural project took an entire year to develop. After the submission of the proposal, the governmental Executive Committee for Large Projects¹⁰ split the project into four parts.¹¹ Although Niemeyer’s office was responsible for the architectural design, technical studies, execution drawings, and tender documents were not part of the office’s scope of work. Instead, different local engineering firms took on the responsibility of preparing technical studies, execution drawings of the assigned sections, and all other tender documents. These firms included Associated Consulting Engineers (ACE)¹² and Dar Al Handasah Nazih Taleb & Partners. The choice of these Lebanese firms was aided by their experience in the development of large projects not only in Lebanon but in the region world as well.

After the preparation of tender documents and after legal matters had been settled, site works and construction began in 1964. Local contracting firms including Darwish Haddad and Ghazal Mouawad took on the execution of the project, applying a high level of technical expertise and craftsmanship.¹³ Developed by Lebanese specialists, the concrete mixture is characterized by its high quality and performance, allowing the naked concrete structures to survive the test of time despite their unprotected exposure to the exterior environment.¹⁴ With a 70 meters wide span for the main exhibition wing as well as other engineering challenges, the survival of these immense curved concrete forms is a testimony for the quality of the execution works.¹⁵

In his second visit to Tripoli in 1966, Niemeyer visited the construction site inspecting the execution process. Although the exterior theater’s main slab was completed on a slightly different angle than his plans, there is no evidence of Niemeyer leaving any important comments on the project execution. Construction was constantly delayed due to fund shortages and conflicts in the region. In 1969, further funds were allocated to speed up the project’s progress. Nonetheless, the delays in the construction were still faced in the following years. Protesters at the time also raised questions regarding the Fair’s modern design and language considering it was a publicly owned complex. Due to the outbreak of the Lebanese Civil War in 1975, the execution of the project was terminated, though the execution was in the finishing stage. As

such, Niemeyer has never seen the project complete.¹⁶

16. Most of the concrete works were finalized and some buildings were fully equipped and furnished

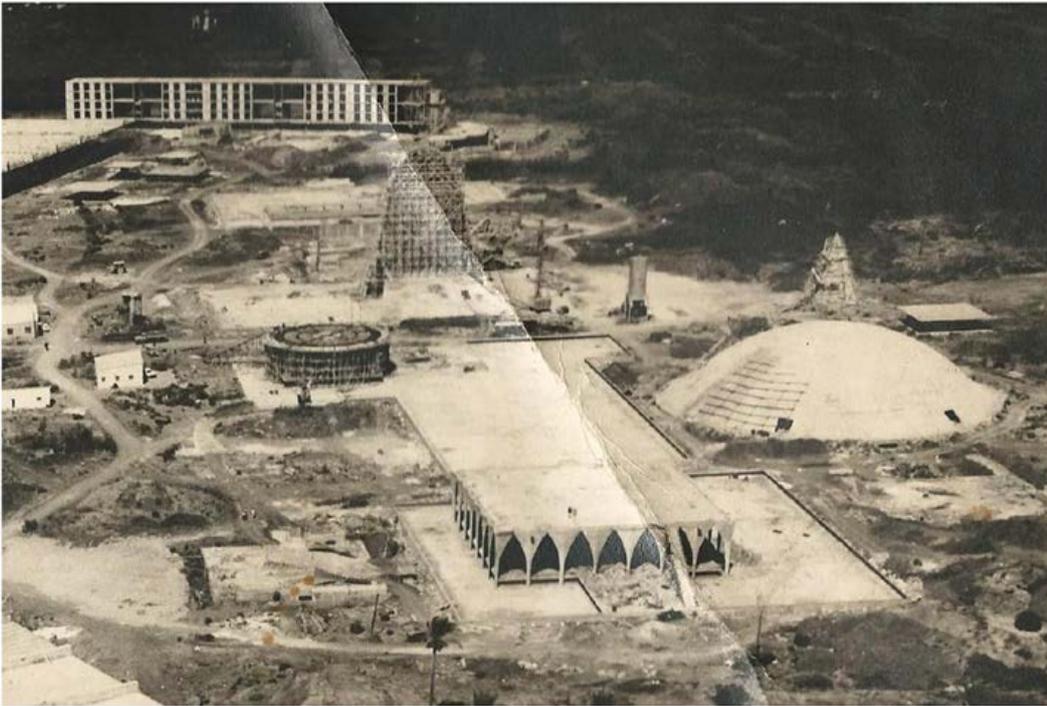


Figure 54 Grand Arch under construction, 1965. Source: Naghi, Wassim. "The Rashid Karami International Fair, Tripoli, Lebanon. The Grand Arch, Consolidation and Restoration Project. The Terms of References, T.O.R. Call For Consultants Stage." Rev. 2. p.17. Lebanon: UNESCO, January 2022.



Figure 55 Grand Arch after construction, 1965. Source: Naghi, Wassim. "The Rashid Karami International Fair, Tripoli, Lebanon. The Grand Arch, Consolidation and Restoration Project. The Terms of References, T.O.R. Call for Consultants Stage." Rev. 2. p.17. Lebanon: UNESCO.



Figure 58 (Left) During the construction of the Grand Cover, July 9, 1965. (Right) Excerpt from the Al Hadara newspaper from 31 December 1966. Source: "Oscar Niemeyer's International and Permanent Fairground of Lebanon: The Challenges of Conserving a Utopian Vision." Essay. In *Keeping It Modern: Heritage Under Pressure. Perspectives from the Global South*, p. 79. 2023.



Figure 56 Oscar Niemeyer visiting the fairgrounds' construction site in Tripoli, escorted by Lebanese officials and the representatives of the execution team. 1966. Source: Mayez El Adhami archives.



Figure 57 During the construction of the Tripoli International Fair. Source: During the construction of the Tripoli International Fair, benefits, accessed 2024, http://33shamy.blogspot.com/2016/08/blog-post_9.html.

Civil War

After the start of major military battles, what was meant to be a site for progress and development became a camp for the fighting soldiers. The site's strategic location at the city's entrance, its proximity to all core transportation routes, and its architecture and scale, the fairground complex was occupied by various militias and armed forces. The grand canopy or boomerang became a shelter for tanks and military equipment. Other structures were used as accommodation or hideouts. After they had to withdraw to the north after the 1982 invasion and after the Israeli army sieged Beirut, Syrian troops who had been in Lebanon since 1976 used the fairground as one of their main military bases. Furnishings and equipment on site were looted by the different groups that occupied the grounds, leaving the concrete structures bare and desolated.



Figure 59 Aerial view of the fairground in 1974 before the start of the civil war. Source: "Oscar Niemeyer's International and Permanent Fairground of Lebanon: The Challenges of Conserving a Utopian Vision." Essay. In *Keeping It Modern: Heritage Under Pressure. Perspectives from the Global South*, p. 74. 2023.

17. Rachid Karami (1921-1987) was a prominent Lebanese politician who had served as Prime Minister for more terms than other ministers. In 32 years, he held office 10 times. He was originally from Tripoli, Lebanon, and of Sunni (Muslim) faith. Although he was supported by Syria that had become the main power broker in Lebanon over the last years before his death, PM Karami did not have a private militia, unlike some of the other Lebanese leaders. (Ihsan A. Hijazi, 1987). He was assassinated using a bomb placed under his seat on June 1, 1987 while he was heading to Beirut in a Lebanese Army helicopter. (Civil Society Knowledge Centre, 2018)

After the end of the Lebanese Civil war in 1990, it was decided to rename the fair “Rachid Karami International Fair” in honor of the assassinated Tripolitan former prime Minister Rachid Karami.¹⁷

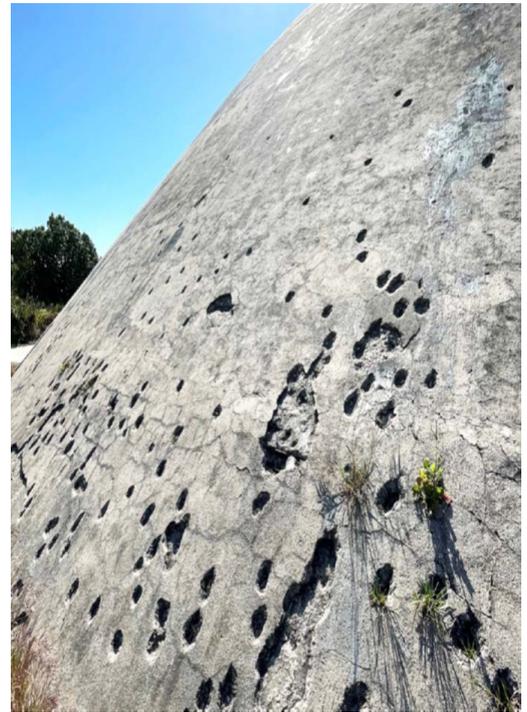


Figure 60 (Left) Reminiscent of the site occupation period, graffiti at Niemeyer’s Guest House, 2019. Source: “Oscar Niemeyer’s International and Permanent Fairground of Lebanon: The Challenges of Conserving a Utopian Vision.” Essay. In *Keeping It Modern: Heritage Under Pressure. Perspectives from the Global South*, p. 62. 2023. (Right) Bullet holes on the Experimental Theatre, 2024. Photographed by Maya Hmeidan. Source: UNESCO Conservation Management Plan, 2024



Figure 61 The site in 1994 during its occupation by the Syrian Army. The military trucks can be seen parked above under the Boomerang. The snack bars were adapted to be used by the soldiers. Photographed by Samer Mohdad. Source: UNESCO Conservation Management Plan, 2024.

According to his memoir published in 2005, Oscar Niemeyer's experience with the Tripoli fair was "an architectural lesson lost in time."

"One of the trips I did abroad was to Lebanon where I was commissioned to design a huge international exhibition. And it was in Tripoli where I did my job for one month (...) While studying this project I didn't want to repeat the usual international exhibitions of that time (like the New York exhibition for example) with their independent pavilions of such bad architecture and confusing structures that I hate. I designed a huge, long block where the various countries would make their exhibitions. Architecture would be simpler and disciplined. An open-air auditorium and the Lebanon Museum would enrich the conjunct.

The construction began, the structures were completed, but the complex is still unfinished due to the wave of violence that took the country. Today I met my cousin Camargo who, together with Dimanche, collaborated with me on that project.

What an architectural lesson lost in time!"¹⁸

Post War

In terms of uses, the fairground has been a constant discussion with several attempts having been made to reuse the complex or revive it.

- In 1993, an intervention was made, focusing on the treatment of hardscape surrounding the buildings with square concrete slabs. Glass partitions were also placed in part of the main canopy to protect from sea wind.¹⁹
- In 1997, a more intrusive intervention was made. Dar el Handassah, who was one of the companies that worked on the project's Tender documents, was asked by the Lebanese Government to prepare an assessment of the complex's condition, and accordingly propose solutions for adaptive reuse. Although at the time, Niemeyer was still active, he was not consulted and the recommendations in Dar el Handassah's report were adopted though some of these recommendations did not follow the spirit of Niemeyer's original design. Though Niemeyer's intention had been to create structural transparency, the interventions made included enclosing the southern part of the Grand canopy with glass and enclosing the front and back facades with solid concrete walls. Between 2017-2018, a conference room was also added near the main entrance under the edge of the canopy.²⁰

Though these interventions were not made in the same spirit and intention that Niemeyer had designed with, they were dictated by modern uses and were made to be reversible. However, not all

18. UNESCO, 2022, p.28-29.

19. Wassim Naghi, 2018

20. Wassim Naghi, 2018

interventions that were made had a conscious awareness of the site's integrity.



Figure 62 Aerial view of fairground in 1999 after the end civil war had ended. Partial rehabilitation of the site was done including major changes in the walkways, added parking spaces, and noticeable changes in the area of the collective housing. The city's urban expansion is also very prominent. Source: "Oscar Niemeyer's International and Permanent Fairground of Lebanon: The Challenges of Conserving a Utopian Vision." Essay. In *Keeping It Modern: Heritage Under Pressure. Perspectives from the Global South*, p. 74. 2023.

- The conversion of the collective housing prototype into a multipurpose hotel in the early 2000s had severely affected the integrity of the site, erasing the traces of Niemeyer's design and affecting the architectural quality of the whole. The difference between the original design and the new intervention were rendered unrecognizable. Currently closed,

the hotel was managed by “Choice Hotels International” under the name of “Quality Inn Tripoli Hotel”. It housed more than 100 rooms and suites, four restaurants, conference rooms that could hold up to 1000 people, Senators’ Hall, indoor and outdoor swimming pools, tennis courts, and other leisure services. The parking space of the hotel could accommodate up to 400 cars.²¹

21. *The Hotel,* Rachid Karami International Exhibition

22. UNESCO, 2022, p. 31



Figure 63 (Left) Original collective housing state and design. (Right). Post-intervention state converting the collective housing into a hotel. The integrity of the original design intent is damaged. Source: UNESCO, 2022, p. 25



Figure 64 Aerial view of the site taken in 2003. Source: “Oscar Niemeyer’s International and Permanent Fairground of Lebanon: The Challenges of Conserving a Utopian Vision.” Essay. In *Keeping It Modern: Heritage Under Pressure. Perspectives from the Global South*, p. 60. 2023.

Several interventions had also been proposed but not adopted.

- An intervention that would have gravely affected the site’s integrity was the construction of an Olympic Stadium on the unbuilt grounds of the site’s southern edge. This proposal was launched by the Ministry of Youth and Sport on the occasion of an Asian football tournament that were to take place during the month of October in the year 2000. Tripoli’s society alongside groups academics and intellectuals protested against this project, pushing the ministry to build the stadium outside of the fairground.²²

23. DBOT: Design, Build, Operate, and Transfer. A DBOT is a type of Public Private Partnership project (PPP) in which a single contractor (private) is chosen to design, build and operate a project for a public client. After an agreed period of time, the operations and maintenance are then transferred back to the client.

24. UNESCO, 2022, p. 31

25. *Inscribed by the World Monument Fund*

26. Harmandayan, 2002

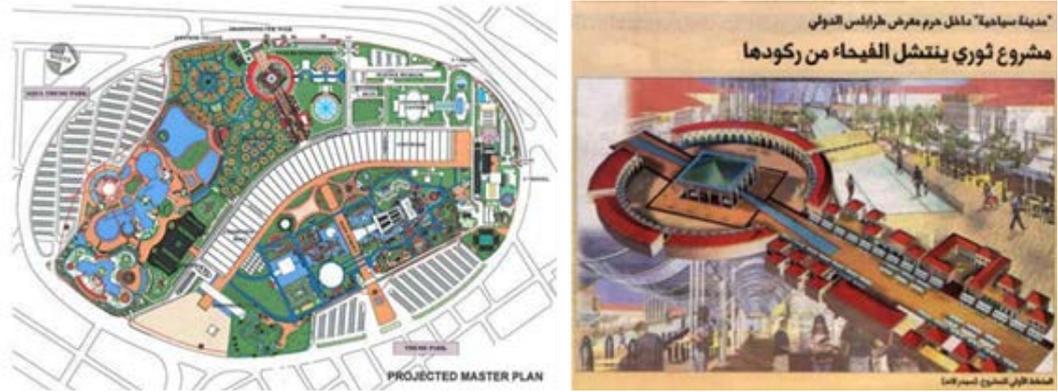


Figure 65 Examples of proposed projects that were never adopted. Source: Mousbah Rajab, 2006.

- In August 2001, the fairground's Board of Directors launched a call for DBOT²³ with the aim of developing and revitalizing the fair. A proposal to convert the site into a Middle Eastern version of Disneyland was submitted by a group of investors. Within the program was a 65000m² exhibition center with parking spaces for 9000 cars, a 200000m² theme park with parking spaces for 2000 cars, a 170000 m² water park with parking spaces for 3000 cars, a 30000 m² shopping street, three hotels, a model of a traditional Lebanese village, and two Japanese and Fijian bathing centers.²⁴ This proposal was not only rejected by the heritage community in Lebanon but also by the civil society considering how negatively it affected the site's integrity. A group of architects, artists and intellectuals launched a campaign that led to the inscription of the site²⁵ on the World Monument Watch List of the world's most noteworthy sites in need of urgent attention.
- In 2002, the Directorate General of Urban Planning commissioned Diran Harmandian Planning firm to prepare a master plan study for Tripoli. After considering the fair's stagnant state and the dangers that threatened, the study proposed reusing the fair's structures to guarantee their longevity and permanent operation. It was thus suggested to create a "Cultural, Social and Leisure center" and a "Meeting center for Mediterranean and Middle Eastern civilizations" where symposiums, conferences and festivals could be organized. A portion of the fair was to be dedicated to the Lebanese University where a group of faculties encompassing 3000-5000 students would be constructed under part of the Grand canopy.²⁶ This plan was never approved.
- In the Spring of 2006, an international seminar was organized to promote the fairground site on a national and international level, and to trigger a reflection on the possibilities of reviving the site and its accessibility Tripoli's inhabitants while protecting its heritage values". Following this campaign, the project was abandoned.
- In 2006, a new proposal to convert the fairground into a long-term fair for imported Chinese products. This project was on the verge

of being approved but was halted due to the outbreak of the 2006 July War (Israeli-Lebanese war)²⁷. The start of the civil war in Syria eventually put a complete end to the proposal.

Though the intervening of the Lebanese community or even the outbreak of certain events has saved the integrity of the site many a times, keeping the site in its current state of deterioration is not a conservation strategy to move forward with, with several structures on the verge of collapse and subsequent disappearance. Over the last years, numerous initiatives tried to revive the fairground complex.²⁸

- Since the 1990s, the “boomerang” grand canopy exhibition wing served short- term exhibitions, conferences and public meetings, and Christmas and Eid Fairs.
- After being equipped, the open-air theatre was frequently used for concerts, attracting a large public. However, due to a partial structural collapse in 2016, public access is now denied.
- On September of 2018, several of the abandoned structures, like the space museum for example, were used as part of a contemporary art exhibition that took place in the fairgrounds. Organized by the Beirut Museum of Art, the aim behind this exhibition was to link Lebanon’s medieval and modern history, linking the fairground and exhibits to Tripoli’s historic center, all under the frame of the “Cycles for the Collapsing Progress” exhibit. Developed by local and international artists, the themes revolved around socio-political challenges and addressed the fairground’s tragic history during and after the civil war.

In 2016, the guest house was renovated to act as a furniture cluster providing production and exhibition spaces for artisans and craftsmen. The project was named “Al Minjara”²⁹ and was meant to revive and preserve Tripoli’s woodcraft heritage. The project has been operating in partnership with the Chamber of Commerce and Industry and with the Association of Lebanese Industrialists since 2019. By defining well-adapted functions that enhance the site’s purpose without damaging its heritage value, this project exemplifies a successful adaptive reuse project for the fair’s buildings.

Current Situation

After the end of the civil war, the Bank of Lebanon cooperated with the World Bank and International Monetary Fund and managed to stabilize the Lebanese economy for a while. This stability did not last too long after the end of the civil war. On October 17, 2019, the government’s intention to tax internet calls triggered large protests across the country against the government and its corruption.³⁰ Lebanese from different backgrounds gathered on the streets for several months to protest their leaders’ corruption and government mismanagement. This exposed the government for having favored international construction

27. Also referred to as the 2006 Lebanon War or the Israel–Hezbollah War. It was a 34-day war between Hezbollah in Lebanon and Israel. (Britannica 2024)

28. UNESCO, 2022, p.32-33

29. Al Minjara: The Carpentry

30. Tom Perry and William Maclean, 2020

31. Asher Kaufman, 2021

32. Anera, 2024

33. Worldometer, 2024

34. Tom Perry and William Maclean, 2020

35. John Hanna, 2020

3 6 . K I C
Architectural Design
Project Competition
Brief, 2019

and tourism corporations over local and productive sectors. Tax laws and building codes were eased and deregulated when it came of benefiting Lebanese or International corporations. This resulted in massive constructions in Beirut and its suburbs that destroying the city's past and heritage, building high-rise buildings for the upper-class and wealthy immigrants whose main lives and economic businesses were ironically outside of Lebanon.³¹

These protests and the events that followed also exposed the Bank of Lebanon for having artificially stabilized the Lebanese Lira's in order to encourage external investment. Up until October 2019, the banks had managed to keep a façade of stability by using loans that were eventually repaid with additional loans. Consequently, Lebanon has been facing a detrimental economic crisis. According to the Consultation & Research Institute in Lebanon and the World Bank, the inflation rate for the past year (2023) had maintained a high reaching an average of 222% for that year.³²

The crisis that started at the end of 2019 was intensified by the COVID-19 pandemic that reached Lebanon in February 2020,³³ followed by the tragic explosion of Beirut's port that took place on August 4, 2020. This was the result of the explosion of a large quantity of ammonium nitrate illegally stored at the port. 200 lives were lost, 6 000 people were wounded, and the city was left in ruins.³⁴ Several of Beirut's architectural heritage was directly impacted, leading to emergency interventions to rescue endangered heritage buildings. One week after the tragic event, the Director-General of Antiquities at the Lebanese Ministry of Culture and UNESCO, alongside other national and international partners, started developing a safeguarding action plan for the architectural heritage. As a result of these efforts, the importance and endangerment of cultural heritage, not just in Beirut, but in Lebanon in general, started gaining perspective and cultural awareness among the public. The issue of lack of awareness, corruption, and absence of comprehensive policies and regulations relating to heritage often led to the destruction of heritage buildings to make way for vertically dense and profitable architecture.³⁵ With an increased public awareness, the protection of Lebanese heritage gains more hope and urgency in order to rebuild.

In 2019, a project for the creation of a large "Knowledge and Innovation Centre" (KIC) was launched by the Lebanese government. The chosen site was the remote western section behind the Grand canopy's convex side. The site took up 75000 m2 and comprised Oscar Niemeyer's administration, Customs and Fire house buildings. This project aimed at accommodating a business and technology park and to help develop different scales of businesses including start-ups and small and middle enterprises in Tripoli. It also envisioned the creation of job opportunities for the youth by creating a dynamic setting for creativity and growth. To do so, an international architecture competition was launched in the hope of finding the most fitting design for the KIC site. Managed by the Order of Engineers and Architects (OEA), this competition was prepared

based on UNESCO-UIA International Competitions Programme. It was supported by the Union of Mediterranean Architects (UMAR) and endorsed by the International Union of Architects (UIA).

The competition brief stressed the importance of preserving the site's modern heritage buildings and site as a whole just as it asked for the design of new structures keeping in mind the site is listed on UNESCO World Heritage Tentative List. As such, special care was to be given to the relationship between the new and Niemeyer's existing buildings. "Any design that would not integrate with Niemeyer's concept may compromise the integrity of the site and thus compromise its future inscription on UNESCO World Heritage List"³⁶. The international jury that was appointed comprised of several renowned members that represented international organizations,³⁷ the OEA, and deans of prestigious international architectural schools and universities. The jury assembled on 27 & 28 June 2019 before announcing the winners on Friday 28 June. The winning proposal was the firm MDDM's³⁸ proposal for an underground intervention that allows the gradual and consistent development of the site. The jury appreciated "the deployment of underground linear structures recalling some of Niemeyer's early designs, resonating with the rhythm of the grand canopy and keeping in the language of the site" and "welcomed the design's resolution of the boundary between the KIC and the remainder of the Fair through a landscape strategy which maintained the integrity of the Fair as open and connected".

37. Docomomo, Agha Khan Foundation, UIA, UMAR, Fundação Oscar Niemeyer

38. MDDM Studios is an architectural firm founded by Margret Domko and Momo Andrea Destro. The firm is based in Beijing and Berlin



Figure 66 Masterplan for the Knowledge and Innovation Center at the Rachid Karami International Fair in Tripoli. KIC 2019 Winning Proposal. Source: MDDM, 2019.

According to the architects at MDDM, creating an agreeable living and working environment within a balanced composition was among the primary objectives of their design. Aware of the financial and political issues that have previously halted the development of the site, the designers wanted their design to feel complete if the project development were ever to be stopped or interrupted. Another essential

39. MDDM, 2020

40. *The Lebanese economic crisis began in October 2019, triggered by the start of the October 17 revolutions. The World Bank has placed this crisis among the top three most extreme global crises since 1850. The severity of the crisis was aggravated by the COVID-19 pandemic that had reached Lebanon in February 2020, the August 4, 2020 Beirut Port explosion, and the surrounding regional and international political conflicts. (Leila Dagher & Sumru Altug, 2023)*

41. *“Criterion (i): The Rachid Karami International Fair complex in Tripoli, designed with Oscar Niemeyer’s Brazilian Modernist principles as a new modern urban core for the city of Tripoli, is a major creation of the human genius, which represents a vivid expression of the principles and ideals advanced by the Modern Movement and effectively integrated in the context of the Arab Near East, near the historic center of the city which is itself inscribed on the Tentative List. The scale and monumentality of Fair complex and modern urban core project were closely linked to an ambitious development strategy and a process of self-affirmation expressing the search for Modernity and for a new*

factor in the architects’ design was the preservation of the site while maintaining its heritage value. As such, an underground architecture was the opted solution. Avoiding conflict with the existing volumes, this solution created spaces with less visual impact as well as allowed for green spaces. Moreover, it is important to note that the guidelines used to design the mass plan were based on the existing volumes just as the interior spaces were meant to allow for flexible spaces to accommodate various user needs.³⁹



Figure 67 Perspective Views of the Knowledge and Innovation Center at the Rachid Karami International Fair in Tripoli. KIC 2019 Winning Proposal. Source: MDDM, 2019.

Due to the severe ongoing economic crisis⁴⁰ that struck Lebanon at the end of 2019, the project’s implementation has been suspended.

Though many of the attempts to save the fairground have either been unsuccessful or have been suspended, they are not in vain. These attempts have given the site the opportunity to become a part of the cultural and social lives of the citizens just as they have highlighted the change in the locals’ perception of the site from a symbol of missed opportunities and lost hope to a symbol of modern history. In July 2018, Lebanon included the Rachid Karami International Fair in Tripoli in its Tentative List under the proposed Criteria (i)⁴¹ & (ii).⁴² The fairground was selected later that year by the Getty Foundation for a “Keeping it Modern Grant”. Funded by the Getty foundation, the UNESCO’s Regional Office in Beirut launched a project to create a Conservation Management Plan for the Rachid Karami International Fair.⁴³ The objective was to create a suitable framework for a general conservation and development policy, a necessary step prior to commencing with any restoration or development initiatives. Headed by its Director Costanza Farina, a team from UNESCO Beirut organized on an-site visit in October 2021 accompanying the Ambassador of Brazil in Beirut Hermano Telles Ribeiro as well as UNESCO partners from the Directorate General of

Antiquities. The delegation noted the degree of degradation of the different structures, the lack of funding and the need to support its preservation and development as an essential socio-economic and cultural catalyst for sustainability.⁴⁴

This Conservation Master Plan (CMP) was set to be completed by the end of the year 2022 but was completed in July 2024. Regardless of several interruptions, UNESCO completed the planned archival study, conducted a value-based assessment, and performed structural evaluations and testing of the original material and techniques used in the Monumental Arch and the Open-Air Theatre's collapsed soffit. In September 2024, the conservation Master Plan was issued on the UNESCO website. This document serves as the framework under which the following thesis has been developed.

History Summary Timeline⁴⁵

1958: At the end of President Chamoun's term, the Exhibition Committee of the Ministry of Planning decided to host a yearly international fair in Beirut.

- **1960:** During President Chehab's term, and in efforts to establish regional balance across the country, the decision to build a Permanent International Fair in Tripoli is officially made.
- **1961:** Prime Minister Saeb Salam allocates a 400,000 m² plot in Tripoli for the fair to be built. A council was also established under the name of Conseil Exécutif des Grands Projets (CEGP) and set out to find international experts to aid in the planning of the fair.
- **1962:** On July 28, Niemeyer arrived to Lebanon to perform initial site inspections and develop a schematic design proposal. On September 3 of that same year, a proposal model was presented at a press conference with the presence of Prime Minister Rachid Karami. Niemeyer described the project as a "Museum of the Modern object"
- **1963:** On October 1, the foundation stone was laid in a ceremonial opening. Three local consulting firms were commissioned to work on the study and development of the fair. They were Abouhamad, Associated Consulting Engineers (ACE), and Dar Al Handasah.
- **1964:** Construction work began in the early months of that year with the inauguration scheduled three years after the construction's starting date.
- **1966:** Oscar Niemeyer visited Lebanon again in order to follow up with construction works. Unfortunately, due to the shortage of funds, there was a delay in the progress. The fair's opening was thus rescheduled for 1969.

identity during the 1960's." (UNESCO, 2022, p. 57)

42. Criterion (ii): The Rachid Karami International Fair project in Tripoli expresses in an exceptional way the vast modernization movement that developed in the Arab Near East since the 1950's. The successful integration of Brazilian Modernist concepts into the context of the Arab Near East in Tripoli is also a vivid example of cultural exchange in the field of architecture.

Moreover, the close collaboration between Oscar Niemeyer, architect of the complex, and the Lebanese engineers who prepared the Technical studies, the Execution drawings, the Tender documents and supervised the execution of the project according to the architectural drawings prepared by the architect's office, was a remarkable example of technical exchange between different continents: Lebanese engineers and contractors gained valuable experience with sophisticated reinforced concrete structures of large spans and concrete shells, the largest in the Middle east at that time, while a new generation of Lebanese architects were inspired by Niemeyer's « Brazilian Modernism », which reflected in several of their works

whether in Lebanon or in the Arab Near East.” (UNESCO, 2022, p. 58)

43. Conservation Management Plan for Tripoli Fair-UNESCO, <https://en.unesco.org/fieldoffice/beirut/RKIF-CMP>

44. UNESCO, 2022, p. 34

45. UNESCO, 2024

1968: Concerns about further delays started to rise, leading Uthman El Dana, the Minister of Public Works at the time, to investigate ongoing projects including the fair and Beirut airport's expansion.

1969: The government agreed to increase the Fair's budget in order to accelerate its completion.

1970: In May of that year, Niemeyer sent a letter to the CEGP expressing his contentment for the executed work while bringing forth his concerns regarding the slow construction pace. He consequently asked for additional efforts to speed up the work, keeping in mind this fairground was regarded as one of his most praised projects.

1971: Concerns regarding the delays in the construction were still on the rise. Protesters at the time also raised questions regarding the Fair's modern design and language considering it was a publicly owned complex.

1975: The Lebanese Civil War began and led to the halting of further construction.

1976: The site was occupied mainly by the Syrian Army forces, taking military control of the site until its partial evacuation in 1994.

1980: In July of that year, the site's complete evacuation is requested by the Chairman of the Fair's Administration Council. In October, Jemp Michels and Roger Weber, two international experts, visited the fair and reported the work that remained, creating a tentative completion date to be in 1982-83.

1982: Progress is halted once again due to the Israeli invasions.

1983: The Fair's Administration Council wished to resign due to the challenging situation created by the Syrian military occupation.

1994: The Syrian Army partially evacuated the site. Rafik El Hariri, the Prime Minister at the time, launched a targeted rehabilitation plan with the hope of reviving the fair's initial function.

1995: the fair is officially renamed Rachid Karami International Fair (RKIF). Despite the presence of the military in some parts of the site, several national and international exhibitions took place between 1995-1998.

1988: After complete military withdrawal, several efforts to revitalize the complex were made.

2005: The Fair's architectural value aroused local and international media's interest after the site was threatened by large scale development proposals, putting its value as a modern heritage site into perspective.

- **2006:** After a local campaign, the World Monument Fund listed the fair as part of the 2006 Monuments Watch List of 100 Most Endangered Sites.
- **2018:** The site was recognized and included in UNESCO's World Heritage tentative list.
- **2019:** With the help of the Getty Foundation, UNESCO's Regional Office in Beirut began the development of a conservation management plan.
- **2023:** On January 25, the RKIF was inscribed on the World Heritage List as one of the most valuable 20th century modern architecture in the region. Due to the critical state of the concrete structures on site, the RKIF was also inscribed on the World Heritage List in Danger.
- **2024:** UNESCO Beirut Office has concluded a Conservation Management Plan for RKIF.

Figure 68 The Fairground Plan after the interventions of Niemeyer, from the mid 1970s-2023. Source: UNESCO Conservation Management Plan, 2024



04. Site Analysis

B. Masterplan and Architecture

1. Petit, 1996, p. 51

2. Petit, 1996, p. 49

Niemeyer's General Approach

In order to understand the site, it is also important to begin by understanding the characteristics of Oscar Niemeyer's architecture. This renowned Brazilian architect is celebrated for his innovative contribution to modern architecture. Among the characteristics that are noticeable in his architecture

- **Integration of social spaces**

"Architecture is always representation of historical situation context, a set of social relations. At the same time, it can emphasize discrimination among men and open their spirit".¹ Niemeyer believed in the importance of encouraging social interaction and community spirit in his architecture. As such, he included public and common spaces in his architecture and created fluidity between indoor and outdoor



spaces.

- **Curvilinear and sculptural forms**

"I have always wanted to overcome the contradiction that exists between form, technique and function, and go towards unexpected and harmonious solutions."² In order to give his architecture a fluid and dynamic movement, Niemeyer often opted for curved and sculptural forms. These forms would create striking architecture. They would also be used for various innovative purposes.



- **Monumental architecture and urban connection**

The scale of Niemeyer's architecture was impressive and sometimes spread over a large surface area and

Figure 69 (Up) National Congress in Brasília. Image by Agencia Senado, 2023. (Down) President's official residence (Palácio do Planalto) in Brasília by Oscar Niemeyer. Image obtained from Kernig Krafts, 2019, via Dezeen.

created a sense of gentle but monumental presence. This was often also a result of the consideration of the urban context, understanding the relationship between open space and the forms, as well as studying the architecture's perception from different angles. In addition to the human-perception of his architecture, Niemeyer established an urban perception for his projects.

- **Integration with nature**

Niemeyer's designs generally took on the approach of integrating nature and architecture by connecting to the surroundings. Different elements were introduced in order to connect the outside and the inside, as well as establish a visual connection between nature and architecture. These elements included green elements and water pools that would reflect the architecture and greenery. Niemeyer consulted Brazilian landscape architect Roberto Burle Marx³ for several of his designs, enhancing this connection with nature. The relationship with nature is also enhanced through the implementation of architectural promenades within his architecture.⁴

- **Use of reinforced concrete**

In order to achieve his sculptural forms, Niemeyer took advantage of the innovative solutions reinforced concrete offered.⁵

Some of his most notable work can be found in Brasília, the capital city of Brazil. These include the National Congress and the Palácio do Planalto.

Niemeyer's Approach to the site

In 1962, during his visit to Lebanon, Oscar Niemeyer had described his concept and vision for the project.

- **Site Location and Urban Context**

Based on Niemeyer's observations, the location of the site initially raised an issue, since it seemed to have been chosen without proper preliminary study of the urban planning of the region and without considering the integration into the city and its future expansion. Instead, it seemed that the site had been chosen due to the requirements and specific interests of the project, with respect to the surfaces, conformation of the land, etc. Moreover, in terms of touristic power, Niemeyer found that the site would have better located at the seaside. Nonetheless, the fairground was designed to provide something new and interesting for Lebanon while taking into consideration a possible urban plan for the development of the site's context. The intention of this urban plan was to provide Tripoli with a modern district, constituting a residential area, with commerce, sports, entertainment and tourism, the latter two extending to the sea, as the continuation of the Fair itself, with hotels, cinemas, theatres, art exhibitions, nightclubs, etc. (Figure

3. *Roberto Burle Marx was a Brazilian (1909-1994) landscape architect who started collaborating with Oscar Niemeyer after having worked on architects Lucio Costa's and Gregori Warchavchik's private residence. Among the notable work that Burle Marx worked with Oscar Niemeyer on was the garden of the Pampulha complex in 1942. Burle Marx's works are modern and avant-garde. They are based on nature. Brazilian popular art, together with cubism and abstractionism known in Germany, influenced his drawings, making modernist aesthetics in a Brazilian key. (Anne Claire Budin, 2022)*

4. *Giacommo Kihlgren, 2014, p. 19-25*

5. *Agnese Torres, 2023*

6. Niemeyer, Oscar, September 1962, p.27.

7. UNESCO, 2022, p.11-16

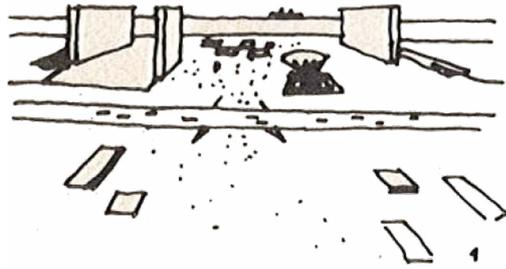


Figure 70 Sketch of Urban Concept. Niemeyer, Oscar, September 1962, p.28.

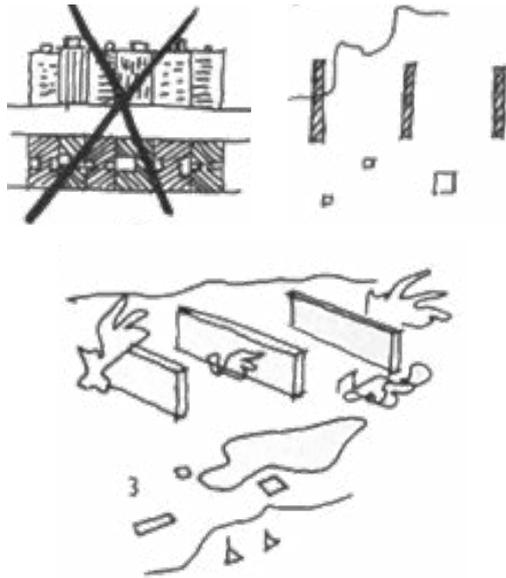


Figure 71 Sketch of Housing Concept. Niemeyer, Oscar, September 1962, p.28.

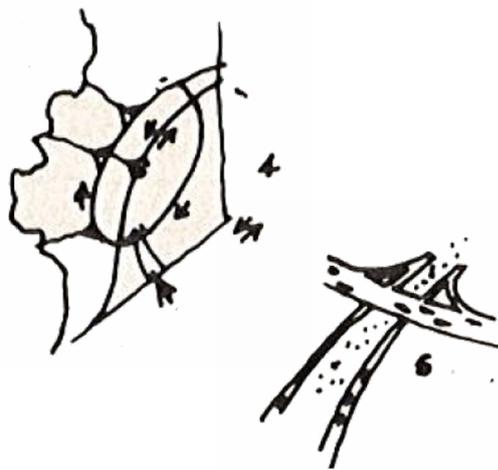


Figure 72 Sketch of Urban Development Concept. Niemeyer, Oscar, September 1962, p.28.

67) Instead of collective housing deprived of comfort and green spaces for the sake of real-estate development, Niemeyer's vision for the collective housing was to present dwelling with parks and gardens, surrounded by schools, nurseries, shops, cinemas, churches and mosques, etc. (Figure 68). As such, the Fairground would become the main element and a center of cultural, artistic, and recreational attraction for Tripoli.

The main lines of the urban development drawn by Niemeyer respect the already well-studied project of the existing boulevard, the cornice and the highway that were to connect Beirut to Syria, while adapting to the situation imposed by the location of the Fair, giving the remaining areas surrounding it a human and updated advantage. Thus, the highway and the railway line were to run along the Fair, cutting the region in a transverse direction and a new avenue were to complete its contour, providing the other sectors of the urbanized area with the essential traffic system, a system that was characterized by the complete independence between vehicles and pedestrians. (Figure 69).

For the entrance to the Fair, a single main access was planned, starting from the boulevard and duly connected to the new arteries, giving the Fair the magnificence and grandeur sought.⁶

Keeping this in mind, Niemeyer established certain principles to guide his approach to the Tripoli Fairground site.⁷

1. Incorporating the project within a general urban development plan: In the 60s, Tripoli had two main urban nuclei that were separated

by orange groves. They were the port district (Al Mina) and the old center with its clusters surrounding the crusaders' fortress (Tripoli Ville). The fairground was meant to become a third nucleus that connects both together.

2. Reflecting on Tripoli's urban trilogy: One of the aspects that drew Niemeyer's attention was the origin of Tripoli's name. Under the Phoenicians, Tripoli was initially referred to as "Athar". When the city came to be under Greek ruling, it became known as "Tri-polis", meaning three cities.⁸ This was interpreted by creating an egg-shaped composition for the complex, creating a focal point for the city that would also act as an urban link to these different parts of the city.

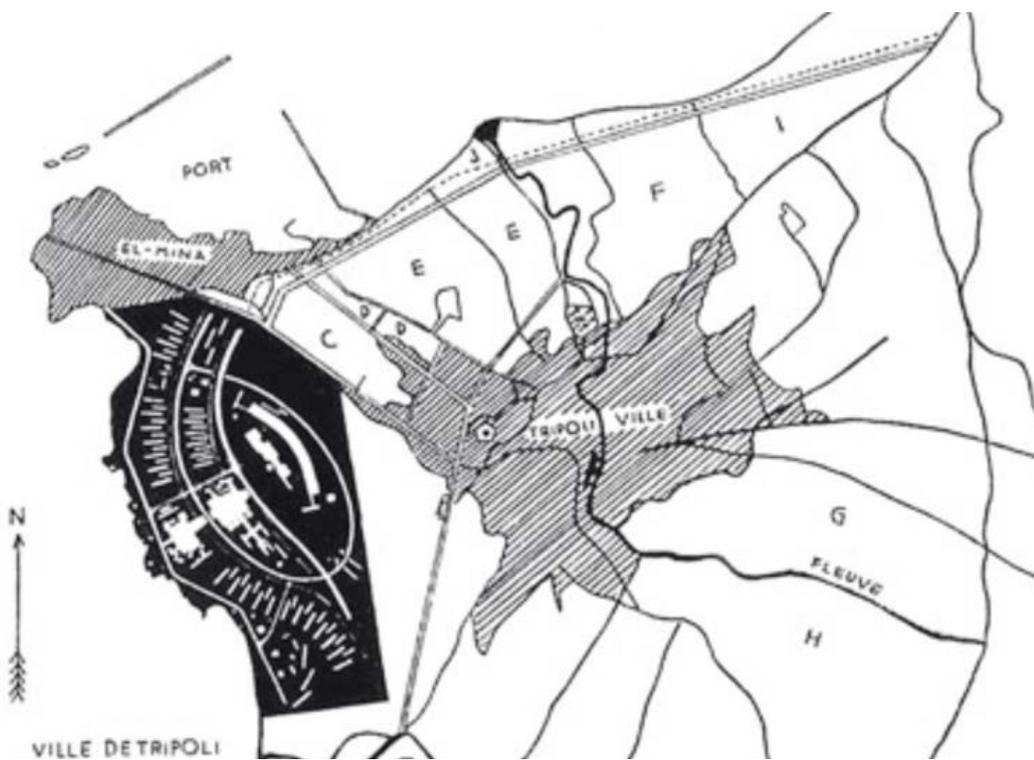


Figure 73 One of Niemeyer's sketches from 1962 expressing his desire to benefit from the opportunities the international fair project offers, creating a third urban nucleus with sporting, recreational amenities, housing, and shops. "Niemeyer's proposed urban plan for a third urban core based around the fair (in black) in addition to the old city of Tripoli and Al Mina (hatched)." Source: "Oscar Niemeyer's International and Permanent Fairground of Lebanon: The Challenges of Conserving a Utopian Vision." Essay. In *Keeping It Modern: Heritage Under Pressure. Perspectives from the Global South*, p. 63. 2023.

This also helped justify the circulation around the composition and within, as well as the separation between pedestrians and cars.

3. Anticipating future urban development: In addition to the fair complex design, Niemeyer presented plans and proposals of new radial social housing neighborhoods that would be situated along the coastline. He expressed his vision towards the future urban development of the city and anticipated the needed infrastructure.

9. UNESCO, 2022, p.11-13

10. Niemeyer, Oscar, September 1962, p.27.

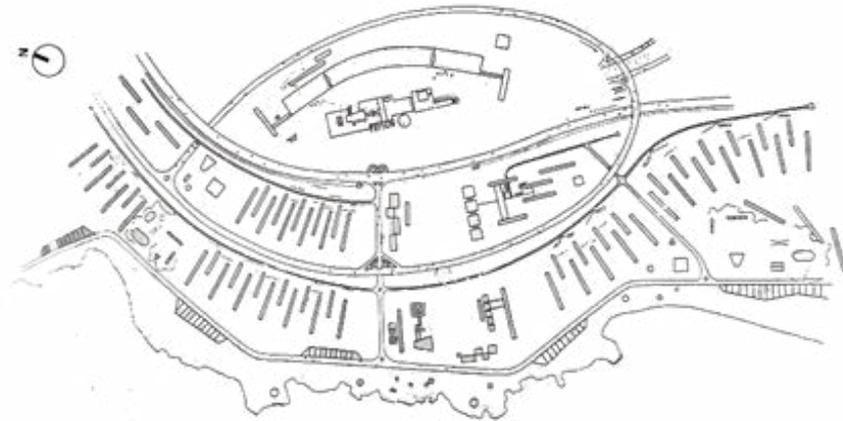


Figure 74 Niemeyer's proposal for a new urban plan, 1962. (Left) Styliane Philippou, 2008, p. 316. (Right) UNESCO, 2022, p.12.

Although the Lebanese government did not take these proposals into account, they would become a reference for Tripoli's future urban development.⁹

- **Concept of the whole**

During the time of its design, International Fairs had been designed in a repetitive manner, lacking unity and harmony. It was quite common to see buildings isolated from one another, with no common unifying element, creating a disruptive chaos. Instead, for the Tripoli Fairground, Niemeyer's intention was to create unity and plastic equilibrium, to properly portray the spirit of a pavilion.⁹

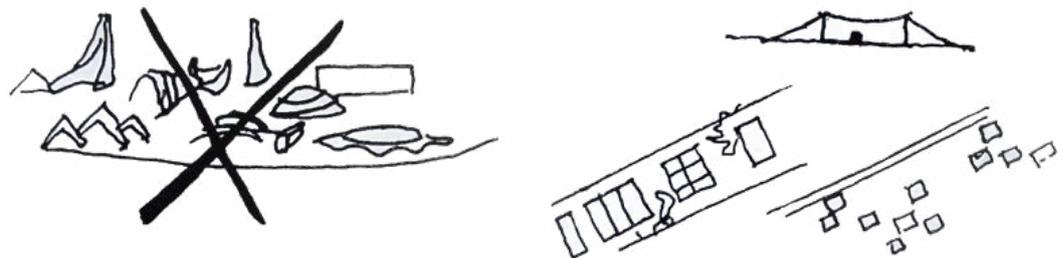


Figure 75 Proposal sketches for the fairground complex with disconnected separated buildings as the prevailing typology was rejected in favor of unified roof to tie the composition together. The last two sketches present the alternative options with a massive roof hosting various pavilions based on the demands of each country vs. an alternative option of a building pavilions of varying sizes and heights under the same massive roof. Styliane Philippou, 2008, p. 317.

Two suggested solutions: the first preferred option is a large cover 1000mx75m, under which different pavilions would be organized based on the desire of the different countries. In the second solution, the pavilions would be constructed under pre-established and equal covers, barely varying in size and height, which will create unity.¹⁰

Although the usual international fairs layout at the time consisted of

free-standing pavilions that were juxtaposed with one another, Niemeyer opted to create a much larger and monumental composition. As such, he went for the first proposal of a large “boomerang”, 70m wide and 640m long, that would host the different countries’ pavilion spaces. Its curvature was made to resemble that of Brasilia project’s Plano Piloto. This striking concrete structure, the largest at the time, provided the composition with plastic unity and equilibrium. The boomerang’s concavity created space for a series of architectural forms, minor in comparison, that created counterpoints linked together by ponds and gardens.¹¹

• Sequence

The Entrance Portico, the Reception Center with its lounges, restaurant, toilets, hairdressers, beauty salons ... were all placed near the main access to allow visitors to relax.

Under the cover that protects the pavilions at the end of the boomerang arch, visitors have a broad view of the whole Fair: on one side, the pavilions succeeding one another, surrounded by gardens, patios and covered parks; and on the other side, the gardens and the lake that complete the cultural and recreational part, detached from the whole with its simple, geometric and varied forms.

Firstly, the playground will emerge with its small circus, a house of recreation and entertainment for children. Then, the Lebanese Pavilion would appear as dominating the whole with its characteristic arcades, adapted to new construction techniques. This is followed by Experimental Theatre - a white dome where the most varied shows, the Helicopter Landing Area and the museum permanent space witness to the evolution in the conquest of the universe. The Open-Air Theatre, the Bowling Stadium, Boxing, Freestyle Wrestling, etc.,

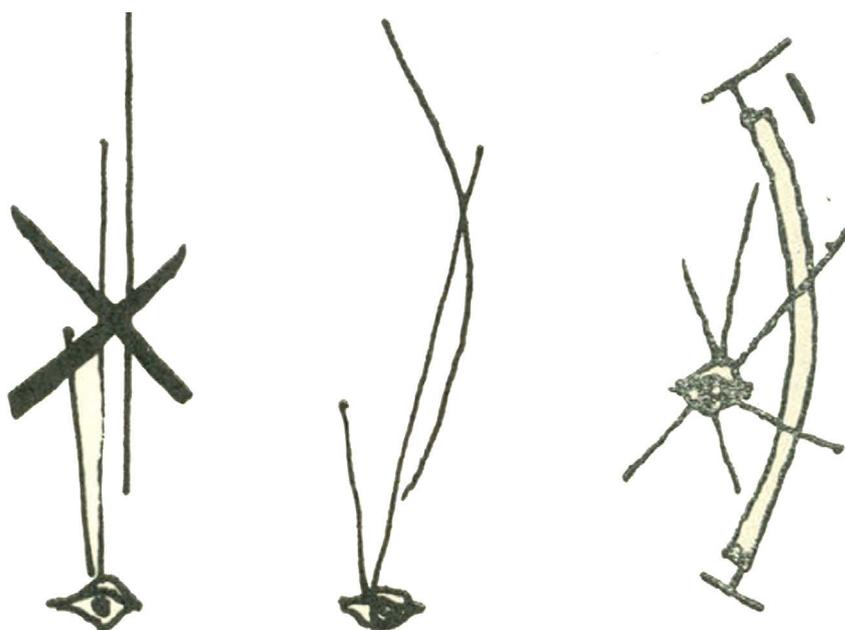


Figure 76 Sketch of Visitors’ Perception of the site. Niemeyer, Oscar, September 1962, p.28.

12. Niemeyer, Oscar, September 1962, p.27.

13. UNESCO, 2022, p.13

14. Oscar Niemeyer, 1963, p.96-100

are situated following the Helipad structure. A restaurant is situated near this theatre, at the highest point of a water tower, for a complete panoramic view.

At the end of the exhibition, visitors reach the housing sector, with the housing museum, and Administration and Customs. The Housing Museum was designed to present the evolution of housing through time and the reasons for housing collective and individual. The annexed buildings were to represent a real-life example of collective housing which was to be the basis of urban planning. Instead of a traditional entrance hall, a garden creates a lighter atmosphere for the apartments which, until the time of its construction, was lacking in this type of housing. A small train was originally intended to run along the route of the exhibition to transport visitors.¹²

It is also interesting to note the development of Niemeyer's proposals. The final results differ from the original ideas in three main areas:¹³

1. As previously mentioned, the initial sketches were not limited to the fairground, but also included Niemeyer's proposals for a new urban core with various facilities. The fairground in this scenario was situated closer to the sea in order to give room for the development of touristic services and facilities as well as the possibility of welcoming cruise ships.¹⁴ Following a composition of radial axes whose center would be the center of the fairground's egg-shape, these housing blocks were meant to be surrounded by public facilities, green spaces, schools and – given Tripoli's demographic – mosques. Accessibility and transportation were two important aspects that were also addressed. The egg shape was proposed to be transversally cut by a highway that would link Beirut and Northern Syria, placing the fairground at a very strategic location. Although Niemeyer's urban proposal was abandoned by the government, the international highway linking Beirut and Northern Syria was eventually realized tangent to the fairground's egg shape.

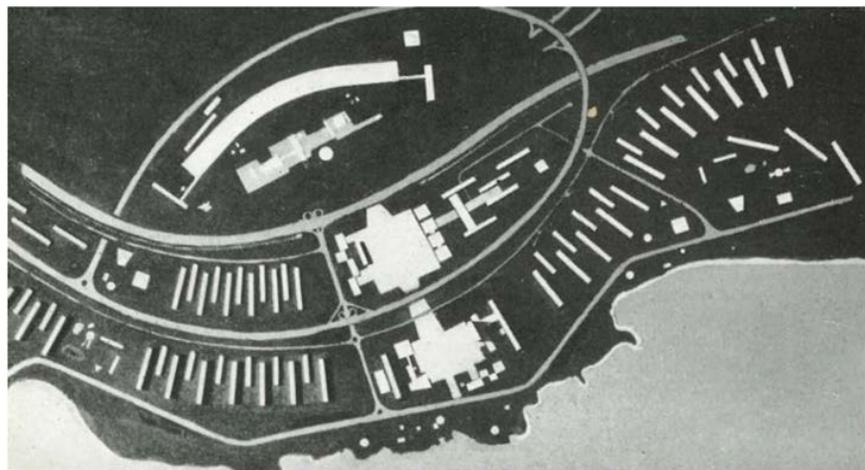


Figure 77 . Original proposal by Niemeyer included an urban development plan for the area. The boomerang's concavity was also directed towards the shore instead of the current orientation facing the city. Source: Niemeyer, Oscar. "Foire Internationale et Permanente Du Liban à Tripoli." *Architecture d'Aujourd'hui*, 33, no. 105 (December 1962), p. 96.

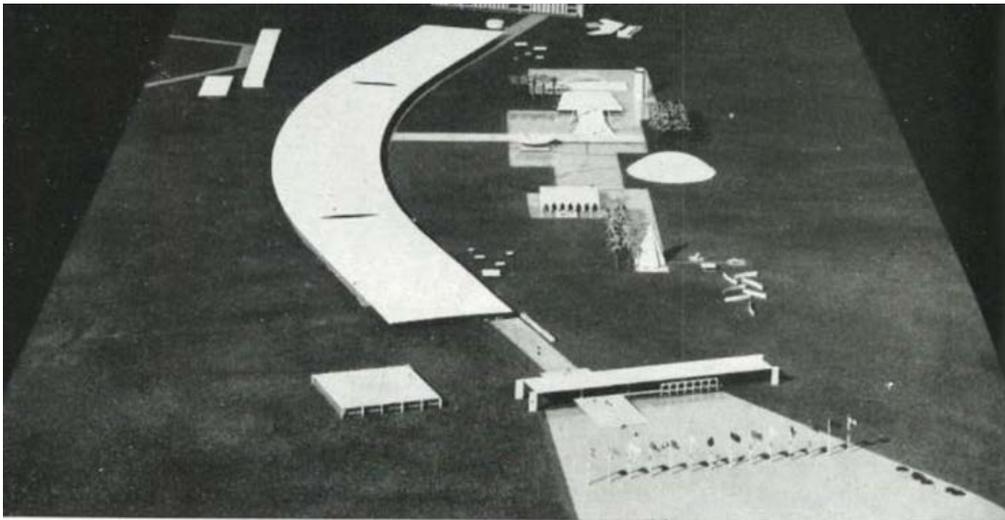


Figure 78 Updated proposal for the site with the boomerang orientation mirrored from the original proposal. Source: Niemeyer, Oscar. "Foire Internationale et Permanente Du Liban à Tripoli." *Architecture d'Aujourd'hui*, 33, no. 105 (December 1962), p. 98.

2. Due to the changes resulting from the previously discussed point, the boomerang shape was reversed to the alignment it currently follows, with the concavity opening towards the city instead of the Mediterranean Sea, forming a protective shield against the heavy winds of the south-west.¹⁵ (Figures 74-75)
3. Differences between the originally planned landscape in 1964 and the landscape executed by Dar El Handaseh can also be seen. The reason behind these changes are unclear. Although the tender documents in 1995 still had the original landscape design, the survey conducted by Dar El Handaseh in 1996 indicate a different landscape design.

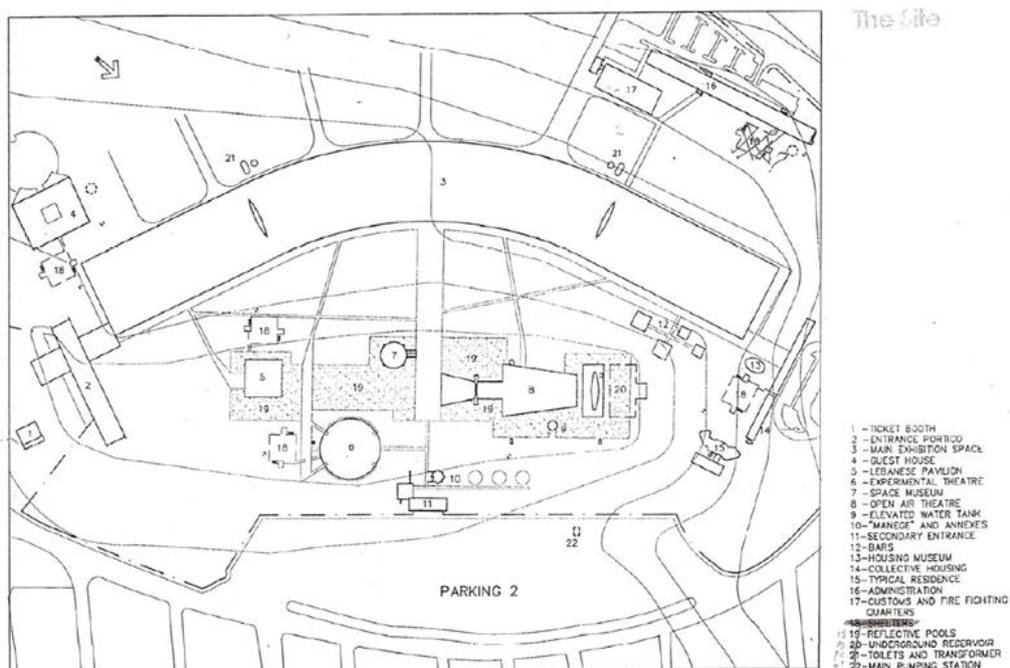


Figure 79 Original landscape design. Source: Dar Al-Handasah. *The Rachid Karamé International Fair Complex - Tripoli - Lebanon. Vol. III of L9458. Tripoli, Lebanon: Dar Al-Handasah, 1995, p.19.*



Figure 80 As-built Landscape. Source: Rami Rizk, May 2021. Retrieved from https://x.com/rami_rizk/status/1393904471084765189.

4. An issue of great debate, Niemeyer's intention was to leave the complex's perimeter freely accessible. Despite his objections, the authorities were adamant about keeping the site fenced for security reasons, especially due to the region's instability and other subsequent threats.¹⁶ This conflicted with Niemeyer's vision to keep the complex visible from the outside. A compromising solution for Niemeyer was to create a barrier made of concrete panels with vertical slits that would establish a visual connection but block access.



Figure 81 Concrete blocks placed as barriers around most of the site. This concrete barrier was against Niemeyer's vision for the site. However, to comply with the clients' needs, the compromise was the use of these concrete blocks. Photographed by Maya Hmeidan, 2019. Retrieved from UNESCO Conservation Management Plan, 2024



Figure 82 Metal fencing around the Eastern Entrance and other parts of the site. Photographed by Israa Akkary, 2023. Retrieved from UNESCO Conservation Management Plan, 2024

An important aspect of the project that sets it apart from its predecessors is the focus on not just the exhibition but the integration of cultural production and performance. In his article *Architecture, the city and its scale: Oscar Niemeyer in Tripoli, Lebanon*, Architect Adrian Lahoud describes the project as follows.

“In the plastic, concrete forms of the pavilions and theatre there is a concerted attempt to produce a surplus of cultural and symbolic capital that cannot be simply explained through recourse to historical precedent. In the prominent location of the collective housing unit and museum at the end of the primary axis, and in the theatre for experimental performance, Niemeyer exemplifies a specifically humanist attitude towards the imagined subject. On the one hand, the symbol of collectivity and on the other, a space reserved for the artistic free expression of the individual—a tension that struggles to reconcile technocratic rationality with individual freedoms—constitute the marker par excellence of the modern project.”¹⁷

Niemeyer wanted his design of the Tripoli fair to evoke a sense of unity and harmony.

Some of the architectural components inspired by local architecture include the Lebanese pavilion’s stylized pointed arches, the guest house’s layout organized around an atrium similar to common typologies found in Tripoli’s historic city, and the collective housing’s double height inspired by Mediterranean loggias.

Not only did Niemeyer get inspired from local architecture for the design of the pavilions, but he also collaborated with Lebanese firms and engineers when it came to the technical aspects and the execution of the project. As previously mentioned, although Niemeyer's office was responsible for the architectural design, technical studies, execution drawings, and tender documents were not part of the office's scope of work. Instead, different local engineering firms took on the responsibility of preparing technical studies, execution drawings of the assigned sections, and all other tender documents. These firms included Associated Consulting Engineers and Dar Al Handasah Nazih Taleb & Partners. This exchange of knowledge was welcome by Lebanese engineers and contractors who gained experience in the use of reinforced concrete for innovative architecture. This in turn influenced the modern architecture movement in Lebanon during the 60's.¹⁸

General Composition

The overall complex is made of several architectural and landscape elements: built structures, reflective pools, green spaces and gardens, pedestrian pathways, parking and other needed infrastructures.



Figure 83 Aerial View of Tripoli showing the Rachid Karami International Fairground. Photographed by Mohamed Mikati, 2019.

The fair's main access is located in the southern part of the composition. A vast ramp leads the way to a raised entrance portico from which visitors enter the fairground and discover the composition that lies ahead. To avoid blocking the view of the entrance, the ticket booths are recessed in a sunken court. The formal exhibits were meant to be placed under the boomerang canopy. As previously mentioned, placing the various national pavilions under one monumental concrete canopy was an innovative idea in the architectural realm of international fairs and large-scale exhibition complexes. However, Niemeyer saw the need to create a monumental unifying element as well as the need to create wide angle perspectives for visitors. Meanwhile, cultural, and recreational activities would create sculptural forms linked by reflective

ponds and gardens. The idea to separate the formal exhibits placed under the boomerang and the recreational zones (cultural, sports, and green play areas) was another innovative idea for the project, possible inspired by the functional divisions Brasilia's urban clusters.



Figure 84 Sketch of section showing the relationship between the different pavilions. Niemeyer, Oscar, September 1962, p.28.

The sculptural elements are strategically placed around the boomerang, forming a unified composition.

The Lebanese pavilion consists of a square surrounded by a gallery with pointed arches, floating in a shallow reflective pool. Facing the adjacent large pool are the experimental theatre, the water tower/ roof restaurant, and the miniature “manège” of archetypical sculptural forms. A secondary entrance is placed along the central axis of the composition, leading to a bridge that gives way to the Space Museum with its distinguishable helipad. In the northern part of the composition, visitors cross a ceremonial ramp to reach the outdoor amphitheater that is framed by a monumental arch. The Housing zone is placed at the northern extreme of the boomerang, creating a form of closure for the composition. Two separate blocks parallel to the convexity of the canopy house the administrative services.

The overall fairground complex houses 15 structures distributed over nearly 70 hectares. By studying the fair's layout, certain alignments and correlations between the different elements can be noticed. Similar to Le Corbusier's reliance on golden proportions, Niemeyer's composition followed a grid system based on well-defined architectural relations and golden ratio.¹⁹

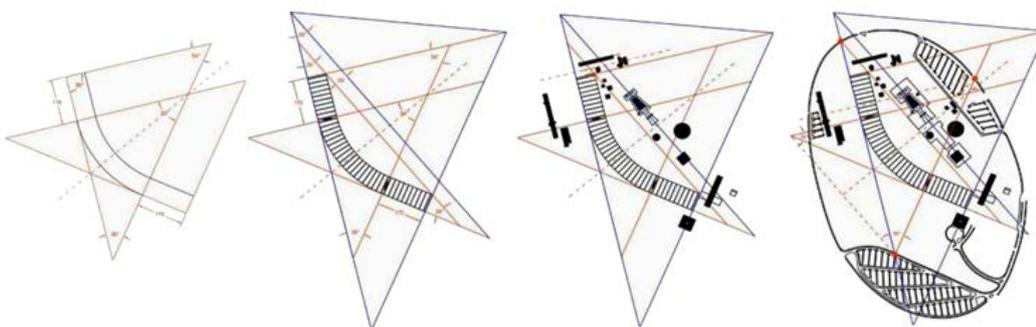
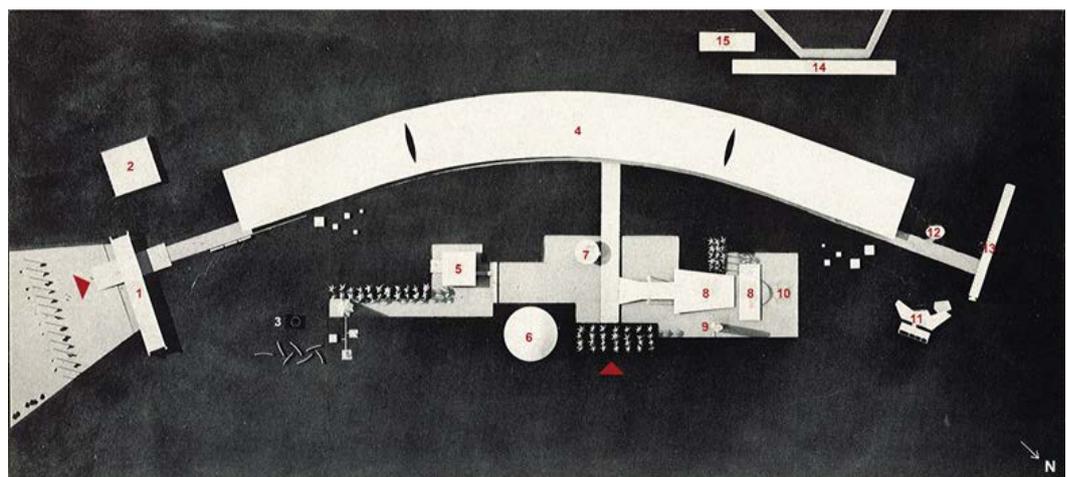
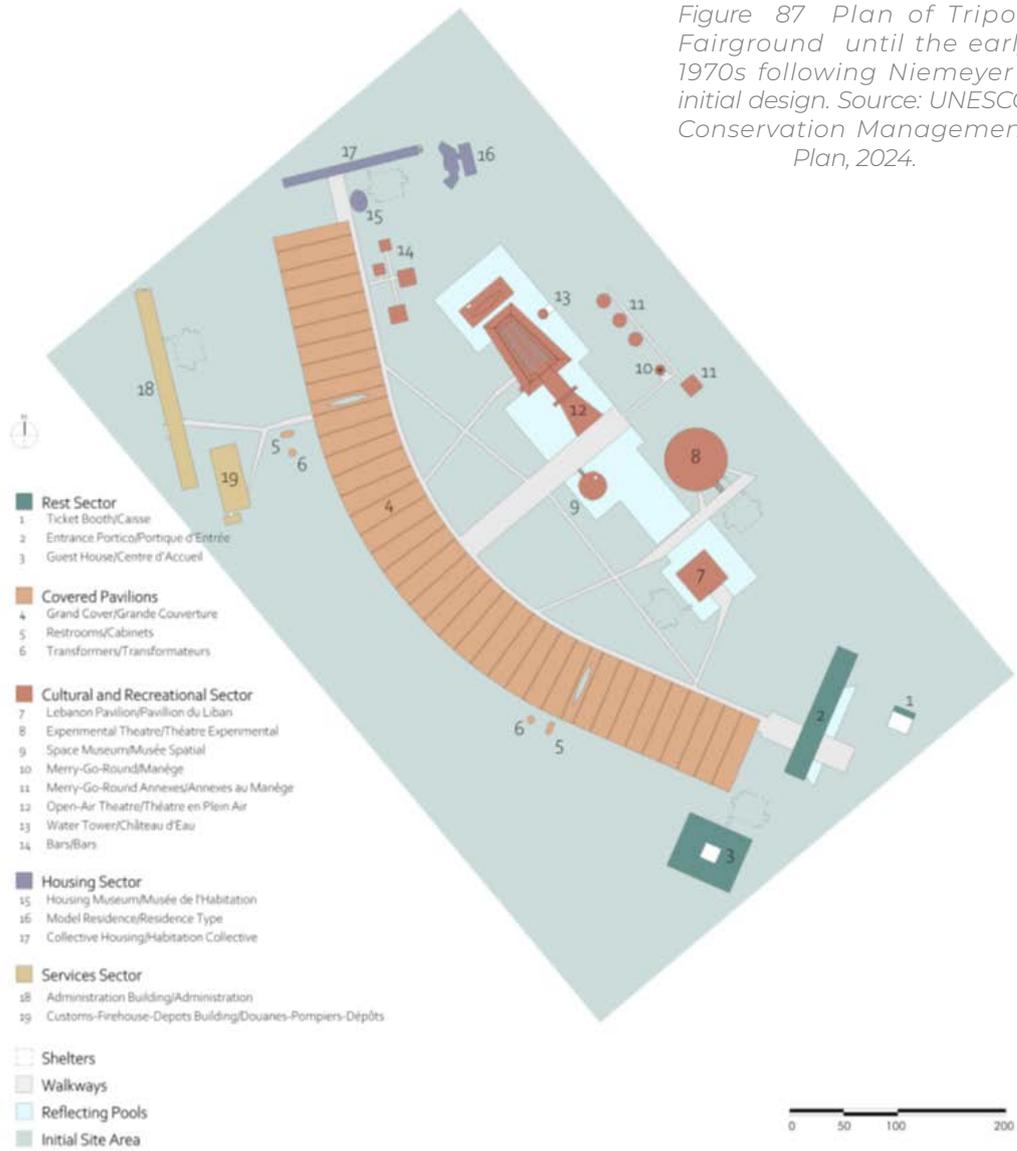


Figure 85 Masterplan Composition Principles. Source: Retrieved from UNESCO Nomination Text prepared by Jad Tabet, 2022, p. 16. Original source: El Hussein, Adonis. Thesis. Oscar Niemeyer's Iconic Ensemble for Lebanon's International Fair Complex in Tripoli, 2019. https://bib.kuleuven.be/english/ebib/collection/publications/Doctorates_and_theses.

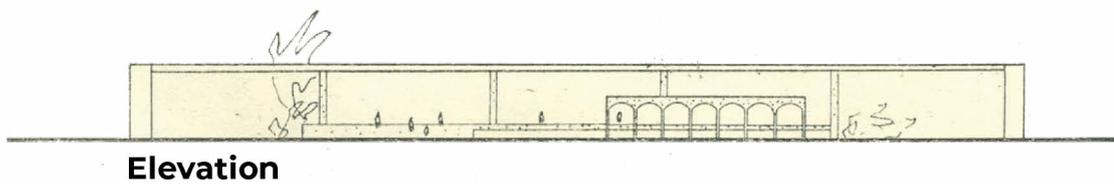
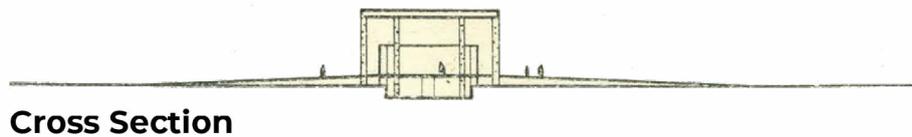
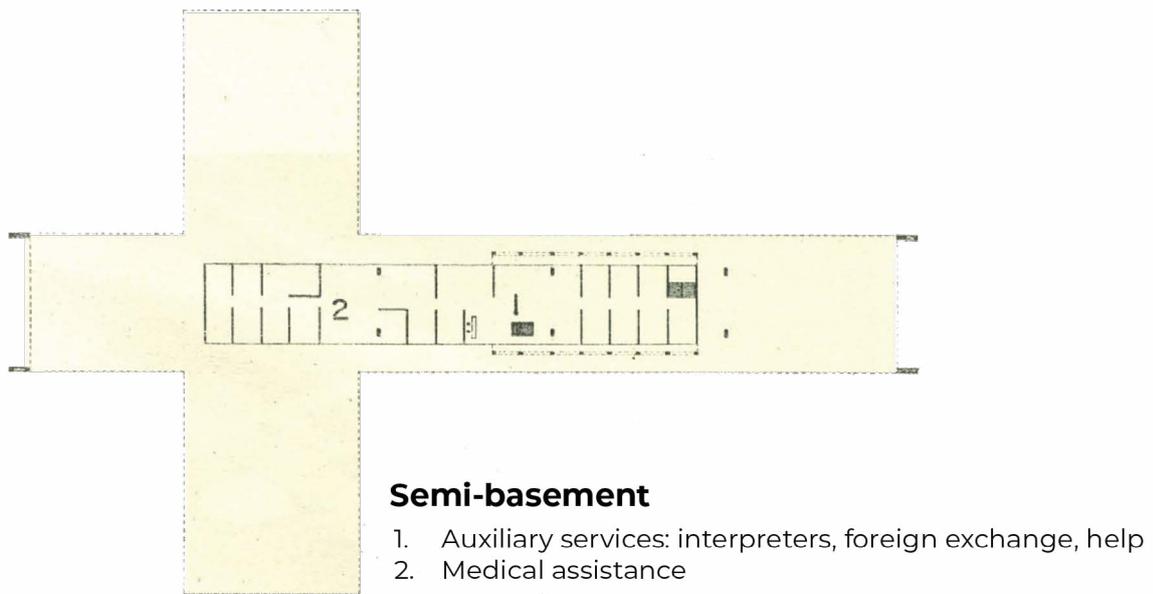
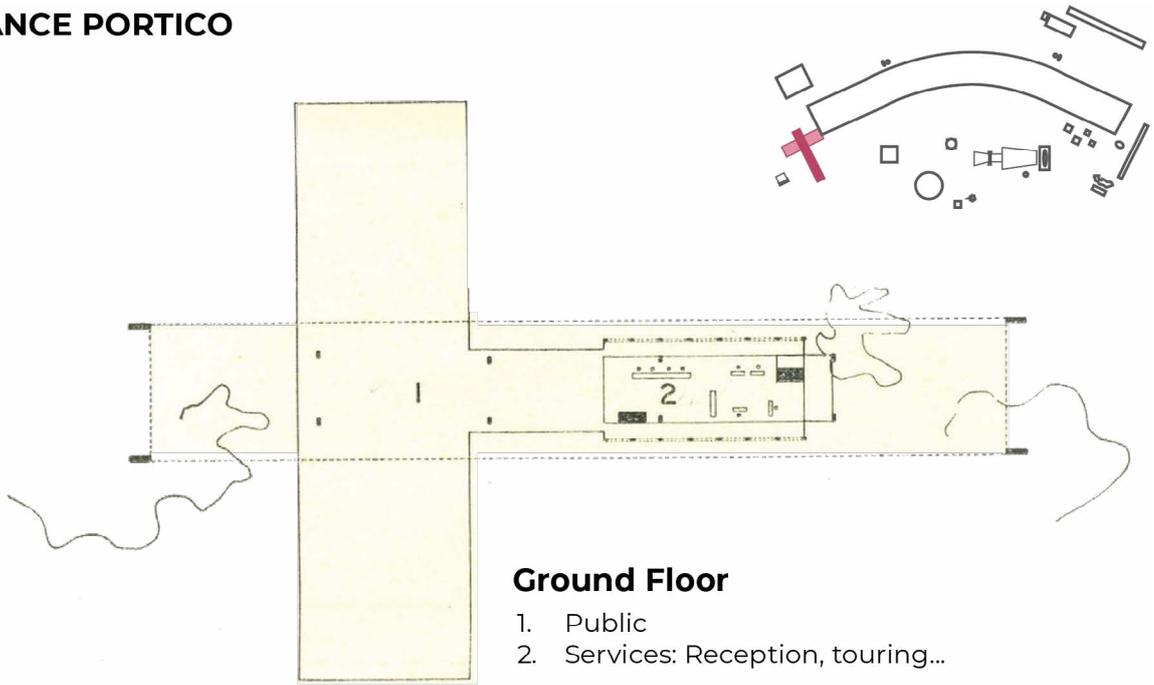
Figure 87 Plan of Tripoli Fairground until the early 1970s following Niemeyer's initial design. Source: UNESCO Conservation Management Plan, 2024.



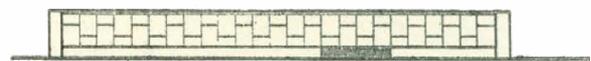
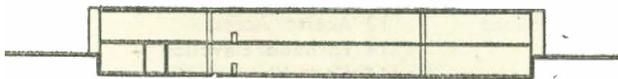
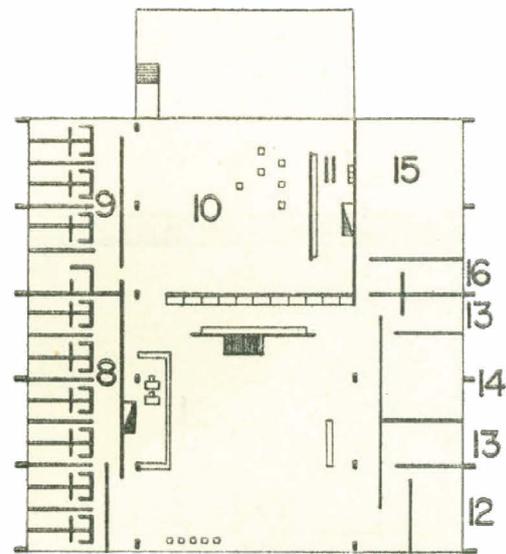
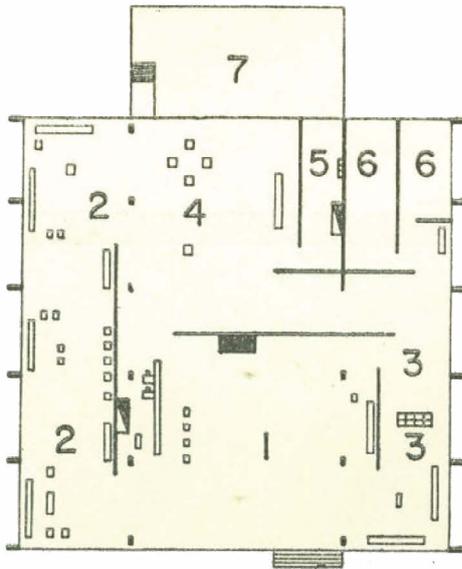
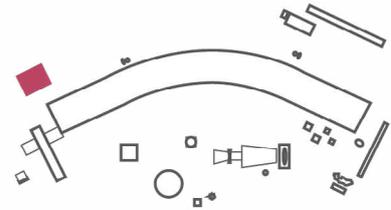
1. Entrance Portico
2. Guest House
3. Circus and playground
4. Boomerang: Pavilion & stands
5. Lebanese pavilion
6. Experimental Theatre (Dome)
7. Heliport and Space Museum
8. Open-air Theatre
9. Water Tower Restaurant
10. Reflective Pools
11. Model Residence
12. Housing museum
13. Collective Housing
14. Administration
15. Customs, Fire House, Depot
▲ Entrance to site

Figure 86 Original Masterplan and pavilions. Labels added to photograph of model retrieved from Conseil Exécutif des Grands Projets, Opening booklet for the Foundation Stone, 1st October 1963, p.13.

ENTRANCE PORTICO



GUEST HOUSE



Ground Floor Plan

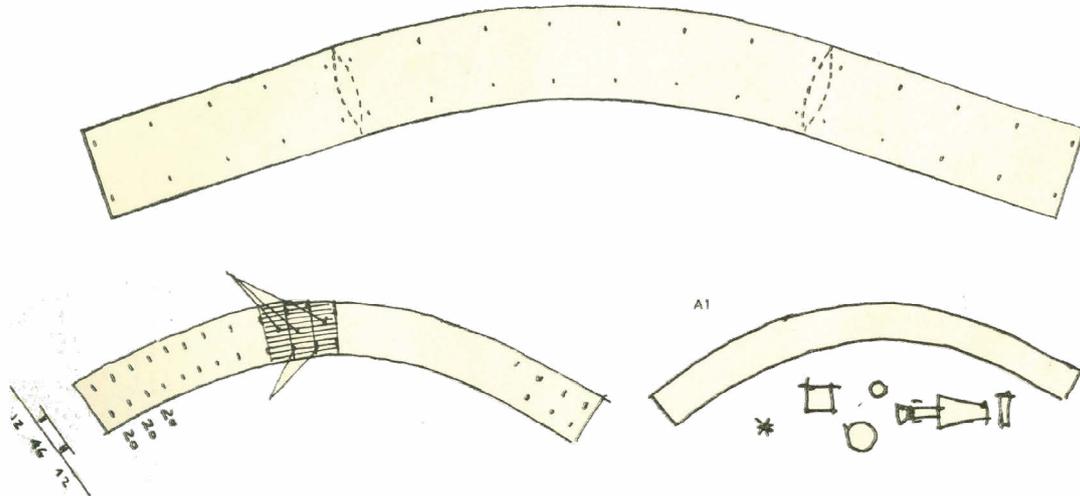
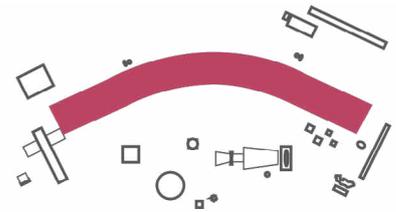
1. Hall, reception, control area, inquiries
2. Lounge, reading room
3. Writing room, telephones
4. Restaurant
5. Kitchen
6. Lavatory
7. Foyer

Semi-basement

8. Bedrooms
9. Children's bedroom
10. Children's cafeteria
11. Children's kitchen
12. Barber shop
13. Lavatory
14. Beauty parlor
15. Linen closet & laundry
16. Servants' lavatory

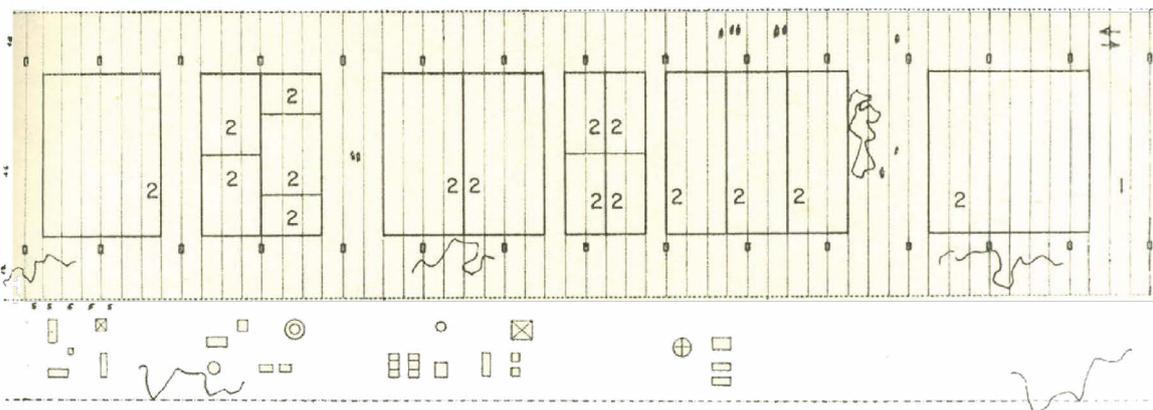
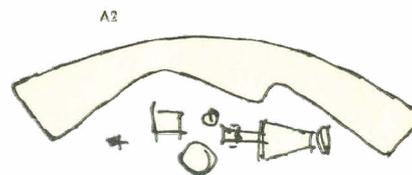
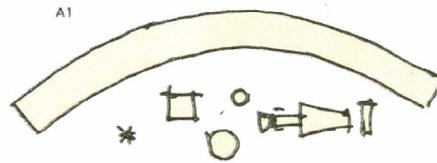
BOOMERANG: PAVILION & STANDS

The solutions proposed for the pavilion roof features horizontal surfaces.



The first solution (A1) consists of columns spaced 20 m apart in the longitudinal direction of the building with a span of 46 m and a cantilever of 12 m, where prefabricated and prestressed beams were proposed.

The second solution (A2) follows the same principles, basing its curved shape on the need to shelter, outside the surface of the pavilions, the areas intended for bars, restaurants, etc.

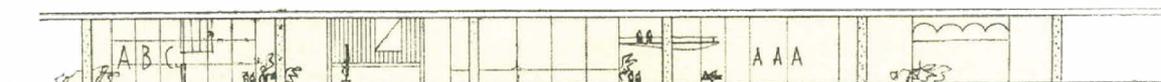


Pavilions

1. Surface of pavilion roof
2. Pavilions

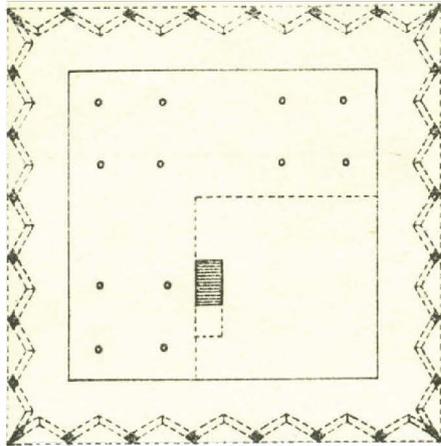
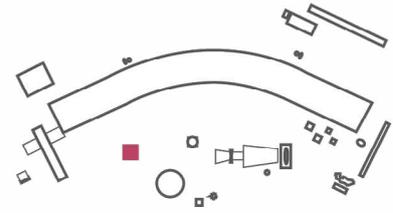


Cross Section

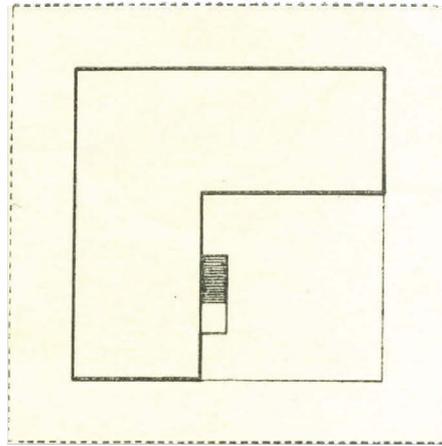


Elevation

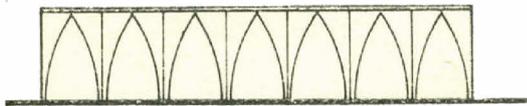
LEBANESE PAVILION



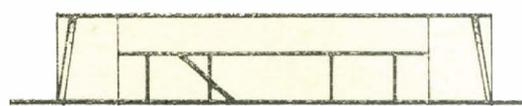
Ground Floor



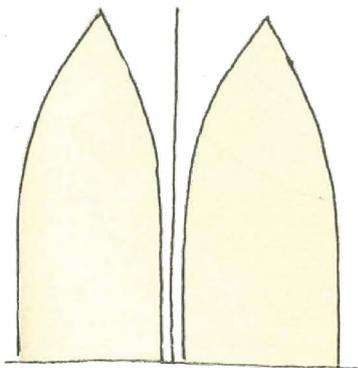
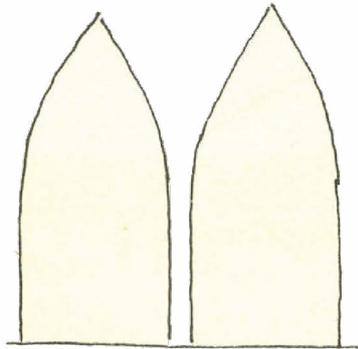
Mezzanine



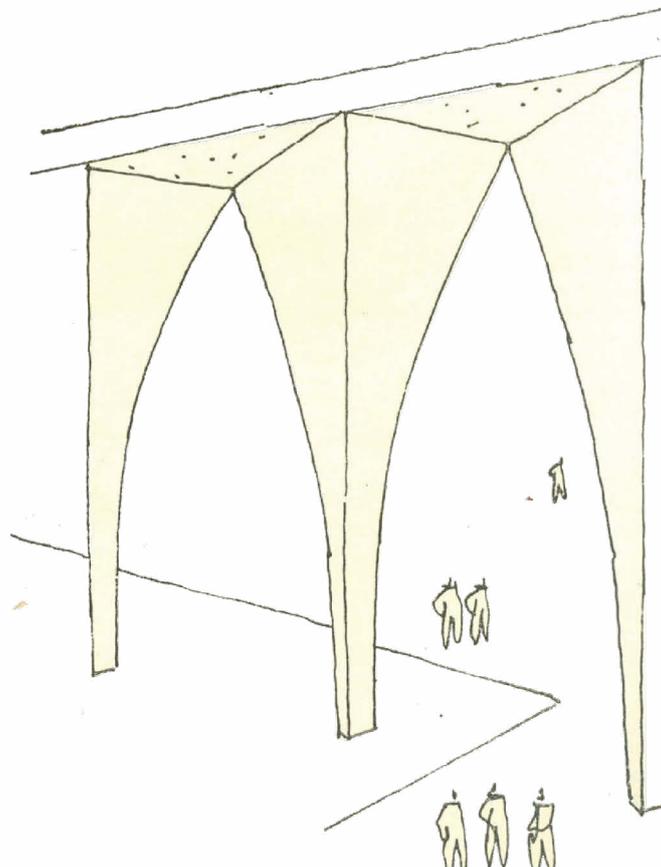
Elevation



Cross Section



Study of Elevation

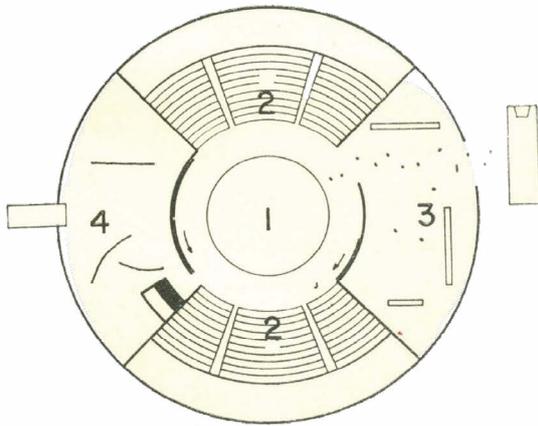


Perspective

EXPERIMENTAL THEATRE



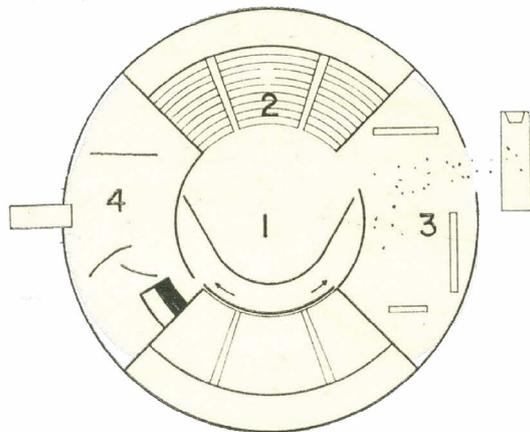
Elevation



Arena Theatre

Ballet, music, ...

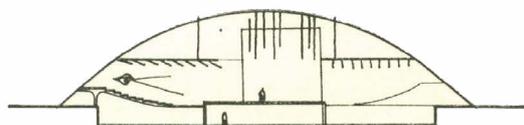
1. Stage
2. Auditorium
3. Foyer
4. Auxiliary services and supervision



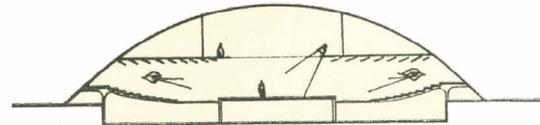
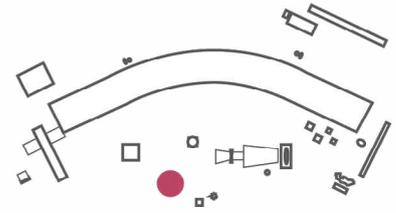
Dramatic Theatre

Ballet, music, ...

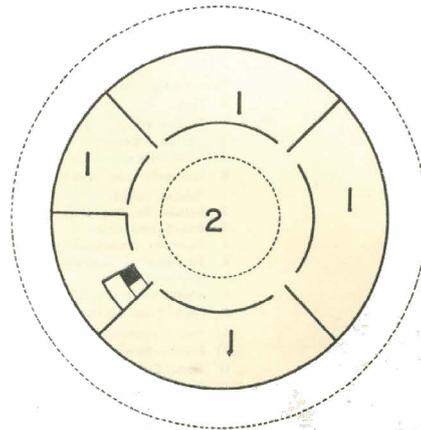
1. Stage
2. Auditorium
3. Foyer
4. Auxiliary services and supervision



Dramatic Theatre Cross Section

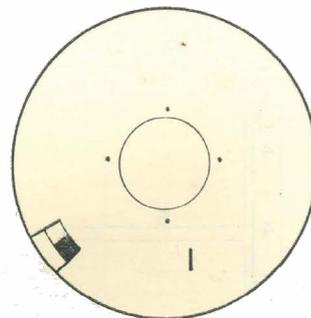


Arena Theatre Cross Section



Semi-basement

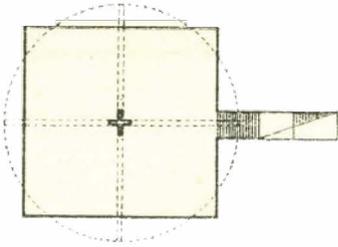
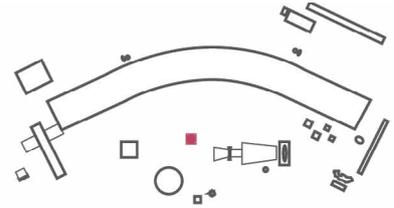
1. Dressing rooms, cloak room, lavatories, wardrobe, ...
2. Void of stage



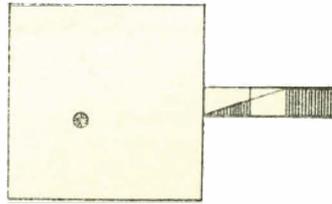
Mezzanine

1. Stage work, lighting, ...

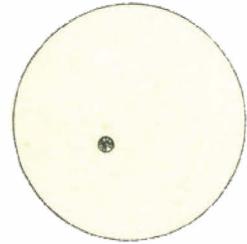
SPACE MUSEUM & HELICOPTER LANDING APRON



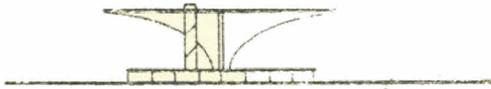
Exhibition



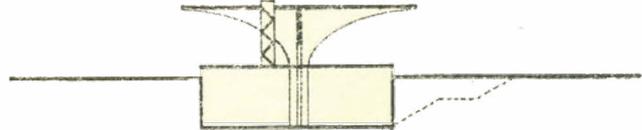
Pilotis



Helicopter Landing Apron

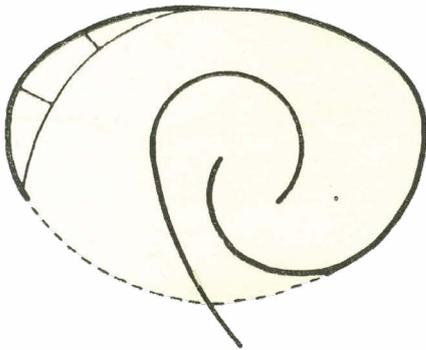


Elevation

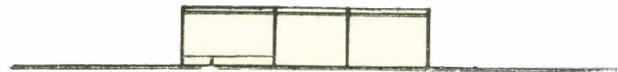
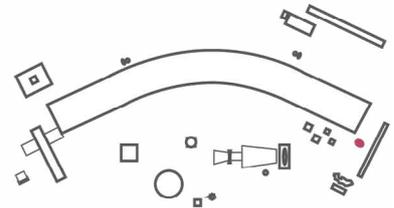


Cross Section

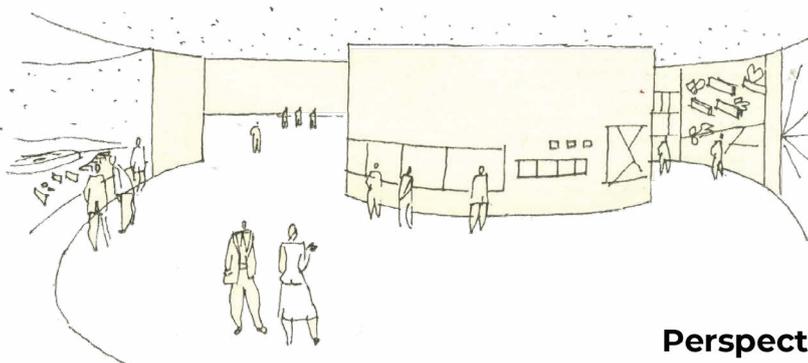
HOUSE MUSEUM



Plan



Cross Section

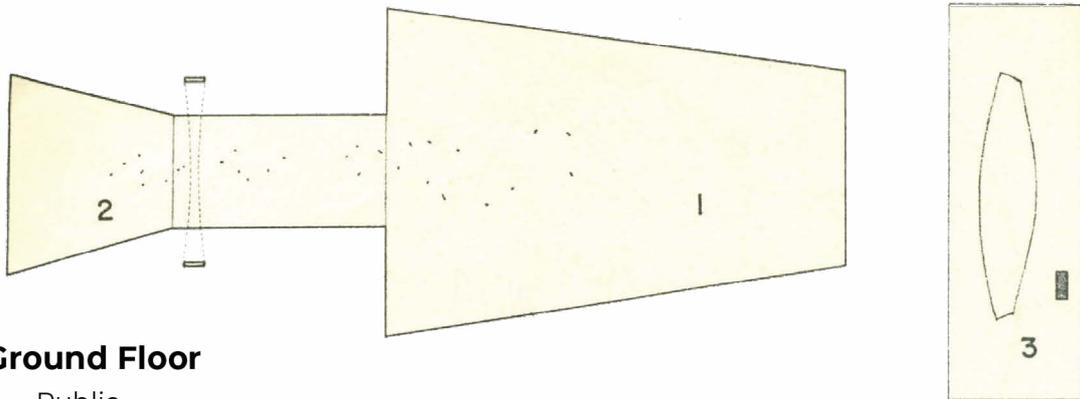
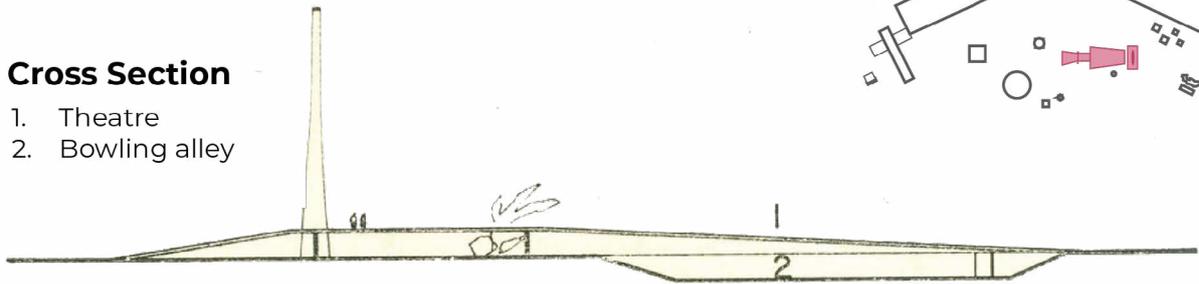


Perspective

OPEN-AIR THEATRE

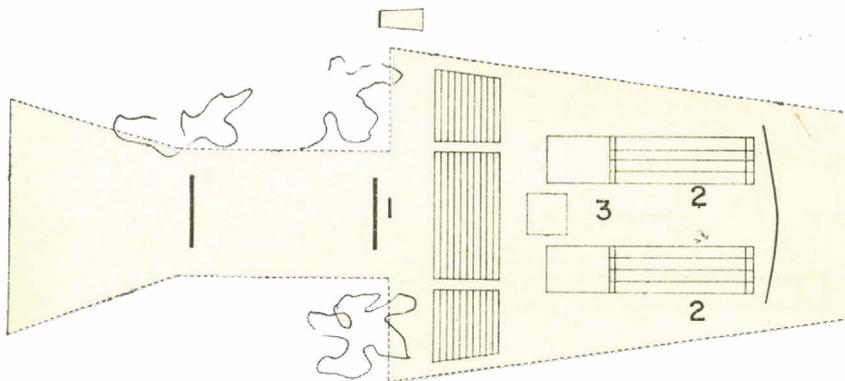
Cross Section

1. Theatre
2. Bowling alley



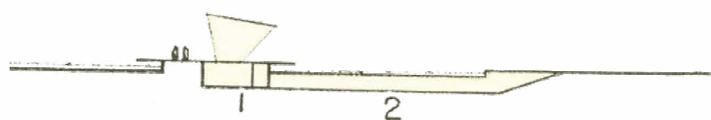
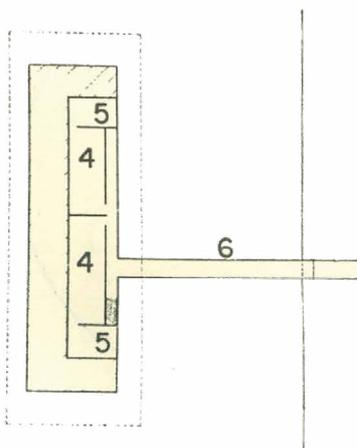
Ground Floor

1. Public
2. Access
3. Stage



Semi-basement

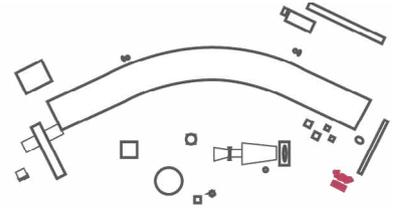
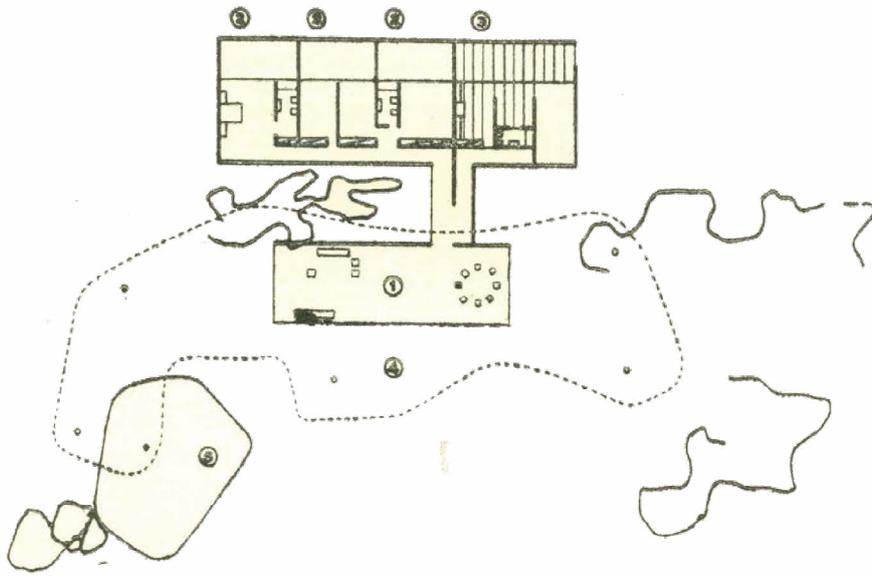
1. Public
2. Bowling aley
3. Boxing ring
4. Dressing rooms
5. Baths and lavatories
6. Stage entrance



Cross Section

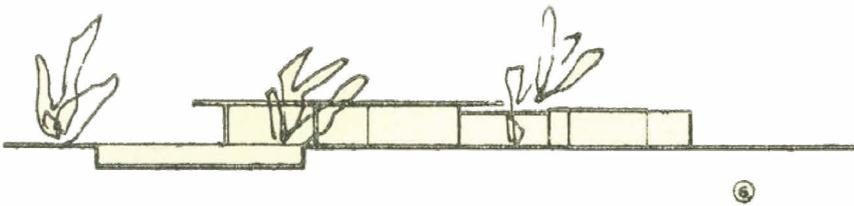
1. Dressing rooms
2. Stage entrance

MODEL RESIDENCE



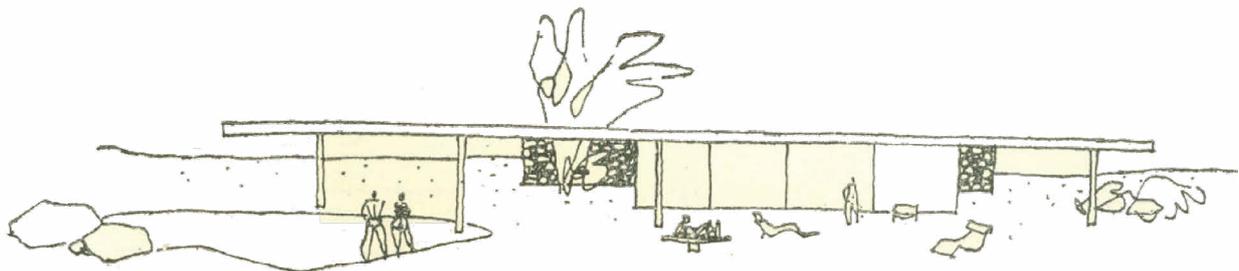
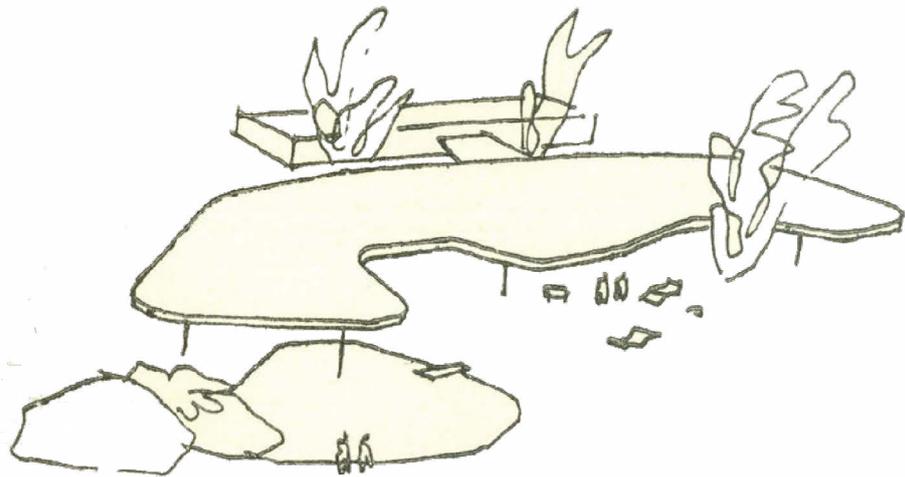
Plan

- 1. Rooms
- 2. Bedrooms
- 3. Service: kitchen, bedroom, area
- 4. Indoor garden
- 5. Swimming pool

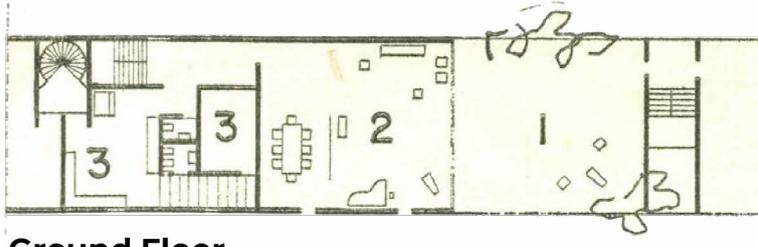


Cross Section

Perspectives

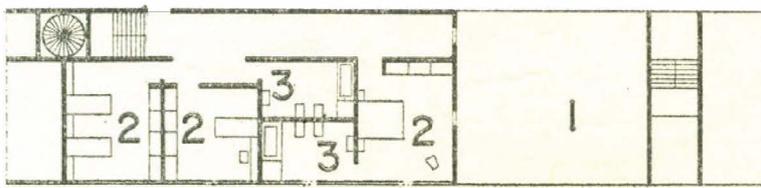
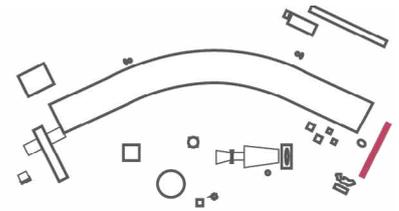


COLLECTIVE HOUSING



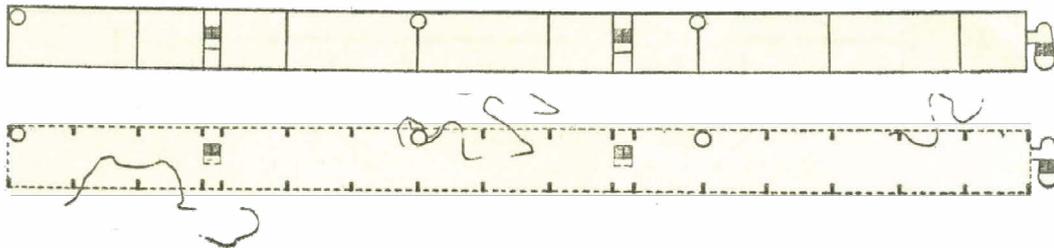
Ground Floor

- 1. Garden
- 2. Rooms
- 3. Service: kitchen and offices

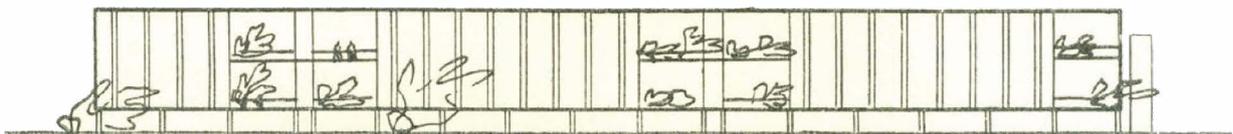


First Floor

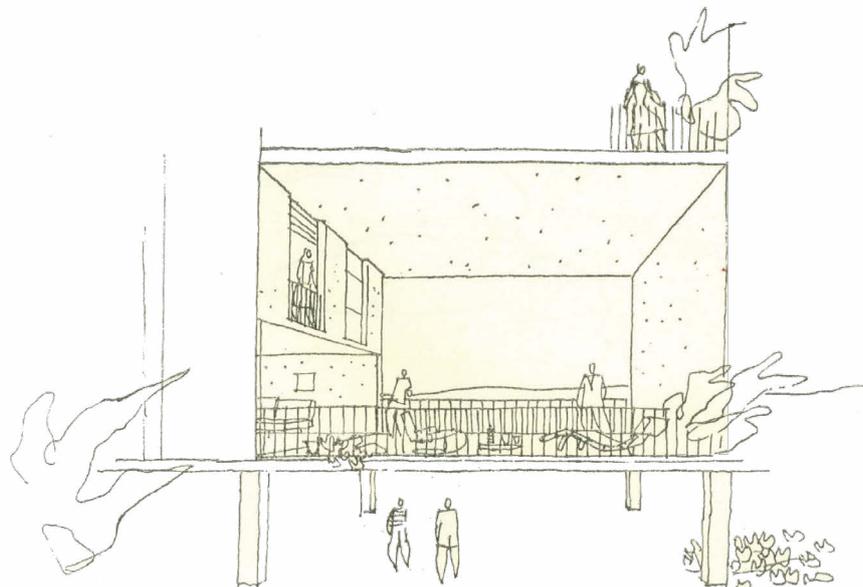
- 1. Void
- 2. Bedrooms
- 3. Bathrooms



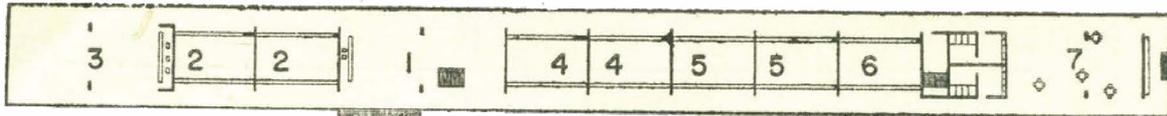
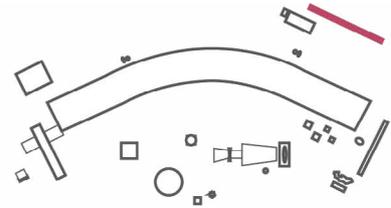
Plans of Blocks



Elevation

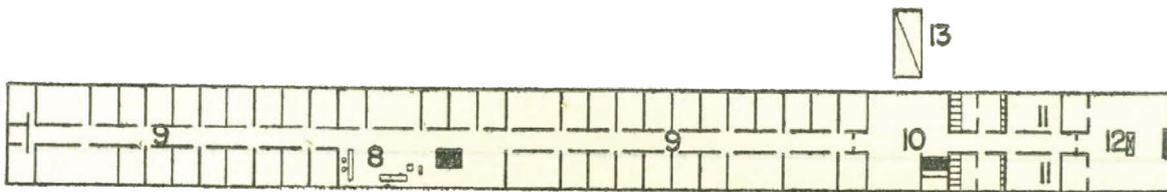


ADMINISTRATION



Ground Floor

1. Hall
2. Porter's office
3. Chamber of commerce
4. Bank
5. Communications
6. Press
7. Restaurant



Semi-basement

8. Inquiries
9. Managing Director & Departments
10. Service
11. Store Room
12. Kitchen
13. Access



Elevation



Cross Section

04. Site Analysis

C. Current State

The following chapter focuses on the direct site analysis of the Rachid Karami International Fair. Access to the site, site boundaries, circulation, topography, and state of conservation of the site and its pavilions are all studied in the following chapter.



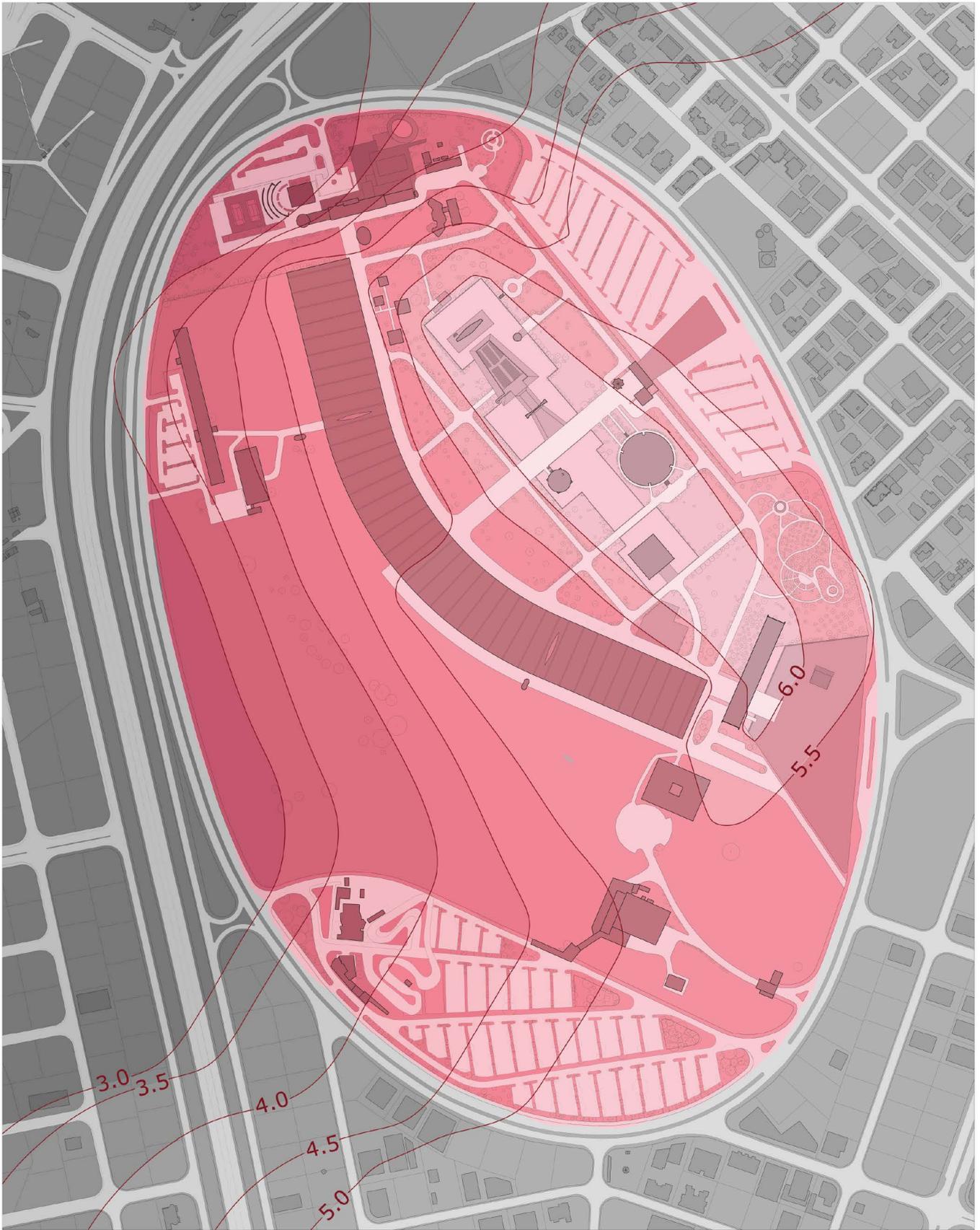
Figure 88 View of the site while looking towards the south. Photographed by Jad Tabet, 2017. Source: UNESCO Nomination Text, 2022, p. 27.



Figure 89 View of the site while looking towards the north. Photographed by Wassim Naghi, 2021. Source: UNESCO Nomination Text, 2022, p. 27.



Figure 90 View of the site while looking towards the west. Photographed by Wassim Naghi, 2017. Source: UNESCO Nomination Text, 2022, p. 32.



Topography



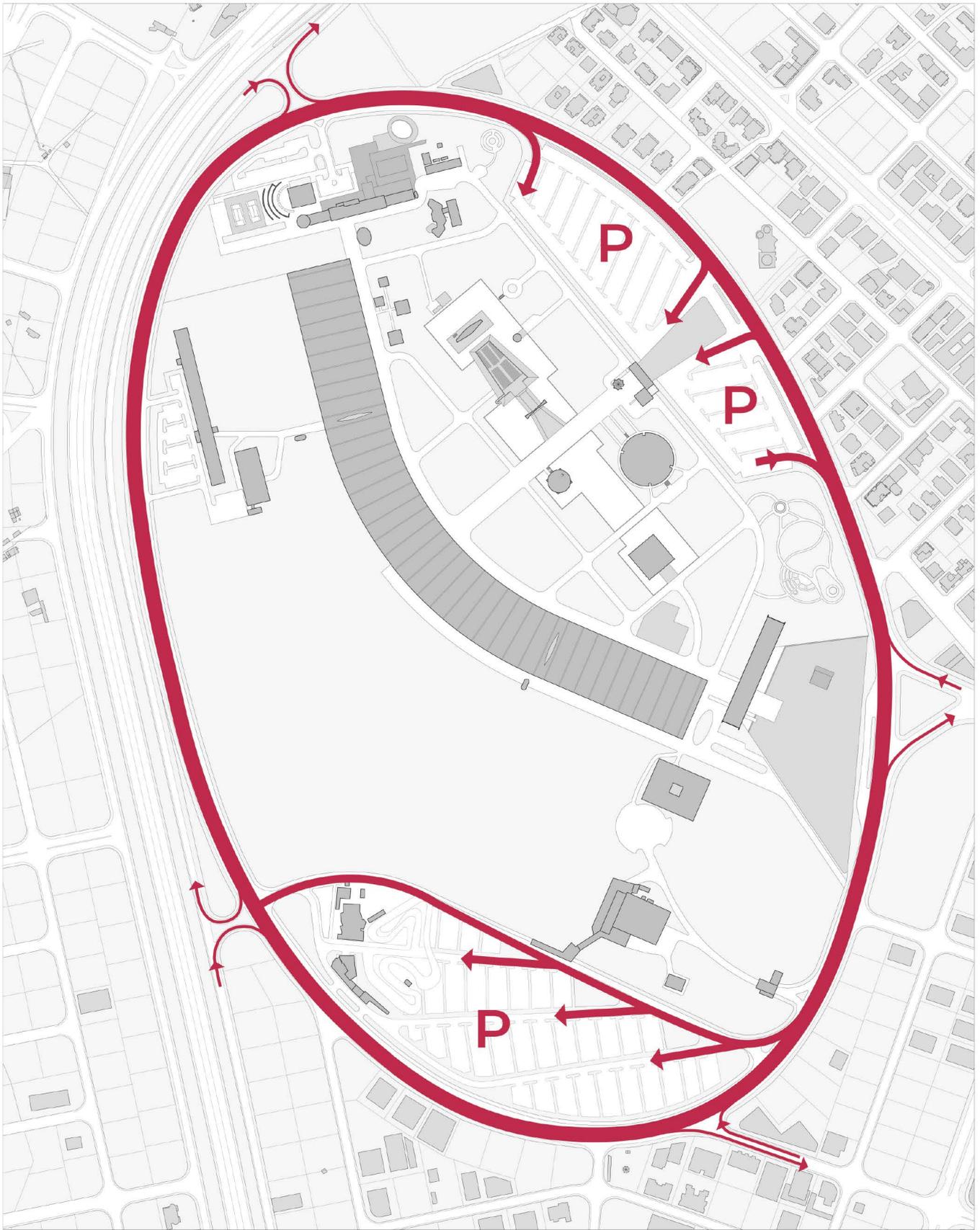


Barriers and Boundaries

- Concrete Barriers
- - - Metal Barriers
- Added Barriers



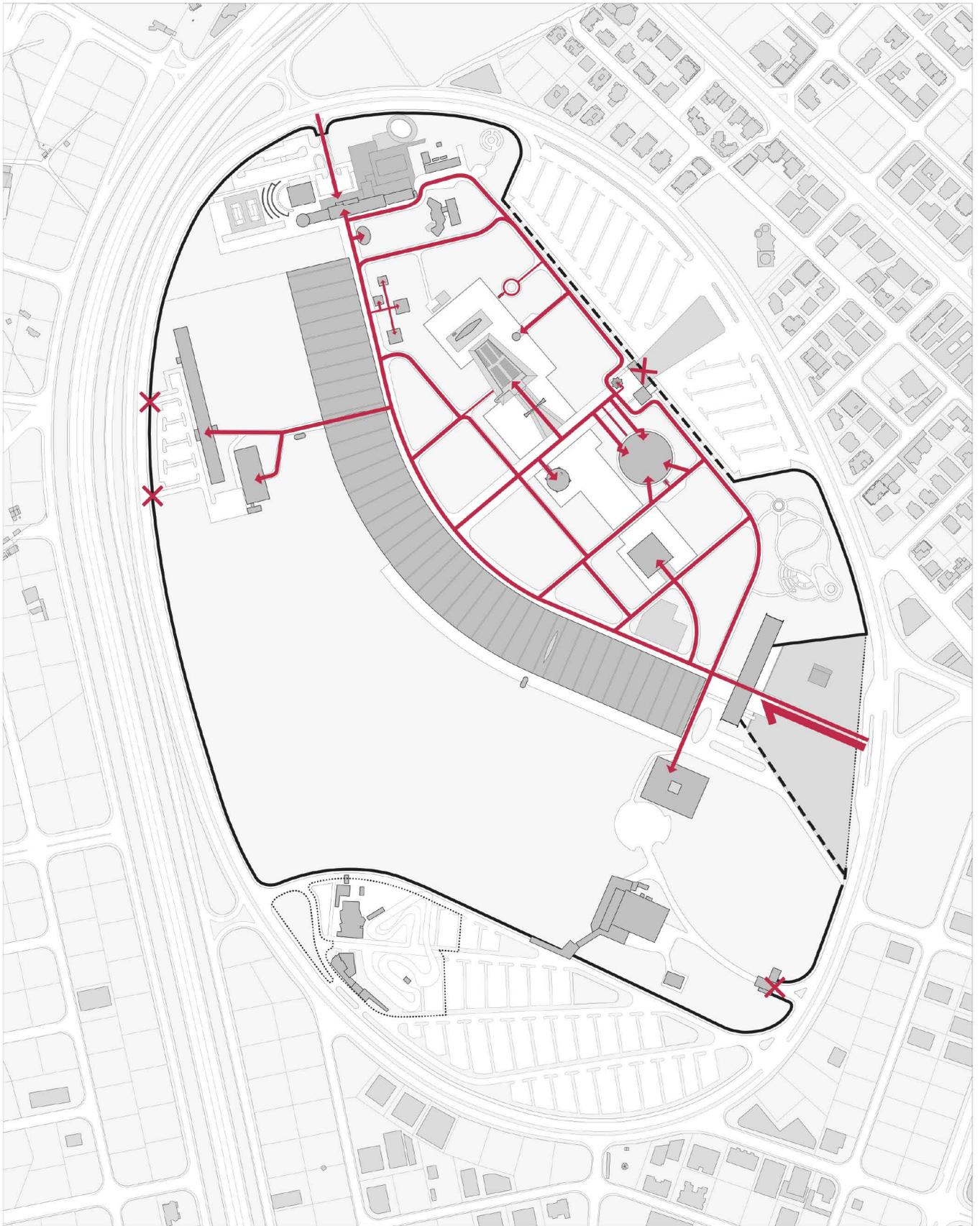
0 10 50 100 200m



Vehicular Access to Site



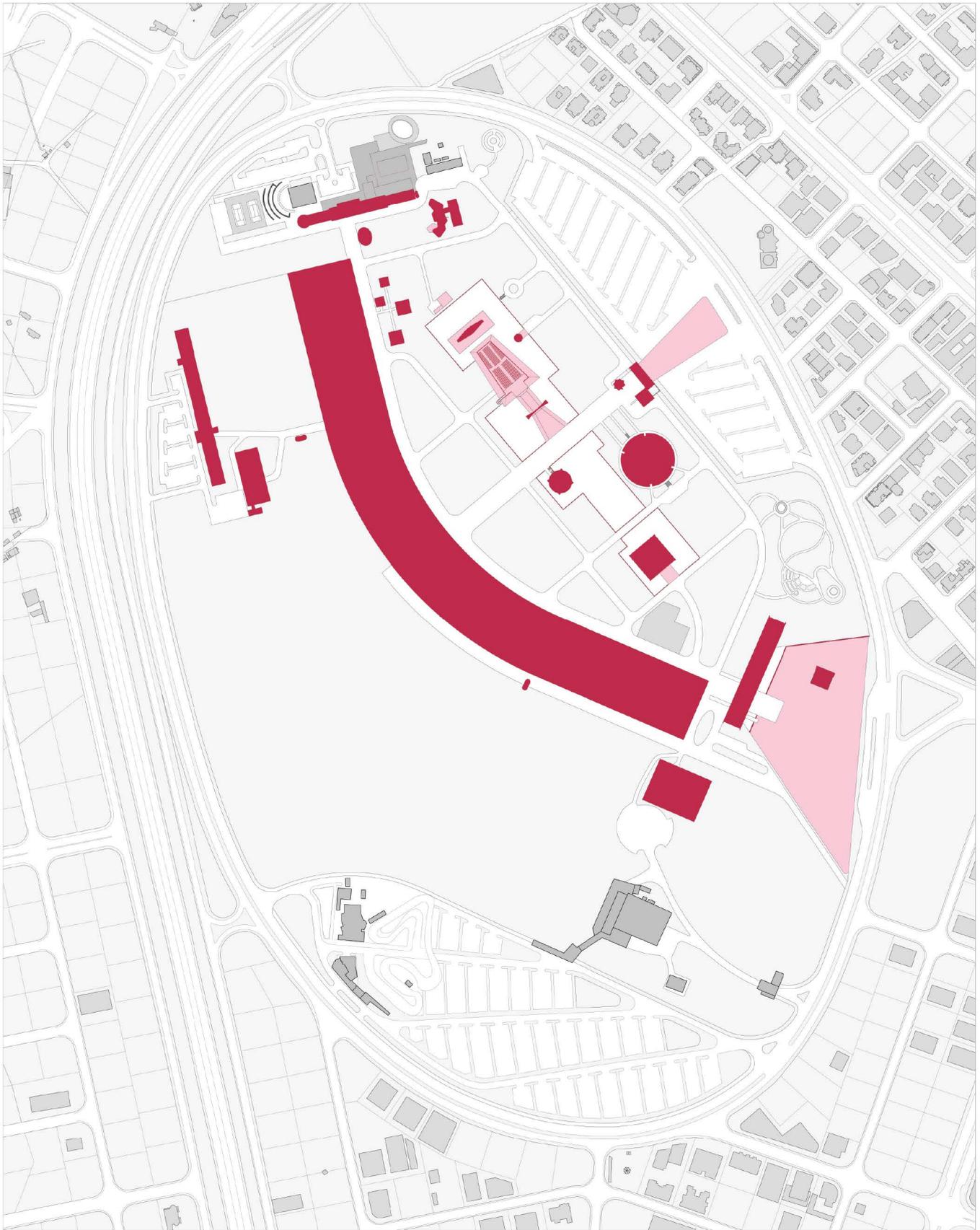
0 10 50 100 200m



Internal Circulation

- Internal Circulation
- Barriers
- × Closed Access Points





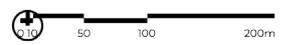
Original Buildings

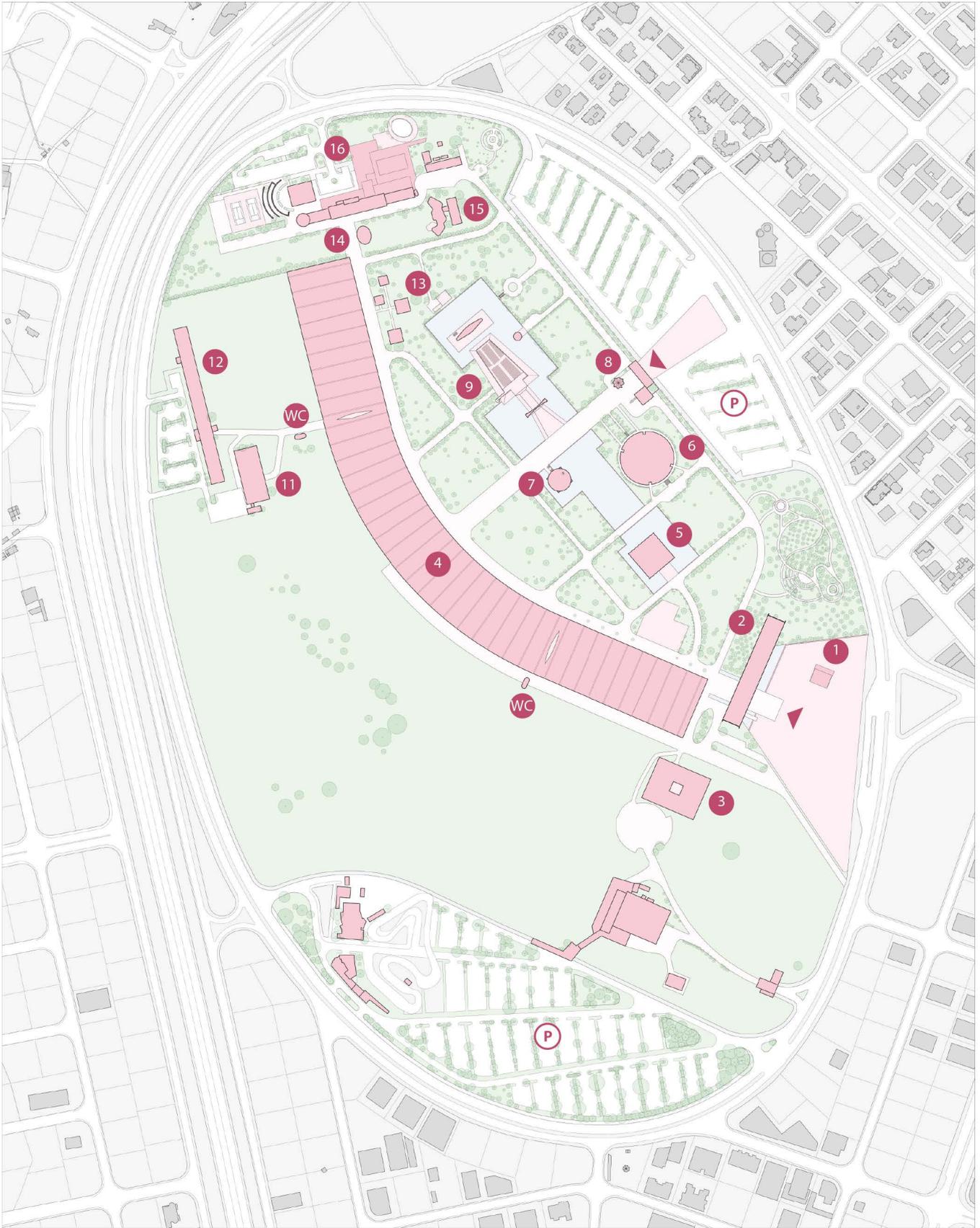


0 10 50 100 200m



Added Buildings





- | | | | | |
|--------------------|------------------------|---------------------------|--------------------|--------------------|
| 1 Ticket Booth | 5 Lebanese Pavilion | 9 Open-Air Theatre | 13 Snack Bars | 0 10 50 100 200m |
| 2 Entrance Portico | 6 Experimental Theatre | 10 Water Tower | 14 Housing Museum | P Parking |
| 3 Guest House | 7 Space Museum | 11 Customs & Firefighting | 15 Model Residence | ◯ Reflective Pools |
| 4 Boomerang | 8 Manège | 12 Administration | 16 Hotel | ▲ Entrance |

1. Ticket Booth



2. Entrance Portico



3. Guest House



4. Boomerang



5. Lebanese Pavilion



6. Experimental Theatre



7. Space Museum



8. Manège



9. Open-Air Theatre



10. Theatre & Water Tower



11&12. Customs, Firefighting & Administration



13. Snack Bars



14. Housing Museum



15. Model Residence



16. Hotel (Ex-Collective Housing)



Image References listed in bibliography



Figure 91 The convex side of the Boomerang with the rehabilitated side on the right. Photographed by Chawki Fatfat, 2018. Source: UNESCO Conservation Management Plan, 2024

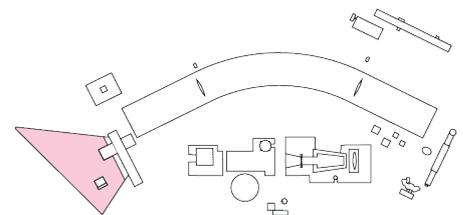


Figure 92 View from the Water Tower. Photographed by Maya Hmeidan, 2019. Source: UNESCO Conservation Management Plan, 2024.

The following assessment done on the individual buildings has mainly been retrieved from the “Emergency Nomination of Rachid Karami International Fair-Tripoli- Lebanon” prepared by Jad Tabet for the UNESCO World Heritage Convention in April 2022. This nomination text is signed on behalf of the state party by Sahar Baassiri, Ambassador and Permanent Delegate of Lebanon to UNESCO. A site visit conducted in August 2024 was also used as a base for the analysis in order to update certain information as well as add to the missing assessments.

Access Piazza

- Gross Area: 20910 m²
- Original Function: Main entrance
- Current Function: Entrance
- General Condition: Good



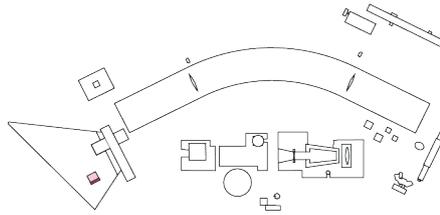
In the 1990s, the access piazza was renovated.



Figure 93 Southern Entrance. Photo credit: Aga Khan Trust for Culture / Photo: Cemal Emden. Retrieved from <https://www.architectural-review.com/buildings/trade-revival-carpentry-workshop-in-tripoli-lebanon-by-east-architecture-studio-and-oscar-niemeyer>

Ticket Booth

- Gross Area: 434 m²
- Original Function: Ticketing booth
- Current Function: Abandoned
- General Condition: Bad



The ticket booth is currently closed and not maintained. It often floods after rain showers affecting the finishes. The booth's windows, doors, and fixtures have been damaged or looted.



Figure 94 Sunken ticket booth facing entrance portico. Photographed by Nour Tabet, August 2024.



Figure 95 Ticket booth main facade, 2023. Photographed by Ieva Saudargaitė. Source: UNESCO Conservation Management Plan, 2024.



Figure 97 Ticket booth interior. Photographed by Ieva Saudargaite, 2023. Source: UNESCO Conservation Management Plan, 2024.

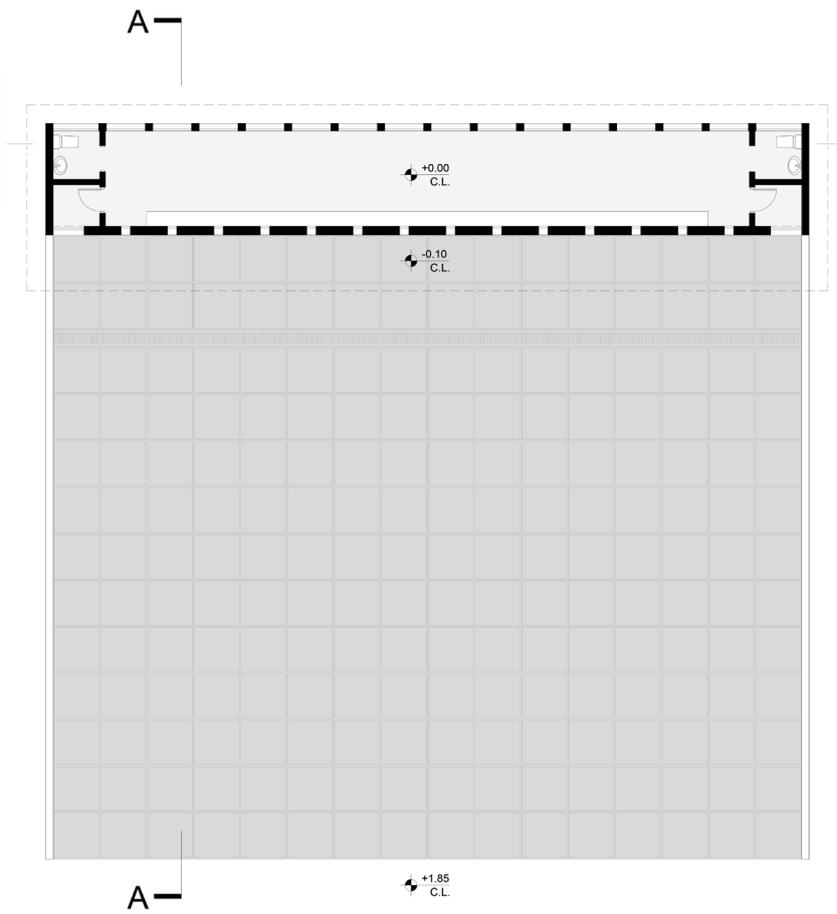


Figure 96 The ticket booth floods with water after heavy rainfall due to the lack of maintenance. Photographed by Ieva Saudargaite, 2023. Source: UNESCO Conservation Management Plan, 2024.

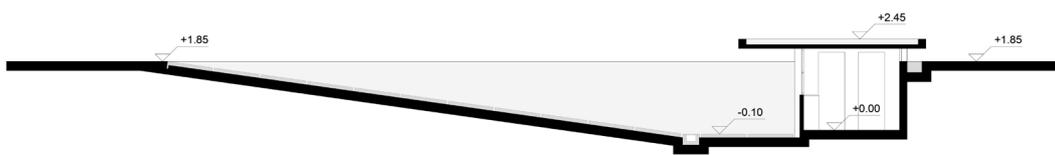


Ticket Booth North-East Elevation





Ticket Booth
Ground Floor Plan



Ticket Booth
Section AA



Ticket Booth
South-West Elevation



Note: Although it has not been realized, Niemeyer had proposed a children's playground between the entrance portico and the Lebanese pavilion.

I. Styliane Philippou, 2008, p. 317

Entrance Portico and Services

- Gross Area: 2400 m²
- Original Function: Rest Center
- Current Function: Administrative
- General Condition: Satisfactory

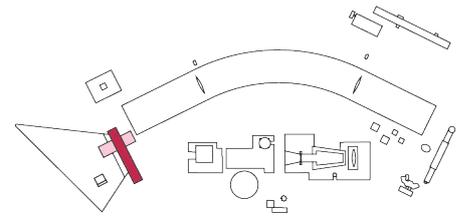


Figure 98 Entrance Portico and ticket booth. Photographed by Ieva Saudargaite, 2023. Source: UNESCO Conservation Management Plan, 2024.

Marking the main public entrance, the portico was meant to express the architecture of its time, through its proportions and spans, accentuated by traditional Arab details used in Lebanon.¹ The structure is made of a trapezoidal ramp, a canopy covering an arched pavilion reflected in the adjacent pool with a tropical garden. The adjoining structure acts as a “Rest Centre” with lounges, restaurant, reading-room, and exhibition space. The basement in this case accommodated the lavatories, beauty parlor, barbershops, and resting rooms.

In the 1990s, the entrance portico and services facilities were partly renovated. The interiors were heavily renovated, and the building was adapted for administrative use.

With no serious structural problems, the building's general condition has been labeled as satisfactory.



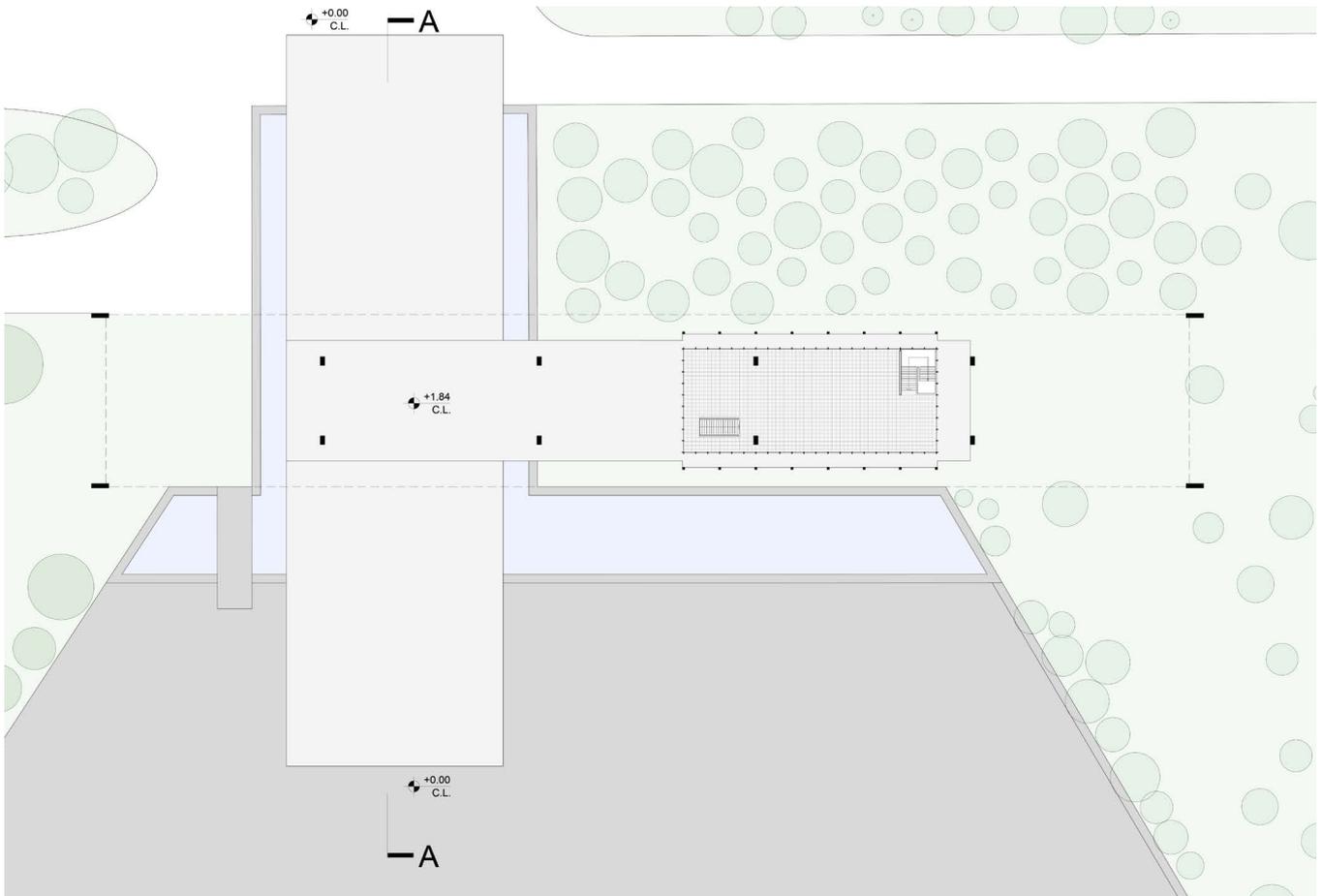
Figure 99 Entrance Portico's Administrative building with the reflective pool facing it. Although the reflective pools are no longer functional, they manage to play a nostalgic role after every rainfall. Photographed by Jad Tabet, 2019. Image Retrieved from UNESCO Nomination Text, 2022, p.17.



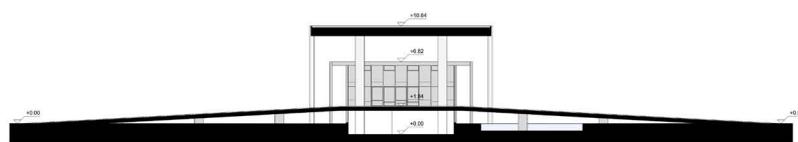
Figure 100 The interior of the Entrance Portico was renovated in a post-modern approach. Photographed by Pamela Jerome, 2019. Source: UNESCO Conservation Management Plan, 2024.



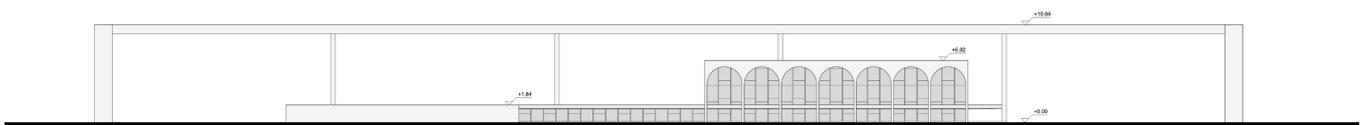
Figure 101 The renovated lower floor of the Entrance Portico (former reception center). Photographed by Pamela Jerome, 2019. Source: UNESCO Conservation Management Plan, 2024.



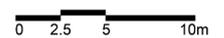
Entrance Portico
Ground Floor Plan



Entrance Portico
Section AA



Entrance Portico
West Elevation



Guest House

- Gross Area: 3590 m²
- Original Function: Hotel
- Current Function: Production & exhibition Space
- General Condition: Good

Only one floor high and introverted, the guest house structure is made of a series of concrete ribs reminiscent of Mediterranean pergolas. The main entrance gives way to a central space with an open-air atrium, recalling the courtyards² typically found in the historic center of Tripoli. The original function of the guest house was to lodge 14 VIP hotel rooms with facilities such as lounges, food and beverages, and technical facilities in the basement.

In 2016, the guest house was renovated to act as a furniture cluster providing production and exhibition spaces for artisans and craftsmen. The project was named “Al Minjara”³ and was meant to revive and preserve Tripoli’s woodcraft heritage. It was financed by the European Union and managed by the Lebanese Industrial Association in partnership with the Chamber of Commerce and Industry in Tripoli. The project has been operating in partnership with the Chamber of Commerce and Industry and with the Association of Lebanese Industrialists since 2019.

After the structure was renovated according to high standards, the building’s general condition has been labeled as good.

*Figure 105 The internal facade facing the courtyard can be opened to create larger free-flowing spaces. Credit: 2021 - East Architecture Studio.**

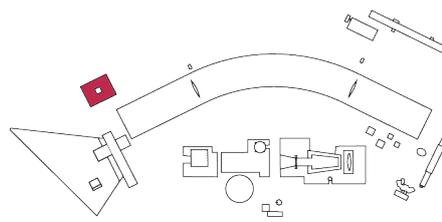


Figure 102 Lebanese East Architecture Studio renovated the guest house in 2018 turning it into a workshop and showroom for the city’s carpenters. Credit: Aga Khan Trust for Culture / Photo: Cemal Emden.*



*Figure 103 The showroom’s entrance faces the southern side of the complex. Credit: 2023 - East Architecture Studio.**



*Figure 104 The showroom is organized around a central courtyard. Credit: Aga Khan Trust for Culture / Photo: Cemal Emden.**



2. These courtyards are also referred to as “hosh”

3. Al Minjara: The Carpentry

* Retrieved from <https://www.architectural-review.com/buildings/trade-revival-carpentry-workshop-in-tripoli-lebanon-by-east-architecture-studio-and-oscar-niemeyer>

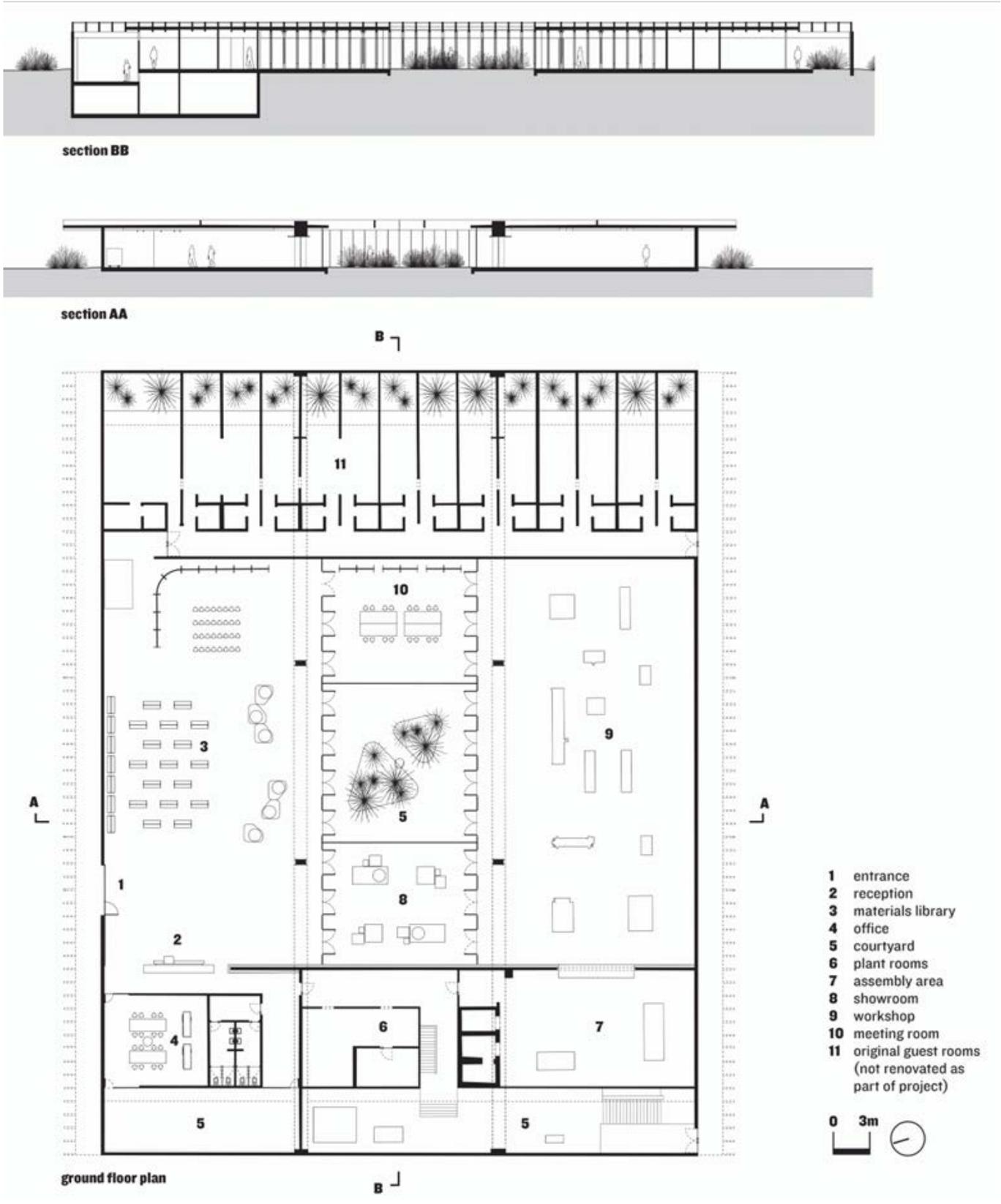
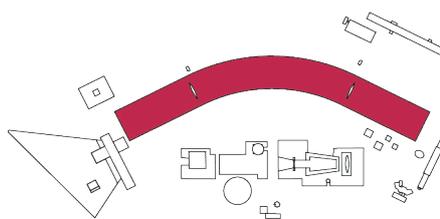


Figure 106 Plans and sections of the restored guest house. <https://www.architectural-review.com/buildings/trade-revival-carpentry-workshop-in-tripoli-lebanon-by-east-architecture-studio-and-oscar-niemeyer>

Boomerang

- Gross Area: 45000 m²
- Original Function: Exhibition spaces
 - Current Function:
 - Southern renovated part: Venue and exhibition space
- Northern part: Abandoned
- General Condition:
 - Southern renovated part: Satisfactory
 - Northern part: Critical



Conceived as a unifying structure where various countries can arrange their pavilions⁴, the boomerang shape cover is an 300m arc with 170m stretches on both sides. It is held by two rows of columns 45m away from each other with 11m cantilever on each side. The distance between two rows is 17m. The clear height under the roof is 6m. It is supported by inverted beams, giving the ceiling a continuous stretch. The roof is punctured by two eye-shaped slits at the intersection between the arc and straight elements on the southern and northern edges. All the structural elements are made of fairfaced concrete, a purposeful choice by Niemeyer.

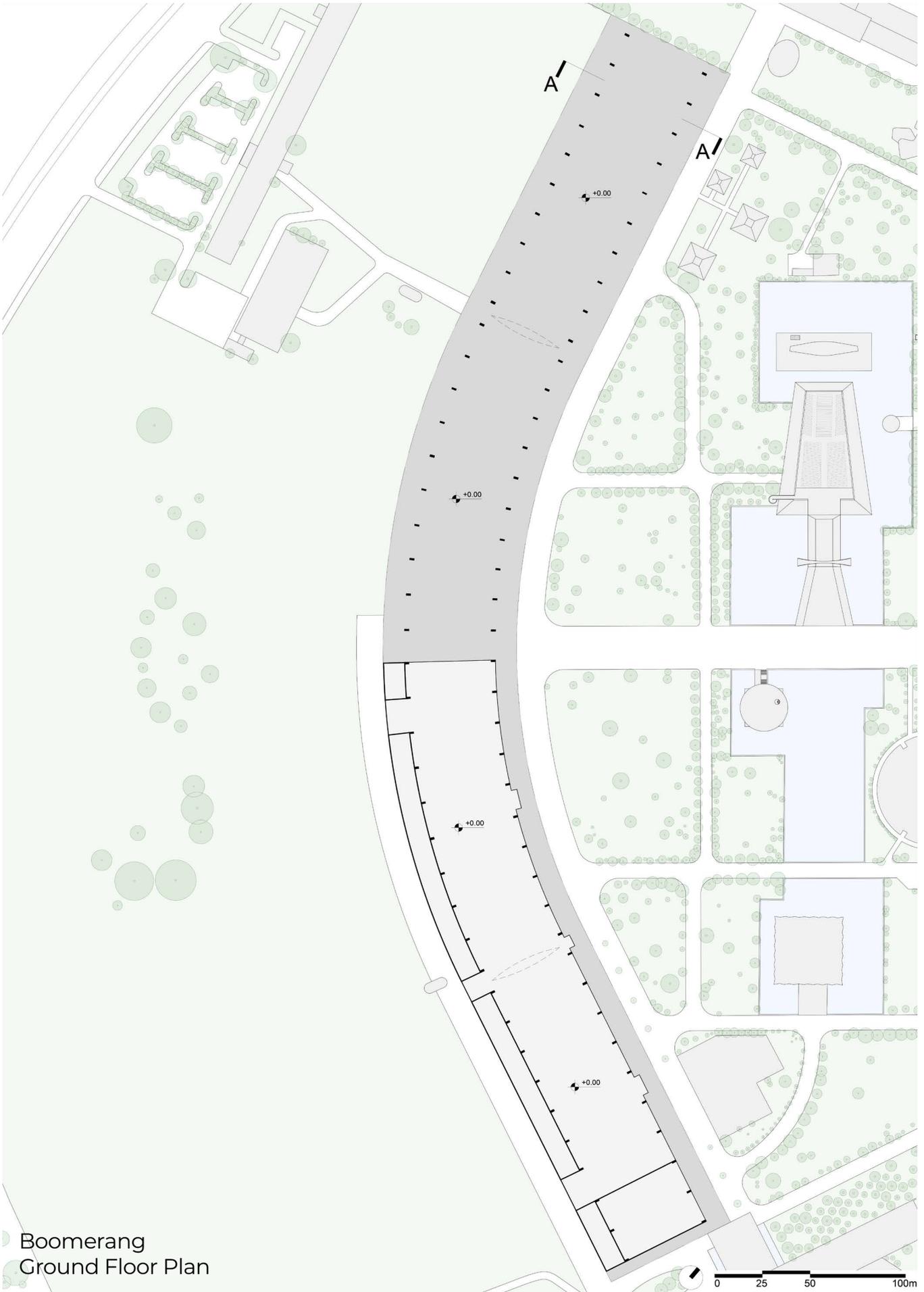
In the 1990s, half of the canopy on the southern side had been renovated to serve as a venue and exhibition space. An enclosed conference hall was a later addition.

Glass partitions were used to enclose the volume just as a waterproofing membrane was used on this part of the roof.

The building's general condition is mixed. The southern renovated part, properly maintained, has been labeled as satisfactory. As for the northern part, serious deterioration has been noted with supporting beams' covering portions having fallen off and the reinforcement steel being exposed in several places. To preserve and save the integrity of this structure, serious structural renovation and consolidation is needed. As such, the northern part's condition has been labeled as critical.



Figure 107 Northern end of canopy. Photographed by Wassim Naghi, 2021. Retrieved from UNESCO Nomination Text, 2022, p.19.



Boomerang
Ground Floor Plan

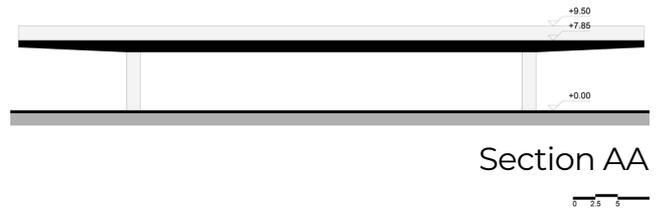
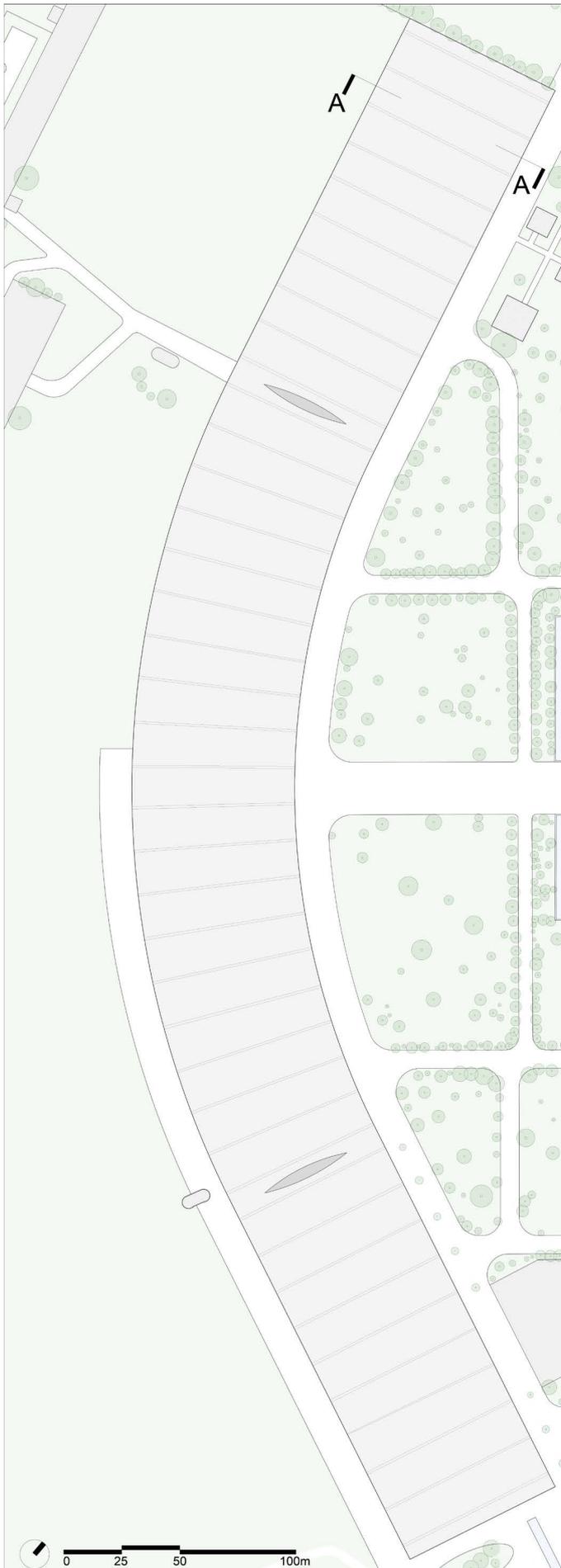


Figure 108 Southern end of canopy during the preparation of a summer festival taking place on site. Photographed by Nour Tabet, 2024.



Figure 109 Northern end of canopy. Photographed by Wassim Naghi, 2021. Retrieved from UNESCO Nomination Text, 2022, p.19.

Figure 110 Slits at northern end of canopy. Photographed by Jad Tabet, 2019. Retrieved from UNESCO Nomination Text, 2022, p.19.

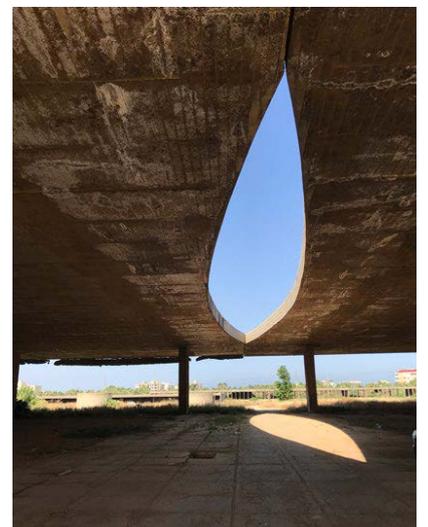




Figure 111 (Up) The convex side of the Boomerang with the rehabilitated side on the right. Photographed by Chawki Fatfat, 2018. (Down) Deterioration of the northern end of the Boomerang. Photographed by Mazen Haidar, 2020. Source: UNESCO Conservation Management Plan, 2024.

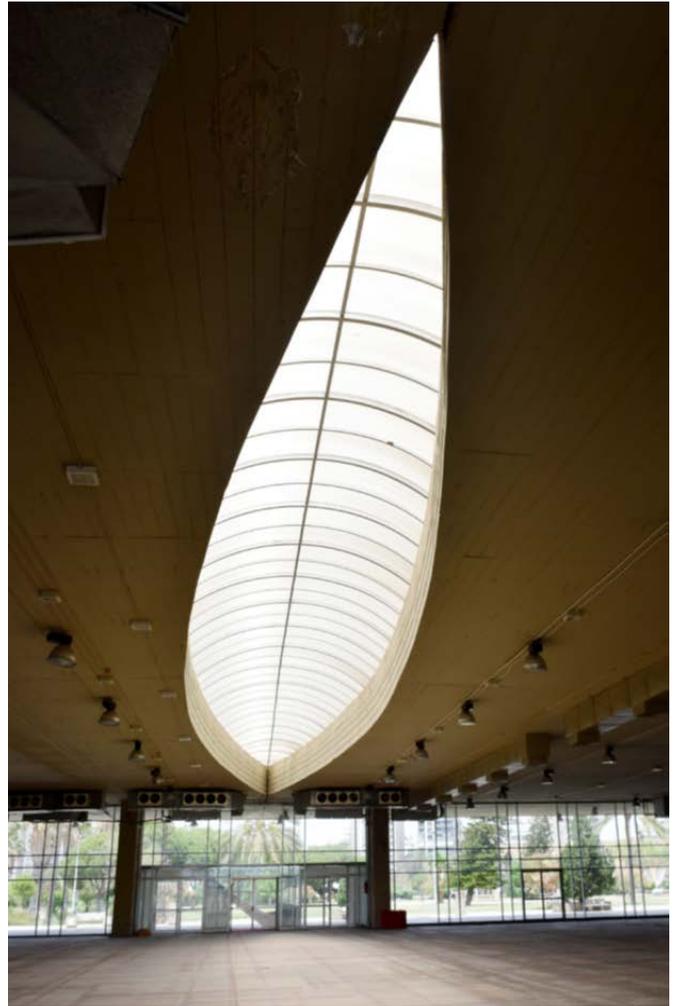


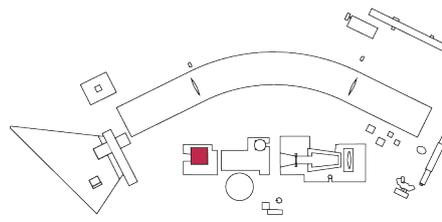
Figure 112 Glazed skylight in the rehabilitated section of the Boomerang. Photographed by Maya Hmeidan, 2019. Source: UNESCO Conservation Management Plan, 2024.



Figure 113 From the top, one can see the Boomerang's waterproofing membrane that is in a deteriorated state and needs replacement. Photographed by Ieva Saudargaite, 2023. Source: UNESCO Conservation Management Plan, 2024.

Lebanese Pavilion

- Gross Area: 3250 m²
- Original Function: Lebanese Exhibition pavilion
- Current Function: Abandoned
- General Condition: Bad



Floating in a reflective pool, the Lebanese Pavilion is a square colonnaded structure that references traditional Lebanese architecture through its pointed arches that dip their base in the facing pool. The central space of this pavilion is surrounded by a glass and steel envelope. Using a bridge to cross the pools, visitors can enter the central space at a split level. A wide ramp then leads to the upper floor while a flight of stairs gives way to the lower floor. The overall pavilion resembles Niemeyer's Palácio do Itamaraty⁵ in Brasilia (1962-70).



This building was nearly completed in 1975. Unfortunately, due to looting and lack of maintenance, all finishing elements were lost. The pavement, glazing, doors, and fixtures are no longer present just as the steel frames are corroding.

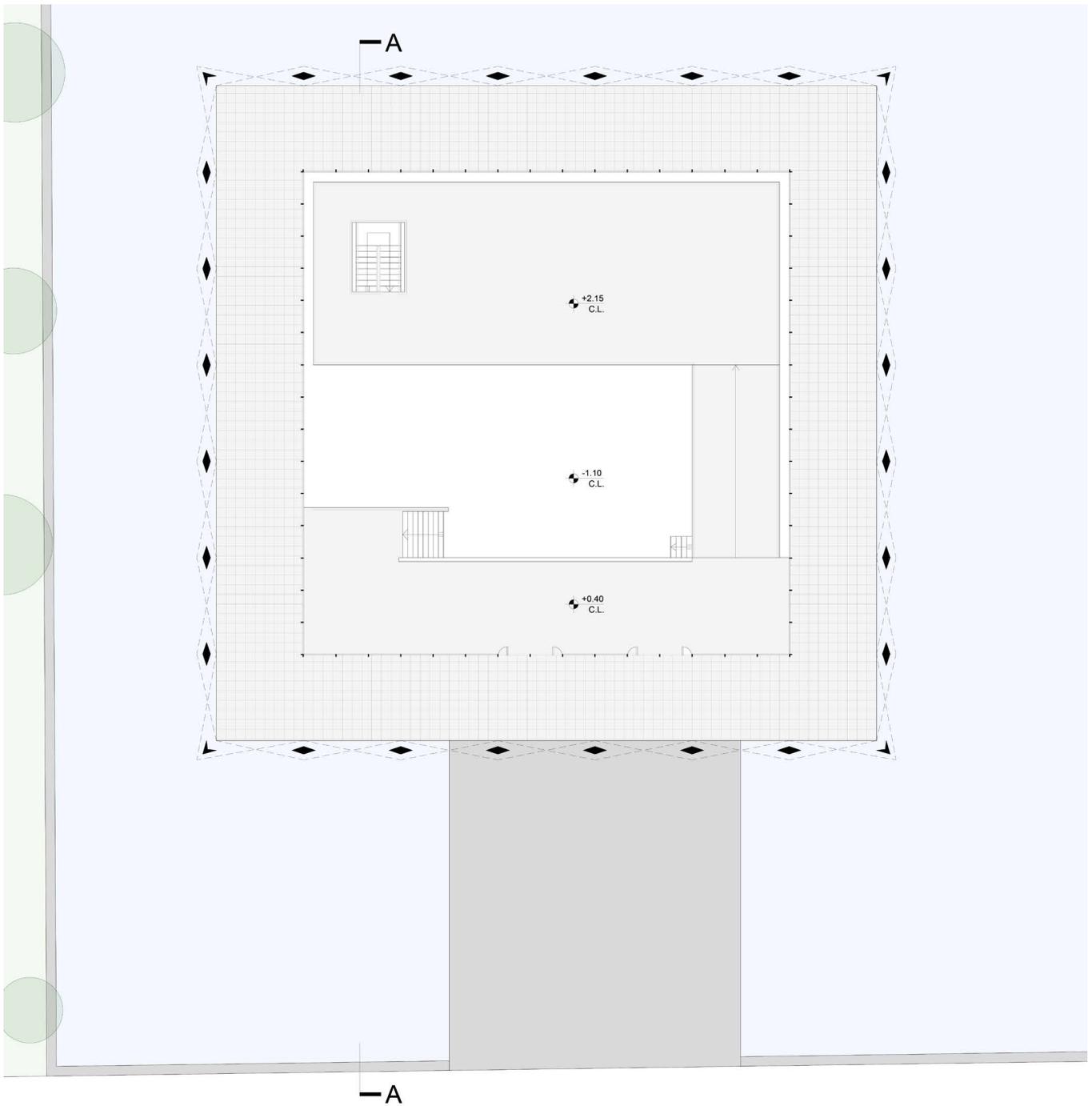


The building's general condition has been labeled as bad.

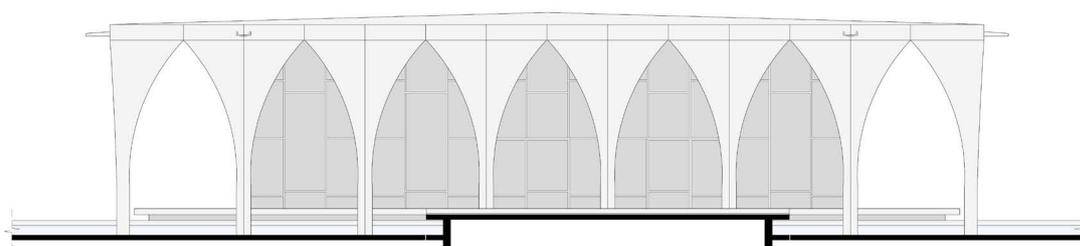
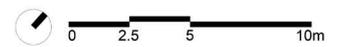
Figure 114 Inside Lebanese pavilion. Photographed by Nour Tabet, August 2024.



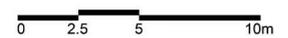
Figure 115 Lebanese pavilion. Photographed by Wassim Naghi, 2019. Retrieved from UNESCO Nomination Text Annex, 2022, p.163.

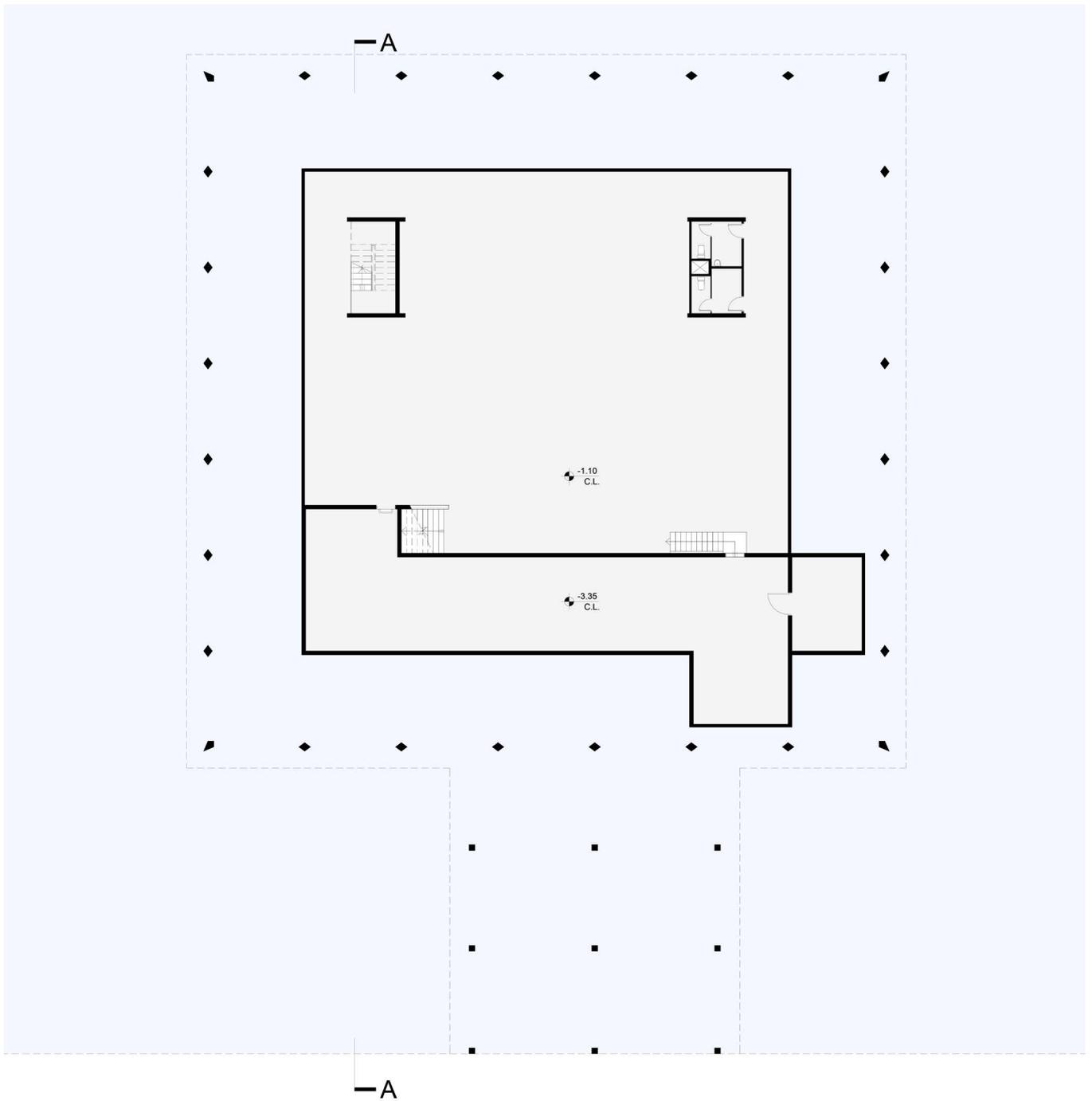


Lebanese Pavilion
Ground Floor Plan

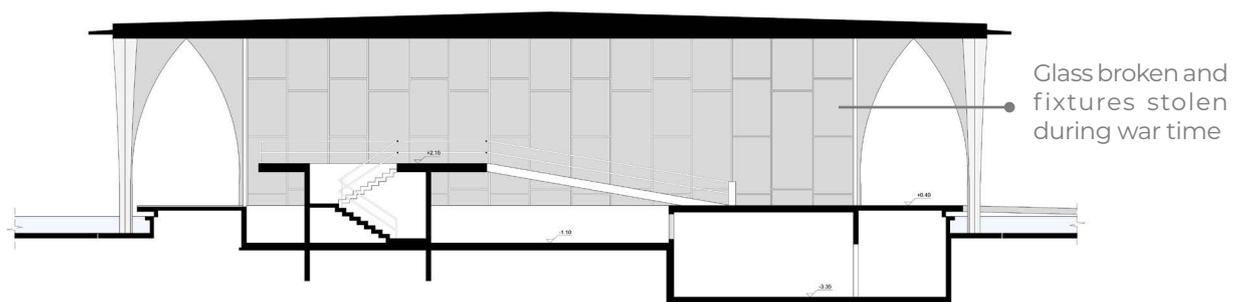


Lebanese Pavilion
South-East Elevation

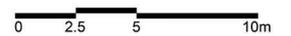




Lebanese Pavilion
Underground Floor Plan

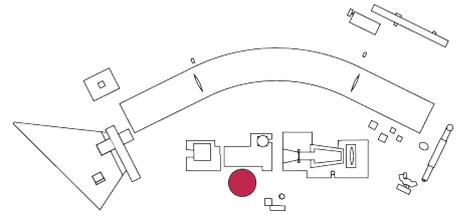


Lebanese Pavilion
Section AA



Experimental Theatre

- Gross Area: 2700 m²
- Original Function: Theatre
- Current Function: Abandoned
- General Condition: Critical



Adjacent to a large pool, and surrounded by vegetation, a 60m concrete dome stands as the Experimental Theater that was planned to host various performances.⁶ The overall dome resembles the auditorium in Niemeyer's Iberapuera Urban Park in São Paulo, Brazil (1954) as well as the main conference room he built for the French Communist party (1970).

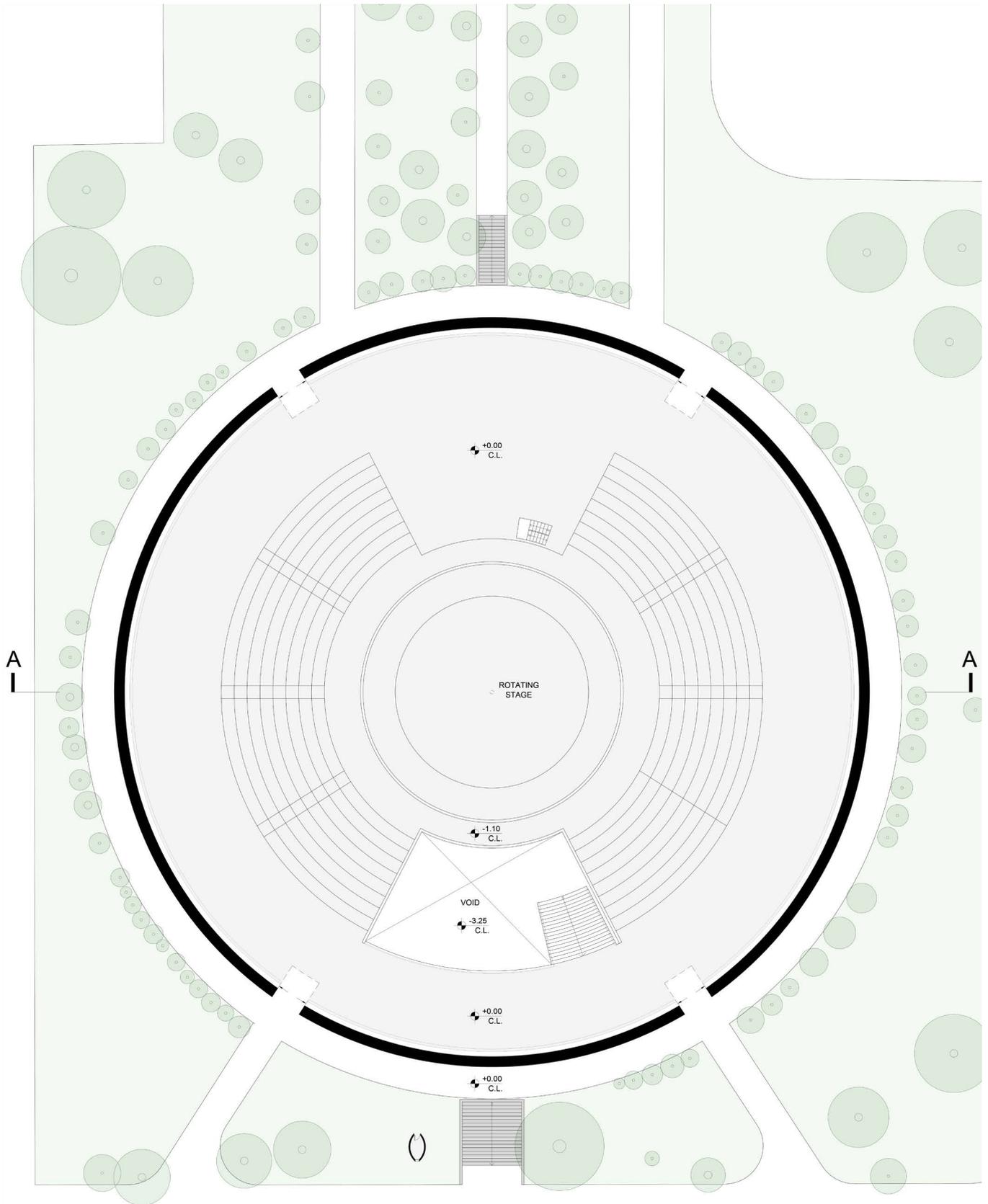
The difference in the case of Tripoli's fair, however, lies in the conception of this dome as a dynamic theater with a rotating circular scene. The cupola of this dome is a large concrete shell painted white. The dome is mainly accessed from the southeastern side where a staircase gives way to an atrium situated at the basement level. A gallery overlooks the atrium at the upper level and gives access to the bar and toilets. Within this level are four exit doors. Opposite to the main entrance is another staircase that leads to the backstage, changing area, and services. On both sides of the dome, 1000 spectators can be seated.

The shell construction was completed in 1975 but equipment was never installed. The steel hanging from the ceiling was provisions for the dropped ceiling. Due to the lack of maintenance, the concrete shell is deteriorating, and the steel reinforcements' corrosion is causing crumbling and blistering on the surface. When the basement level floods and overflows, accessing the atrium through the main entrance becomes impossible.

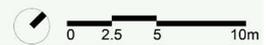
The structure's general condition has been labeled as critical.

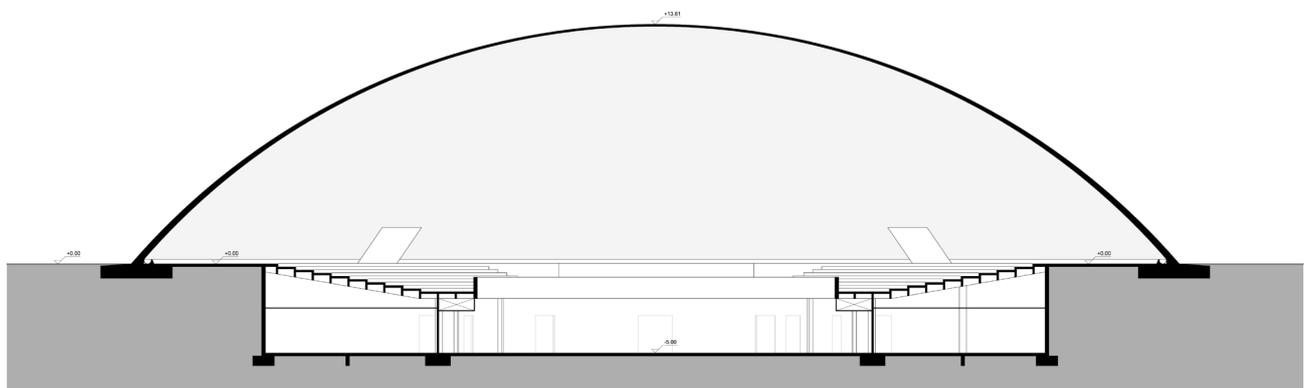
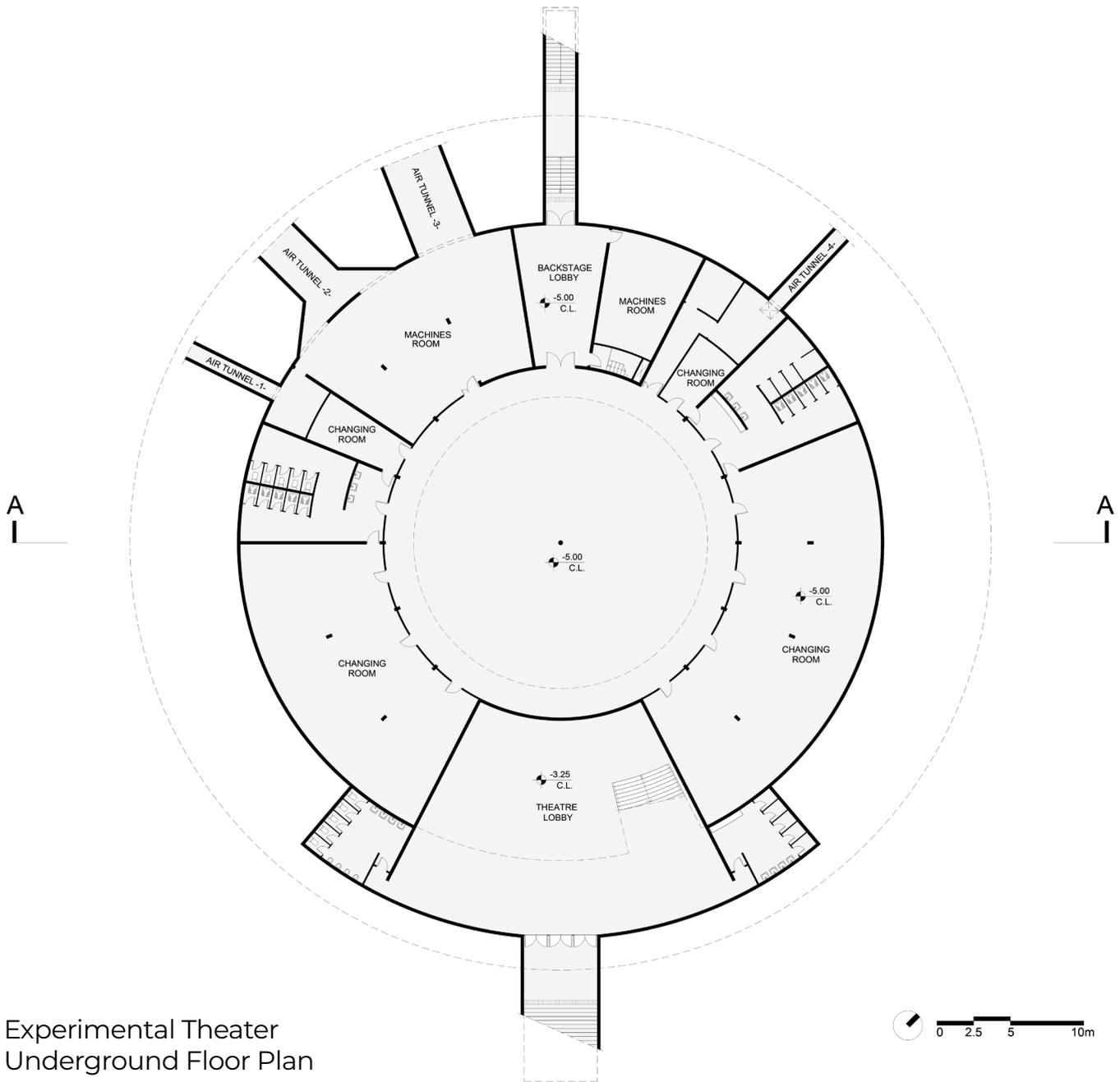


Figure 116 Experimental Theatre exterior and interior. Photographed by Nour Tabet, August 2024.



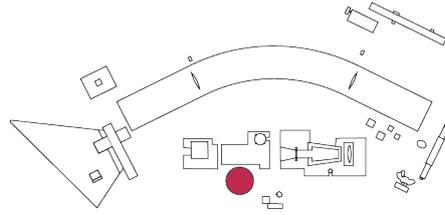
Experimental Theater
Ground Floor Plan





Space Museum and Helipad

- Gross Area: 800 m²
- Original Function: Space-themed museum
- Current Function: Abandoned
- General Condition: Critical



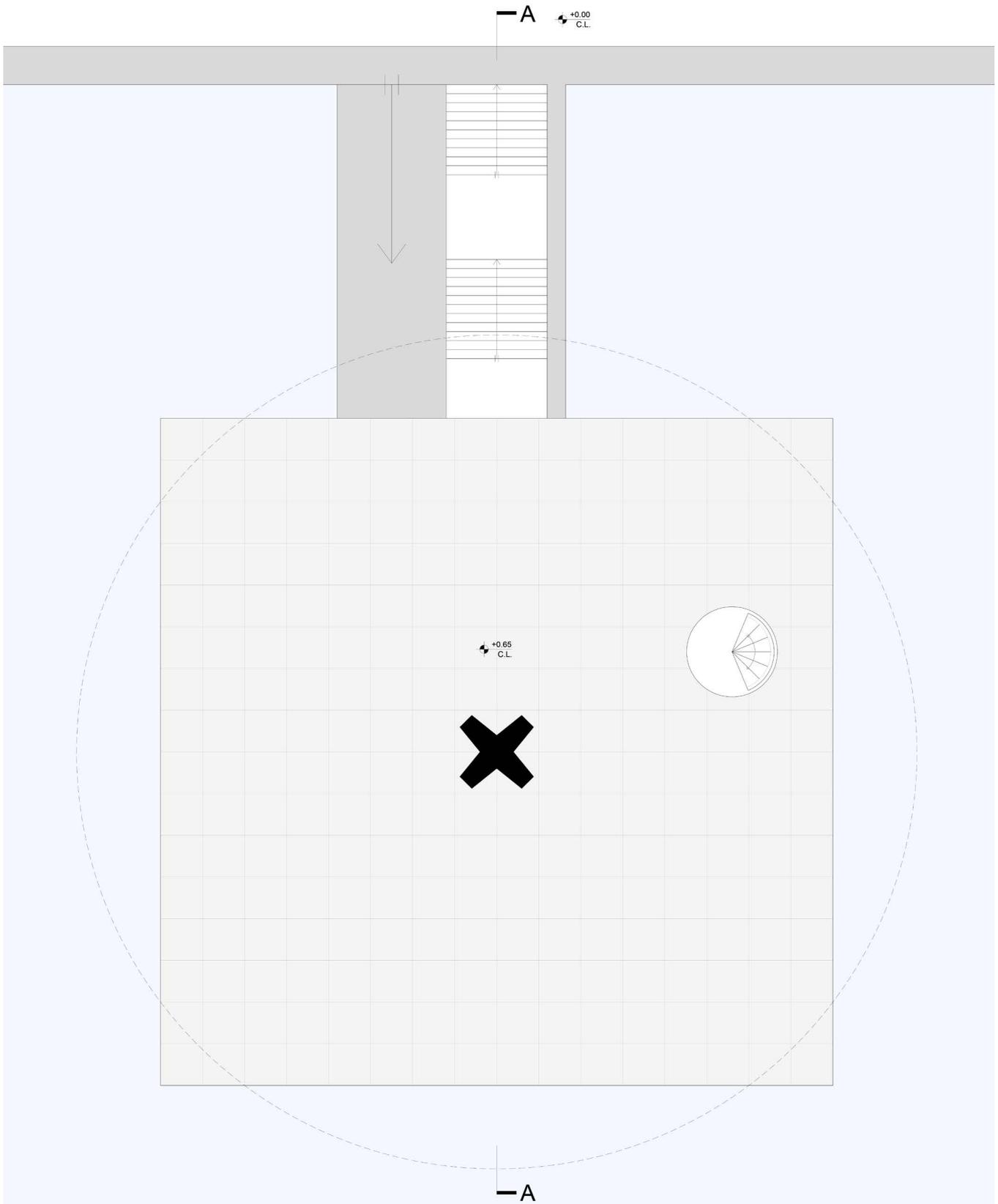
The Space Museum with its iconic helipad crown is accessible through a long low bridge along the axis of the secondary entrance and stemming from the center of the canopy. During the 60s, the space race was a significant topic that many artists and architects based their approach on. As such, Niemeyer shared his vision by designing a pavilion devoted to space odyssey. A sculptural central column rises from the basement to hold the crowning helipad. Meanwhile, the reflective pools give the ground floor platform the illusion of floating. From this platform, a circular steel staircase leads the way to the helipad's roof. As for the closed exhibition space of the museum, it seems to hide in the basement level.

Due to looting and water flooding, the museum's basement has suffered from severe deterioration. Finishing elements were lost. The pavement, doors, fixtures, and equipment are no longer present. Though the spiral staircase connecting the spiral staircase connecting the ground floor platform and the helipad is still there, the concrete of the structure is deteriorating, and steel reinforcements are corroding, creating blistering and crumbling on the surface.

The structure's general condition has been labeled as critical.

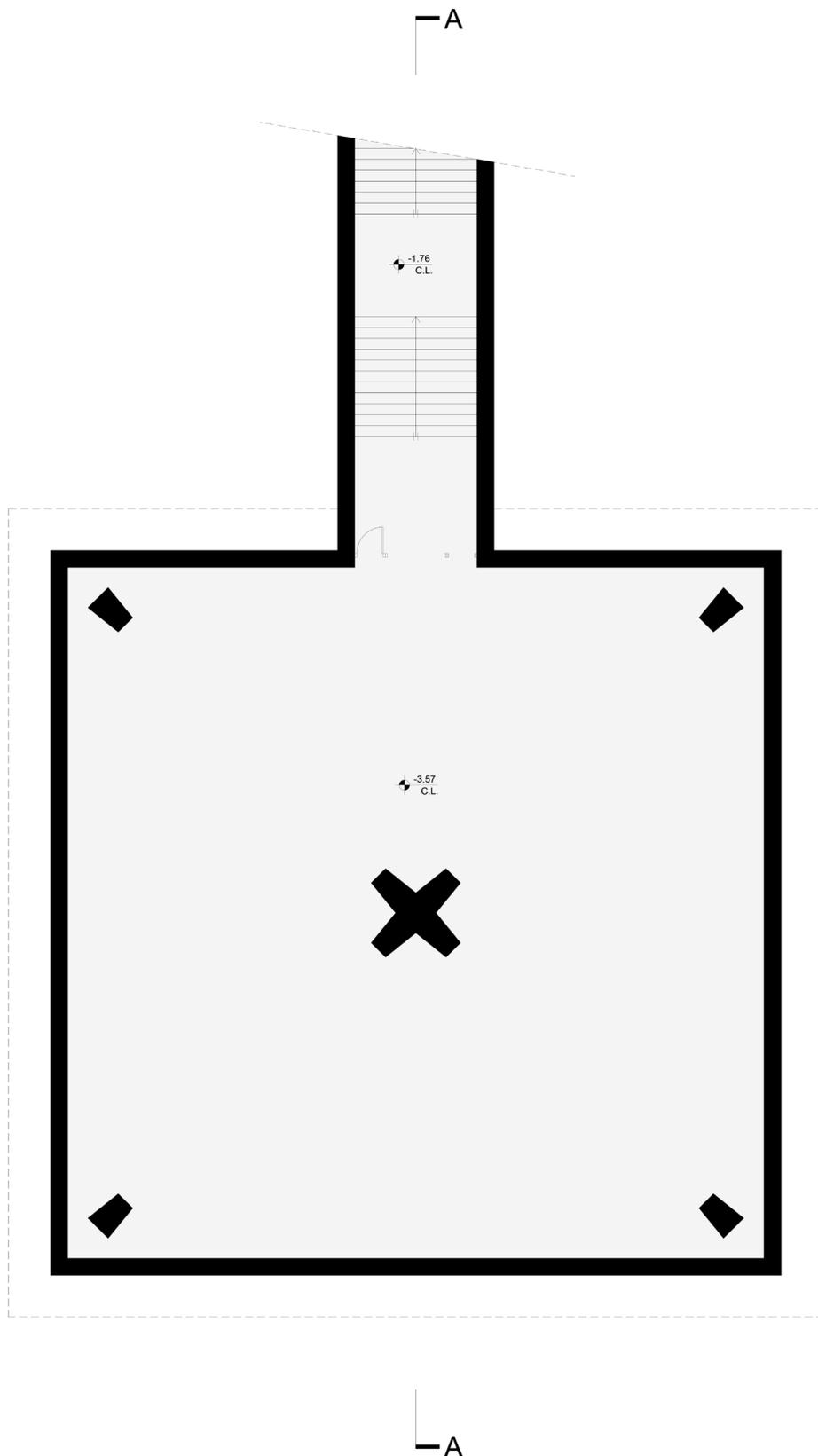


Figure 117 Helipad Space Museum after a rainfall. Photographed by Manal Hmeidani, 2024. Source: UNESCO Conservation Management Plan, 2024.



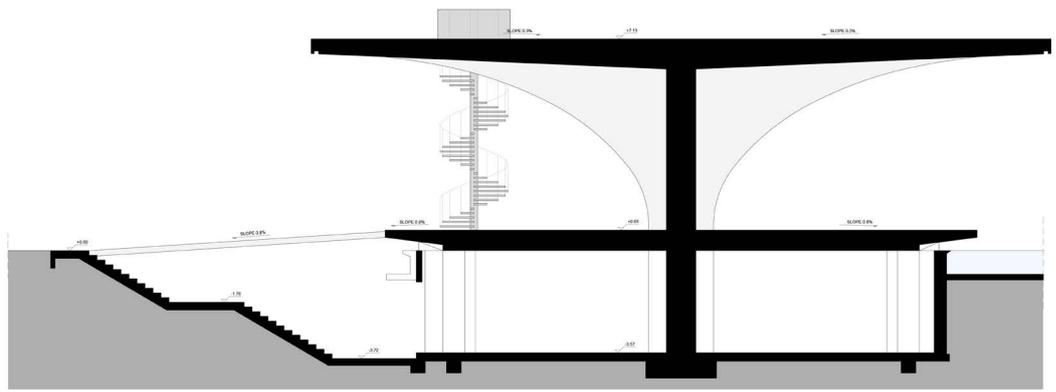
Space Museum
Ground Floor Plan





Space Museum
Underground Floor Plan



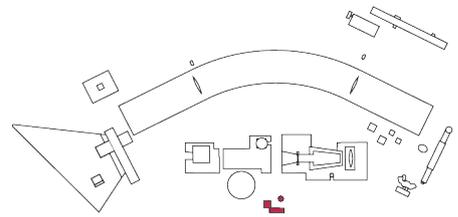


Space Museum
Section AA

0 2.5 5 10m

Miniature “Manège” and Secondary Entrance

- Gross Area: 325 m²
- Original Function: Undefined compositional element
- Current Function: Abandoned
- General Condition: Critical



Opposite to the boomerang, aligned with the central axis of the composition, lies the secondary entrance with its ticketing booth and control area. Although the function of the manège conical shape is unclear, it was meant to be used by children, justifying its location next to the children playground.

In 1995, the entrance was renovated though the area remains abandoned. The conical manège is unfortunately deteriorating with parts of the concrete shell collapsing. The original playground with sculptural forms and curved walls was demolished.

The structure’s general condition has been labeled as critical.



Figure 118 Miniature “Manège” and Secondary Entrance. Photographed by Nour Tabet, August 2024.



Figure 119 The Miniature “Manège” on the right facing the Secondary Entrance, as seen from the Water Tower. Photographed by Ieva Saudargaite, 2023. Source: UNESCO Conservation Management Plan, 2024.



Figure 120 The Secondary Entrance Structure, looking towards the East. Photographed by Ieva Saudargaite, 2023. Source: UNESCO Conservation Management Plan, 2024.

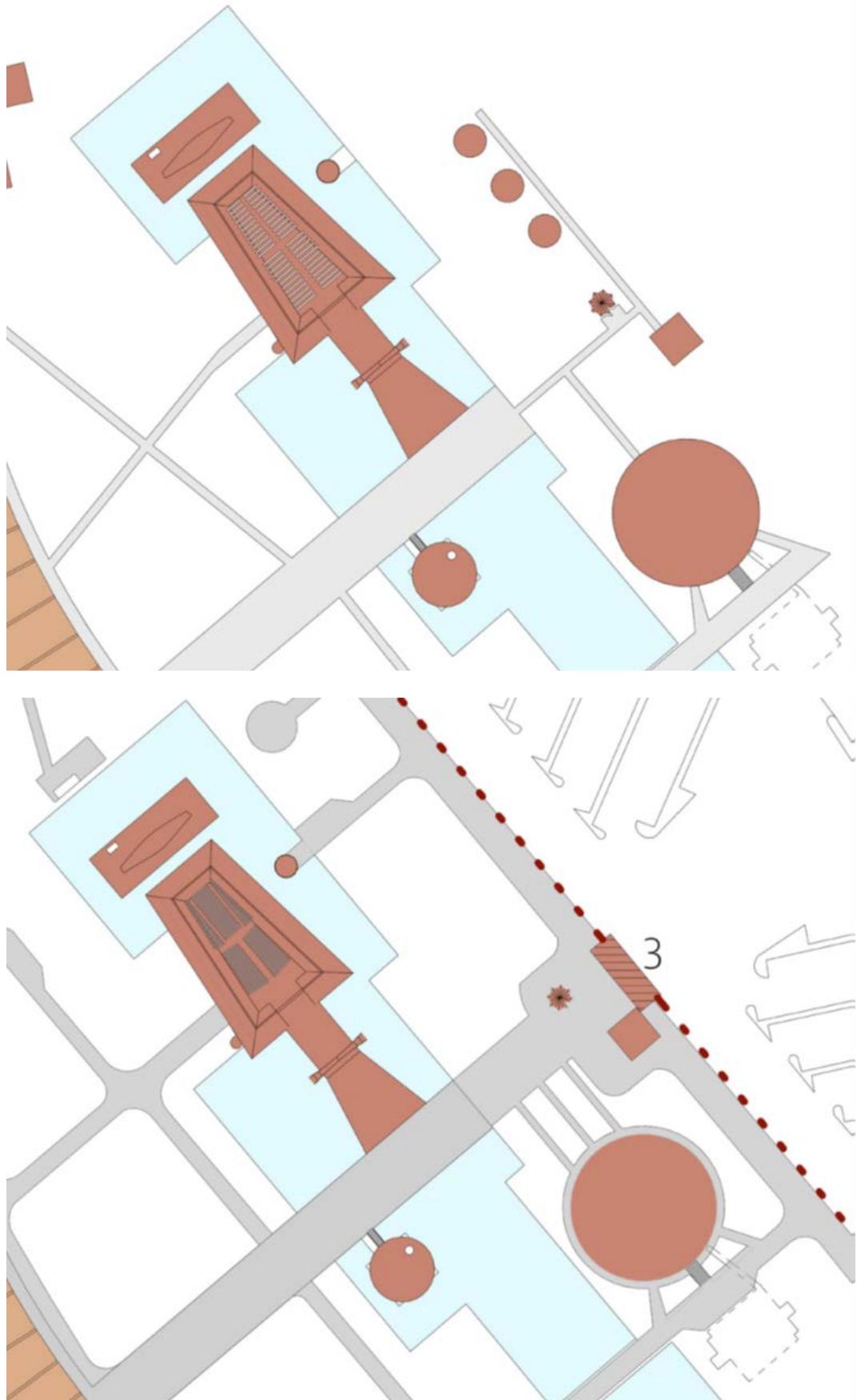
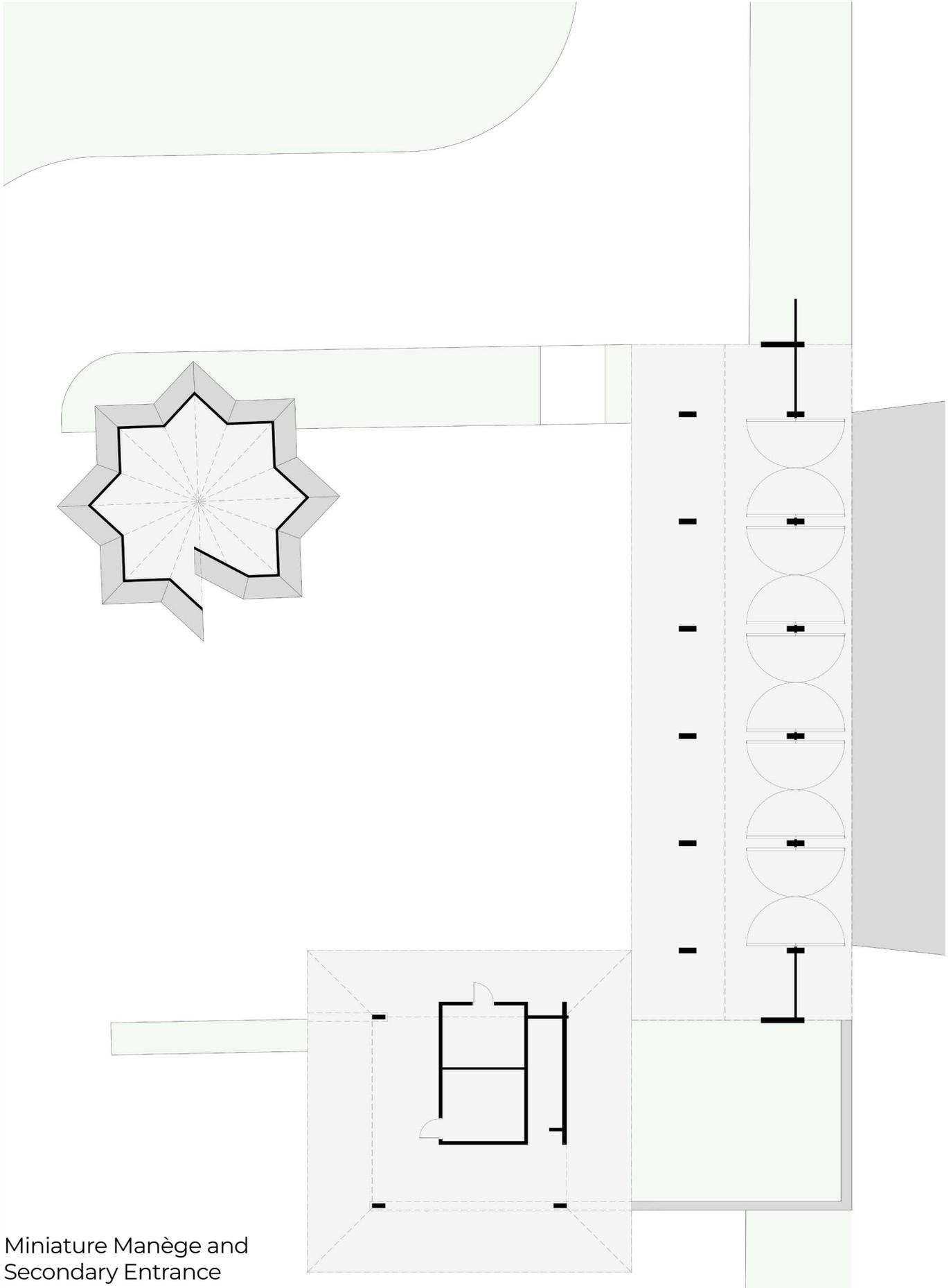


Figure 121 (Up) The plan of the Fair's secondary entrance up until the early 1970s in comparison to the current situation. The circular features of the Manège and its Annexes were demolished and a secondary entrance with a metal fence was added. Source: UNESCO Conservation Management Plan, 2024, p.50.



Miniature Manège and
Secondary Entrance
Ground Floor Plan



7. Eight regular bowling lanes and two mini bowling lanes

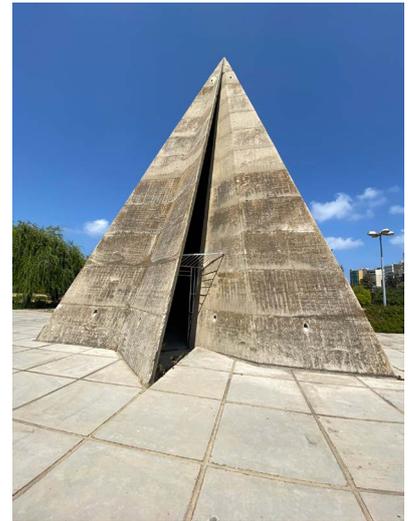
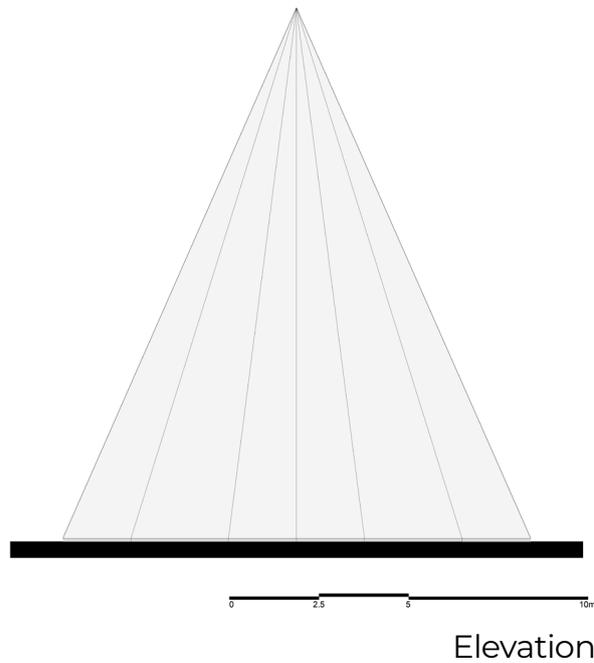
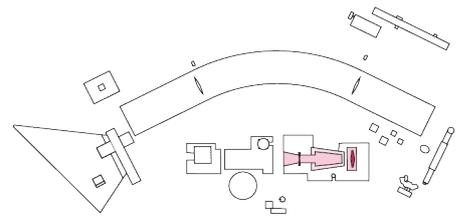


Figure 122 Miniature "Manège" and Secondary Entrance. Photographed by Nour Tabet, August 2024.

Open-Air Theatre

- Gross Area: 5000 m²
- Original Function: Outdoor theatre
- Current Function: Occasionally used but stopped being used in 2016 due to collapse
- General Condition: Critical



Equipped with an acoustic shell, the Open-Air Theatre is reached through a ceremonial ramp that ascends from the bridge leading to the Space Museum. At the ramp's highest point, a concrete arch, reminiscent of the Gateway Arch in St. Louis Missouri by Eero Saarinen, stands in all its monumentality, framing the entrance to the open-air foyer. Inclined towards the stage, the trapezoidal area holds 600 seats. The stage seems to be floating, having been installed on an island on the surrounding water pool. It is covered by a sculptural shell that provides acoustic control. Performers are led to the changing rooms through a staircase at the edge of the pool that leads to the basement. The basement level under the seats was also designed with a bowling alley⁷ while the second basement level held the technical area and service rooms. The theater is currently inaccessible to the public due to a partial collapse in 2016, although it had been occasionally used from the 1990s-2016. After the collapse, a technical survey was conducted on the structure revealing major stability problems in the theatre slab and the Grand arch. This was due to the aging of concrete and severe steel corrosion.

The structure's general condition has been labeled as critical.



Figure 123 Janine Pendleton, October 2023. Retrieved from <https://www.obsidianurbexphotography.com/other/rachid-karami-international-fair-of-tripoli-lebanon/>

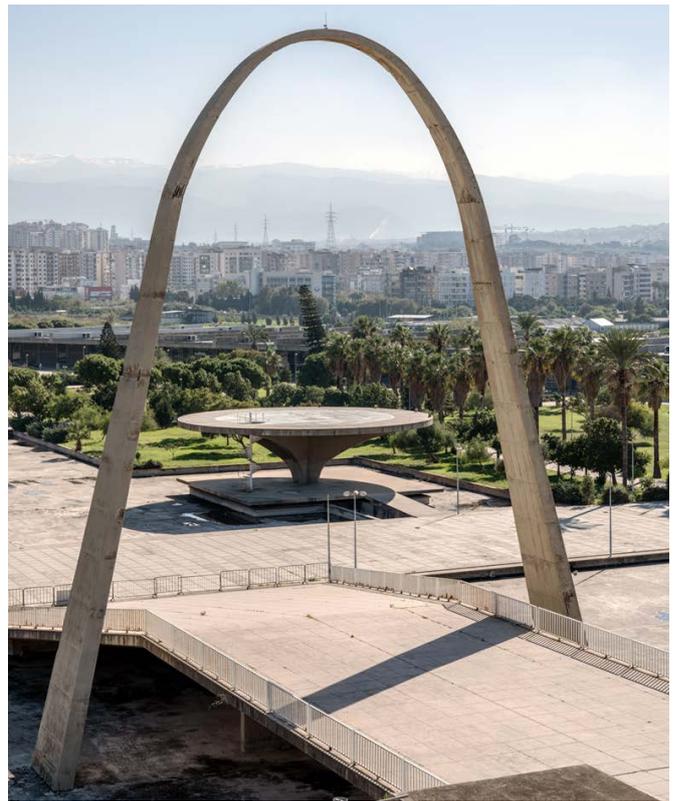
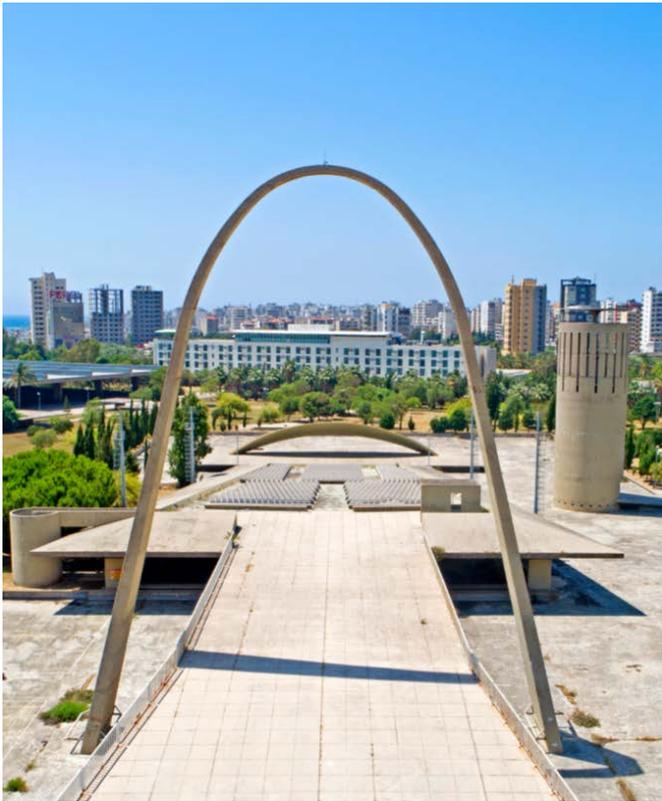
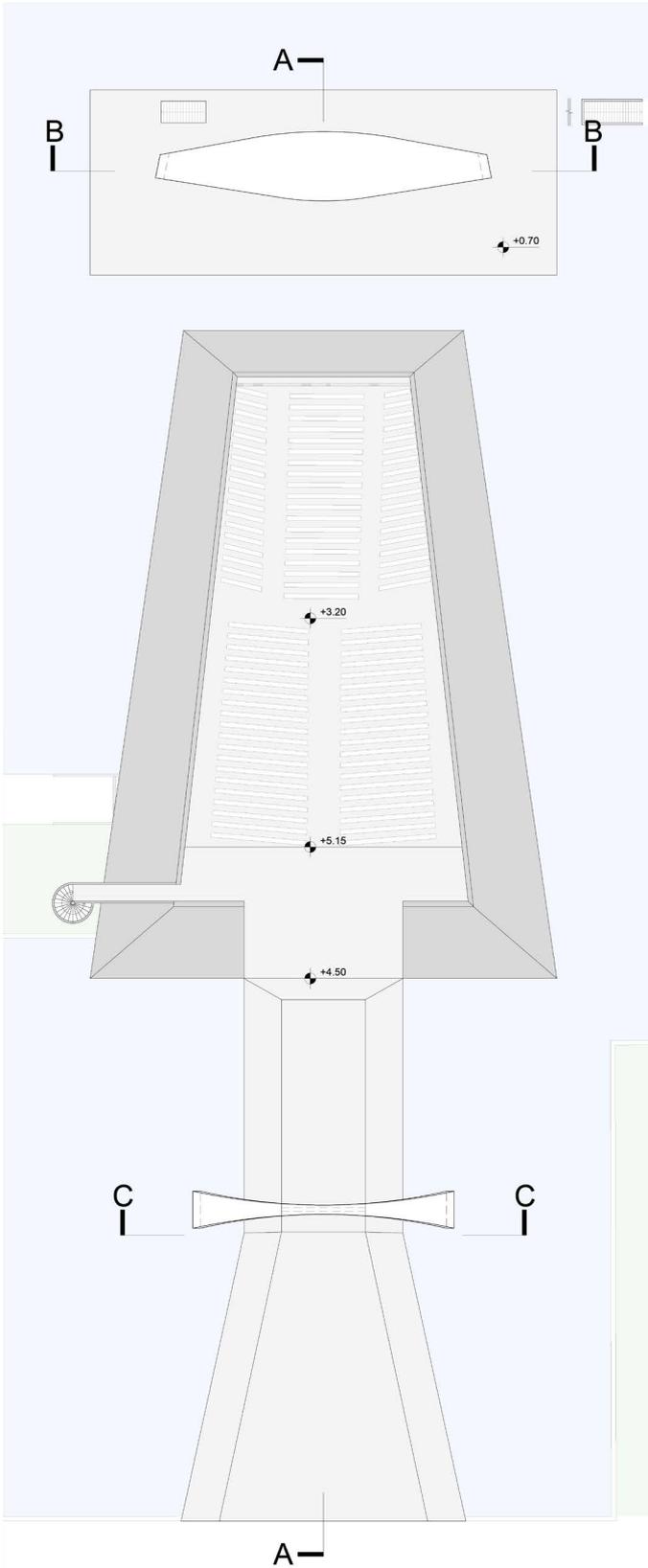


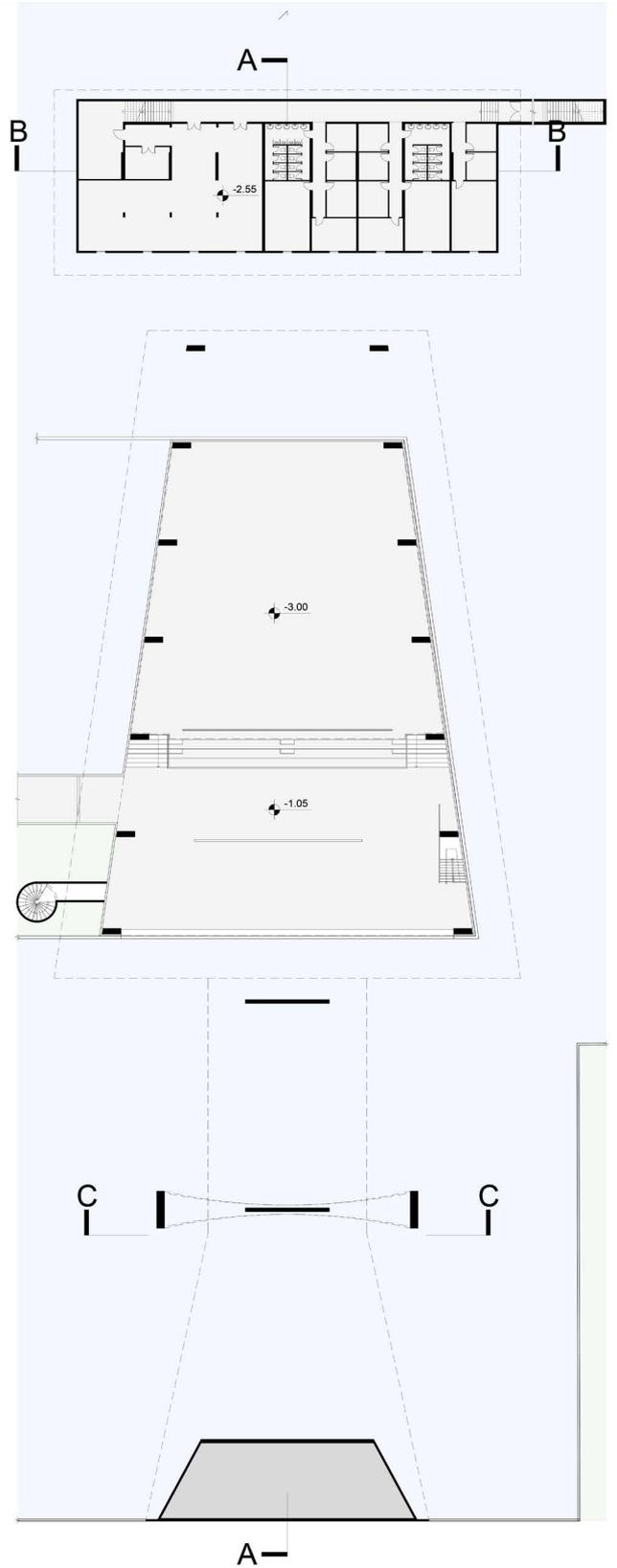
Figure 124 (Left) The Grand Arch overlooking the Open-Air Theatre, looking towards the North, with the Quality Inn Hotel in the background. Photographed by Chawki Fatfat, 2018. (Right) The Grand Arch framing the Helipad and Boomerang in the background. Photographed by Ieva Saudargaitė, 2023. Source: UNESCO Conservation Management Plan, 2024.



Figure 125 The original seats and seating arrangements of the Open-Air Theatre have been changed from the original ones. Currently, fiberglass seats that do not correspond to the original intent are there. The concrete audiovisual booth is also not original. Photographed by Pamela Jerome, 2019. Source: UNESCO Conservation Management Plan, 2024.

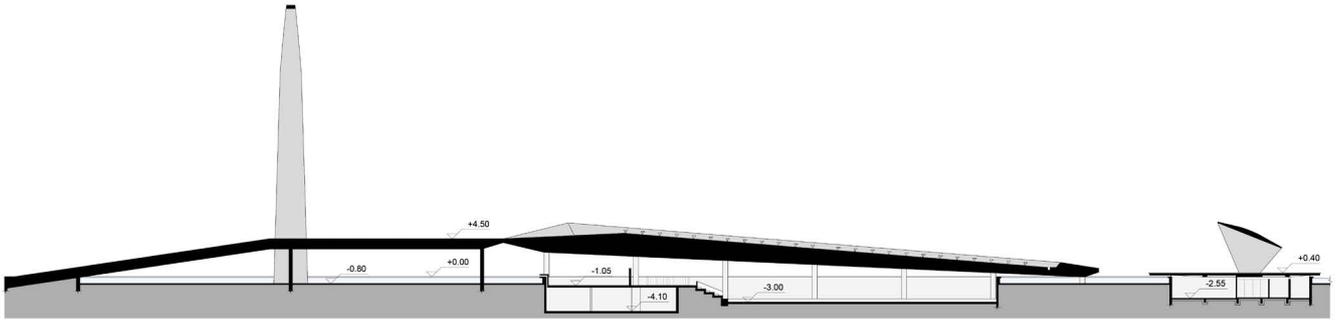


Amphitheater
Ground Floor Plan

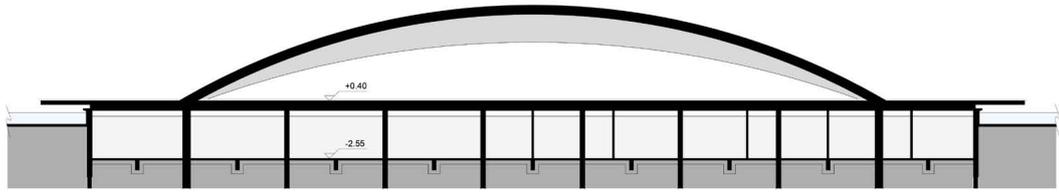


Amphitheater
Underground Floor Plan





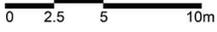
Amphitheater
Section AA



Amphitheater
Section BB

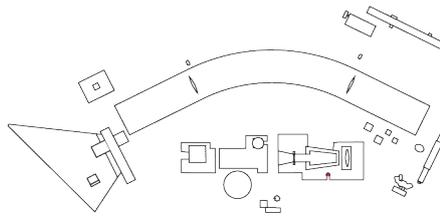


Amphitheater
Section CC



Water Tower and Roof Restaurant

- Gross Area: 420 m²
- Original Function: Restaurant & panoramic view
- Current Function: Abandoned
- General Condition: Critical



A prominent landmark of the complex, the elevated water tower is a concrete cylinder that is topped with a mushroom-looking shell. The entrance is accessed through a ramp crossing over a water pool. The restaurant and kitchen are situated on the upper levels of the water tank. They are accessed through a central spiral staircase and elevator. The terrace at the top gives visitors a panoramic view of the complex and the surrounding landscape.

The water tank and restaurant are in a state of decline, with severely deteriorating concrete. The building currently closed for security purposes.

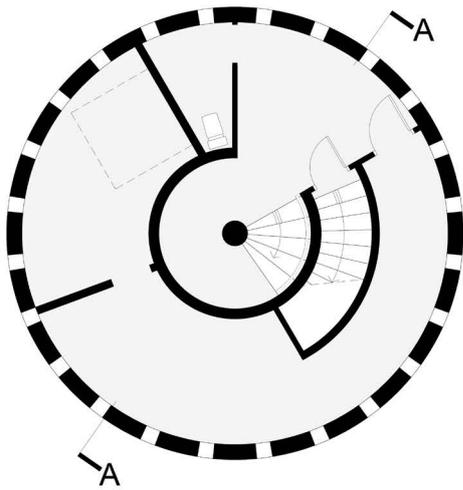
The building's general condition has been labeled as critical.



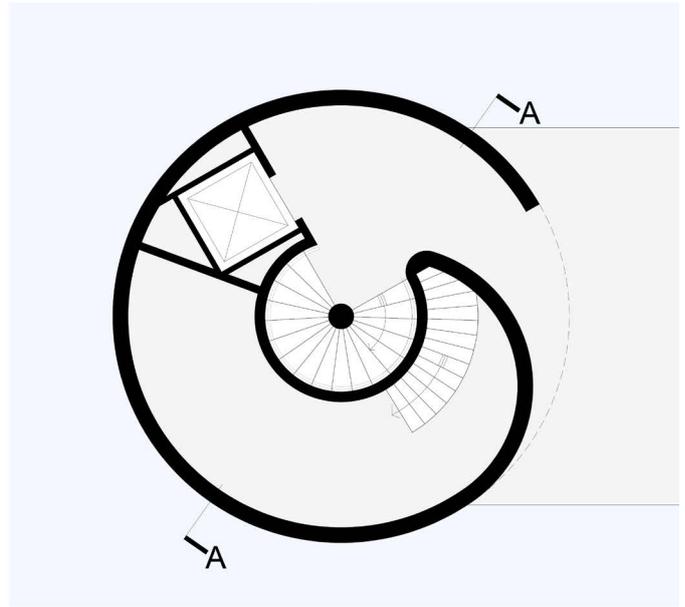
Figure 126 Water Tower. Photographed by Jad Tabet, 2017. Retrieved from UNESCO Nomination Text, 2022, p.23.



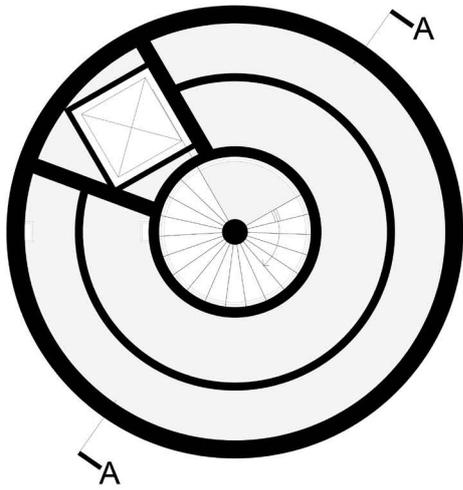
Figure 127 Water Tower showing the main access with the ramp leading to the main entrance. Photographed by Maya Hmeidan, 2024. Source: UNESCO Conservation Management Plan, 2024.



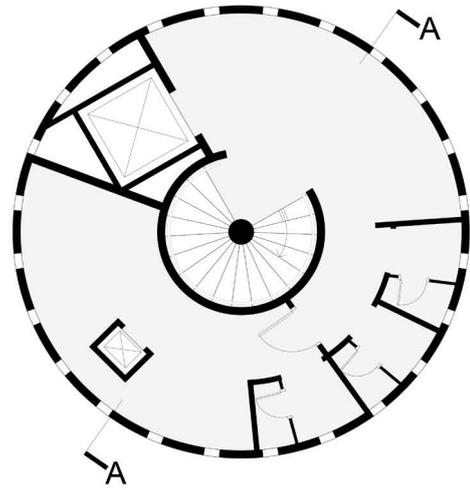
Underground Floor Plan



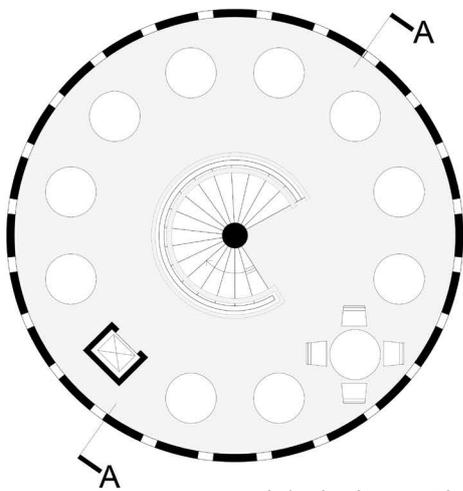
Ground Floor Plan



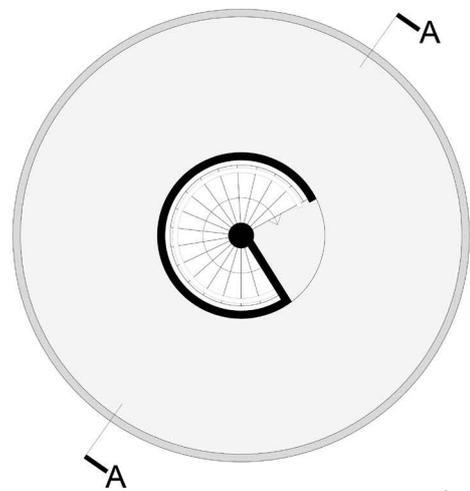
First Floor Plan



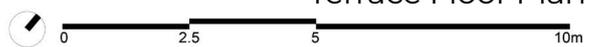
Second Floor Plan



Third Floor Plan



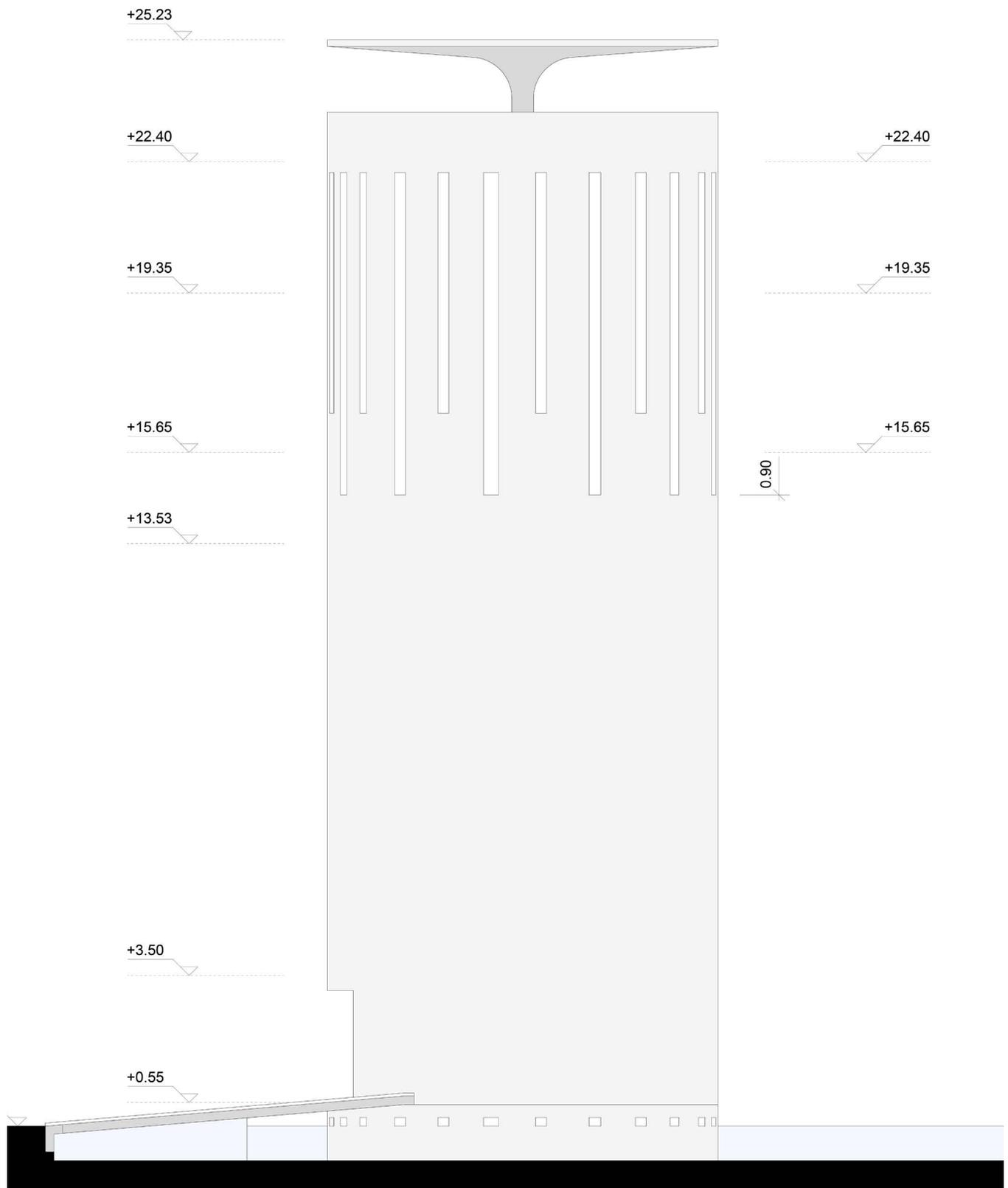
Terrace Floor Plan





Water Tower and Roof Restaurant
Section AA

0 2.5 5 10m



Water Tower and Roof Restaurant
North-West Elevation





Figure 128 The Water Tower and Open-air theater share a pool. An elevated access ramp leads the way to the tower. Rectangular holes allow light into the underground levels. Photographed by Ieva Saudargaite, 2023. Source: UNESCO Conservation Management Plan, 2024.



Figure 129 The interior of the water tower's third level, showing the staircase leading to the panoramic platform. The central column supporting the Water Tower's roof is deteriorated. Photographed by Ieva Saudargaite, 2023. Source: UNESCO Conservation Management Plan, 2024.

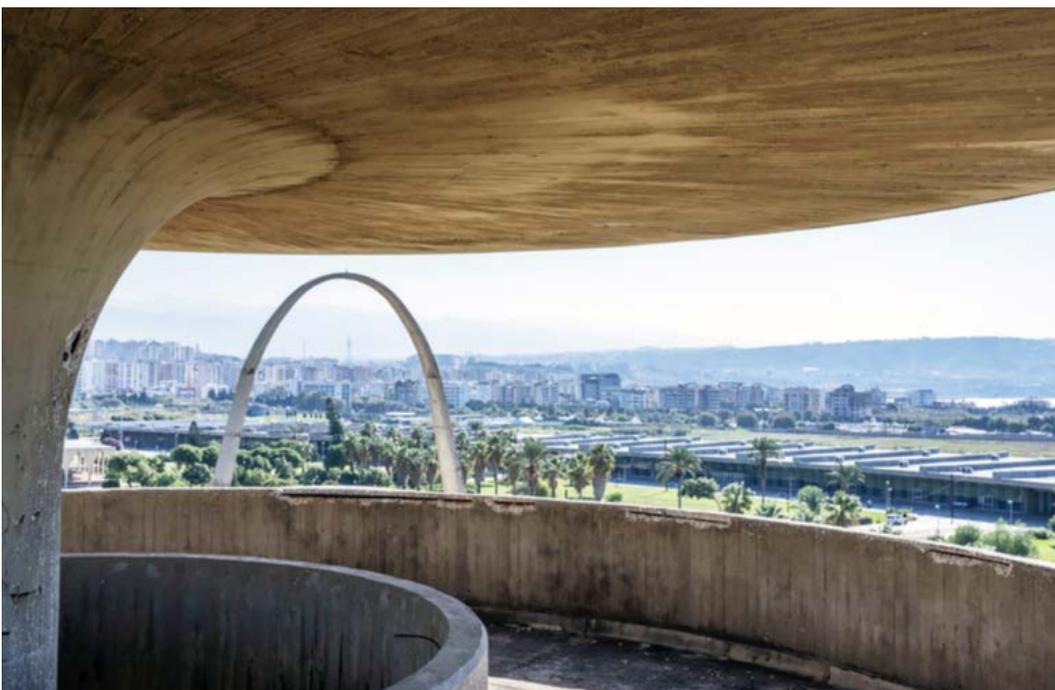
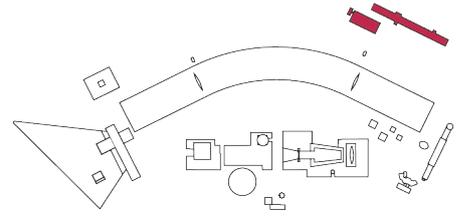


Figure 130 The view from the terrace of the water tower overlooking the complex. The tower itself portrays curved forms characteristic of Niemeyer's design. Photographed by Ieva Saudargaite, 2023. Source: UNESCO Conservation Management Plan, 2024.

Customs, Firehouse and Administration

- Gross Area: 7285 m²
- Original Function: Administration and auxiliary services
- Current Function: Abandoned
- General Condition: Critical



Parallel to the convexity of the grand canopy are two blocks that accommodated administration and auxiliary services. The building hosting the administration services is composed of two split levels, creating a lower and upper ground floor. With movable partitions integrated into the original design, the floor layouts were intended to be flexible. As for the rectangular customs building, a parabolically shaped annex was dedicated for the fire-fighting squad.

During the Lebanese civil war, the buildings were occupied and severely damaged. The fixtures, equipment, glazing, and doors were all looted. Bullet traces and shrapnel can still be seen to this day. The concrete of the buildings is in a deteriorating situation with steel reinforcements corroding, causing blistering and crumbling of several parts. Surrounding the building are overgrown shrubs. The site in this area suffers from a lack of maintenance.

The building's general condition has been labeled as critical.



Figure 131 View towards the customs, firehouse, and administration buildings, as seen from behind the Boomerang. Photographed by Mazen Haidar, 2022. Source: UNESCO Conservation Management Plan, 2024.



Figure 132 Administration Building's main facade. Photographed by Maroun Kassab, 2019. Source: UNESCO Conservation Management Plan, 2024.

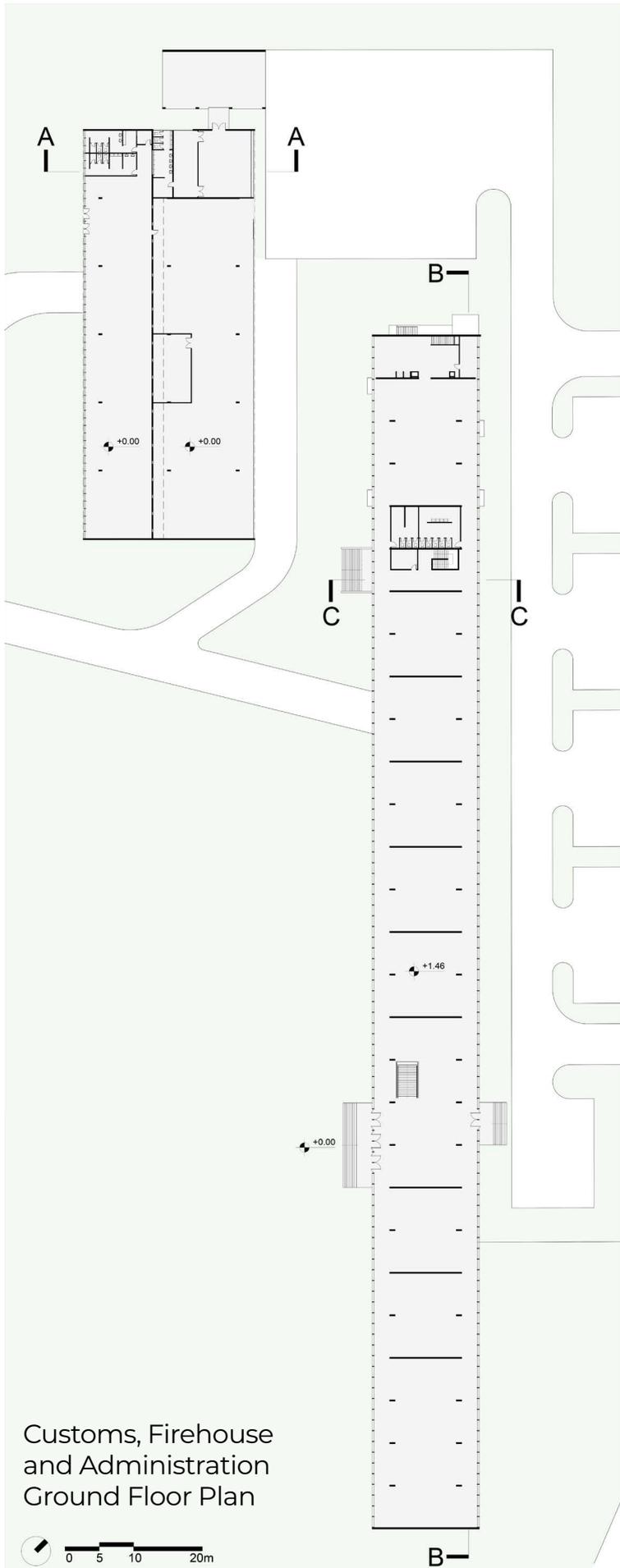
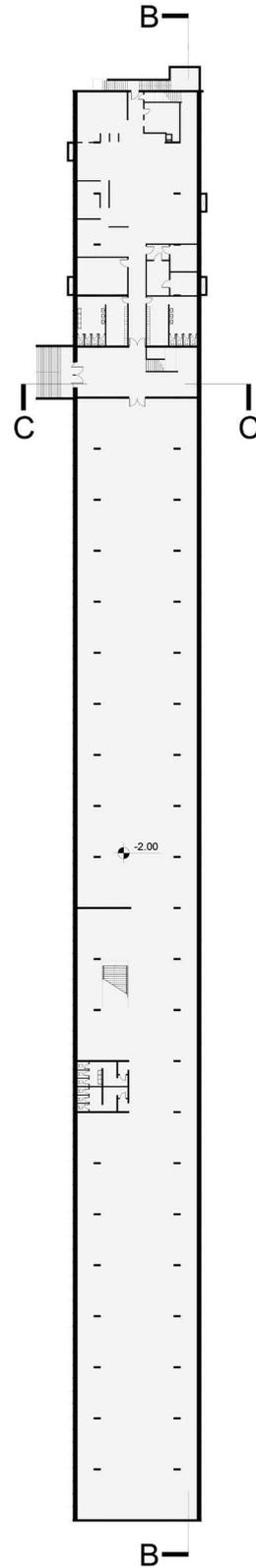


Figure 133 (Left) Inside the abandoned Administration Building, looking towards the west. Photographed by Ieva Saudargaitė, 2023 (Up) Inside the Administration Building, looking towards the west. Photographed by Ieva Saudargaitė, 2023 (Down) Firehouse arched structure is open from both ends, originally meant to host firetrucks. One of the sides provides access to the main building. Photographed by Maya Hmeidan, 2024. Source: UNESCO Conservation Management Plan, 2024.



Figure 134 Firehouse and shed structure Photographed by Maroun Kassab, 2019. Source: UNESCO Conservation Management Plan, 2024.

Administration
Underground Floor Plan



Customs, Firehouse
and Administration
Ground Floor Plan



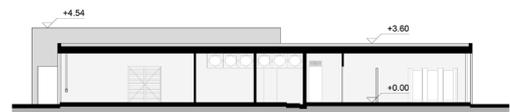
Customs and Firefighting
West Elevation



Customs and Firefighting
East Elevation



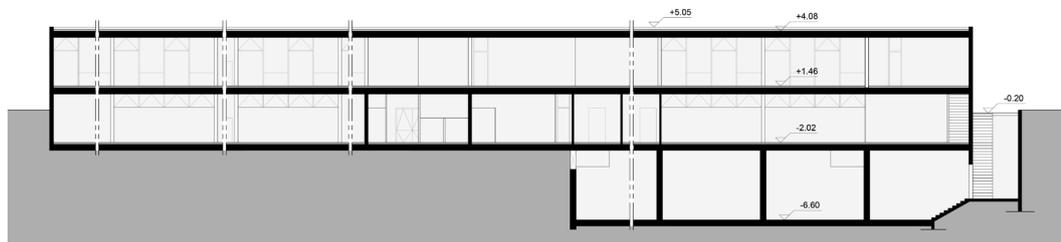
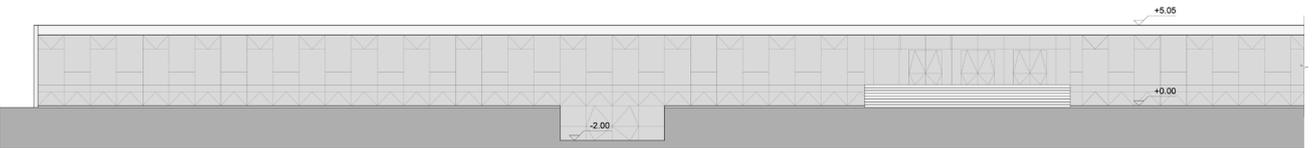
Customs and Firefighting
North Elevation



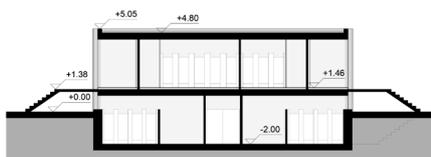
Customs and Firefighting
Section AA



Administration
West Elevation



Administration
Section BB

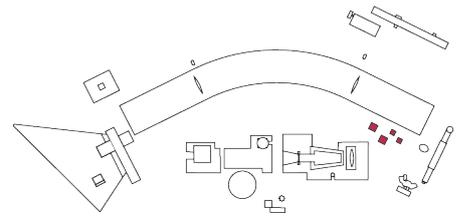


Administration
Section CC



Bars Structure

- Gross Area: 225 m²
- Original Function: Refreshment facilities
- Current Function: Abandoned
- General Condition: Bad



Located in the northern part of the grand canopy, a cluster of four small structures were designed to accommodate refreshment facilities. These open spaces are sheltered by a cantilevered roof supported at the center. Some of the structures were meant to accommodate a small toilet and kitchen. These structures currently have no use. However, walls had been built under the cantilever in three of the structures to store technical equipment.

The building's general condition has been labeled as bad.

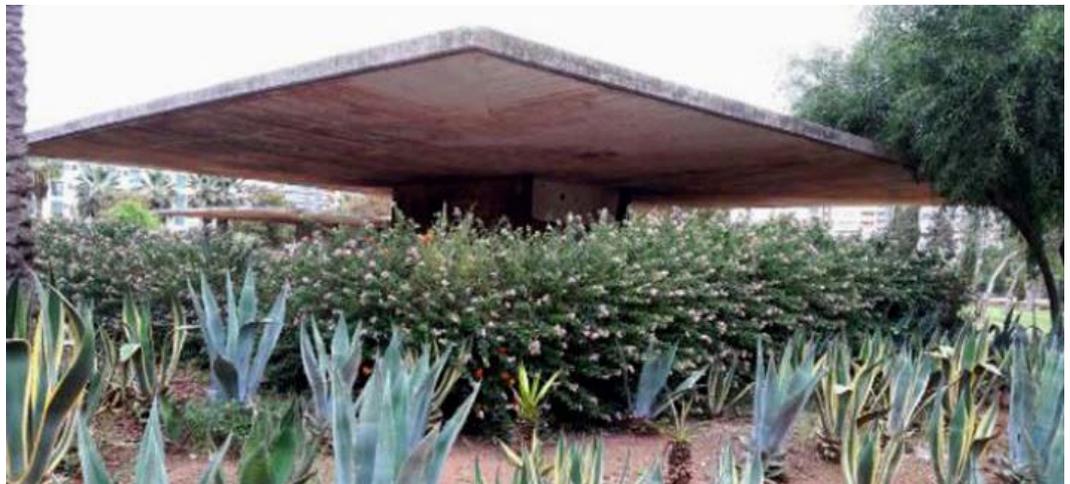
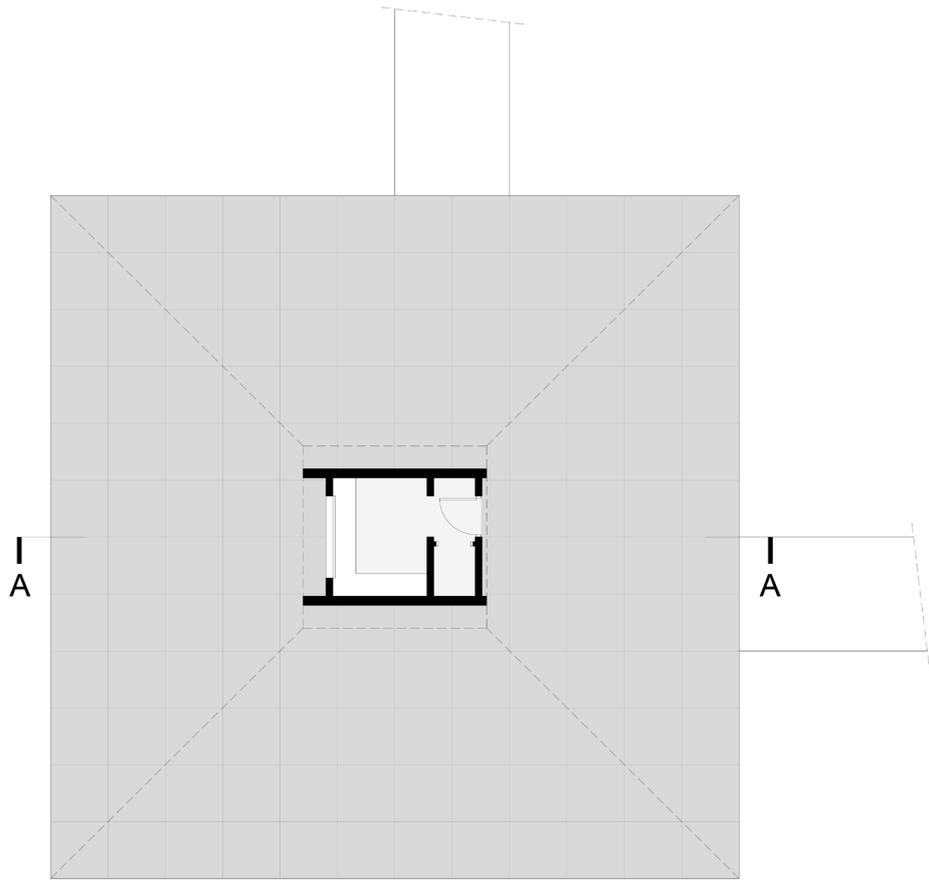


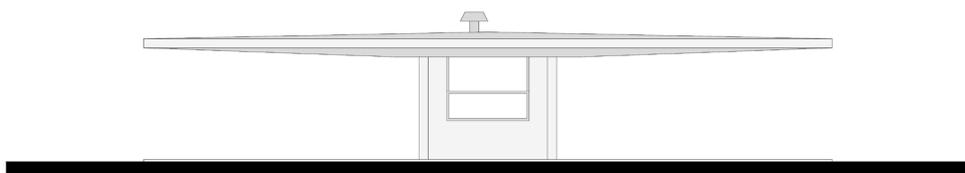
Figure 135 Snack Bar structures. Photographed by Edig Lesage, 2018. Retrieved from UNESCO Nomination Text, 2022, p.20.



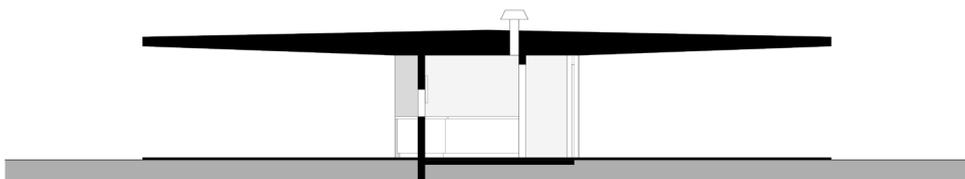
Figure 136 The four bars can be seen from the Quality Inn hotel rooftop. Currently, Niemeyer's sculptural structures are hidden behind vegetation. This vegetation is considered an oasis by the dense city's residents. Photographed by Pamela Jerome, 2022. Source: UNESCO Conservation Management Plan, 2024.



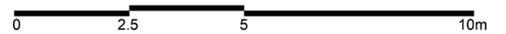
Snack Bar
Plan (North Varies)

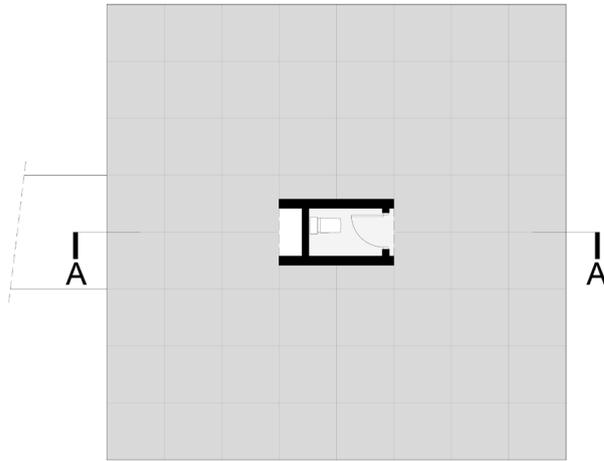


Snack Bar
Customer Window Elevation



Snack Bar
Section AA

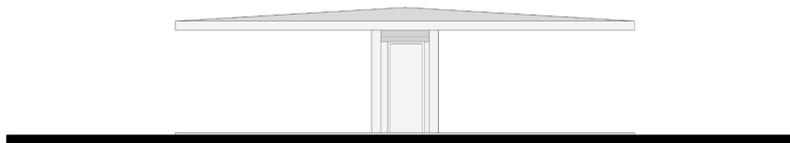




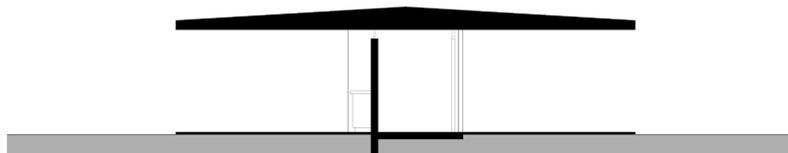
Snack Bar Toilets
Plan (North Varies)



Snack Bar Toilets
Side Elevation



Snack Bar Toilets
Entrance Elevation

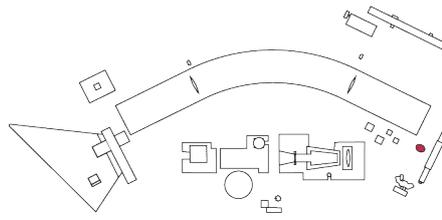


Snack Bar Toilets
Section AA



Housing Museum

- Gross Area: 245 m²
- Original Function: Collective housing and individual residence prototype
- Current Function: Abandoned
- General Condition: Critical



8. Oscar Niemeyer, 1962 p.1-31

9. Presidential palace church

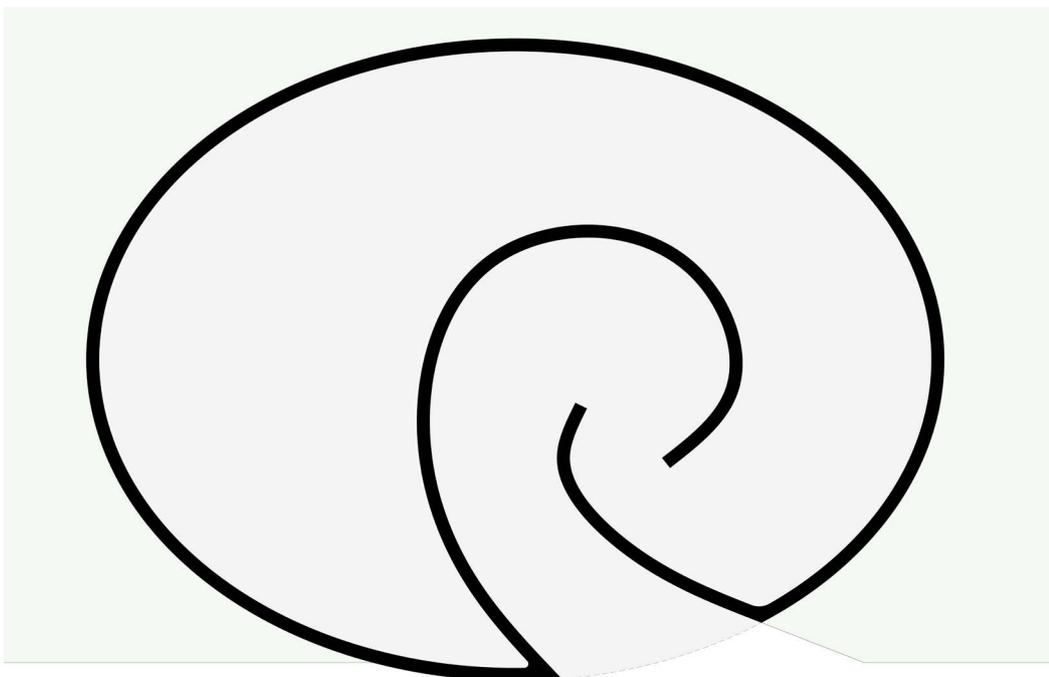
10. Isabelle Regnier, 2018

Part of the “Housing Section” that included an individual residence and a prototype for collective housing, the Housing Museum served as a comparison between the typologies of individual residences and collective housing. According to Niemeyer, individual residences are characterized by “plastic unrestraint...justified by the variety and individualization of the programmes” while collective housing “upon which contemporary town-planning is founded is simple and built to a module”⁸. The overall shape of the museum follows a snake-like shape reminiscent of Niemeyer’s Palácio da Alvorada⁹ in Brasília (1958).



Figure 137 Photographer unknown. Retrieved from <https://www.unesco.org/sites/default/files/medias/fichiers/2024/07/RKIF%20Flyer-%20April%202024.pdf?hub=802>.

The building’s general condition has been labeled as critical.



Housing Museum
Ground Floor Plan

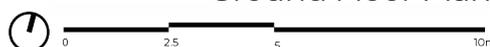
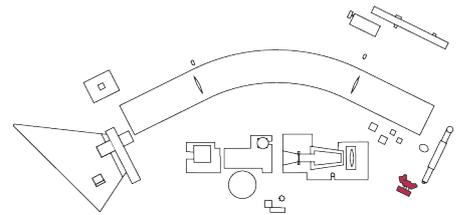




Figure 138 The Housing Museum with the entrance on the left and the exit recessed on the right. The model residence can also be seen in the background. Photographed by Maya Hmeidan, 2022. Source: UNESCO Conservation Management Plan, 2024.

Model Residence

- Gross Area: 450 m²
- Original Function: Residential prototype for individual housing
- Current Function: Abandoned
- General Condition: Critical



Intended to represent a prototype of an individual residence with unrestrained plasticity, this building was meant to accommodate the Fair's administrative director. A glazed rectangle placed under an organic roof housed the living spaces. The roof extended over a large terrace that overlooked the swimming pool. Meanwhile, the bedrooms and kitchen were placed in a solid stone rectangle. The overall spirit of the place is reminiscent of Niemeyer's "Das Canoas" house in Rio de Janeiro (1951).



Figure 139 Residence Prototype. Photograph taken by Wassim Naghi, 2022. Retrieved from UNESCO Nomination Text, 2022, p.25.

Unfortunately, the residence was left in ruins, with all glazing, doors, fixtures, and equipment looted during the war.

The building's general condition has been labeled as critical.



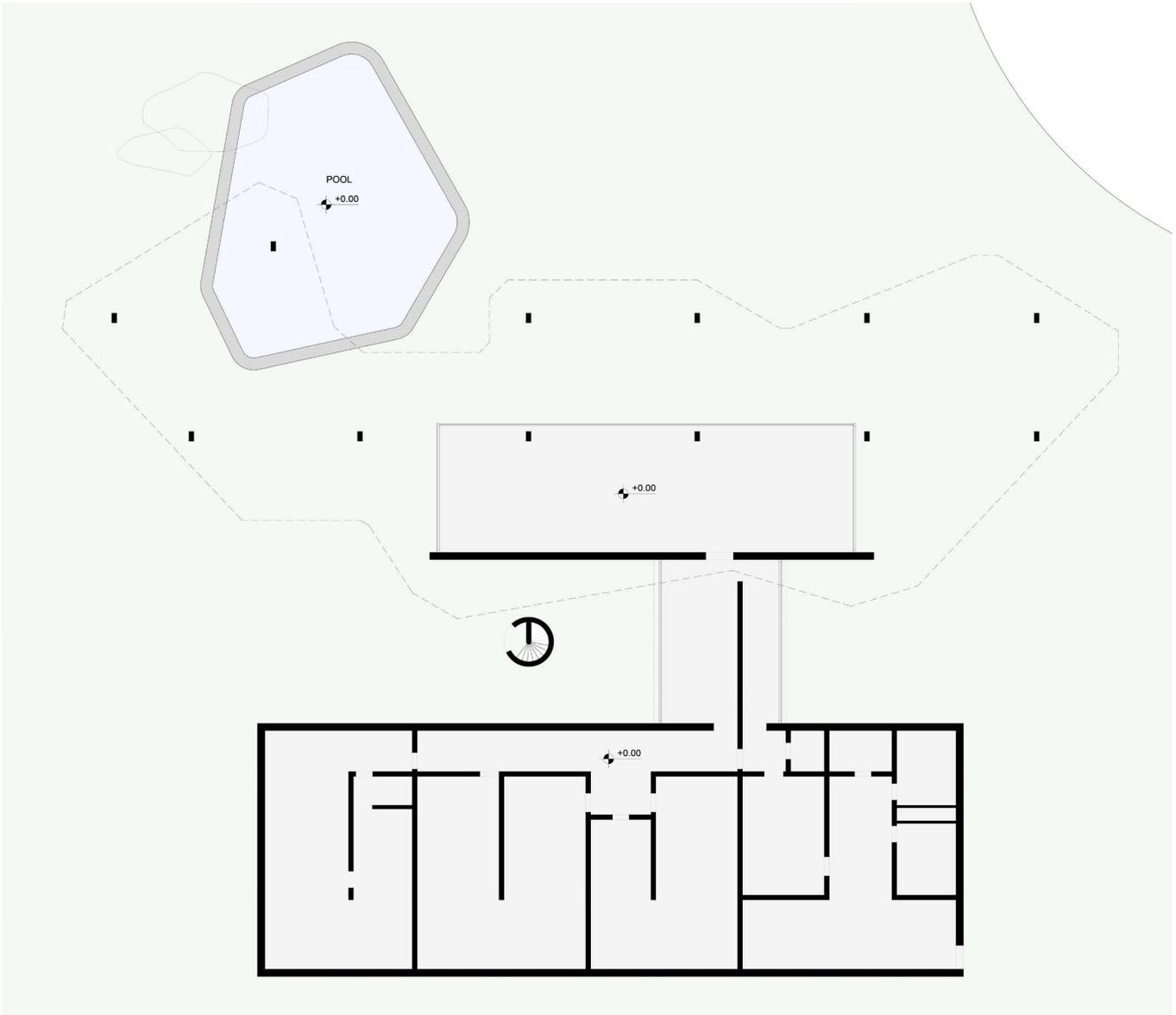
Figure 140 The Model Residence's pool with its artificial rock. The overall spirit of the place is reminiscent of Niemeyer's "Das Canoas" house in Rio de Janeiro (picture below). Photographed by Ieva Saudargaite, 2023. Source: UNESCO Conservation Management Plan, 2024.



Figure 141 Oscar Niemeyer's Casa Das Canoas in Rio de Janeiro (1951). Photographed by Nelson Kon, 2007. Retrieved from UNESCO Conservation Management Plan, 2024.



Figure 142 (Left) Residence Prototype. Photographed by Jad Tabet, 2019. Source: UNESCO Nomination Text, 2022, p.25. (Right) Model Residence with the ex-Collective Housing in the background. Photographed by Ieva Saudargaite, 2023. Source: UNESCO Conservation Management Plan, 2024.



Model Residence
Ground Floor Plan

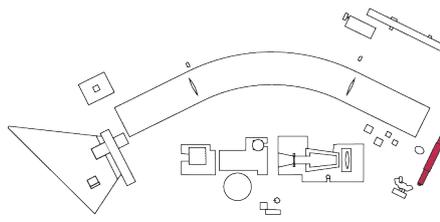


Model Residence
West Elevation



Collective Housing prototype

- Gross Area: 4584m²
- Original Function: Collective housing for families of the fair employees
- Current Function: Closed
- General Condition: "Since the original building has been completely transformed and no elements from the original design were preserve, the current state of conservation is irrelevant."



Intended to house the families of employees in the fair, the collective housing prototype was Niemeyer's attempt to offer the benefits and qualities of individual residences but in a collective setting. Standing on pilotis, the building houses ten apartments distributed on four floors. These apartments were designed as duplexes separating living area on the lower floor from the sleeping area on the upper floor. Accompanying the living area were large terrace gardens similar to those typically found in Mediterranean houses. The building was completed in 1975 including finishes and equipment. During the war, the fixtures were dilapidated just as the building was occupied and heavily damaged. In 2000, the building was transformed into a hotel by a delegation from the Tripoli Chamber of Commerce and Industry that was selected by a private investor.

Although the structural skeleton of the building was kept, the original design was not taken into consideration during the transformation, resulting in voids in the duplexes and terrace gardens to be filled. Among all the structures on site, the following failed to maintain the intentions that Niemeyer had originally designed with.



Figure 143 Original collective housing state and design before the damaging Quality Inn Hotel interventions. Photographed by Samer Mohdad, 1994. Source: UNESCO Conservation Management Plan, 2024.



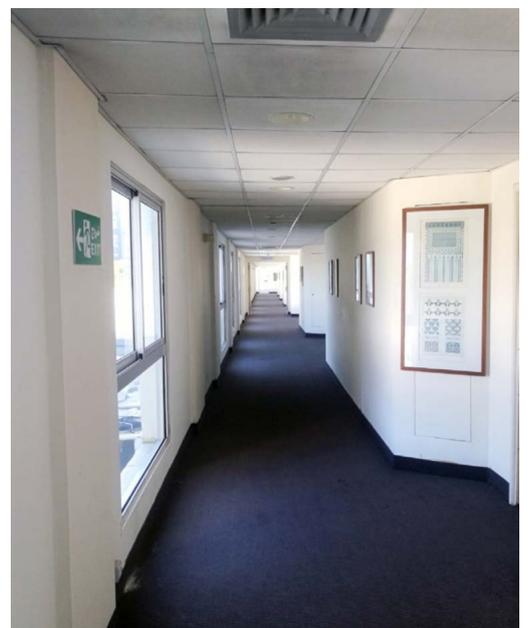
Figure 144 Ex-Collective Housing after the Quality Inn Hotel interventions. The integrity of the original design intent is damaged. Photographed by Ieva Saudargaite, 2023. Source: UNESCO Conservation Management Plan, 2024.



Figure 145 Part of the additions of the hotel was a new facility hosting an indoor swimming pool. Photographed by Paul Gaudette, 2022. Source: UNESCO Conservation Management Plan, 2024.

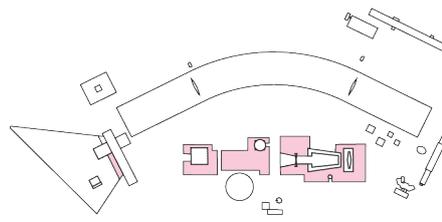


Figure 146 (Left) Main entrance elevation of the Quality Inn Hotel, facing the street. The rooftop addition can be seen in addition to the ground floor pavilions and overall changes made to the building as a whole. Photographed by Pamela Jerome, 2022. (Right) Inside the Quality Inn Hotel. Photographed by Mazen Haidar, 2022. Source: UNESCO Conservation Management Plan, 2024.



Reflecting Pools

- Gross Area: 18600 m²
- Original Function: Landscape
- Current Function: Inactive
- General Condition: Bad



An integral part of the landscaping elements of the fairground are the shallow reflective pools that were meant to not only reflect the scenes but also complete the forms or give the illusion of floating. While concrete bridges link the various site elements, the Lebanese Pavilion, Space Museum, and Open-Air Theater give the impression of floating in a series of reflective water mirrors. These pools cover large parts of the entrance and the central area to the east of the boomerang shape.

In the 1990s, these pools were renovated and actively used and maintained until recent years. Due to their current inactivity and lack of maintenance, the mechanical systems are rusting, and the concrete structures are deteriorating. The only time these pools manage to bring back Niemeyer's original intention of reflective pools is after rainstorms.

The general condition of these pools has been labeled as bad.

Open spaces and Landscape

- Gross Area: 122000 m² (96000 m² Softscape + 26000 m² Hardscape)
- Original Function: Landscaping
- Current Function: Abandoned
- General Condition: Overall: Satisfactory; Area behind the Great Canopy: Bad

Based on the initial studies conducted in 1964, the original site of the fair was limited to an 800x450m rectangle surrounding the main buildings, creating a total of 36 hectares. The site was then enlarged to its current elliptical egg similar to the urban core Niemeyer had originally designed in 1962. Although the reflective pools and hardscaping elements surrounding the buildings on site correspond to Niemeyer's original concept, it is unclear if the current open spaces are in alignment with the original design. According to Isabelle Regnier, a journalist from the "Le Monde" newspaper, Roberto Burle Marx was responsible for the fair's landscape conception.¹⁰ This landscape architect who introduced modernist landscape architecture into the Brazilian scene also accompanied Oscar Niemeyer in many of his works. Although the fair complex was not mentioned in the list of his works, knowing it was never completed, the influence of his "Brazilian spirit" and tropical gardens can still be seen on site.

After the end of the civil war, the gardens were maintained, although their authenticity is uncertain. Moreover, despite the water pools and reflective surfaces being currently inactive, the rest of the landscape

has been kept intact. Unfortunately, the area behind the convexity of the boomerang has no landscaping and is still to this day left untreated.

The landscape's general condition has been labeled as satisfactory. The area behind the grand canopy has been labeled as bad.



Figure 147 Reflective Pools filled with water after rainfall. Photographed by Wassim Naghi, 2019. Retrieved from UNESCO Nomination Text Annex, 2022, p. 167-177.



Figure 148 (Left) Among the post-war interventions was the addition of nozzles for the water pools facing the Entrance Portico. Photographed by Manal Hmeidan, 2024. (Right) Another post-war addition was the bridge parallel to the Entrance Portico ramp. Photographed by Ieva Saudargaite, 2023. Source: UNESCO Conservation Management Plan, 2024.

Undeveloped Landscape

The landscape found in the site's buffer zone (refer to Chapter 04.E. Conservation Policies and Laws), mainly behind the Boomerang, remains undeveloped. It was never completed prior to the war. The current condition of the area needs proper care and maintenance. Although some trees can be found on site, the overall landscape consists of weeds and other random plants that have grown. Nonetheless, it is important to keep in mind the importance of this green space with respect to the densely populated city of Tripoli.



Figure 149 Landscape behind the boomerang. Mature date palms can be seen facing the western side of the Boomerang. Photographed by Hana Itani, 2023 Source: UNESCO Conservation Management Plan, 2024.

04. Site Analysis

D. State of Conservation and Decay Analysis

1. Nader, Fadi H., 2014. *The Geology of Lebanon*. Scientific Press, p. 79.

2. UNESCO Nomination Text, 2022, p.63.

Unfortunately, due to the current situation in Lebanon, we were unable to document the state of conservation and the decay of materials in person. Therefore, the following part uses pictures and data, from various sources and at various dates, to complete the analysis.

The material forming of the building shells mainly consists of reinforced concrete that is left raw, exposed and without any finishings. Due to lack of documentation, there is no information about the composition of this concrete. It can however be assumed that Portland cement was used due to the prevalence of limestone in Lebanon.¹ Some interior finishing materials include ceramic tiles, concrete tiles, marble, glass, plaster and paint.

Material Index



Urbanite Pathways



Concrete Tiled Pathways



Asphalt Pathways



Raw Reinforced Concrete



Glass Curtain Walls



Steel Columns



Plaster and Paint Finishing



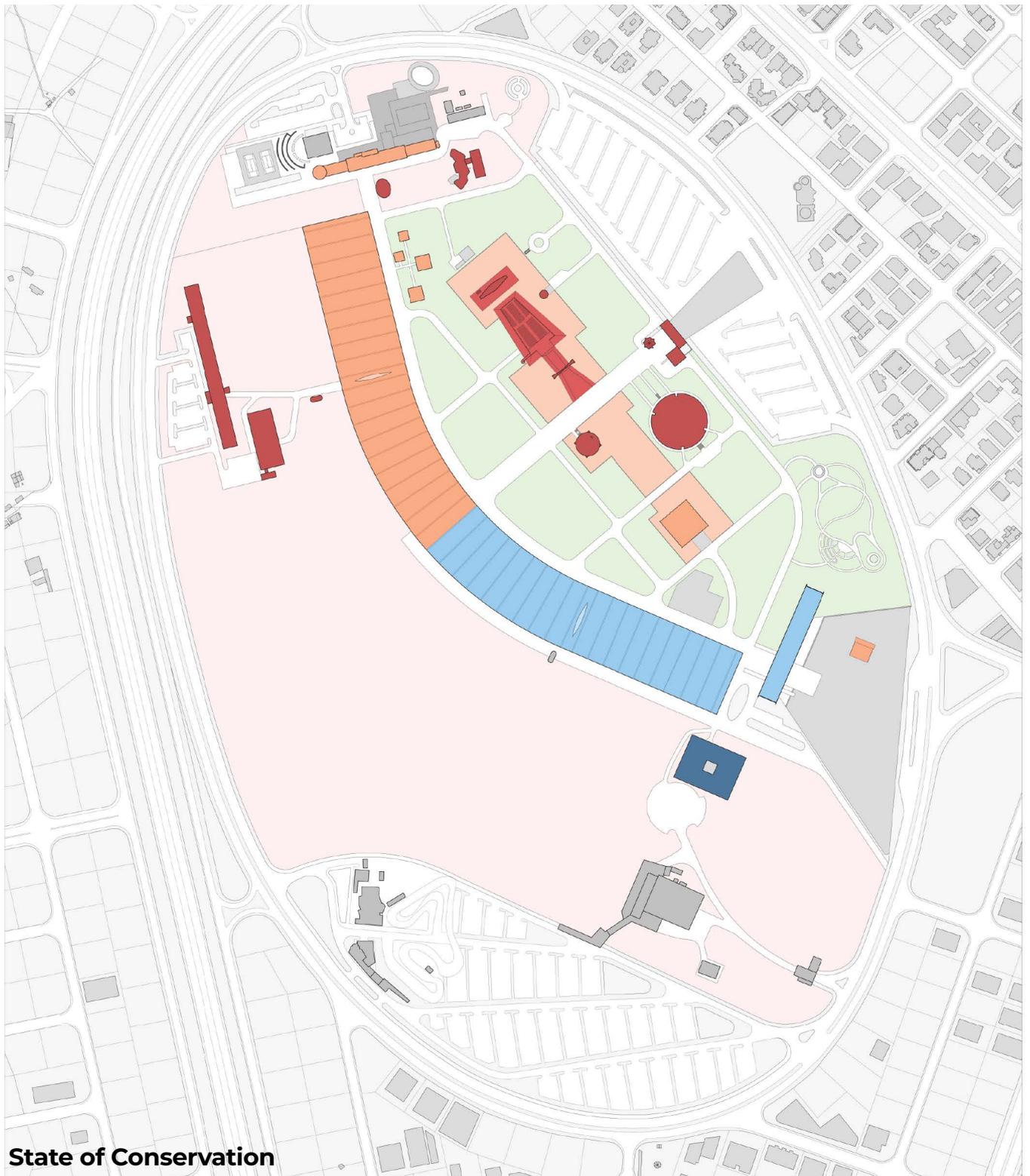
Marble Finishing



Ceramic Tile Finishing

Figure 150 Material Index of the fair. Photographed by Nour Tabet, August 2024

The following plan shows a synthesis of the current state of conservation of the buildings and the main landscape furnishings ranging from good to critical conditions based on a similar analysis done by UNESCO in 2022.²



3. Anson - Cartwright et al., *ICOMOS-ISCS: Illustrated Glossary on Stone Deterioration Patterns*.

4. Anson - Cartwright et al., *ICOMOS-ISCS: Illustrated Glossary on Stone Deterioration Patterns*, p. 10.

Generally, most of the buildings on site with bad and critical conditions all lack functioning electricity, plumbing and other forms of necessary infrastructure. Several buildings are also missing doors and windows that would have better protected the interiors from the environmental elements. The prevalent forms of decay on site manifest themselves as concrete degradation and rusting of the steel bars caused by lack of maintenance and heavy water infiltration.

In the following part, we will be identifying specific decays within the site structures using ICOMOS-ISCS: Illustrated glossary on stone deterioration patterns³ and the detailed categories as a framework.

Cracks and Deformations

a- Cracks:

As defined by ICOMOS-ISCS, “Cracks are individual fissure, clearly visible by the naked eye, resulting from separation of one part from another”.⁴

In our case, the causes of the cracks vary. Some are caused by the weight of the structure itself or by variable pressure forces such as users, cars, machines, ect. Cracks also formed due to weathering of the material and water infiltration.



Figure 151 Fractures within the main entrance pavement. Photographed by Nour Tabet, August 2024.



Figure 152 Network of thin cracks within the dome of the experimental theater. Photographed by Nour Tabet, August 2024.

Figure 153 Advanced fractures and splitting within the roof of the Great Canopy. Photographed by Sanaa Abdallah 2015. Retrieved "LA FOIRE INTERNATIONALE DE TRIPOLI.", 2015, p. 22.

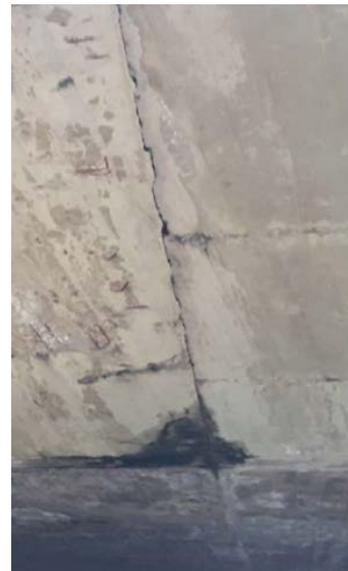


Figure 154 (Left and Center) Cracks and splitting within the arch of the amphitheater due to steel bar corrosion. Photographed by Wassim Naghi, 2019. Retrieved from UNESCO Nomination Text Annex, 2022, p. 119. (Right) Fracture in the structure of the bleachers of the amphitheater. Photographed by Wassim Naghi, 2019. Retrieved from UNESCO Nomination Text Annex, 2022, p. 92.

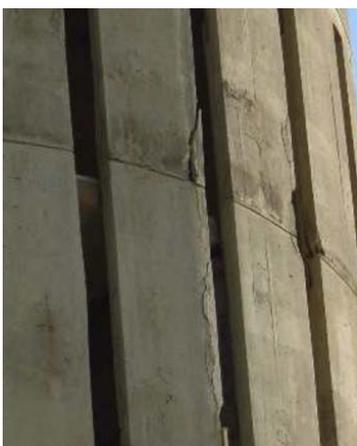


Figure 155 Splitting within the concrete window openings of the water tower that might lead to eventual detachment. Photographed by Sanaa Abdallah 2015. Retrieved "LA FOIRE INTERNATIONALE DE TRIPOLI.", 2015, p. 38.



Figure 156 Evidence of the Civil War throughout the site needs to be carefully evaluated and potentially preserved and interpreted. In the Water Tower, there is damage to the slab from an unexploded ordnance. Photographed by Pamela Jerome, 2019. Retrieved from UNESCO Conservation Management Plan, 2024, p.230

Detachment

a- Blistering

As defined by ICOMOS-ISCS, “Blistering is separated, air-filled, raised hemispherical elevations on the face of stone resulting from the detachment of an outer stone layer. This detachment is not related to the stone structure.”⁵

In our case the blistering is due to water infiltration and then the expansion of the corroded iron bars of the reinforced concrete. The blistering therefore fully exposes portions of the iron bars.



Figure 157 Blistering within the columns of the Lebanese Pavilion. Photographed by Nour Tabet, August 2024.



Figure 158 Blistering within the exterior of the dome of the experimental theater. Photograph taken by Wassim Naghi, 2022. Retrieved from UNESCO Nomination Text, 2022, p. 61.



Figure 159 Severe blistering within the ceiling of the basement floor of the Helipad. (Left) Photographed by Pamela Jerome, 2019. (Right) 2022. Photographed by Maya Hmeidani, 2018. Retrieved from UNESCO Conservation Management Plan, 2024, p. 167.



Figure 160 (Left) Blistering in several spots within the Arch of the Amphitheater. Photographed by Nour Tabet, August 2024. (Left) Peeling, blistering, and thin or missing areas of coating. (Right) Spalled concrete near a construction joint. We can see the effect of blistering here as well. Retrieved from RKIF Grand Arch and Open-Air Theatre Final Report, May 22, 2023, WJE No. 2022.4235.1, p. 15-17.

b- Bursting

As defined by ICOMOS-ISCS, “Bursting is the local loss of the stone surface from internal pressure usually manifested in the form of an irregularly sided crater.”⁶

In our case, blistering was observed in the underground level of the entrance portico and was due to water infiltration and the expansion of the underground walls as can be seen below.



Figure 161 Bursting within the underground walls of the entrance portico. Photographed by Sanaa Abdallah 2015. Retrieved “LA FOIRE INTERNATIONALE DE TRIPOLI.”, 2015. p. 18.

6. Anson - Cartwright et al., ICOMOS-ISCS: Illustrated Glossary on Stone Deterioration Patterns. p. 16.

7. Anson - Cartwright et al., ICOMOS-ISCS: Illustrated Glossary on Stone Deterioration Patterns. p. 22.

c- Fragmentation

As defined by ICOMOS-ISCS, “Fragmentation is the complete or partial breaking up of a stone, into portions of variable dimensions that are irregular in form, thickness and volume.”⁷

In our case, fragmentation in the form of chipping occurred on the edges of surfaces, as well as the loss of bigger portions of the structure due to advanced deterioration.



Figure 162 (Left) Fragments have already fallen and exposed the steel. Lebanese Pavilion. Photographed by Mazen Haidar, 2019. Retrieved from UNESCO Conservation Management Plan, 2024, p.160. (Bottom) Cracking of the external thin layer of mortar covering the reinforced concrete. Photographed by Maya Hmeidan, 2024. Retrieved from UNESCO Conservation Management Plan, 2024, p. 164.



8. Anson - Cartwright et al., *ICOMOS-ISCS: Illustrated Glossary on Stone Deterioration Patterns*, p.24.

9. Anson - Cartwright et al., *ICOMOS-ISCS: Illustrated Glossary on Stone Deterioration Patterns*, p.30.

d- Peeling

As defined by ICOMOS-ISCS, “Peeling is the shedding, coming off, or partial detachment of a superficial layer (thickness : submillimetric to millimetric) having the aspect of a film or coating which has been applied on the stone surface.”⁸

In our case the peeling occurred due to material degradation and water infiltration.



Figure 163 (L e f t) Peeling of the concrete in the slab in the Lebanese Pavilion. Photographed by Nour Tabet, 2024. (Right) Peeling of the concrete within the central column of the water tower. Photographed by Ieva Saudargaite, 2023. Retrieved from UNESCO Conservation Management Plan, 2024, p.177.



Figure 164 Peeling of the concrete within the shell of the experimental theater. (Left and Top Right) Photographed by Nour Tabet, August 2024. (Bottom Right) Photograph taken by Wassim Naghi, 2022. Retrieved from UNESCO Nomination Text, 2022, p. 61.

Features Induced by Material Loss

a- Peeling

As defined by ICOMOS-ISCS, “Erosion is the loss of original surface, leading to smoothed or roughened surfaces.”⁹

The erosion noticed on our site is mainly the sub-type of “Differential erosion” that was caused by weathering, giving the material a roughened and uneven surface.



Figure 165 (L e f t) Differential erosion of the marble balustrade in the Lebanese pavilion. (Right) Differential erosion of the concrete shell of the Manège. Photographed by Nour Tabet, August 2024.

b- Mechanical Damage

As defined by ICOMOS-ISCS, “Mechanical damage is the loss of stone material clearly due to a mechanical action.”¹⁰

In the international fair, mechanical damage can be seen in the form of perforations for mechanical systems that have now been stolen, as well as several bullet holes which are visual remnants of the Lebanese civil war and Syrian Occupation.



Figure 166 New openings created during the military presence on site in the administration building. Photographed by Ieva Saudargaitė, 2023. (Right) Bullet holes on the exterior shell of the Experimental theatre. Photographed by Maya Hmeidan, 2024. Retrieved from UNESCO Conservation Management Plan, 2024, p.191 & 142.

c- Missing Parts

As defined by ICOMOS-ISCS, “Missing parts are empty space, obviously located in the place of some formerly existing stone part.”¹¹

Material loss within the buildings of the site is mostly caused by looting during the civil war of partitions, metal frames, glass, machinery, ect.



Figure 167 (Left) Missing portion of a wall in the Lebanese pavilion. (Right) Missing partition wall within the lower floor of the Lebanese pavilion. All photographed by Nour Tabet August 2024.

10. Anson - Cartwright et al., ICOMOS-ISCS: Illustrated Glossary on Stone Deterioration Patterns. p. 32.

11. Anson - Cartwright et al., ICOMOS-ISCS: Illustrated Glossary on Stone Deterioration Patterns. p. 36.

12. Anson - Cartwright et al., ICOMOS-ISCS: Illustrated Glossary on Stone Deterioration Patterns. p. 42.

13. Anson - Cartwright et al., ICOMOS-ISCS: Illustrated Glossary on Stone Deterioration Patterns. p. 46.

Discoloration and Deposit

a- Crust

As defined by ICOMOS-ISCS, "Crust is a generally coherent accumulation of materials on the surface. A crust may include exogenic deposits in combination with materials derived from the stone. A crust is frequently dark colored (black crust) but light colors can also be found. Crusts may have a homogeneous thickness, and thus replicate the stone surface, or have irregular thickness and disturb the reading of the stone surface details."¹²



Figure 169 (Left) Crust formation on the floor of the Lebanese pavilion. (Center) Crust formation on the shell of the experimental theater. (Right) Black crust and efflorescence formations on the interior of the Manege. All photographed by Nour Tabet, August 2024.

b- Discoloration

As defined by ICOMOS-ISCS, "Discoloration is a change of the stone color in one to three of the color parameters: hue, value and chroma."¹³

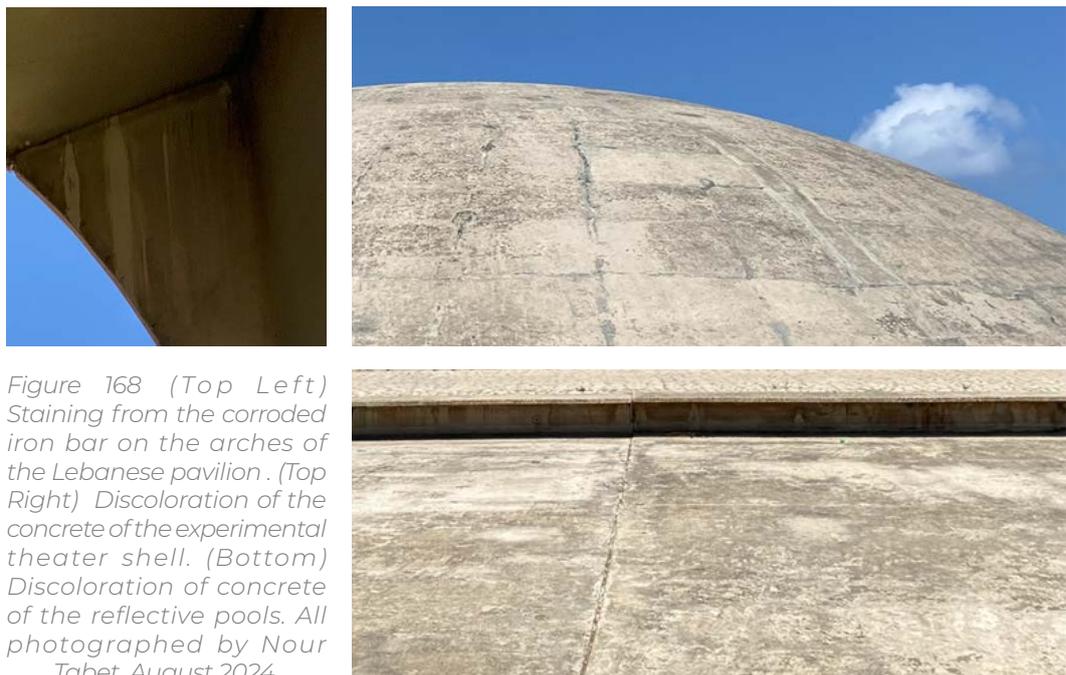


Figure 168 (Top Left) Staining from the corroded iron bar on the arches of the Lebanese pavilion. (Top Right) Discoloration of the concrete of the experimental theater shell. (Bottom) Discoloration of concrete of the reflective pools. All photographed by Nour Tabet, August 2024.

c- Efflorescence

As defined by ICOMOS-ISCS, “Efflorescence appears as generally whitish, powdery or whisker-like crystals on the surface. Efflorescences are generally poorly cohesive and commonly made of soluble salt crystals.”¹⁴



Figure 170 (Top) Efflorescence formation on the ceiling of the northern portion of the Great. Photographed by Sanaa Abdallah 2015. Retrieved “LA FOIRE INTERNATIONALE DE TRIPOLI.”, 2015, p. 22. (Bottom Left) Efflorescence formation on the ceiling of the experimental theater. Photographed by Nour Tabet, August 2024. (Bottom Right) Black crust and efflorescence formations on the interior of the Manege. Photographed by Nour Tabet, August 2024.



Figure 171 (Left) Efflorescence formation on the ceiling of the water tower. Photograph taken by Wassim Naghi, 2022. Retrieved from UNESCO Nomination Text, 2022, p. 62. (Right) Efflorescence formation on the reflective pools. Photographed by Nour Tabet, August 2024.

c- Encrustation

As defined by ICOMOS-ISCS, “Encrustation is a compact, hard, mineral outer layer adhering to the stone. Surface morphology and color are usually different from those of the stone.”¹⁵



Figure 172 Calcareous deposits in the fractures within the ceiling of the ticket booth. Photographed by Sanaa Abdallah 2015. Retrieved “LA FOIRE INTERNATIONALE DE TRIPOLI.”, 2015, p. 15.

14. Anson - Cartwright et al., ICOMOS-ISCS: Illustrated Glossary on Stone Deterioration Patterns, p. 48.

15. Anson - Cartwright et al., ICOMOS-ISCS: Illustrated Glossary on Stone Deterioration Patterns, p. 50.

16. Anson - Cartwright et al., ICOMOS-ISCS: Illustrated Glossary on Stone Deterioration Patterns. p.56.

17. Anson - Cartwright et al., ICOMOS-ISCS: Illustrated Glossary on Stone Deterioration Patterns. p.60.

d- Graffiti

As defined by ICOMOS-ISCS, "Graffiti is any engraving, scratching, cutting or application of paint, ink or similar matter on the stone surface."¹⁶



Figure 173 (Left) Graffiti inside the Lebanese pavilion. Photographed by Nour Tabet, August 2024. (Right) Graffiti on the exterior of the water tower. Photographed by Sanaa Abdallah 2015. Retrieved "LA FOIRE INTERNATIONALE DE TRIPOLI.", 2015. p. 38.

e- Soiling

As defined by ICOMOS-ISCS, "Soiling is a deposit of a very thin layer of exogenous particles (eg. soot) giving a dirty appearance to the stone surface."¹⁷



Figure 174 Soiling on the edge of the roof of the entrance portico. Photographed by Nour Tabet, August 2024.



Figure 175 Soiling on the edge of the roof of the great canopy. Photographed by Nour Tabet, August 2024.



Figure 176 (Left) Soiling on the arches of the Lebanese pavilion. (Right) Soiling on the walls of the Manège. All photographed by Nour Tabet, August 2024.

Biological Colonization

a- Alga

As defined by ICOMOS-ISCS, “Algae are microscopic vegetal organisms without stem nor leaves which can be seen outdoors and indoors, as powdery or viscous deposits (thickness: tenth of mm to several mm). Algae form green, red, brown, or black veil like zones and can be found mainly in situations where the substrate remains moistened for long periods of time. Depending on the environmental conditions and substrate type, algae may form solid layers or smooth films. On monuments, algae are constituted of unicellular to pluricellular clusters, and they never form macroorganisms.”¹⁸

In our case, the alga is formed along paths of water leakage.



Figure 177 Alga formation on the pillars of the amphitheater. Photographed by Sanaa Abdallah 2015. Retrieved “LA FOIRE INTERNATIONALE DE TRIPOLI.”, 2015, p. 36

b- Mold

As defined by ICOMOS-ISCS, “Mold is a microscopic fungus which colonies, to the naked eye, look like a downy film or a network or star-like millimetric patches of filaments of diverse colors (white, grey, black).”¹⁹



Figure 178 (Left) Mold growth on the walls of the helipad's underground. Photographed by Sanaa Abdallah 2015. Retrieved “LA FOIRE INTERNATIONALE DE TRIPOLI.”, 2015, p. 33. (Center) Mold growth on the walls of the basement of the experimental theater. Photographed by Nour Tabet, August 2024. (Right) Mold growth on the ceiling and walls of the customs department. Photograph taken by Wassim Naghi, 2022. Retrieved from UNESCO Nomination Text, 2022, p. 63.

18. Anson - Cartwright et al., ICOMOS-ISCS: Illustrated Glossary on Stone Deterioration Patterns. p. 66.

19. Anson - Cartwright et al., ICOMOS-ISCS: Illustrated Glossary on Stone Deterioration Patterns. p. 72.

c- Plant

As defined by ICOMOS-ISCS, "Plants are vegetal living beings, having, when complete, root, stem, and leaves, though consisting sometimes only of a single leafy expansion (e.g. Tree, fern, herb)."²⁰



Figure 179 (Top Left) Plant growth between the tiles near the ticket booth. (Bottom Left) Plant growth within the concrete near the amphitheater. (Right) Plant growth within the concrete floor of the Manege. All photographed by Nour Tabet, August 2024.

NB:

Over the years, a few attempts were made to fix portions of the deterioration of the materials. However, some of these interventions were poorly done and also negatively impacted on the visual aspects of the buildings. One example can be shown in the picture below of the shell of the amphitheater, where grouting was haphazardly spread over decayed areas to provide a quick solution to certain problems.



Figure 180 D a m a g i n g intervention on the shell of the experimental theater. Photographed by Nour Tabet, August 2024.

Synthesis and Conclusion

In conclusion, most of the buildings of the Fairground require urgent maintenance as the deterioration of the reinforced concrete poses a structural threat in addition to the visual and aesthetic decline. The problems arose due to years of neglect, inflicted damage and significant water infiltration.

Solutions and methodologies for dealing with these decays will be addressed in the following design and restoration parts, specifically Chapter 05.D. Restoration Philosophy & Techniques.

04. Site Analysis

E. Conservation Policies and Laws

When it comes to the conservation and development of historic sites, it is always essential to refer back to conservation policies and laws in order to draw a framework for present and future projects. However, when it comes to architectural heritage from the modern movement, awareness to the importance of the preservation of such heritage is a relatively fresh notion that has gradually been gaining importance. Not only so, but local legislation can also present risk for architectural heritage from the modern movement. In the following chapter, general legal issues regarding the conservation of such sites will be looked upon before diving into the legislative issues regarding Lebanon and the site specifically.

General Overview

Though there are no significant differences in the application of regulation in 20th century architectural heritage and heritage from previous centuries, 20th century heritage has proven to have specific features that cannot be ignored when compliance measures are applied. In comparison to structures from previous centuries, 20th century buildings present a greater complexity in several areas such as space and size where high-rise buildings and large complexes were designed to accommodate for new needs and greater flow of people. Moreover, buildings from the last century, as with buildings from previous centuries, face issues of compliance with current-day energy efficiency, safety, and accessibility standards. The difference lies in the perception of the lack of compliance. For example, while the double helix staircase in the Chateau of Chambord, a 16th century castle in France, holds a parapet lower than current regulatory standards, maintaining the parapet at its current height is an accepted decision. However, when it comes to parapets in buildings of the previous century, justifying such decisions is less accepted. The similarity between the last century's architecture and contemporary architecture in terms of form, materiality, and technique does not aid in defending the case of 20th century heritage. In the cases concerning legally recognized monuments, specific applications are usually presented in order to obtain a form of dispensation. These are often referred to as "equivalent solutions" that allow for equivalent safety measures without impacting features of the buildings in question. Some authorities have as such created their own alternatives for protected buildings. The conservation department in Bern, Switzerland, for example, has created a document called "Fire protection in historic buildings" and has managed to save even modern Bernese monuments from disfigurement.

When applying equivalent solutions, integrating protective interventions and preventive measures can also prove to be essential in playing a

1. Grignolo, Roberta. "Part II: Short Critical Lexicography; Conservation: Law and Regulations." *Essay. In Time Frames: Conservation Policies for Twentieth-Century Architectural Heritage*, 443–452. London, New York: Routledge, 2017.

complementary role. Examples of such measures can be the integration of highly sensitive fire detection systems that reduce evacuation time, and limiting the number of visitors thus requiring the lowest level of compliance to regulations. An example of such equivalent solutions can be found in the glass and brass entrance door of Milan's Villa Necchi Campiglio. The doors of this entrance, though part of the building's distinctive features, open inwardly and thus do not comply with standards. Authorities had thus requested that the door either be made to open outwardly or to be completely replaced by a new fire door. After several discussions between conservation architects and fire safety authorities, the decision to adopt an equivalent solution of having the door permanently manned was adopted.

In addition to fire safety, personal safety of protected buildings is also often a question of debate. This is particularly the case when it comes to parapets of buildings. As a result, several monument-compatible adaptations exist including adding metal profiles on the inside of the existing parapets, tubes above, and so forth. In other cases, closing off an area from the public has proven to be sufficient enough to avoid intervening at all.

As for accessibility, over the last decades, heritage buildings are required to be accessible to all as long as economically viable solutions can be adopted. As such, multi-story or fluid structures present a challenge. In areas where it is not possible to implement lifts, ramps, or elevator platforms, certain equivalent solutions have included preparing a virtual tour for visitors who may not physically reach all levels.

Until the 1970s, seismic safety was not considered in construction standards. As such, several of 20th century heritage buildings do not comply to current standards. Though protected buildings are typically exempted from seismic compliance requirements, it is still highly recommended to incorporate possible measures from the start of the design of adaptive reuse projects.

Finally, among the tricky issues to deal with when it comes to 20th century heritage is compliance with energy efficiency regulations. In such cases, it is essential to apply a performance-based approach rather than a perspective-based approach. In cases where the building's envelope represents an important aesthetical and architectural value, modifying slabs and the roof as well as optimizing glazing can prove to be alternatives to modifying the integrity of the envelope. As such, effective energy retrofitting strategies can be implemented by considering different alternatives that do not present a risk on the building's integrity.¹

Rachid Karami International Fair

In the case of Lebanon, architectural heritage in general suffers from outdated heritage laws and the absence of proper legal protection.

Currently, Law No. 166 L.R. (1933) is the only regulation regarding historic buildings, their preservation, and their conservation. This law that was issued during the French mandate, 10 years before Lebanon gained its independence, only protects traditional buildings, religious complexes, and archaeological monuments built before 1700. As a consequence, controlling the demolition of heritage buildings, especially during the post-war reconstructions, became a tedious task that required urgent attention. This issue was particularly present in Beirut. In 1995, the APSAD (L'Association pour la Protection des Sites et Anciennes Demeures²) exerted serious pressure on the Ministry of Culture to address and end the unrestrained demolition of Beirut's traditional buildings. Although this led the ministry to commission the APSAD with the task of identifying and documenting Beirut's heritage,³ pressures from owners of these buildings⁴ as well as political spheres led the government to review decree No. 12/1997, assigning a team of experts to create an accurate analysis of the buildings and classification criteria. Still dissatisfied, owners resisted and added pressure on the government, forcing the latter to reconsider decrees No. 33/1998 and No. 7/1998. As such, a new committee of experts was created and a new category list was developed based on Beirut, dividing old buildings into the following:

- a) Historic buildings linked to historical personalities. They have particular architectural and artistic qualities and are mostly in good shape with minimal restoration works needed.
- b) Buildings without specific historical significance but with high architectural standards or particularly distinguishable features.
- c) Category B buildings that were not severely damaged during the war.
- d) Buildings without specific historical significance but with distinguishable architectural features.
- e) Buildings older than 50-60 years without historic significance, not following traditional architecture, with modified character, with new materials introduced changing the building's character, with structural failures potentially at risk of collapsing, and/or with unsustainable preservation costs.

Eventually, categories D and E were deleted by the government. Moreover, it is important to note that this classification included only buildings without considering the urban context. Though in 2007, the ministry proposed a law to raise awareness on the dangers of rapid building development on traditional and historic areas, currently, the only bodies defending architectural heritage in Lebanon remain individuals, activities, architects, and non-governmental organizations, including the APSAD and the Modern Heritage Observation project.⁵

In the case of Oscar Niemeyer's Fairground in Tripoli, the regulations

2. Association for the Protection of Sites and Ancient Residences

3. The list of buildings excluded Beirut Central District that was under the power of SOLIDERE (Société Libanaise pour le Développement et la Reconstruction du Centre-ville de Beyrouth). SOLIDERE, a private development company and joint-stock company. It was formed thanks to law No. 117/1991 that allowed the municipal administration the rights to create real estate companies in charge of reconstructions after the Lebanese Civil War (1975-1990).

4. The ministry required municipal authorities to obtain the Directorate General of Antiquities' approval before allowing for demolitions. This dissatisfied owners who had buildings listed as heritage. These owners wanted the government to compensate for their expropriation or to waive the prohibition decision.

5. El Asmar, Jean-Pierre. "Part I: Conservation Policies for Twentieth-Century Architectural Heritage; Asia: Lebanon." *Essay. In Time Frames: Conservation Policies for Twentieth-Century Architectural Heritage, 153-55.* London, New York: Routledge, 2017.

6. *International Council on Monuments and Sites*

7. *UNESCO, 2022, p.38-39*

8. *World Heritage Convention. Operational guidelines for the implementation of the World Heritage Convention. Paris, France: Unesco, 2023, paragraph 88 p.31.*

9. *According to article 2.1 of the Madrid - New Delhi Document (2017) issued by ICOMOS regarding 20th century heritage, "The integrity of the cultural heritage places of the twentieth century should not be impacted by unsympathetic change or interventions. Adequate research, documentation and analysis of the history and significance of a place or site is needed to avoid, minimise and mitigate potential adverse impacts." (Citation, p.7)*

relative to the site fall under the UNESCO regulations in accordance with the ICOMOS⁶ Operational Guidelines for the Implementation of the World Heritage Convention (2023), and a national law that was developed in 2022 for the protection of the site.

In the Nomination Text prepared in 2022 to add the Rachid Karami International Fair under UNESCO's list of endangered World Heritage, the assessment of the site in terms of state of integrity⁷ was made, highlighting the property's significance, the effect of development and neglect, as well as its Outstanding Universal Value⁸ (OUV). The following was found to be the case:

- The elliptical shape of the property covering 72 hectares corresponds to the limits of the original site defined in 1962. Within this boundary is a rectangle area of 800x500 m that contains all the buildings and landscaping designed by Niemeyer in the 60's. The rest of the area outside of this rectangle belongs to a buffer zone with different regulations.
- Niemeyer's original vision called for the development of the area surrounding the site into a new urban extension. Although applying Niemeyer's original vision for this expansion in its literal form is not required, preserving the conceptual vision and spirit of the place is encouraged. Not only so, but the original intention of turning these new areas and neighborhoods into livable and attractive points for locals and tourists.
- Nearly all the buildings were preserved in accordance with Niemeyer's original designs, with landscape areas being regularly maintained. This is with the exception of the Quality Inn hotel that transformed the collective housing into a hotel in 2001 by completely disregarding the architecture of the place and thus jeopardizing the building's integrity. The hotel is currently closed with attempts to restore the architecture back to its original state being made.⁹
- In terms of function, the site was never used as an International Fairground, as it had been designed to be. Instead, the site was occupied during the Lebanese civil war (1975-1990) by several military groups. After the war had ended, reversible interventions on the Southern end of the boomerang were made, mainly consisting of transparent glass "boxes" whose use was dictated by modern needs. An example of a successful adaptive reuse that has taken place on site is the transformation of the Guest House into a furniture cluster with both production and exhibition areas for craftsmen and artisans. Given the current geo-political changes in the area, reviving the original functionality of the site as a permanent international fairground does not seem feasible. As such, new functions need to be found while taking care of the site's cultural significance. As such, considering that the creation of an attraction and recreation center within this fairground was among the original vision of the

site, introducing new uses aligned with this vision maintain the property's authenticity.¹⁰

- Although it is unknown if the current landscaping corresponds to Niemeyer's designs, the reflective pools and hardscapes around the buildings adequately match the original concept. The garden design's authenticity is yet to be confirmed but does correspond to the whole's tropical character with natural elements imported from Brazil.
- Several current structural issues threaten the site in different areas, including the boomerang that is currently completely closed from public access, the open-air theatre that had partially collapsed in July 2016, and the structures of the Grand Arch, water tower, and space museum basement slab.
- The concrete wall boundary around the site was designed by Niemeyer and introduced after the Lebanese authority's request. Originally, Niemeyer did not want to place any boundaries around the site since it contradicted his desire to keep the site open to public use. As such, this boundary is to be reviewed.
- On an urban scale, the site's intention of being a "third modern urban core" maintains its validity with the development of the modern urban fabric. Today, the fairground still stands as a center of modern Tripoli.
- The intervention of civil society has in many cases saved the site from interventions that were designed without the site's integrity in mind. People's involvement and intervening has proven their intent to preserve the site and its value as modern heritage.

Protection and Management

The Rachid Karami International Fair (RKIF) is currently considered a Public Establishment¹¹ and has been placed under the Lebanese Ministry of Economy's authority. In this case, the Lebanese government appoints a Board of Directors who are in charge of managing the site.

The RKIF Public Establishment was initially created on May 4 of 1960 by Decree law 4027. However, in November 2017, UNESCO Beirut organized a conference about Modern Heirtage in Lenanon¹² with the help of the University of the Holy Spirit (USEK). Experts from ICOMOS International, DOCOMOMO Lebanon, and the Arab Centre for Architecture among many others had participated in this conference. Following this event, in 2019, the RKIF was added to UNESCO's Tentative List for Lebanon. With this, efforts were made to find a legal framework to ensure adequate protection of the heritage values of the site. On March 7 of 2022, a new Law No. 274¹³ was adopted by the Lebanese Parliament providing a legal framework for the site's protection.

10. According to article 8 of the Madrid - New Delhi Document (2017) issued by ICOMOS regarding 20th century heritage, "Recognize when use contributes to significance and manage accordingly: Where a functional use contributes to the significance of a place or site, conservation should aim to sustain that use where possible. Where a new use is introduced as a means of sustaining the place, and where the previous use or functions contribute to cultural significance this should be clearly interpreted."

11. In 1961, the entire site was expropriated and became a public property. (UNESCO, 2022, p.66)

12. *Modern Heritage in Lebanon: Opportunity or Threat*

13. *Official Journal including the law was published on 10/03/2022*

14. Article 18 of law N° 274, Dated 07/03/2022, Published in the Official Journal on 10/03/2022 states that "The Board, investors, and occupants must preserve the authenticity of the built structures in the Fair and take into consideration the external architectural character and cultural value of these structures, as confirmed by its inclusion in the UNESCO tentative world heritage list, in accordance to the attached image, which is considered an integral part of this law and divides the Fair premises into two parts: zone (A) is a red-hatched rectangle on the map 800 m long and 500 m wide. The rectangle includes the structures designed by Architect Niemeyer, and Zone (B) covers the rest of the premises and consists of the green-hatched area on the map and serves as a buffer zone for the heritage installations.

Zone (A) and its facilities are subject to UNESCO conditions for inclusion on the World Heritage List, and any intervention for restoration, reconstruction, or internal development must be approved by the Ministry of Culture.

Zone (B) is subject to the conditions of Buffer zones. Its uses, as well as new constructions in it are subject to UNESCO

According to Article 18¹⁴ of this law, "The Board, investors, and occupants must preserve the authenticity of the built structures in the Fair and take into consideration the external architectural character and cultural value of these structures, as confirmed by its inclusion in the UNESCO tentative world heritage list, in accordance to the attached image, which is considered an integral part of this law and divides the Fair premises into two parts."

As such, the site, defined by its elliptical shape, is divided into two zones:

- Zone A: defined by an 800x500 m rectangular shape that covers the buildings and open spaces designed by Oscar Niemeyer as a core zone for the heritage site. This zone is subject to rules defined by UNESCO in order to include a property on the World Heritage List.¹⁵ The core zone in this case includes the following components.
 - The Entrance Portico and Information Centre which is currently being used as an Administration building.
 - The Guest House that was used as "Al Minjara" furniture cluster for craftsmen and artisans up until late 2023.
 - The Grand Canopy of Pavilions also known as the Boomerang. Currently, the Southern end contains is partially covered with glass and was used as a covered exhibition area
 - The Lebanese Pavilion
 - The Experimental Theatre
 - The Space Museum and Helipad
 - The Open-Air Theatre
 - The Water Tower and Restaurant
 - The Miniature "Manège" with its conic structure
 - The Secondary entrance
 - The Prototype Residence
 - The Housing Museum
 - The Collective Housing that was transformed into a hotel in 2001 and stopped functioning as a hotel in 2018. (Attempts are made to restore the building to a state similar to Niemeyer's design)
 - The Snack Bars
 - The Administration, Customs, Fire House and auxiliary structures
 - All Underground Shelters and passages

- The Hard and soft landscape
- The Reflecting Pools
- Zone B: The remaining areas within the shape that consist of a buffer zone for the heritage site. This zone is subject to rules defined by UNESCO when it comes to the construction and uses of buffer zones of the World Heritage List properties in question.¹⁶ New construction would then be subject to the country's Ministry of Culture's approval. This zone currently consists of the concrete fence, parking lots, and the open spaces in the back area.

requirements for buffer zones of the sites nominated for the World Heritage List, and new constructions are subject to the approval of the Ministry of Culture. (Retrieved from Annex 2 of the UNESCO Nomination of Rachid Karami International Fair-Tripoli (1702), July 2022. <https://whc.unesco.org/en/list/1702/documents/>)

15. Articles 99-102 of the Operational Guidelines for the Implementation of the World Heritage Convention

16. Articles 103-107 of the Operational Guidelines for the Implementation of the World Heritage Convention

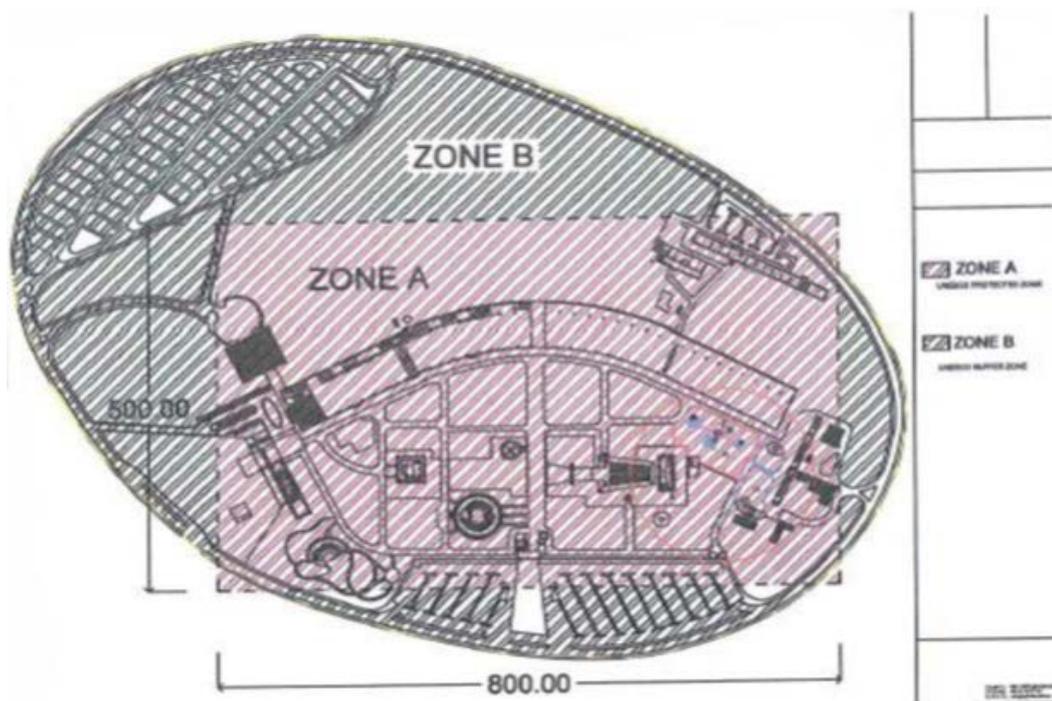


Figure 181 Site division according to article 18 of Law No. 274/2022. Zone A represents the main Heritage Core while Zone B represents the heritage Buffer Zone. Source: LAW N° 274, Dated 07/03/2022, Published in the Official Journal on 10/03/2022. Retrieved from Annex 2 of the UNESCO Nomination Text (2022). <https://whc.unesco.org/en/list/1702/documents/>

It is also important to note that Article 3 of this law states that “The Fair oversees:

- Organizing and/or hosting: exhibitions, conferences, seminars, meetings, festivals, and different celebrations particularly in the fields of economics, commerce, culture, art, tourism and sports.
- Exploits the Fair's facilities or grounds to set up business ventures that do not contradict with the objectives of the Fair and/or provide various sorts of services, primarily in the domains of tourism, knowledge economy, information technology and sport.”

Law No. 274 - 10/03/2022 can be found in the annex.

Conservation Management Plan

After its inclusion in UNESCO's Tentative List in September 2018, the site was selected for the "Keeping it Modern Grant" by the Getty Foundation. As such, with the help of this fund, a project to create a Conservation Management Plan (CMP) was launched by UNESCO Beirut. This document was intended to ensure the preservation of the cultural and historical value of the site in future development. While most of the buildings on the fair require immediate maintenance and structural repairs, the aim of the CMP was to create a framework for an overall conservation and development policy, necessary before undertaking physical repairs, restoration, and/or development initiatives. The document was initially set out to be completed in 2022. However, it was delayed for another two years. Although the 500-page document is complete, it has still not been made available to the public on the UNESCO website due to issues regarding the copyright of the historical photographs included within. As such, in order to get an insight into this document, we managed to consult Mrs. Maya Hmeidan regarding the document and the site as well as conducted an interview with her on August 29, 2024.

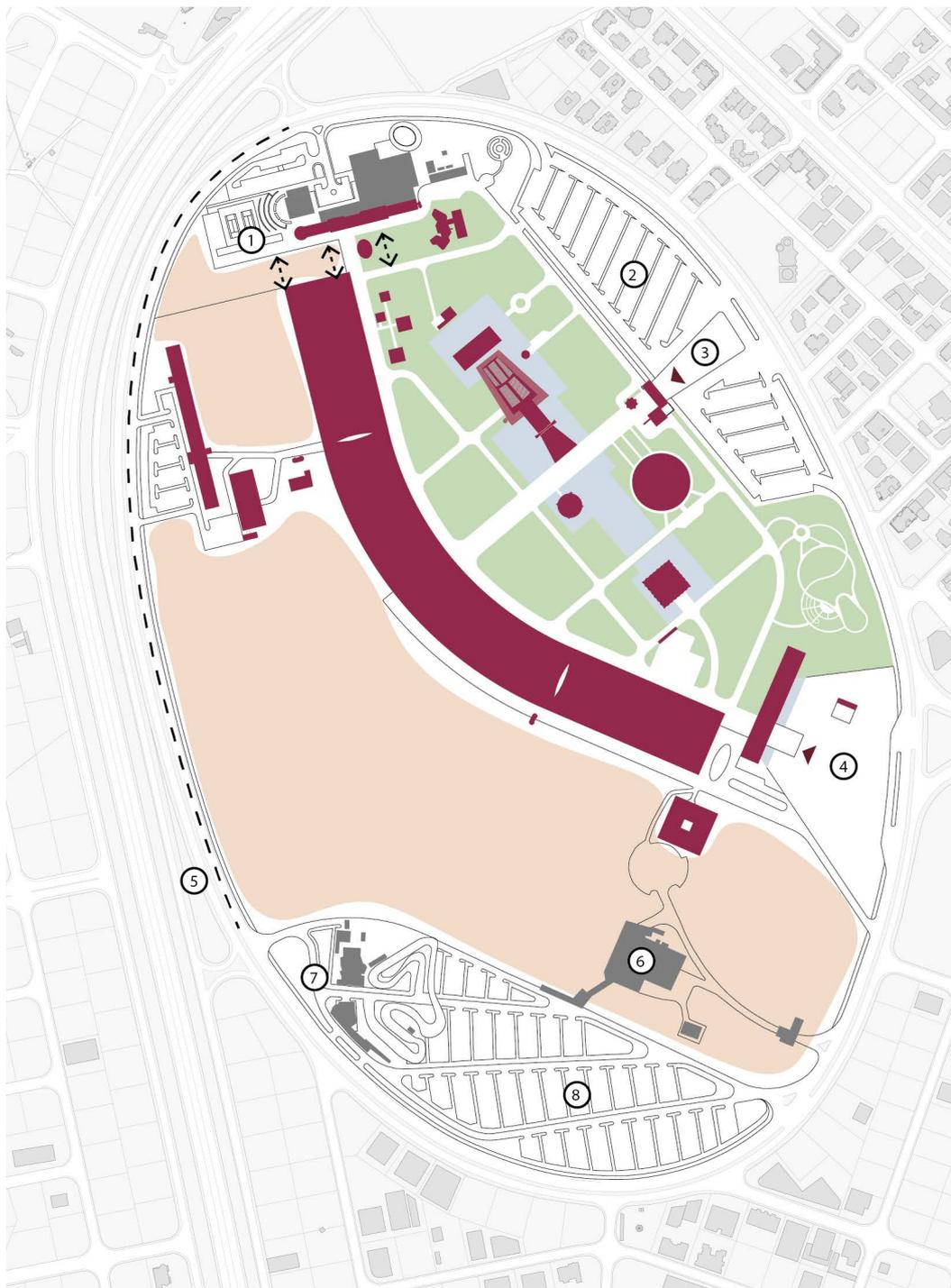
Mrs. Hmeidan is an archaeologist and Heritage Expert with more than 10 years of experience. She has worked as a Heritage Consultant with the Ministry of Culture on several projects. Since 2016, she has worked as a technical coordinator with UNESCO Beirut for projects related to World Heritage Sites in Baalbek and Tyre.

Mrs. Hmeidan has been the Technical Coordinator working with UNESCO Beirut on the Conservation Management Plan. Throughout this interview, the content of the document were discussed keeping in mind our the objectives of our thesis. As such, the information discussed within the meeting are concluded in the following map.

Regarding the Conservation Management Plan Summary,

In what concerns the landscaping highlighted in green in the plan and within Zone A, the following hardscape and softscape elements, including the reflective water pools, are to be maintained in accordance with the original design. The same applies to the original structural elements of the site, designed by Niemeyer. Unlike the exterior, changes to the interior of these structures can be made if justification to these changes is viable as well as respects the original intentions of the design.

As for the landscaping within the buffer zone, highlighted in beige on the map, The following parts of the landscape require development and are flexible in terms of design. However, due to the limited green spaces around the city, providing green public spaces within these areas is highly recommended.



- Original structures to maintain
- Unoriginal structures
- Greenery to maintain
- Water Pools to maintain
- Undeveloped landscape to develop
- Concrete Barriers
- Need for Connection
- Entrance
- ① Quality Inn Hotel: Most integrity-damaging intervention
- ② Parking recommended to maintain
- ③ Secondary entrance suggested to reopen
- ④ Main entrance to maintain
- ⑤ Security issues requiring fence
- ⑥ Temporary UNHCR to be omitted
- ⑦ Karting to be omitted
- ⑧ Southern parking recommended to maintain

UNESCO Conservation Management Plan Summary

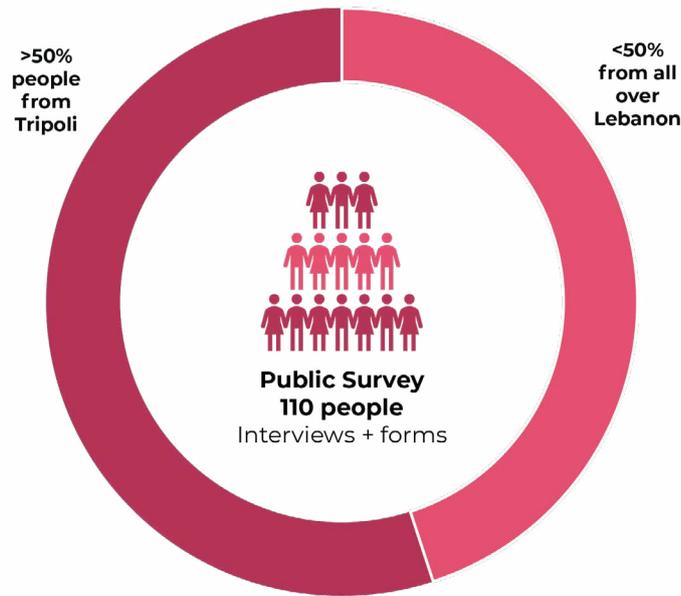


1. Quality Inn Hotel The most damaging intervention that has been made over the years on the authenticity and integrity of the site is the Quality Inn Hotel. In addition to changing the appearance of the social housing complex, expansions to the buildings have been made. Although the ideal scenario would be to reverse back to the original design, budgeting priorities are not allocated to such a reverse intervention. Instead, it is recommended to work on the connection of the hotel with the site as well as defining the same or alternative function.

2. Parking near secondary entrance is recommended to be maintained while ensuring pedestrian means to the site
3. Secondary entrance is recommended to reopen
4. Main entrance of the complex is large and has a view towards the site. The entrance is to be maintained.
5. Although Niemeyer was against placing barriers on the site, he designed concrete panels to be placed on the site upon the Lebanese authority's request. Today, security issues require a fence, especially the side facing the informal settlements. For budget purposes, the original concrete barrier is recommended to remain unless a budget for a more transparent alternative can be allocated.
6. A UNHCR Office has been temporarily placed on site due to its vicinity to the informal settlements. It is advised to relocate this temporary structure outside of the site
7. A small karting center has been opened in the southern parking lot and can be removed in future developments of the site.
8. The following parking mainly severs the primary southern entrance.

Public Survey

While preparing the Conservation Management Plan, UNESCO conducted a public survey in which they interviewed nearly 110 people, more than half of whom were citizens of Tripoli. This public survey's aim was to assess the community needs and values regarding the site. The survey showed that more than 80% of people who were surveyed valued the site as part of the city's heritage as well as a UNESCO heritage site. Their hope is to maintain the site as a heritage site and bring value to it. Citizens also expressed the need for green public spaces within the city. Among the ways the site is currently appropriated by the public is as a green public square. As such, they hope to maintain and enhance this aspect. Several of the surveyed also expressed their concern regarding the project's economic returns. Many people had sold their land for relatively low prices to make the fairground possible, believing the site would eventually provide them and their children with work opportunities and a return on investment. However, due to the site's lack of functioning after the war had begun, this was never achieved. As such, people expressed the need for a project that proves to be financially sustainable as well as create job opportunities and boost local tourism.



Economic Viability

The Fair was to originally provide job opportunities and economic return to the people of Tripoli, especially those who sold their lands to have the fair built. Most surveyed people requested economic return, creating job opportunities, and increasing tourism.

Heritage Site

More than 80% of people surveyed saw the value of this site as a heritage site and wanted to maintain its presence on the World Heritage List.

Green Space

Public deemed the site's green spaces as important public spaces and requested that the green public spaces to be preserved.

Fairground

Although the concept of an International Fairground is no longer seen as fitting. However, the function of a Fairground is still desirable.

Conclusion

After having understood the global approach to modern heritage as well as dove into the conservation laws related to the site specifically, we were able to use these policies as guidelines for our interventions. Our input regarding these guidelines mainly concern the functionality of the site as well as its connectivity to its surrounding. We do agree that the site never took on its original function as an International Fairground meaning its current function may not need to follow its original intent. However, we do believe that the fairground can still function as a fairground in an altered sense. In other words, we believe the site has the potential of acting as Tripoli's Fairground. As such, integrating the memory of its original function while creating relevant uses for the fair can be made possible under this notion. As for the site's connectivity to its surrounding, we believe that the current concrete barriers are among the priority points to tackle. A connection with the surrounding, both visually and physically, is necessary while maintaining security barriers that are not too obstructive

05. Concept & Masterplan

A. Synthesis

S.W.O.T. Analysis

STRENGTHS



Heritage value as a Modern Architecture site, as a legacy of Niemeyer, and as a UNESCO Heritage site



Intriguing architecture and interesting spaces



Central location and strong urban impact



Large undeveloped landscape valued by locals as green spaces



Public appropriation acting as an indicator of user needs



Availability of existing structures that can be adapted to different uses



Distinct architectural identity

OPPORTUNITIES



Drawing attention to Tripoli through the lens of heritage



Connection to Tripoli's valuable tangible and intangible heritage



Diversity of Tripoli's demographics and context



Availability of land for the development of needed green and public spaces



Creation of jobs also ensuring the site's longevity



Creation of better connectivity within the city



Increasing demand for workspaces dedicated to freelancers, small businesses, and artisans



WEAKNESSES



Large undeveloped area



Declining state of conservation & lack of maintenance



Accessibility only by vehicles



Lack of sufficient funding



Harmful interventions (Karting, Quality Inn)



Urban island and site's disconnection from the surroundings



Original function as an international fair no longer relevant to the modern context

THREATS



Lack of public awareness about modern heritage



Delays in the Management Plan threatening the site's longevity



Urban isolation and disconnection



Local's poor socio-economic living conditions



Safety and security threats



Lebanon's ongoing situation

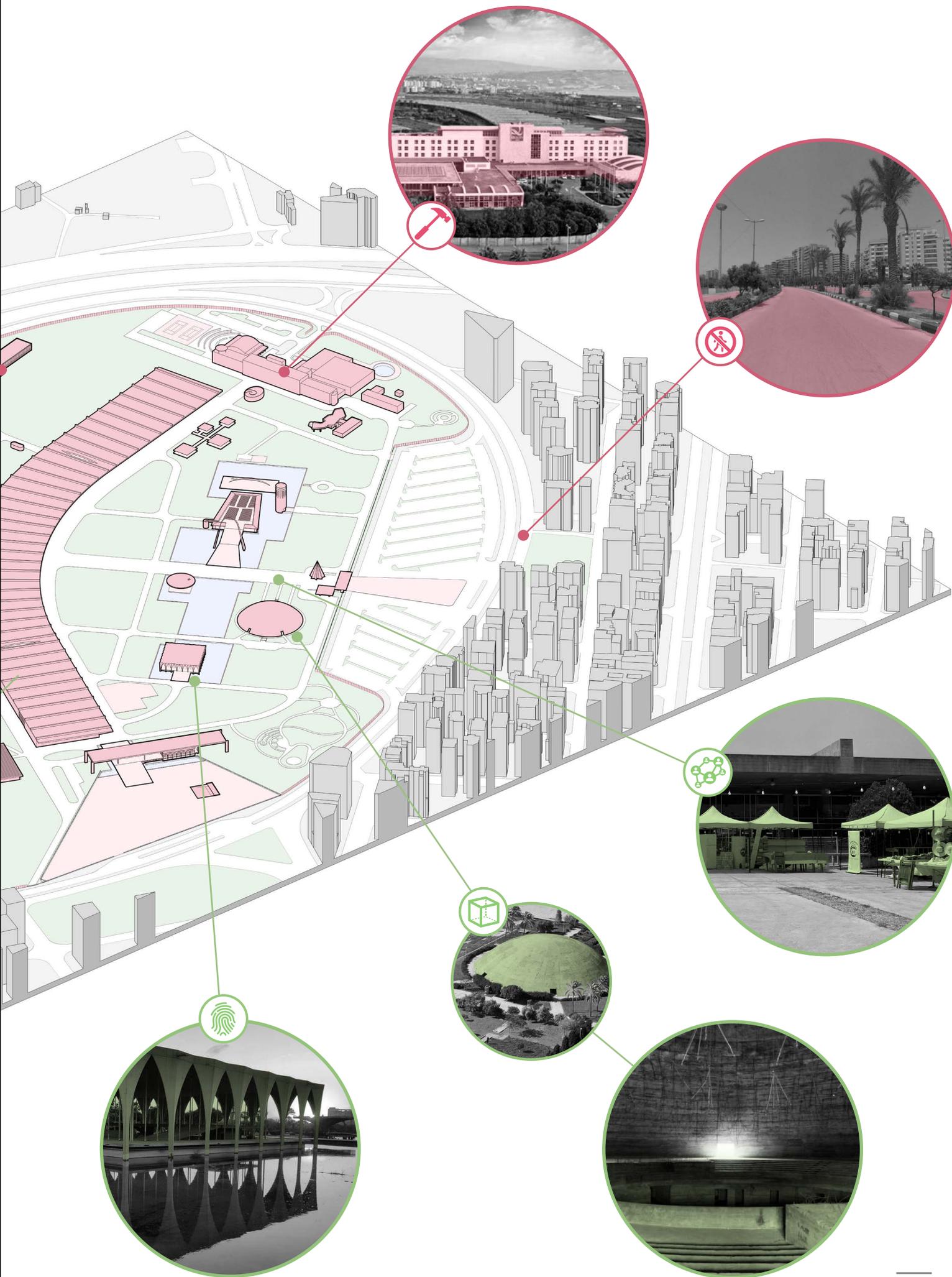


Gentrification threats



*Image sources can be found in the bibliography

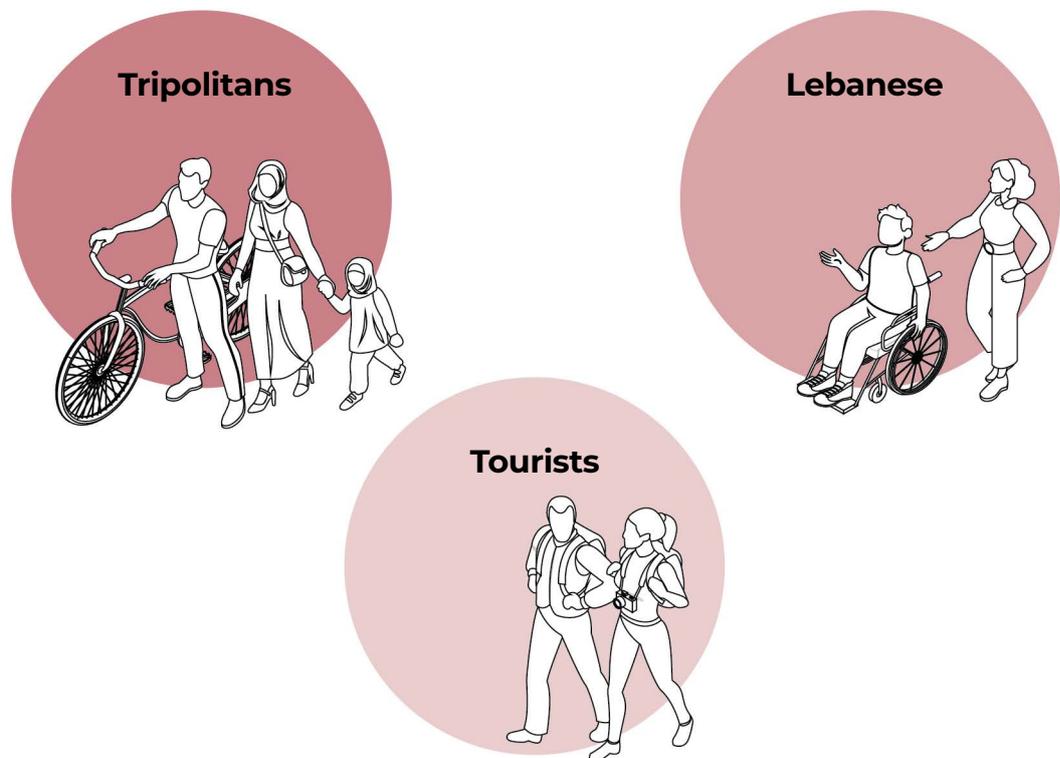




05. Concept & Masterplan

B. Concept Development

Based on the previously conducted analysis, we were able to define specific aims, objectives, and methods of implementation. The main users in question are, in order of abundance, Tripolitans (families, young individuals, seniors, students, and skilled workers), Lebanese visitors, and international tourists. The Tripolitans would be the main users of the site, frequenting the site for the job opportunities it could provide, for the services it would provide, and for leisure purposes. The same would apply to non-Tripolitan Lebanese users, though their main purpose would be leisure. As for tourists, the site's modern heritage presents an attractive trait that would be highlighted with the various functions introduced to the site.

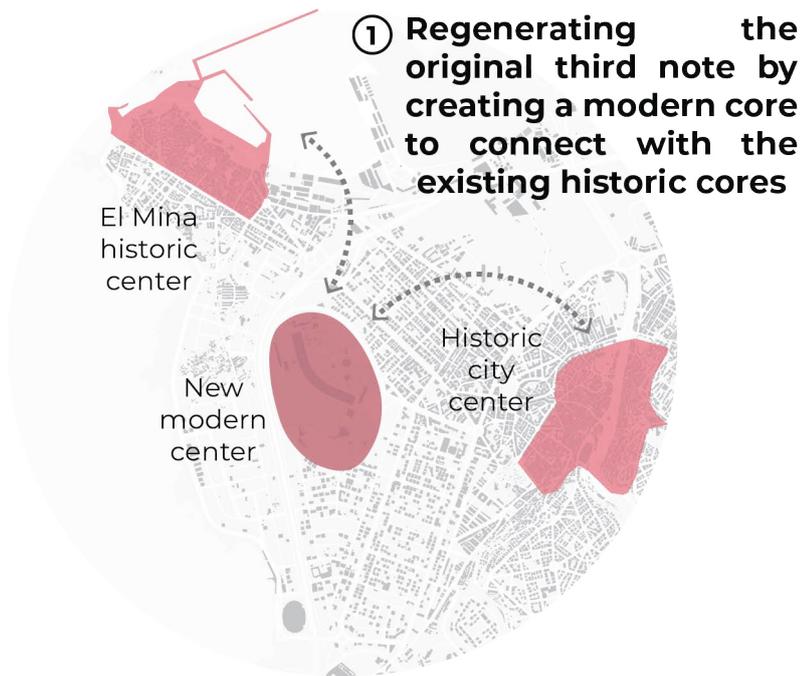


The main aims of the project are

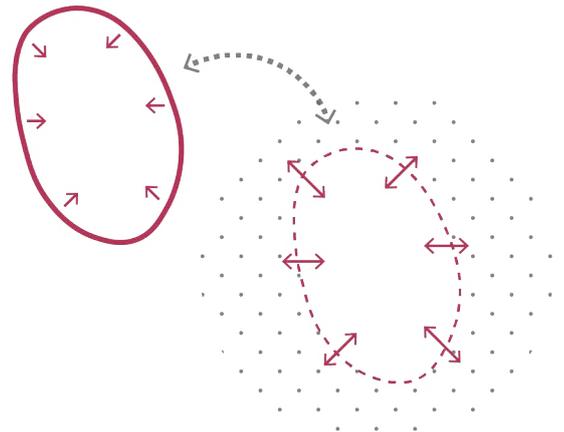
- Create a socio-cultural hub for people to connect in a public space.
- Connect the site to its history and to the history of its context
- Reflect Tripoli's cultural heritage within a modern monument
- Provide the site's livelihood by proposing functions that would meet user needs and generate income.

As such, it is suggested to reuse the Rachid Karami International Fairground as Tripoli's Cultural Fairground instead.

OBJECTIVES



② Breaking urban island effect & connecting to the surrounding



③ Connect to history and community



④ Respond to Tripoli's needs



⑤ Provide the city with green and public spaces acting as the city's breathing spaces



⑥ Encourage active lifestyle by introducing pedestrian pathways, bike lanes, bike sharing, and accessible spaces.



1. Image Sources:

(Left) View of the Fairground from the water tower, at 25m of height. At the start of the works, the site was filled with orange trees. Photo taken by Yves Marchand and Romain Meffre for the Polka Magazine. Retrieved from <https://www.polkamagazine.com/marchand-meffre-sur-les-traces-de-niemeyer-au-liban/>

(Right) Tripoli in the 1940s, surrounded by gardens of fruit and mountains. Photo courtesy of Charbel Meer. Retrieved from <https://x.com/ImadSalamoun/559538544766>

2. Image Sources:

(Left) Amphitheatre from view from the back, October 2023. Photo courtesy of Obsidian Urbex. Retrieved from <https://www.obsidianurbexphotography.com/other/rachid-karami-international-fair-of-tripoli-lebanon/>

(Middle) A view of Tripoli's Fairground, Lebanon February 2, 2023. REUTERS. Photographed by Issam Abdallah. Retrieved from <https://www.reuters.com/world/middle-east/lebanon-hopes-unesco-danger-listing-could-save-crumbling-modernist-fairground-2023-02-05/>

(Right) Tripoli Festival. Photo taken during Ragheb Alam Concert on Tripoli's Fairground,

METHODS OF IMPLEMENTATION



Orange Tree Groves, Tripoli, 1940

Replant Orange Trees¹

Tripoli is often referred to as “Al-Fayha”. This translates to “the fragrant one” in reference to the orange tree groves that used to grow there. Unfortunately, these groves have greatly diminished with the city’s urban expansion. Before this expansion, orange tree groves used to grow on the site where the fairground was built. Some orange trees can still be found on site. As a way to connect the site to its previous history, it is suggested to replant parts of the undeveloped landscape with orange trees to recreate and reconnect to the areas “Al-Fayha” image.



Music festival held on site, Tripoli, August 2024

Reviving Cultural Events and Festivals²

Part of the site includes facilities that can host cultural and social events such as Tripoli’s yearly summer festivals, different musical performances, and so much more. Even though part of the site is closed, other parts are still being used for Tripoli’s many festivals.



September 2016. Retrieved from <https://lebanoninapicture.com/tags/pictures/tripoli-festival-2016>

3. Image Sources:

(Left) Boomerang in Tripoli Fairground. November 2023. Photo by Gianluca Ferriero. Retrieved from <https://www.artribune.com/progettazione/architettura/2023/11/fiera-incompiuta-niemeyer-tripoli-libano/>

(Right) Tailors' Market in Tripoli. December 2020. Photo courtesy of Live Love Beirut. Retrieved from https://www.facebook.com/LiveLoveBeirut/photos/a.451878981519422/5041506625889945/?type=3&_rdr

Next Page:

(Left) Slit in the northern end of the boomerang. 2011. Photo by Georges Haddad. Retrieved from <https://officialbespoke.co/oscar-niemeyers-vision-for-tripoli/>

(Right) Traditional handmade crafts in Tripoli. February 2018. Photo taken by Georges Chamoun. Retrieved from https://www.facebook.com/photo.php?fbid=1530883787029727&id=194533623998090&set=a.240986832686102&locale=en_GB

4. Ayoub Khaddaj, 2022.

Connecting to Tripoli's historic markets and artisanal crafts³

Tripoli is known for its historic souks that represent not only an attraction to tourists but also a means of living to many. Due to the saturation of the historic city center in terms of space and markets, illegal markets were built over the Abu Ali River. Providing market spaces within the site could help solve the need for market places as well as ensure community engagement.

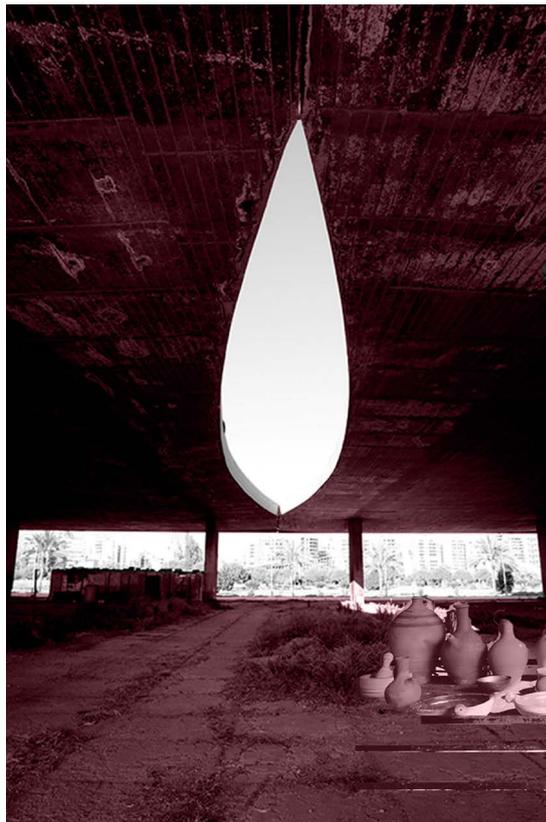
These historic souks are also often accompanied by craft workshops. Back in 2022, Handicrafts made up nearly 5% of Lebanon's GDP (Gross Domestic Product), with 431 different crafts earning nearly 20M USD per annum and attracting more than 1000 craftsmen. This sector helps families and individuals achieve reasonable earnings despite the situation, reduces levels of joblessness, and helps women improve their living conditions. Nonetheless, governmental efforts towards supporting this industry should be increased.⁴ Unfortunately, this sector does not have a lot of data and studies revolving around it. The community of craftspeople are currently considered a vulnerable community with more than half living below the poverty line. This

5. *Nicole Hamouche, December 2020.*

6. *(Left) Lebanese Pavilion. August 2024. Photographed by Nour Tabet, 2024.*

(Right) Fahim Coffee in the Hill Square, Tripoli, 1970s. Retrieved from <https://www.facebook.com/mohamad.abouwahid/posts/1079858772170352/>

community is also largely made up of individuals over 50 and has a high feminine representation. The different types of crafts present in Tripoli include blowing glass, pottery, copper, woodwork, embroidery, perfumed soap, and more. In addition to providing workshop spaces and market spaces for such crafts, providing technical and vocational centers. Based on a policy paper issued by Samir Kassir Foundation and The Friedrich Naumann Foundation for Freedom (FNF), the need for such educational centers is highly recommended in addition to the creation of local exhibitions and festivals dedicated to crafts, in addition to creating permanent crafts fairs in Tripoli or Beirut.⁵

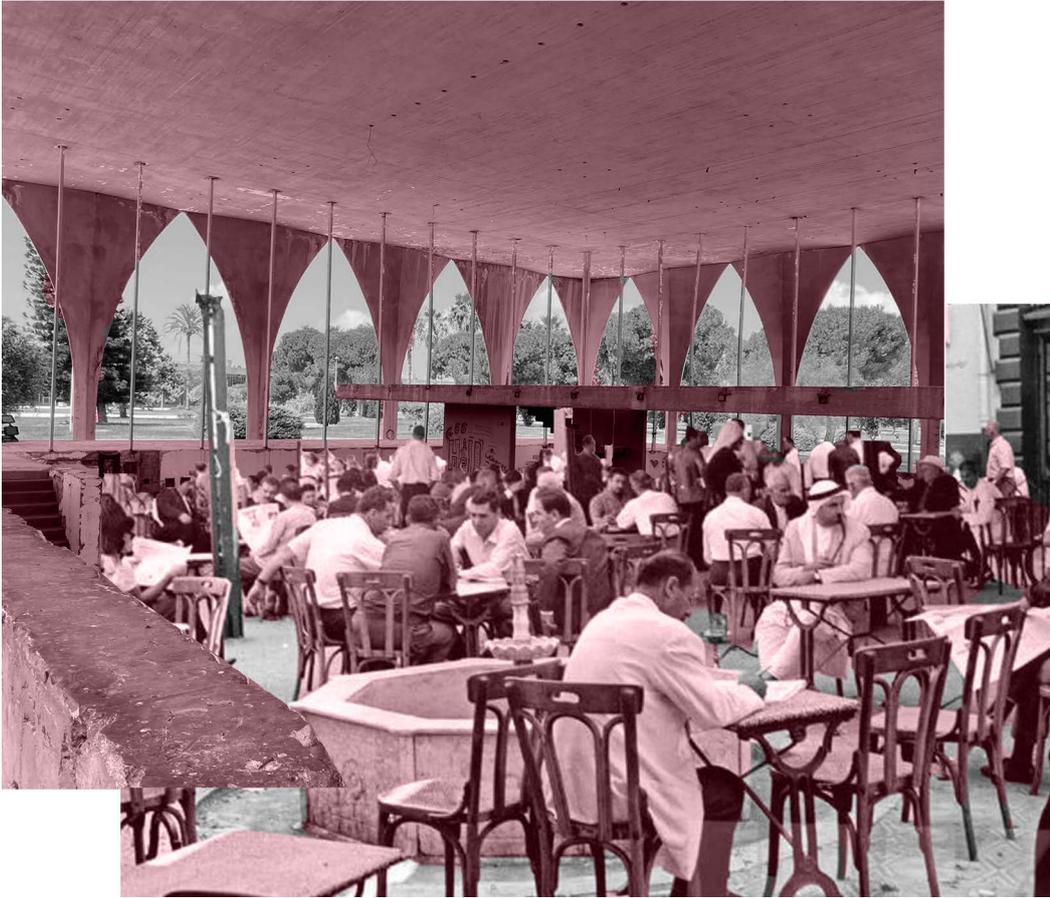


Traditional basket weaving, Tripoli, 2018



Creating Social and Cultural Spaces⁶

Part of the Lebanese culture revolves around gathering with people to eat together, grab coffee together, talk, and even play table games. As a result, a large part of the economy depends on services revolving around this lifestyle. Food and Beverage services as well as facilities providing various types of social activities are always in demand. It is quite common to find people in Tripoli, as in the country in general, meeting up at a café, locally referred to as “Ahwe” to play traditionally-played games such as Backgammon, discuss local news and politics, and engage in other such activities.



Fahim's Coffee in the Hill Square, Tripoli, 1970s

After having performed a SWOT analysis, defined objectives for the site and assessed the city and the site's needs, it was clear that, though it is not recommended to revive the site's previous function of an international fairground, it can still function as Tripoli's Cultural Fairground, bringing together Tripoli's past, present, and future. A connection with the city's historic centers, historic orange tree groves, cultural crafts and markets, and the city's people is established. The site would not only provide a public cultural fairground, but bring to life public green spaces of local plants, respond to the city's various needs, and foster both private and public functions. It is important to balance between both private and public functions in order to ensure the future of the site in terms of financial investment and preservation incentives.

As such, our main aims are to turn the site into Tripoli's Cultural Fairground as well as create a space that acts as the green and social lungs of the city

Based on this approach, the following categories of functions were created to incorporate within the site.

Socio-Cultural

An integral part of the lifestyle of people in Tripoli and in Lebanon in general is the social aspect of life. In addition to that, the cultural

customs and activities of Tripoli are among the aspects of Tripoli local people take pride in just as visitors seek to enjoy. In this category, various forms of activities and functions dedicated to enriching the social and cultural life are developed.

Craft & Trade

As previously mentioned, Tripoli is well-known for its various crafts that are still being made by craftsmen and artisans. Although these crafts are a means of income for some, the number of people working in these crafts is in decline. Certain government and local efforts have been made to support this trade such as encouraging vocational and technical training as well as creating a syndicate for craftsmen. The following category focuses on supporting local crafts by providing workshop and market spaces. In addition to that, vocational and technical training is provided in order to encourage such crafts as well as provide the needed skills for students who wish to become skilled labor and increase their chances in finding a job and financially sustaining themselves.

Agri-Culture

Prior to the construction of the fairground, the site used to be known for the presence of orange trees that filled the area with their scent. In the hope of reviving the land's historical scent and essence, part of the site is dedicated for the development of agriculture. However, the aim of this category is not only to develop the land for agricultural purposes, but also to instill a sense of culture, awareness, and community contribution and accessibility. To ensure the feasibility of this idea, we turned to the example of *Orti Generali* in the south of Turin. This project, launched in 2010, involved gardeners, residents, schools, and associations in a four-year participatory planning process that aimed to create an urban garden park in a former industrial area where informal gardens were the norm. During the project's early years three educational gardens and two neighborhood collective gardens were created while an educational path was launched. In 2023, *Orti Generali* was the winner of the National Landscape Award for that year and represented Italy at the Council of Europe Landscape Award. Today, the project hosts 170 gardens over nearly 12 hectares. This project achieved social inclusion, allowing gardeners with limited economic resources to contribute with a little of their time in return for gardening space. Vulnerable individuals also have specific pathways designed for them with social and employment reintegration programs with dedicated collective and educational gardens. Not only so, but the project grew to become a social integration project with green spaces for sharing and socializing and kiosks to sell the produce from the gardens.⁷

The below illustrates the community gardens available to the public for rent purposes. As can be seen, the prices vary in square meters and based on client needs.



(Left) Image Source: "Coltiva UN Orto." ORTI GENERALI, August 27, 2024. <https://www.ortigenerali.it/coltiva-un-orto/>.

Examples of Orti Generali Community Gardens System

Area	Cost per month (€)
Individual or Family-Owned (SQM)	
50	25
75	35
100	45
Lesser-Income Users	
50	5 +10hrs of work/month

(Right) "Gardens in Cascina Piemonte (Orti Generali)." Oppla, October 7, 2022. <https://oppla.eu/casestudy/26297>.



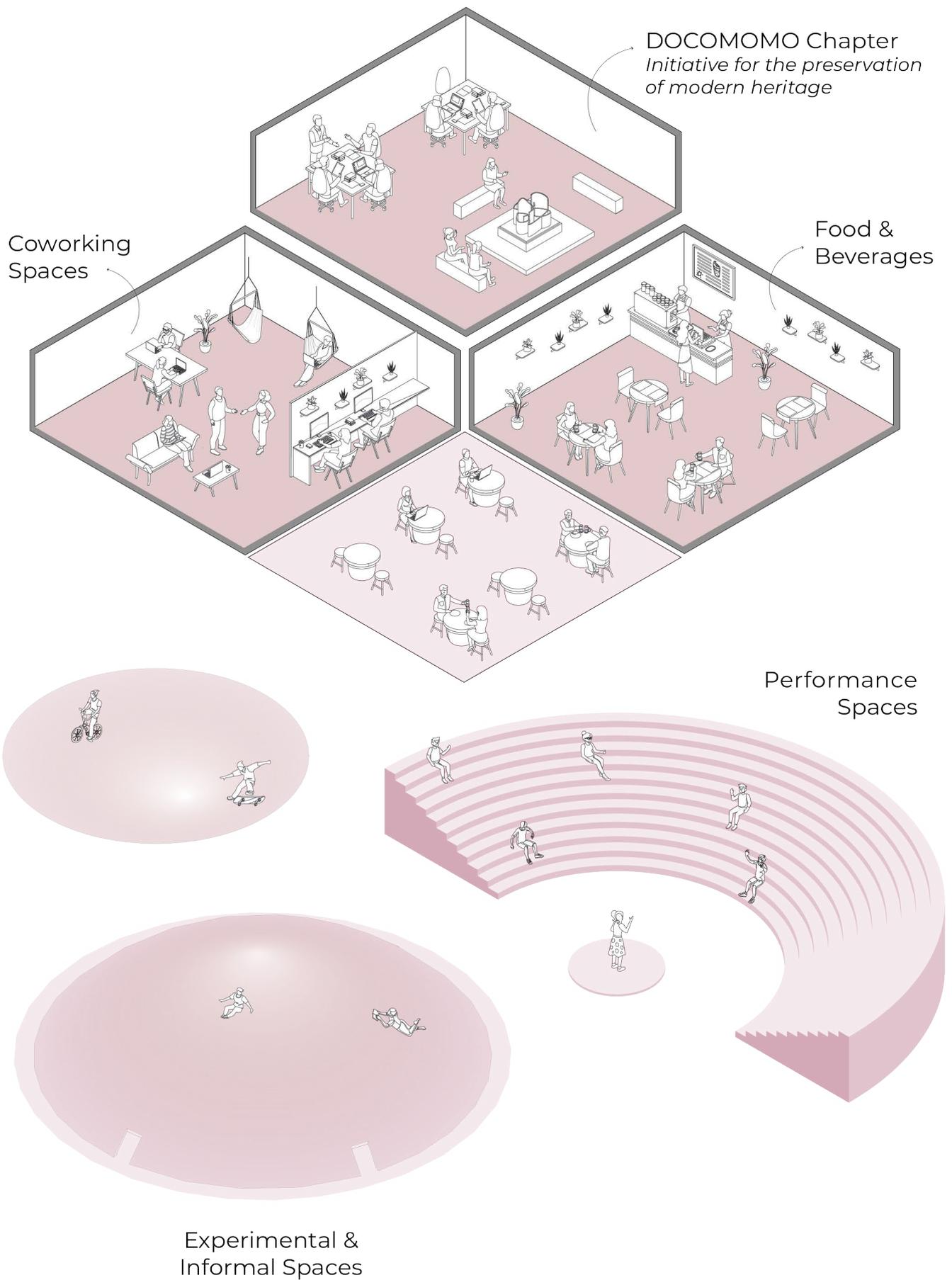
Wellness

Providing public health facilities that meet both mental health and physical health needs is the main aim of the following category. Free public physical activity spaces such as playing courts are provided. In addition to that, converting the hotel and its facilities into more publicly accessible services is one of the actions we aim to implement. Although ideally reverting the hotel back into its original design is desirable, the financial and environmental cost makes as well as the damage done by the hotel's intervention make it an unattainable possibility. However, instead of maintaining the hotel with its exclusive services, we aim to convert its sports facilities into public sports facilities as well as provide physical health services such as public health clinics. In addition, we aim to provide mental health services such as group or individual therapy. As such, instead of keeping a hotel with services exclusive to its customers, wellness services are instead offered to the community, meeting their health needs as well as ensuring the facilities' longevity.

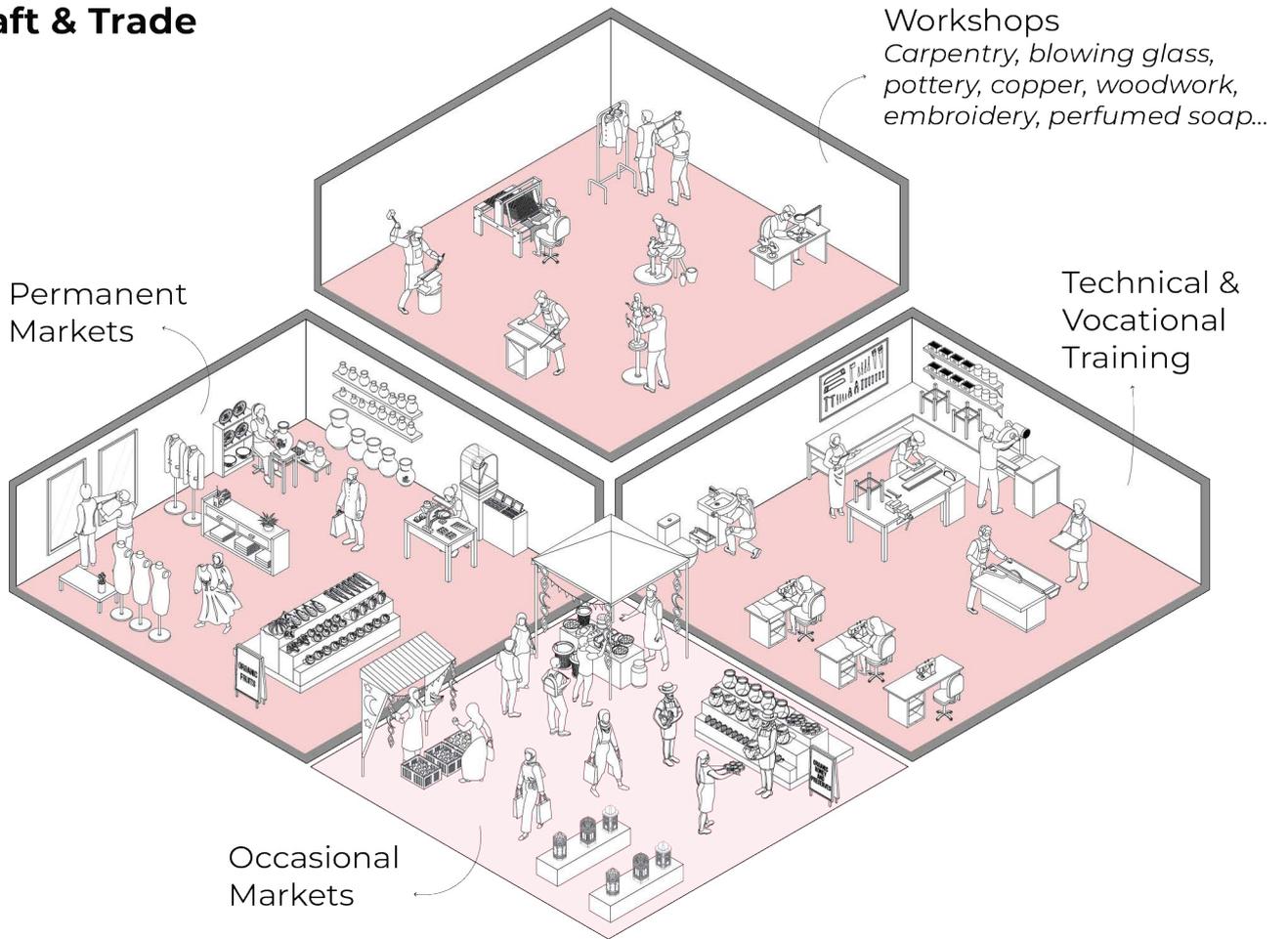
Services

The following category refers to services such as information and administration services, public facilities, accessibility, bike sharing and bike lanes, pedestrian access, and car parking.

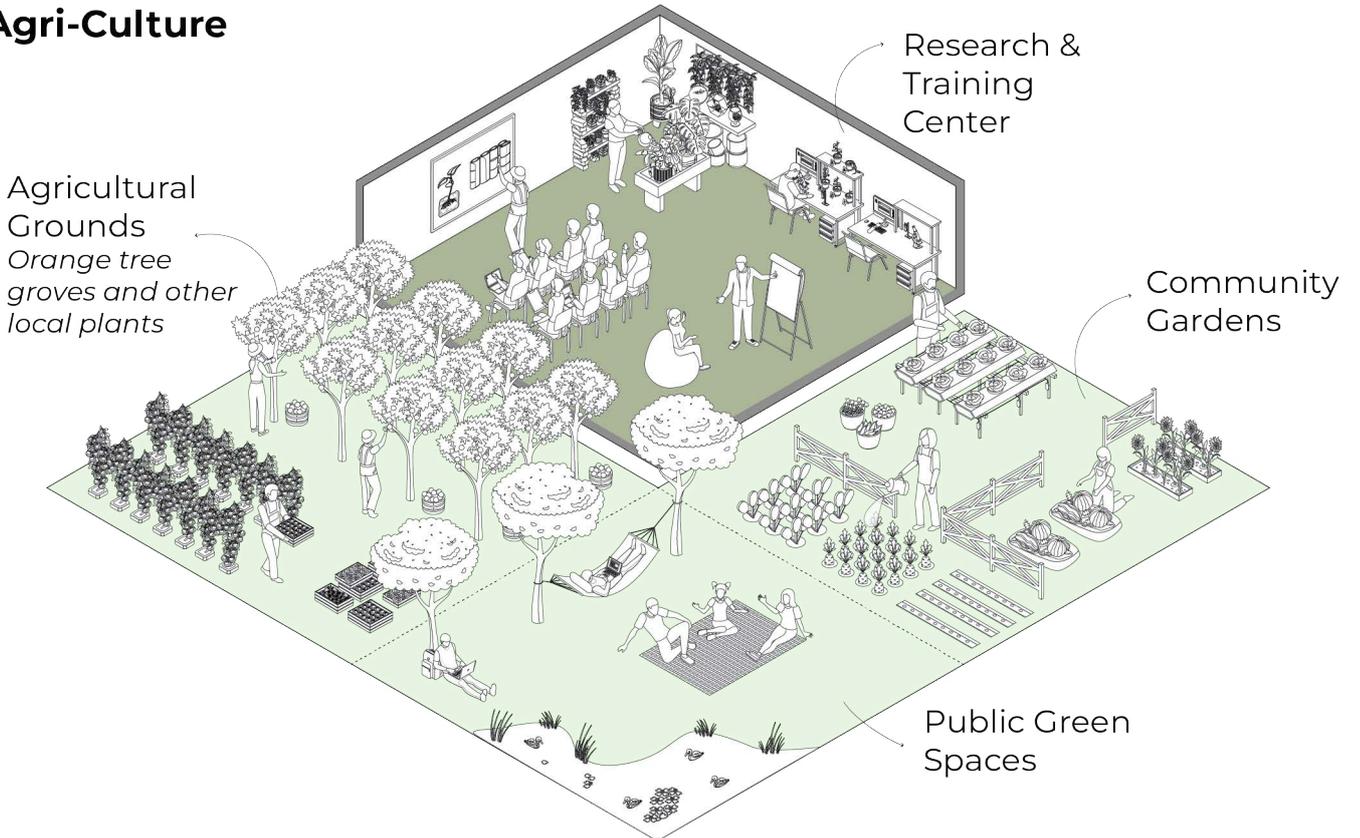
Socio-Cultural



Craft & Trade



Agri-Culture

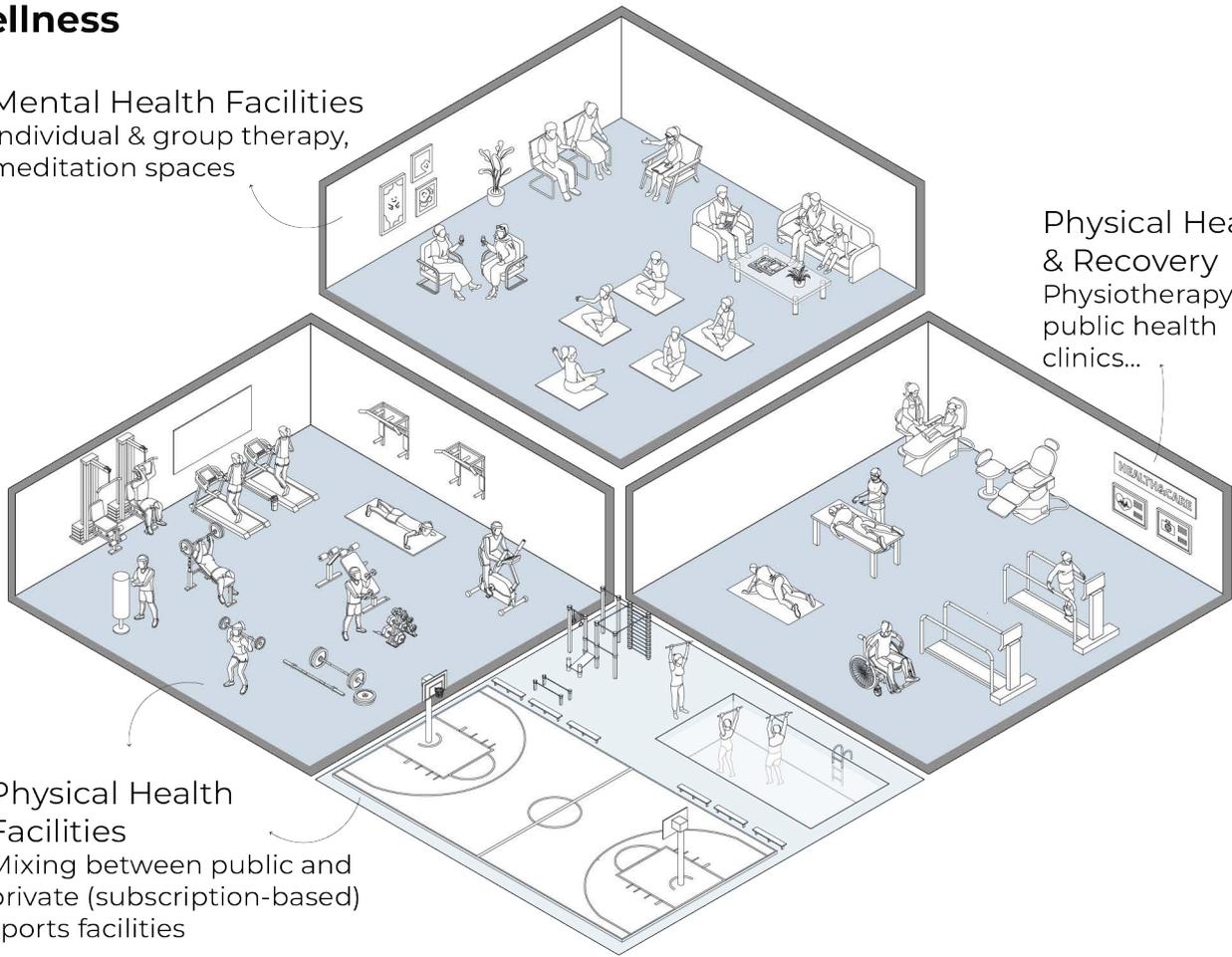


Wellness

Mental Health Facilities
Individual & group therapy, meditation spaces

Physical Health & Recovery
Physiotherapy, public health clinics...

Physical Health Facilities
Mixing between public and private (subscription-based) sports facilities



Services

Accessibility

Information & Administration Services

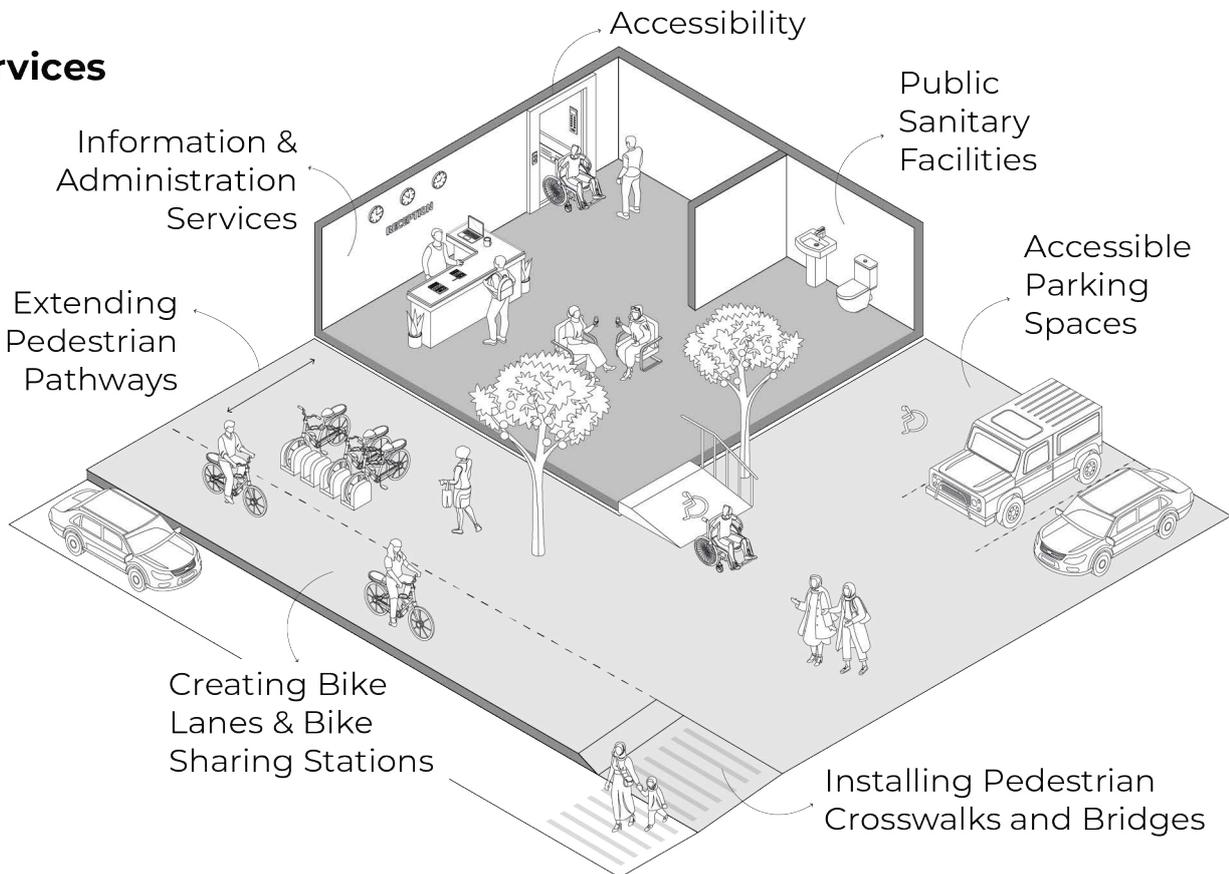
Public Sanitary Facilities

Extending Pedestrian Pathways

Accessible Parking Spaces

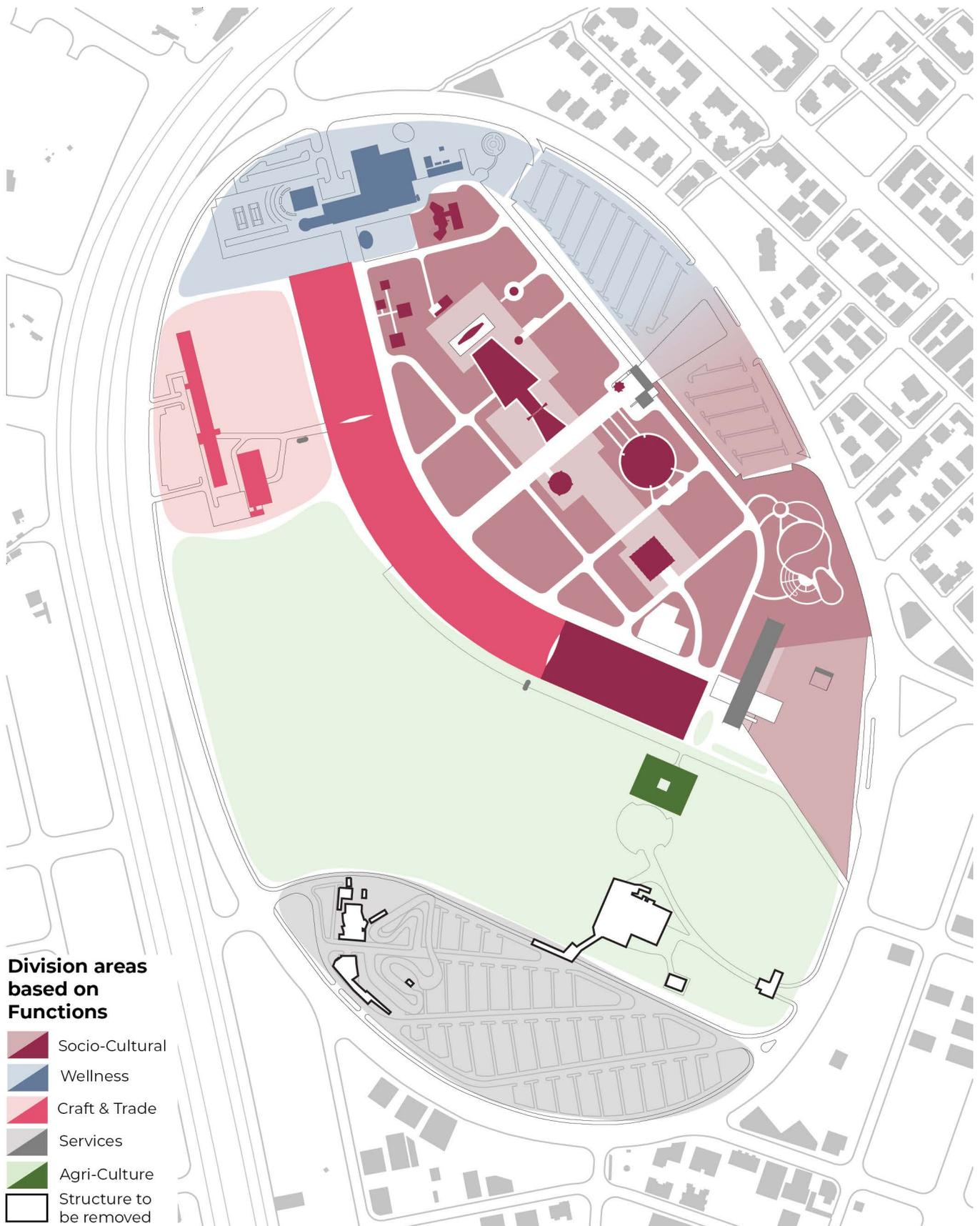
Creating Bike Lanes & Bike Sharing Stations

Installing Pedestrian Crosswalks and Bridges

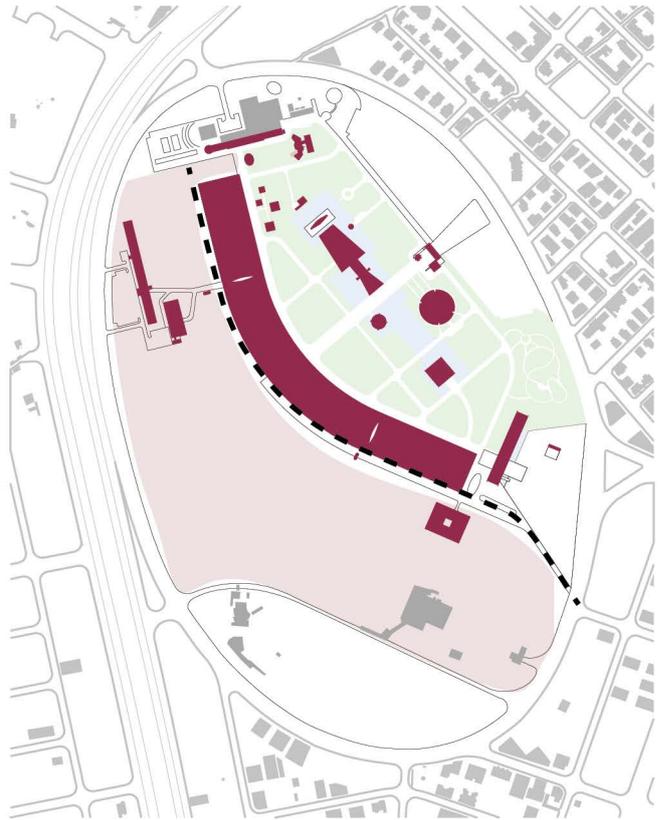


05. Concept & Masterplan

C. Masterplan Development

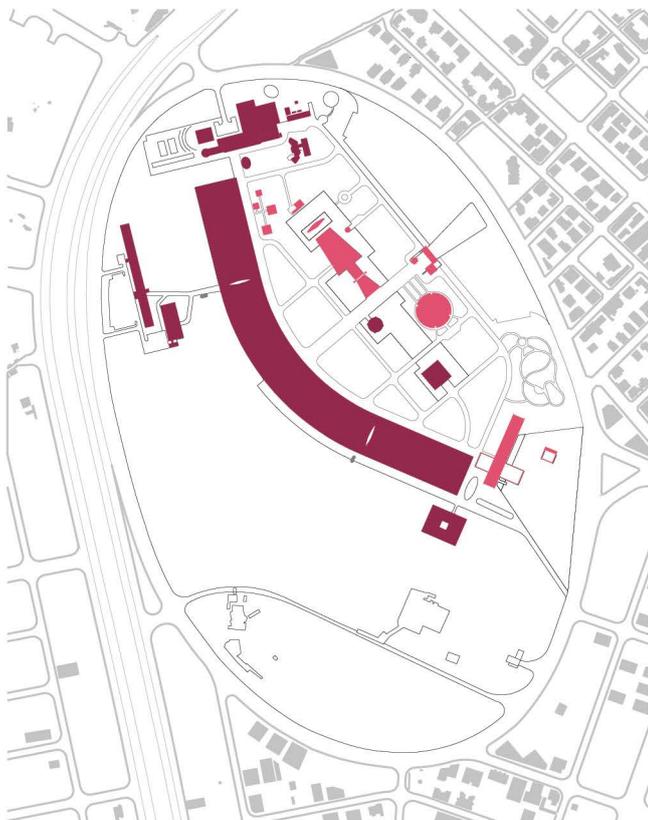


The initial steps in designing the masterplan were dividing the land and structures based on functionality. It was quite evident that the south-western side of the site was underdeveloped in terms of landscape while the north-eastern side remains in its as-built state and is relatively well-maintained. Moreover, the north-eastern side of the site has a higher concentration of structures, forming a cluster of modern “archaeological” ruins. Dividing the site based on function was not a haphazard decision, but was based on the assessment of the individual structures, their original intention, the city’s needs, and the connectivity between the different proposed functions. After functions had been decided, the site’s design was made in such a way to complement the existing while providing an added value.



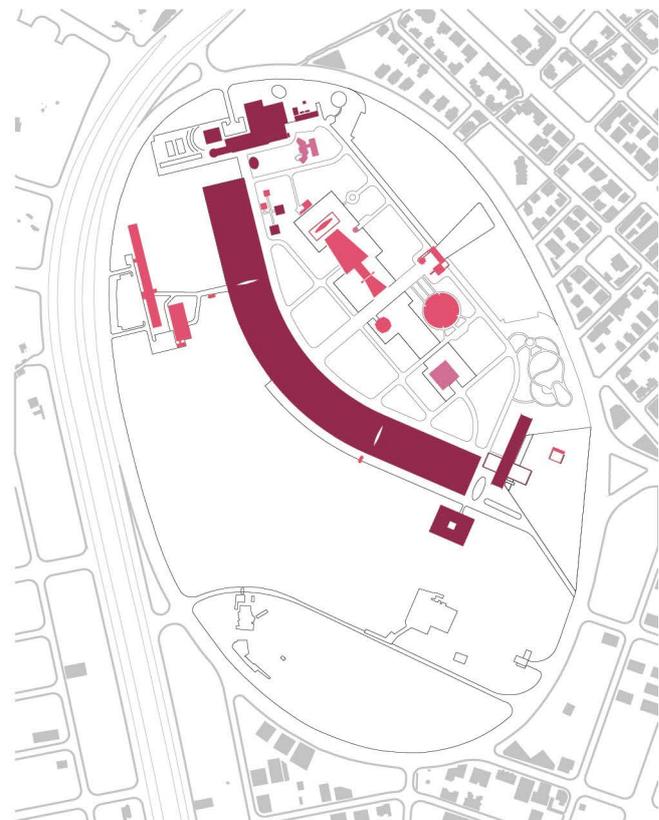
Land Division

- Original Building
- Later Addition
- Original Landscape
- Undeveloped Landscape



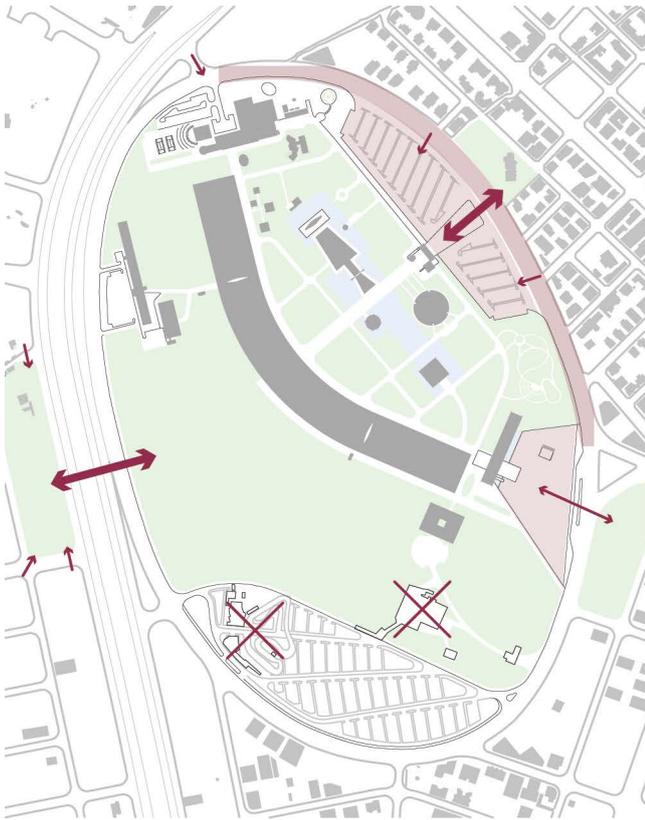
Function

- Maintained Function
- New Function

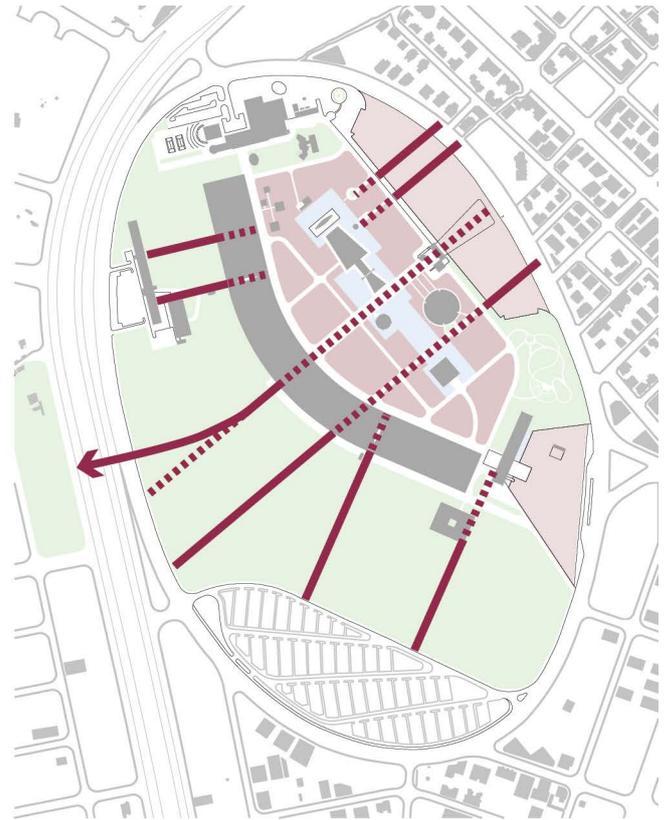


Ownership

- Semi-Public
- Public
- Private



1. Breaking the Island: Connecting with the surrounding context and anticipating potential development.



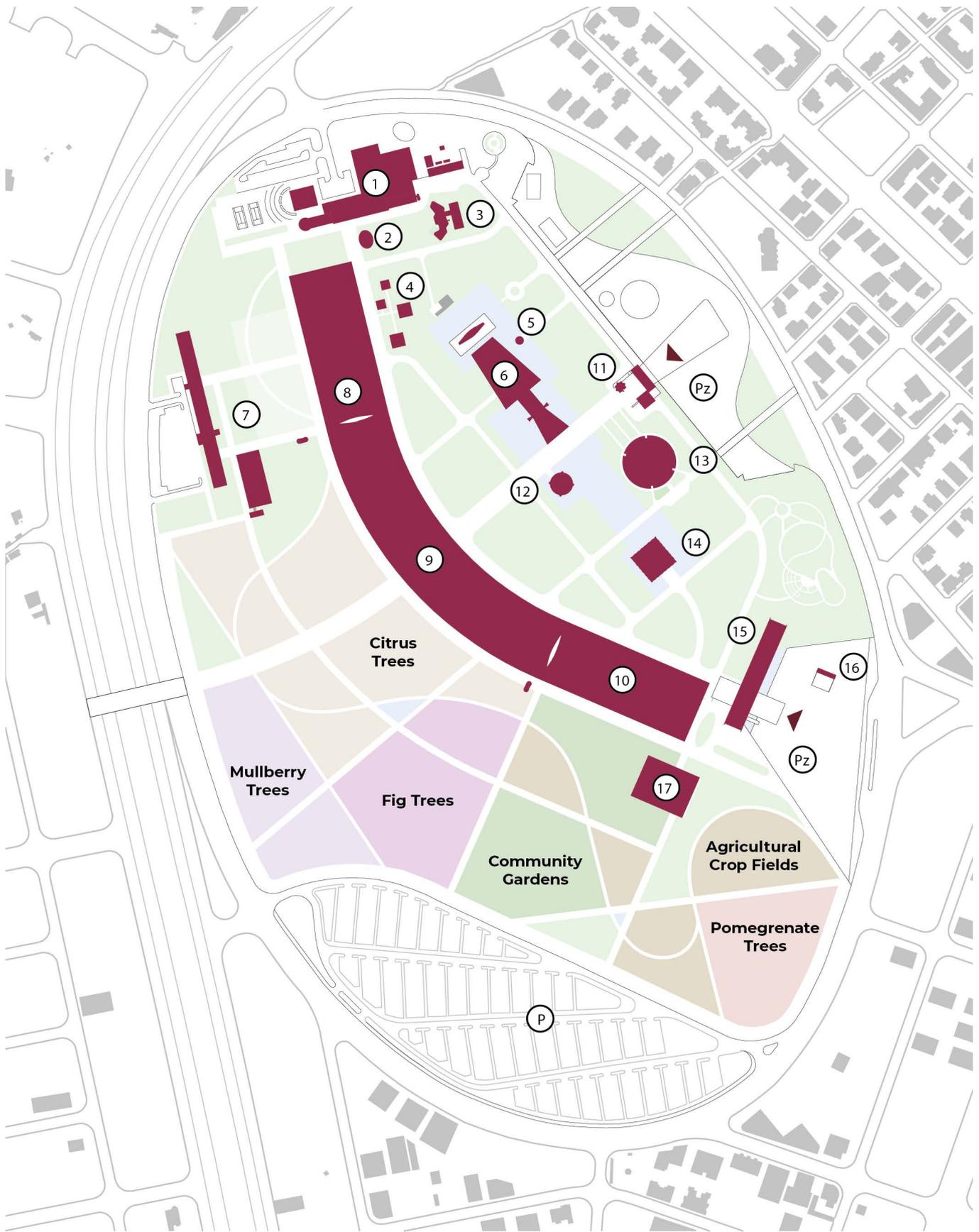
2. Extending the Axis: Developing the different zones based on existing axis to create connectivity with Niemeyer's design and his intentions.



3. Drawing Parallels: Developing new paths based on existing ones.

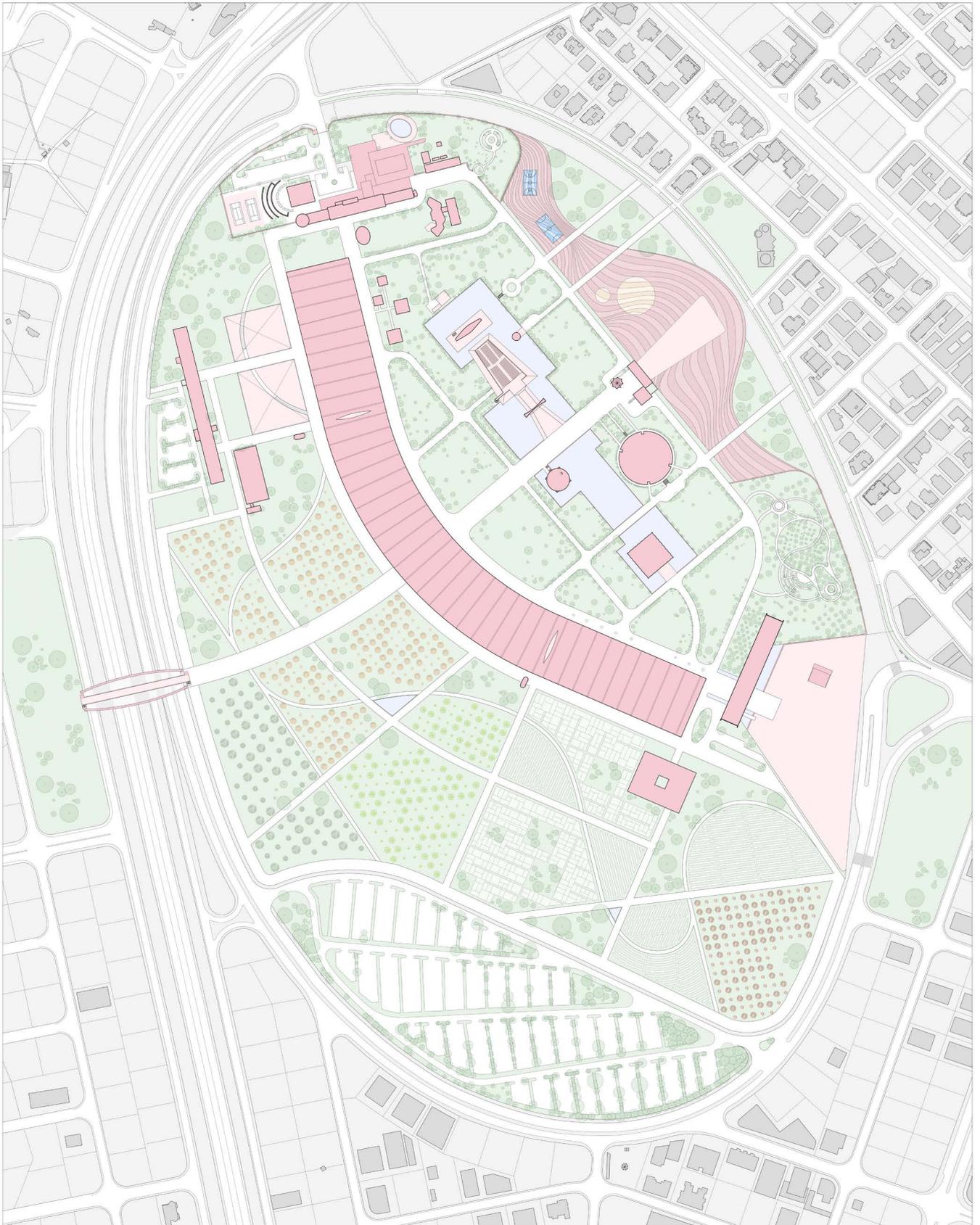


4. Exploration Path: Creating a new homogeneous path to show new perspectives of the site.



Functional Distribution

- | | | | |
|---------------------------|----------------------------------|--------------------------|-------------------------|
| 1. Wellness Center | 6. Open-air Theatre | 11. Manege | 16. Information Center |
| 2. Meditation Shell | 7. Technical & Vocational School | 12. Site Exhibit | 17. Agricultural Center |
| 3. DOCOMOMO | 8. Workshops | 13. Experimental Theatre | P: Parking |
| 4. Snack Stands & WC | 9. Markets | 14. Coworking Cafe | Pz: Piazza |
| 5. Water Tower Restaurant | 10. Food&Beverages | 15. Administration | ▲ Entrance |

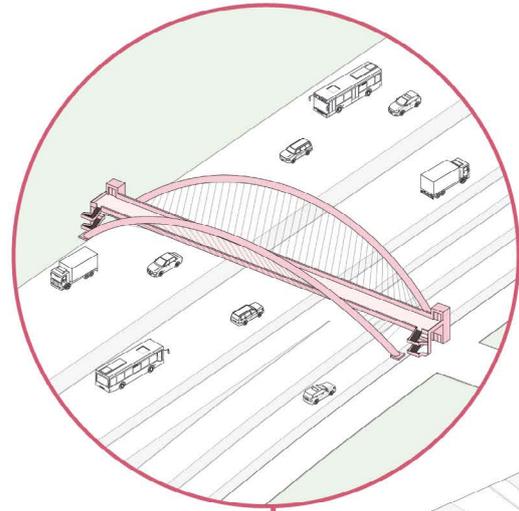
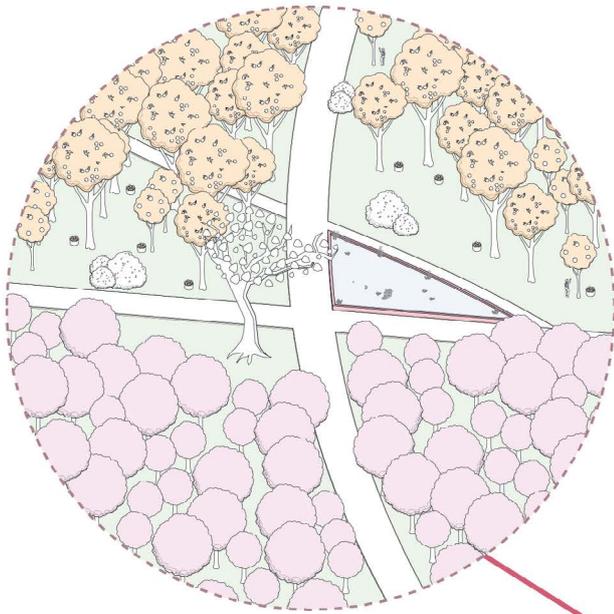


Masterplan

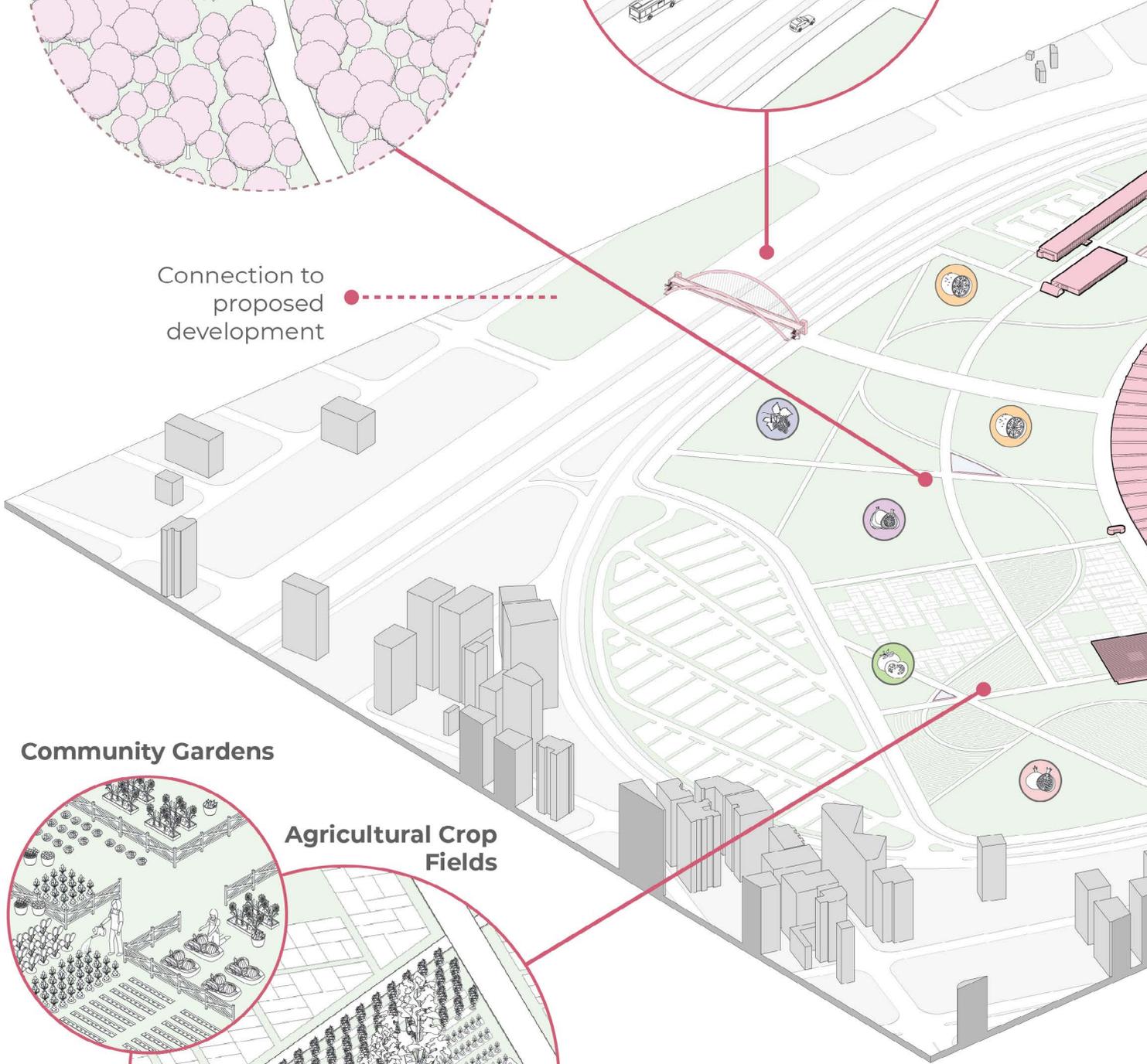


Orchard Fields

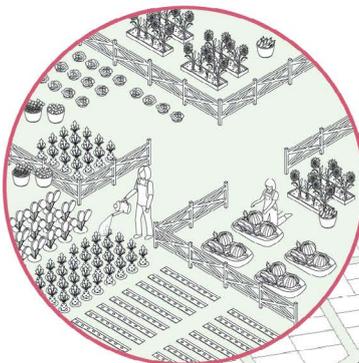
Pedestrian Bridge to Connect



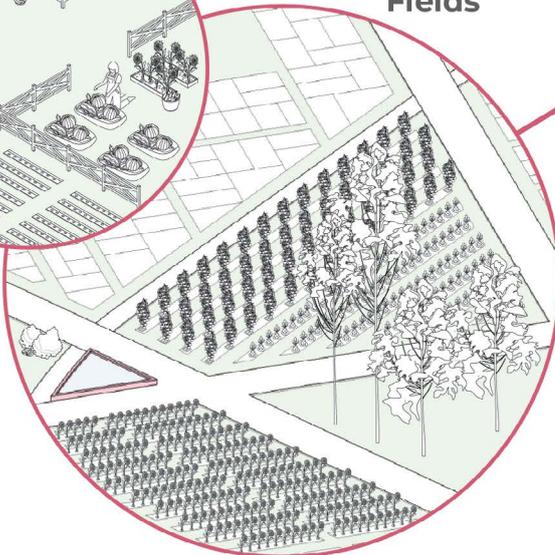
Connection to proposed development



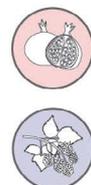
Community Gardens



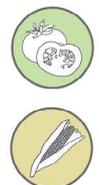
Agricultural Crop Fields



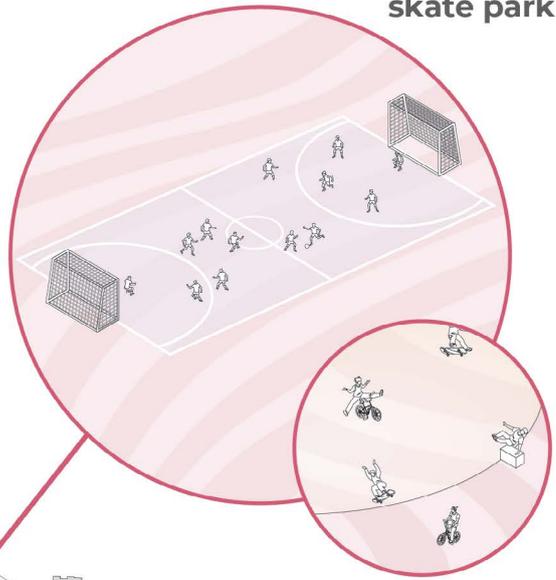
Orchards



Agri-Fields

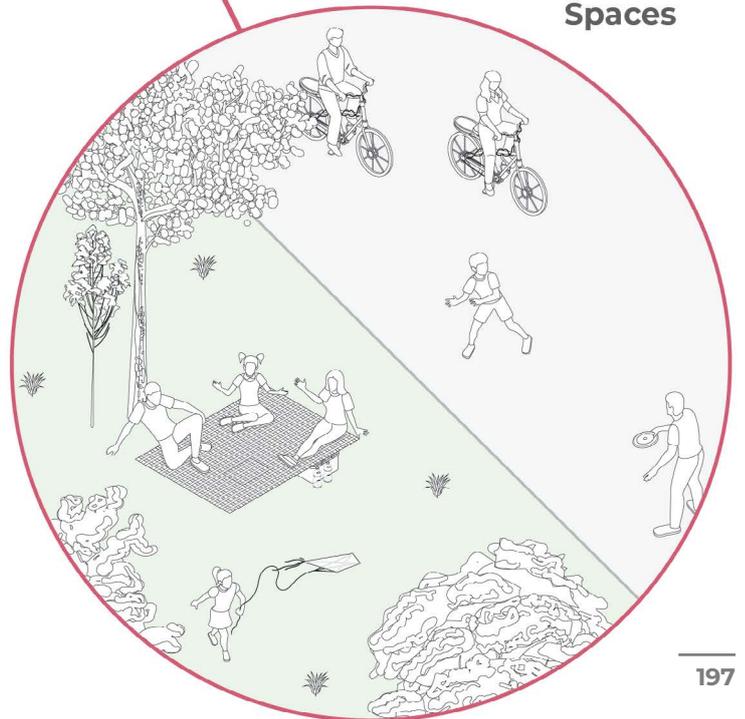


Activity Spaces including courts & skate park



Connection to mosque & its square

Green & Public Spaces



Connection to park facing main entrance

Lebanese Pavilion

Boomerang

Two developed examples



North-Eastern Entrance and Piazza



North-Eastern Entrance and Piazza



North-Eastern Piazza



North-Eastern Piazza



Orchards



Orchards



Up: Rachid Karami International Fairground. Image source: Kobayashi, Keigo. "Tripoli Knowledge & Innovation Centre." NoRA Architecture Home, October 29, 2024. <https://www.nora.global/project/garage-house-x23kj-a44fa-bzhkh-pkfs-2846x-7x49e-ndnpc-93xml-aj2ef-2kjaw>.



Proposed Intervention

05. Concept & Masterplan

D. Restoration Philosophy & Techniques

After having examined the different challenges the site's many structures face and after having established a general approach to the site's potential, it was important to include the approach of the restoration of the buildings in the conceptual approach of the site. The aim of the following chapter is to develop a general guiding philosophy for the treatment of the buildings before diving into a more technical approach to treating material decay, especially in what concerns concrete damage.

Philosophy

Although the site has witnessed the traumatic history of the civil war, and although the site has been a victim of neglect modern heritage has faced, we believe the traces of history should not be fully erased. Over the past decades, people who have come to visit the site have come to know it through its scars. Their perception of the place have created a spirit and has shaped the site's story. There is always beauty in the abandoned that invites people to come visit, snap photographs, and leave a trace. Erasing the passage of time would be erasing the memory of the place. As such, we have chosen to treat, when possible, elements of the site as modern "archaeology". However, in order to render the site functional, ensure its longevity, and restore Niemeyer's vision, the deterioration in certain parts need to be addressed, especially when it comes to structural damage and missing elements. As such, this modern "archaeology" will not be treated exactly as ancient archaeology, but will rather be catered to the following site, its proposed uses, and the potential of the various spaces.

A great example of a project that has maintained and highlighted these scars is the Beit Beirut also known as the Yellow House or the Barakat House. This house was originally built in 1924 in Beirut, Lebanon, by the Lebanese architect Youssef Afandi Aftimos. Eight years later, two floors were added by architect Fouad Kozah. The house became a pivotal location during the war and bears its scars to this day. The restoration works done on this structure managed to preserve its war-torn history.

The Yellow House was built with a neo-ottoman style and gained its name from its ochre-colored sandstone. This four-stories high building is made of two bourgeois-style buildings and a roof terrace. The building's central axis is entirely open toward the sky and leads to the main entrance and staircase. Meanwhile, a passageway underneath the building gives way to a rear courtyard. Raised columns decorated with ironwork join the two buildings together.

This complex stands at the intersection of Independence Street and Damascus Street. During the civil war, the Damascus Street was part

of what was known as the “green line” which separated East and West Beirut. The building served as a control post and sniper base during the civil war (1975-1990). Not only did this building benefit from a strategic location, but its open architecture and varied shooting angles served military purposes that allowed control over the “Sodeco Crossroads”!

1. Beit Beirut, 2016
2. Roman Robroek, 2024

After the war was over, the Yellow House was planned to be demolished before local cultural conservationists protested to prevent its destruction, fighting for its architectural and historical value. Led by architect Mona Hallak, a group of activists managed to raise enough public awareness to save the building. In 2003, the government initiated its renovation process to transform it into a cultural center and museum. After some delays, the project was finally completed in 2016. The transformation works made sure to maintain the scars and traces left by the civil war, even highlighting the structural downfalls of the building. The photographs below highlight the sensitive restoration works performed.²



Figure 182 Internal courtyard facing the entrance. Author of the photograph is unknown. Image source: <https://www.bamleb.com/guide/museums/beit-beirut>.

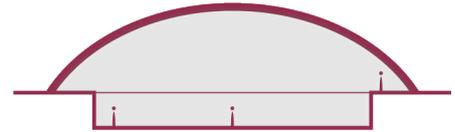


Figure 183 Figure 2. Inside Beit Beirut. Original damage by war and time is preserved. Instead of fixing structural damage in a way to restore things as they had been, new structural interventions were made distinct while damages were kept intact. Photographed by Roman Robroek, April 12, 2022. Retrieved from <https://romanrobroek.nl/i-photographed-the-beit-beirut-building-in-lebanon/>.

With this being said, our intention to highlight the traces of time remain. Though the scars left by the civil war are not as abundant as the ones found in Beit Beirut, we still wish to highlight the story of the passage of time and events while bringing value to the modern heritage value of the site. In order to do so, we organized the site's structures into the following categories

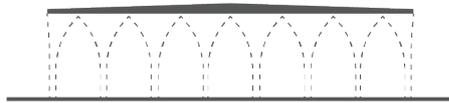
1. Pure Shell

Restored shell while maintaining aged appearance
Restored original function



2. Inhabited Shell

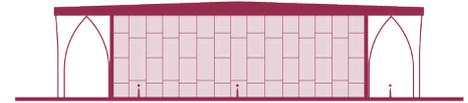
Restored shell while maintaining aged appearance
New function



a. Inserted



b. Reinhabited



c. Extended



3. Maintained Shell

Shell already restored and in relatively good condition
New function has already been operating



a. Maintained



b. Repurposed

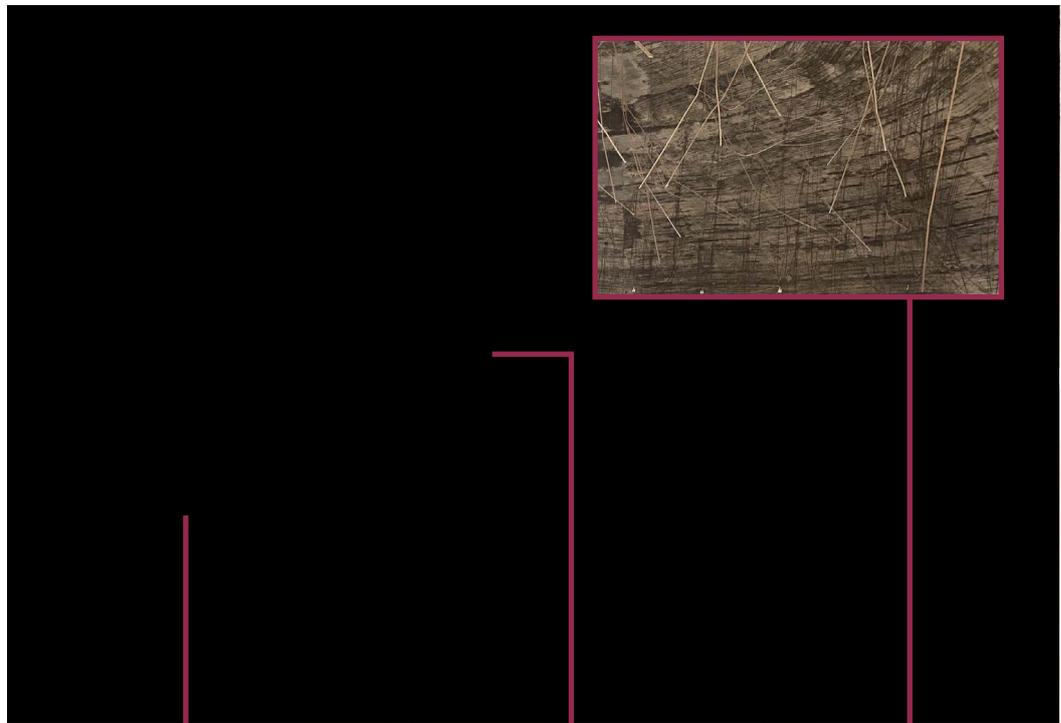


Original or existing condition
New function

1. Pure shell: the following structures would maintain their original function while maintaining the aged appearance of concrete. New fixtures and furnishings would be installed in order to render the structures functional, merging between new furnishings and fixtures while still respecting original design intentions.
2. Inhabited shell: the following structures would acquire a new function while maintaining the aged appearance of concrete. New fixtures and furnishings would be installed in order to render the structures functional while merging between original design intentions and new interventions.
 - a. Inserted: inserted functions would be placed in their own shell within the existing shell
 - b. Reinhabited: reinhabited functions would inhabit the existing shell, merging between the aged aesthetic of the shell and the new added furnishings and fixtures.
 - c. Extended: extended functions would be dealt with similarly to reinhabited functions. The main difference is the provision of expansion the space through the addition of extensions that respect the value of the place.
3. Maintained shell
 - a. Maintained: These structures have already been restored and still hold a function. The renovations made at the time somewhat respect the integrity of the design and would only require no to minor changes.
 - b. Repurposed: These structures have already been restored and hold or have held a function that is to be changed. The renovations made at the time do not respect the integrity of the site's modern heritage. However, due to high costs and questionable feasibility of reversing the intervention, the proposed solution is to simply repurpose the site and avoid further damage.

In most cases, the buildings will be treated as shells to be inhabited by original or new functions. For example, The Experimental Theatre holds scars from its unfinished state as well as the war. Bullet holes can be found on the exterior surface of the dome, steel provisions for a dropped ceiling can be seen hanging, and structural stability issues have resulted in the closing of this structure from public visits. In this case, we encourage the structural rehabilitation of the dome as well as addressing the problems that cause future deterioration such as water infiltration. However, when it comes to the bullet holes, we encourage to leave the bullet holes intact unless they are deep enough to cause water infiltration or other problems. If the steel bars hanging from the ceiling do not cause potential safety risk, we also encourage keeping them as part of the building's unfinished story. In this case, the building

is proposed to maintain its original function. As such, other than treating the decay and their causes, the main intervention to be made is the installation of equipment and fixtures, railings, doors, and furnishing.



Installing safety railings and other safety provisions

Reinstalling fixtures and openings

Maintaining unfinished appearance if the steel rods do not create a safety risk and where the decay does NOT cause further damage, such as discoloration



Maintaining the traces of the bullet holes while mitigating further damage. Photographed

by Maya Hmeidan, 2024. Retrieved from UNESCO Conservation Management Plan, 2024, p. 142.

Similarly, the open-air amphitheater needs major structural repairs just as the original seats have been replaced by fiberglass chairs. In this case, after performing structural repairs and performing the necessary restoration, the open-air theatre would be able to regain its original function. The seats in this case would be replaced with the original concrete bleachers arrangement.

An example of a shell inhabited by new functions is the Boomerang. In this case, we propose a similar approach followed by the Experimental Theatre. Where structural issues are at hand, we propose restoring the structure to its original intention and design. Addressing the poor

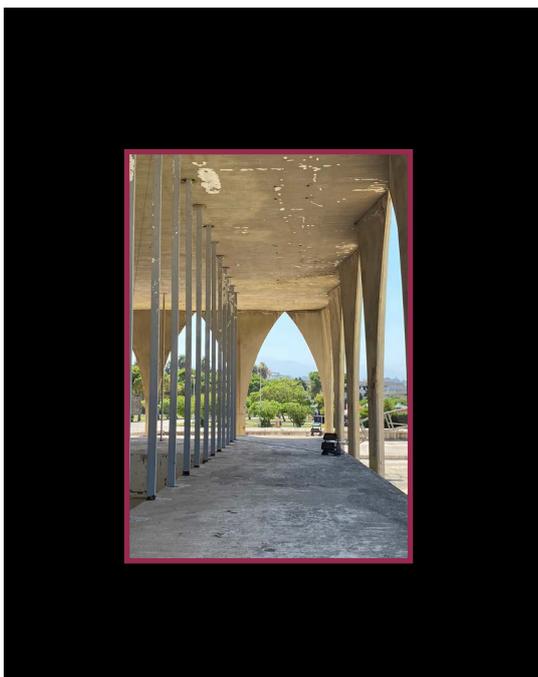
state of the roof is also an urgent issue especially in terms of water proofing. The problematic issues of decay are to be tackled while the aesthetic ageing of concrete is proposed to be maintained. As for the new functions, we suggest inserting boxes in the Boomerang's shell that can be dismantled in the future if need be while at the same time respecting Niemeyer's vision of the boomerang. This intervention can be further explored in Chapter 06. Architecture.



Inserting new functions as boxes to create the notion of a box within a box.

Boomerang or Great Canopy. Photographed by Maya Hmeidan, 2019, Retrieved from UNESCO Conservation Management Plan, 2024, p. 74

Another example of a shell that has been inhabited by a new function is the Lebanese pavilion. Our proposal suggests converting the space into a café and coworking space. Unlike the Boomerang, inserting a box to carry the new function would be detrimental to the integrity and design intention of the pavilion. Instead, seeing that the proposed



Keeping the aged concrete aesthetic while reviving the original intentions of the facade. Photographed by Nour Tabet, 2024.

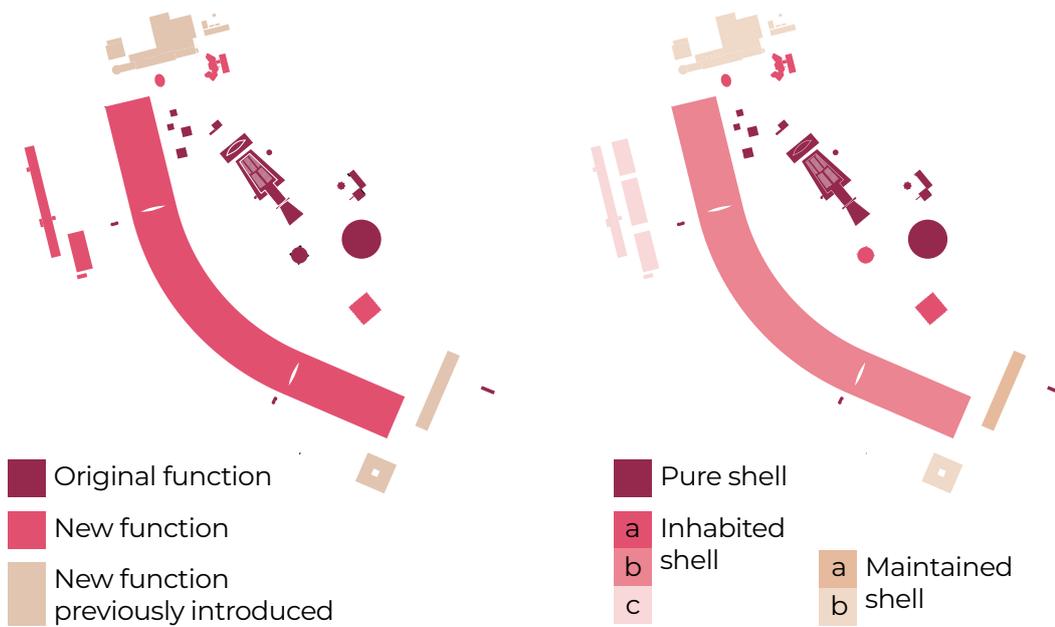
function requires indoor spaces, the glass façade is suggested to be restored based on the original design. In addition to new furnishing and fixtures, some minor additions have been made to the interior of the space. A ramp is installed on top of the mid-level stairs in order to provide accessibility while maintaining a reversible nature. The walls of the stairwell and bathroom cores are also slightly extended while maintaining visual connection and overall symmetry. In terms of materiality, it is suggested to maintain the concrete's ageing aesthetic while tackling sources of decay and any possible threats. As for the concrete floor, seeing that work will be done to ensure

the leveling of the floor, and to install the necessary plumbing and electro-mechanical provisions, a new flooring finish is to be applied. The choice in flooring material is made to reflect the Lebanese culture. This intervention can be further explored in Chapter 06. Architecture

Finally, when it comes to buildings such as the previous firehouse, customs, and administration building, similarly to the Lebanese pavilion, the new functions would be placed in the existing shell, respecting the original design intentions especially when it comes to the exterior façade. However, seeing that the proposed vocational and technical school may, in the future, need expansion, its extension has been included in the masterplan of the site. In this case, the shell will witness an addition. However, in order to avoid overpowering the existing site, and in order to create a dynamic and humble relation between the elements of the site, this expansion is suggested to take place underground, expanding not only the building, but expanding its dedicated landscape area.

The last two approaches to the structures of the site are with regards to the structures that have already been restored and are currently still in use or have been until recent years. This is mainly in reference to the Entrance Portico and the previous Collective Housing. In what concerns the Entrance Portico, restoration works have maintained the integrity of the exterior while changes have been made to the interior with a more post-modern approach. Seeing that the state of conservation of this building is in good shape and the function of the building is maintained, we would recommend that no changes are made to this building. As for the previous Collective Housing that has been turned into the Quality Inn Hotel only to be closed over the last couple of years, we would instead suggest repurposing the facilities. The intervention of converting the collective housing building into a hotel has resulted into damaging the integrity of the building as well as expanded the building to introduce facilities. Although, ideally, restoring the collective housing building to its original sensitive design, the cost of such a decision is high just as the feasibility of this reverse intervention is questionable. Instead, we propose performing maintenance work on the structure as well as converting the complex into facilities that are more useful to the public instead of the exclusive functions of the hotel. The proposed function, as previously mentioned, would be a wellness center with sporting facilities and clinics open to the public via memberships or health-based needs.

The different approaches to the various buildings can be seen on the following maps.



3. Claudio Piferi, 2018, p. 262.

4. Chapter 04.D. State of Conservation and Decay Analysis

5. Above 80-90%. Although the humidity in Tripoli varies from one month to the next, depending on the season, it is not uncommon for the humidity levels to reach 80% or more.

After establishing a framework of intervention for the different buildings, an understanding of the techniques involved in the restoration works, especially with regards to the reinforced concrete, is studied.

Restoration Techniques

In the early 1900s, reinforced concrete technology gained great popularity due its mechanical qualities, its sculptural abilities and the innovation in architectural styles it was capable of. The modern movement was one of the main advocates of concrete, using this material to highlight expressive spaces and visions. Oscar Niemeyer was one of many other architects including Le Corbusier, Frank Lloyd Wright, and Zaha Hadid, who utilized and experimented with this material to achieve their visions. However, many of the architectural works at the time developed serious problems of deterioration only a few years after their construction. While product innovations today allow the mitigation of defects in fair-faced concrete, the knowledge on the restoration of this material is still limited.³

When it comes to the Rachid Karami International Fairground, several problems were noted on the overall site,⁴ many of which are the result of various problems such as water infiltration, lack of maintenance and neglect, structural damage and more.

Before diving into the different solutions in restoring fair-faced concrete, it is important to understand what the causes are and how to mitigate them. Among the many causes for the deterioration of concrete in the case of Tripoli's fairground is the exposure to concrete to water through rainfall, high humidity,⁵ and water infiltration. Due to the presence of free water inside the concrete, such factors inevitably lead to the corrosion of steel reinforcement as was previously seen, create freeze-thaw damage, as well as other damaging phenomena.

6. Paola Piffaretti and Giacinta Jean, 2018, p.11

7. Paola Piffaretti and Giacinta Jean, 2018, p.12

8. Patches of concrete breaking off

9. Cap Arreghini, 2017, p.7

10. Cap Arreghini, 2017, p.7

11. Kate Fann, 2023

Moreover, certain deficiencies are inherent to concrete.⁶ This includes

- adding more water than is needed for cement to harden. While the excess water in the concrete is drying, interconnected capillary pores start to form. Water and chloride ions on the surface then penetrate through these pores, damaging the mechanism.
- carbonation and corrosion of steel. This natural and slow chemical reaction occurs in concrete when lime in the free water reacts with carbon dioxide in the air to create calcium carbonate. Due to this process, the alkaline environment that usually protects the steel reinforcement from deterioration is lost and the rebars begin to corrode.⁷ The environmental factors that usually favor this occurrence is humidity higher than 80% and/ or pH less than 9. In these cases, moisture found in the structure adheres to oxygen and causes the iron to oxidize and form rust. This rust also leads to volume expansion leading to the spalling⁸ of the surface covering the concrete.⁹
- corrosive action of salts. Due to the presence of water-soluble salts, especially with the vicinity of the site to the Mediterranean sea, corrosion is a risk. These salts enter through pores and cracks found on the concrete, creating swellings, further cracks, and surface breakage.¹⁰

Although we wish to preserve the ageing appearance of concrete, it is still crucial to intervene on decay that causes further degradation or presents a risk to the structure. While discoloration, for example, only affects the aesthetic appearance of the concrete, other forms of decay such as steel corrosion and present a greater threat. The methods to be applied in this case are as follows.

After inspecting the surfaces and performing structural assessments, areas in need of intervention through structural or rehabilitative methods vs. those that need simple cleaning and protection would be identified.

Cleaning and surface preparation then follows. The concrete is cleaned from dirt, grime, and other contaminants by using a specialized concrete or a mild detergent followed by rinsing with water.

Loose and flaking concrete, dust, and debris found in cracks are all removed using a chisel or wire brush. Although, usually, stains and discolorations are dealt with using an acid wash, we only recommend using this if necessary. Otherwise, we intend to keep the ageing and discolored appearance of concrete.¹¹

Throughout the cleaning process, it is important to address the different forms of deposits that have formed on the surface including efflorescence and mold. To deal with the efflorescence, light cases can be removed through dry-brushing, moderate cases through water and mild solutions. Heavier cases of efflorescence can be removed through a diluted vinegar solution or a dilute acid solution as an acid-

based cleaner. In this case, after the etching process, the concrete is to be rinsed with water and then neutralized using baking soda. Finally, to prevent further crystallization, it is important to use an effective concrete sealer to prevent salt from building up.¹² As for the mold, it can be removed through a vinegar solution. If it were strong, some may opt to use bleach. However, this may present safety risks especially in closed areas.

The following step would be crack and surface repair. Though small cracks may not cause immediate damage, they can lead to water infiltration. As such, in order to keep the aging aesthetic of concrete, including the hairline cracks, we suggest the application of deep-reaching hydrophobic treatment. As for larger cracks and corroded steel, a more elaborate process is needed.

Deep-reaching hydrophobic treatment helps restrict moisture infiltration to avoid corrosion and other possible damages. This technique consists of applying water repellent products on the surface in sufficient amounts. These products are absorbed into the concrete through capillary suction and settle on the pore surface. The greater the permeability, the more the products penetrated, allowing vulnerable concrete to be protected as well. The products need to be inserted into the surface layer at around 5mm so that water and humidity from the exterior are properly repelled. Seeing that the hydrophobic products do not create a waterproof film, free water in the concrete can still evaporate. This treatment is also colorless, meaning it allows us to keep the aged aesthetic of the concrete. It is important to note that in recent years, it has become common to apply a thin epoxy-based coating which forms a waterproof film on the concrete surface. This is something we wish to avoid since the migration of water from inside the concrete to the outside is blocked with such an intervention, leaving the humidity locked inside the concrete. Moreover, the epoxy-based protections create a plastic-like appearance unfavorable to the overall aesthetic desired.

When it comes to heavily cracked surfaces or surfaces contaminated with salt, the ideal method is hydro-demolition through the use of a high-pressure water jet. In the case of steel bars with advanced corrosion, the surface covering them need to be uncovered and integrated eventually. Using reprofiling mortar¹³ made of gravel and sand similar to those of the original construction, the missing areas close to the concrete surface would then need to be reconstructed. To recreate the pattern of the formwork used in the original design, wooden formwork with similar patterns are to be used in this step.

12. *Ghostshield, June 7, 2021*

13. *Reprofiling tests are done to match the original concrete color and texture*

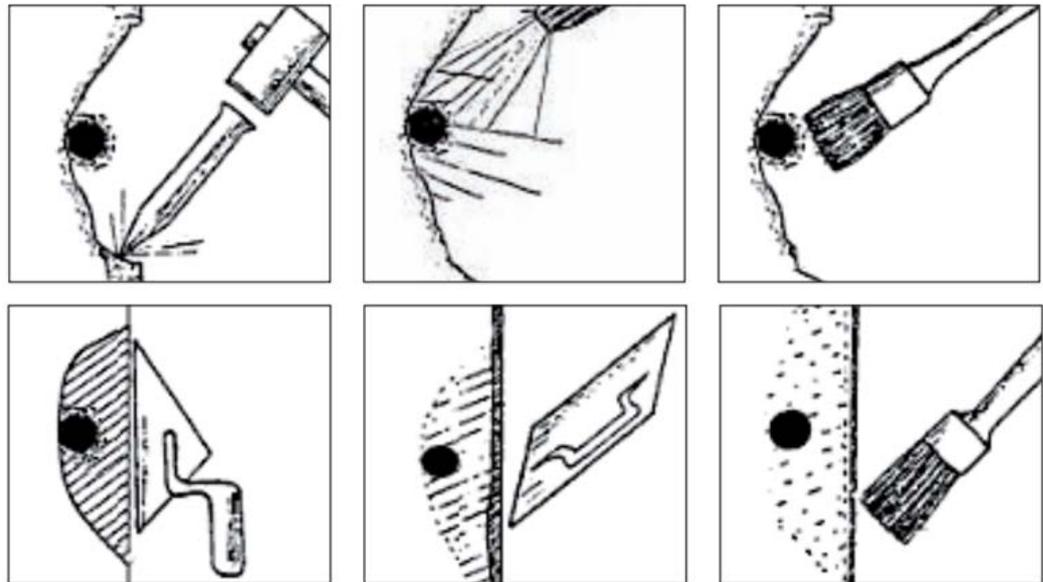


Figure 184 Hydro-demolition and reprofiling mortar. Source: A06 Protection and Rehabilitation of Concrete. Portoguardo, Italy: Cap Arreghini, September 2017. https://www.caparreghini.it/wp-content/uploads/2017/09/06_PROTECTION-AND-REHABILITATION-OF-CONCRETE.pdf, p.22.

After addressing the damaged parts of the concrete and steel, it is important to apply surface protection, especially since several of the damages are the results of inherent problems in concrete notably with exposure to water. By applying a water protection on all surfaces exposed to water, infiltration into concrete is prevented, enhancing its durability. This surface protection is to be reapplied every 1-2 years or 5-10 depending on the type.

Other preventative measures are also suggested, keeping in mind that they do not act on water infiltration. As such we suggest the application of these methods in parallel to the use of surface protection. Corrosion inhibitors that re-establish a protective film on steel rebar's surface. Another possible method is an electrochemical one such as recreating an alkaline environment to stop steel corrosion through realcalinisation. It is important to apply protection after this. Otherwise, the carbonation process will recur.¹⁴

Similarly to the aesthetics of the aging concrete, the scars left by bullet holes is an aspect we wish to preserve. However, since water infiltration is an issue, our recommendation is reprofiling mortar in the bullets holes that have deeply penetrated the concrete. This new mortar would not reach the level of the original concrete surface, but rather a slightly lower level to preserve the shape of the bullet hole. Then, deep-reaching hydrophobic treatment would be applied.

Finally, in what concerns the reflective pools, besides performing the necessary restoration works, waterproofing and surface treatment is necessary as well as long-term management. Moreover, the intervention of waterjets at the entrance portico has disrupted the reflectivity of the water pools, it is important to remove such interventions and respect the original intent of the pools.

Conclusion

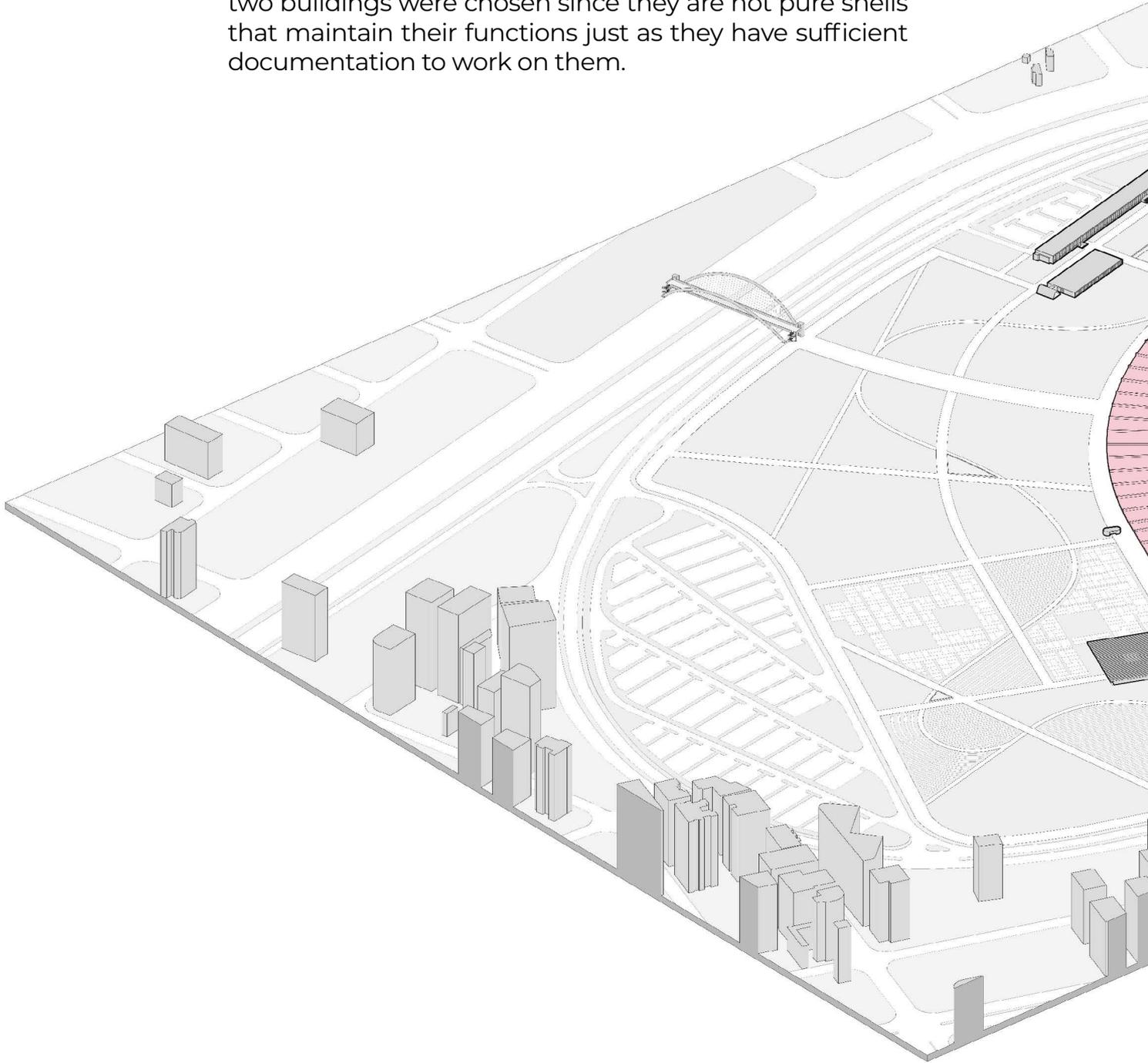
Overall, we can categorize the types of interventions on the site as follows:

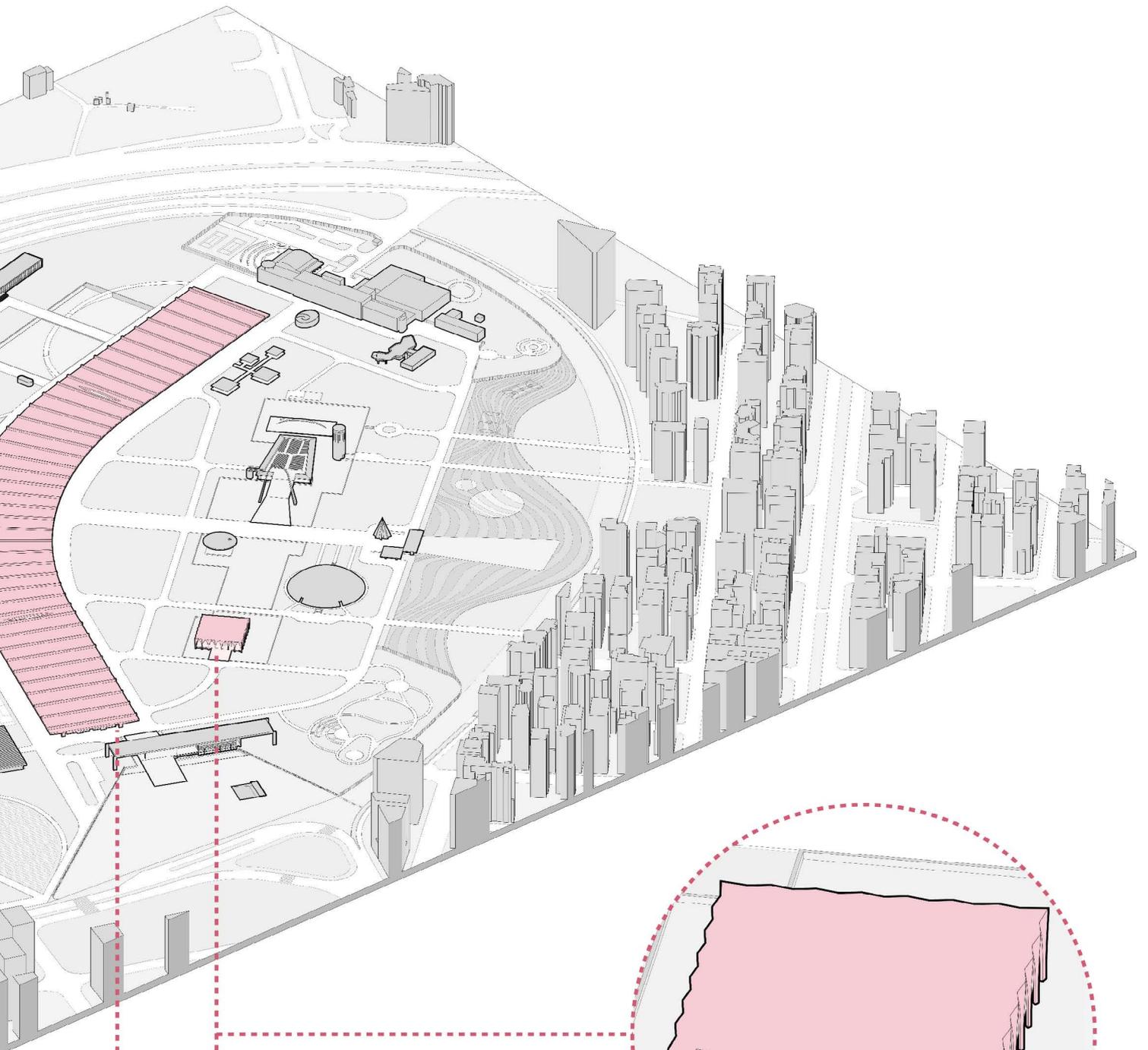
1. Pure shell
2. Inhabited shell
 - a. Inserted
 - b. Reinhabited
 - c. Extended
3. Maintained shell
 - a. Maintained
 - b. Repurposed

In terms of repair and conservation, the methods applied combine techniques of damage repair where needed while maintaining the aged or scared value of the concrete. Protection and prevention of further damage is important in all cases in order to mitigate further damaging consequences.

06. Case Studies

The two buildings chosen as case studies are the Boomerang and the Lebanese Pavilion. The reason behind choosing the following two buildings is to highlight two different approaches to the “inhabited shell”. The Boomerang applies the insertion of functions within the shell, in other words, a shell within a shell, while the Lebanese Pavilion reflects the approach of a reinhabited shell. Moreover, these two buildings were chosen since they are not pure shells that maintain their functions just as they have sufficient documentation to work on them.





Lebanese Pavilion

Boomerang

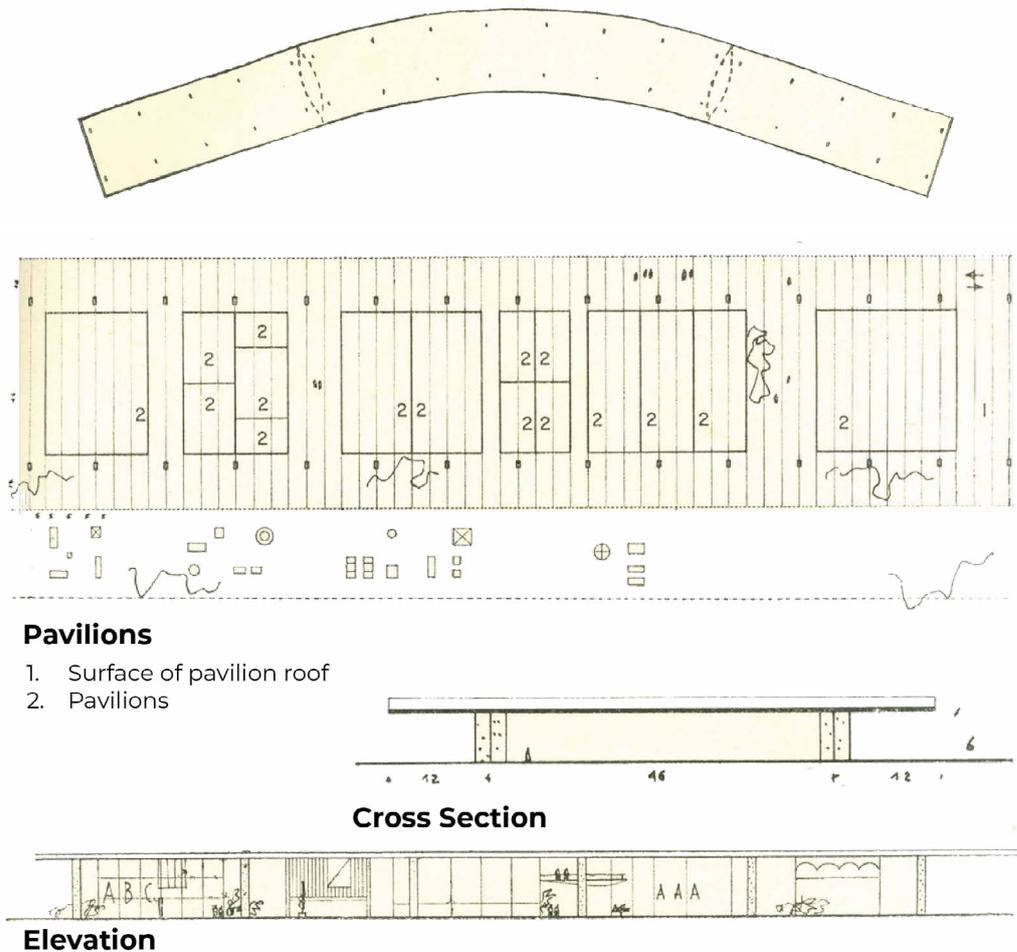
Two developed examples

06. Case Studies

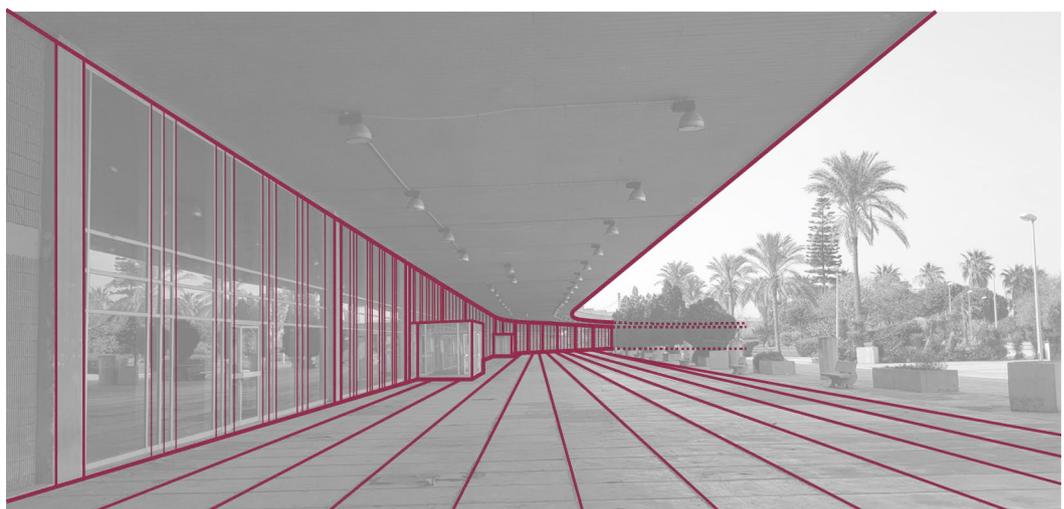
A. Boomerang

In Niemeyer's original designs for the boomerang, the intention was to use the canopy to host the different international exhibitions anticipated. The divisions followed several modular systems distributed between the columns holding the roof. The façade was meant to feel dynamic despite its large span.

*Sketches of Canopy
by Oscar Niemeyer.
Niemeyer, Oscar,
September 1962,
p.28.*

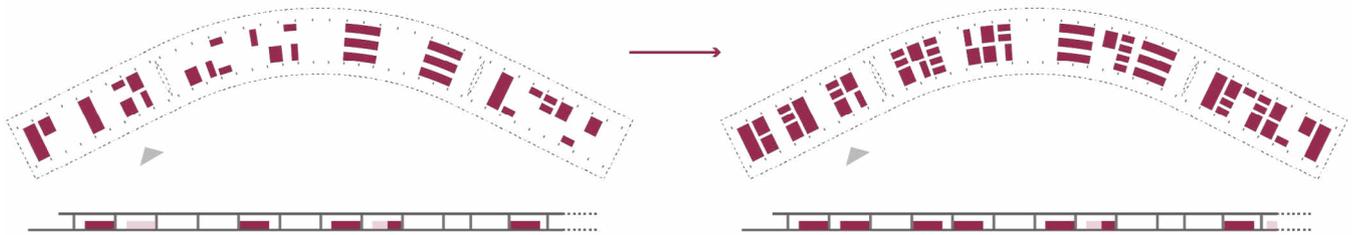


The southern side of the pavilion had been previously rehabilitated with a continuous glass façade that renders it seemingly endless. Original underlying photograph by Simon from ArtSaysSimon, February 2019. Retrieved from <https://www.artsayssimon.com/arttravels/oscar-niemeyer-in-lebanon/>

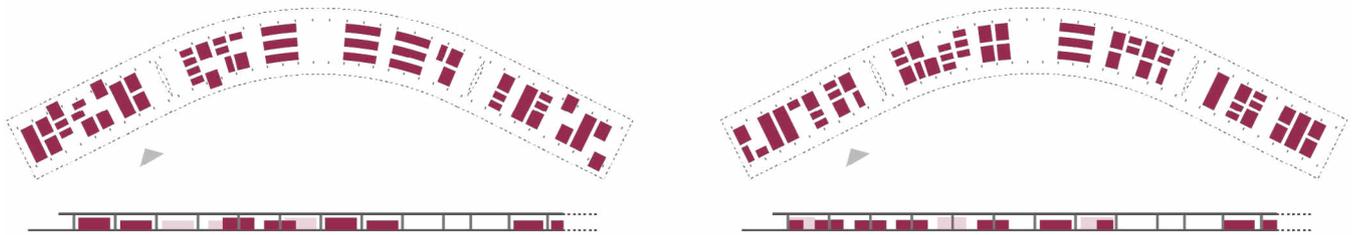


Between 1997-1998, the boomerang had been partially rehabilitated. However, the original design intentions were not respected and resulted in an endless long glass façade. Meanwhile, the northern end remains untouched.

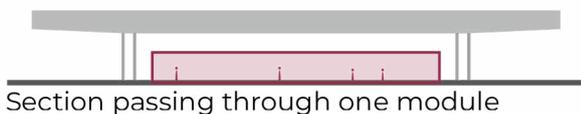
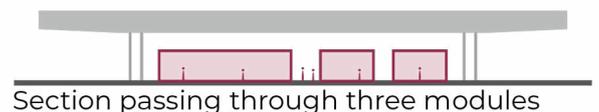
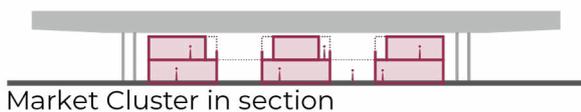
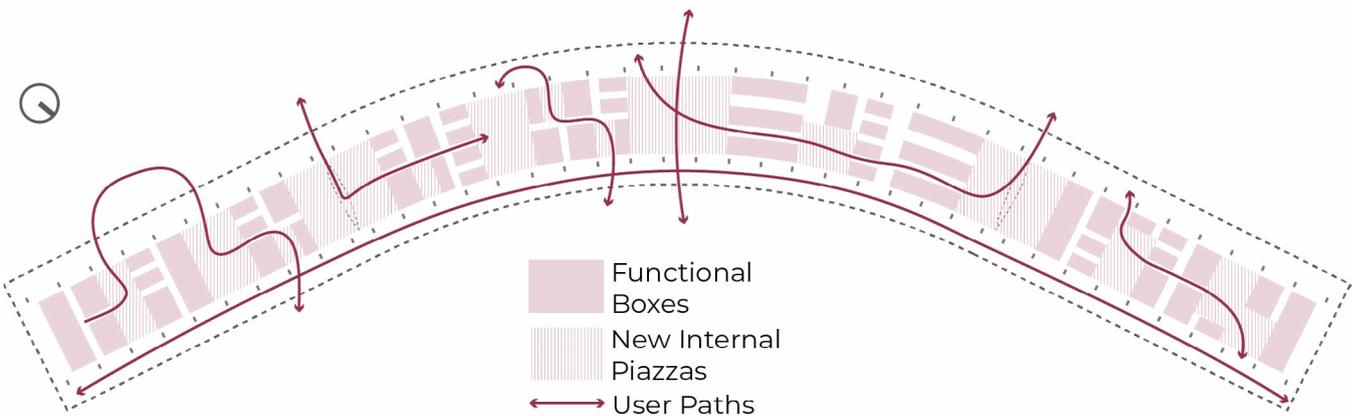
Gradual build-up



Different possible arrangements



Proposed Boomerang Arrangement

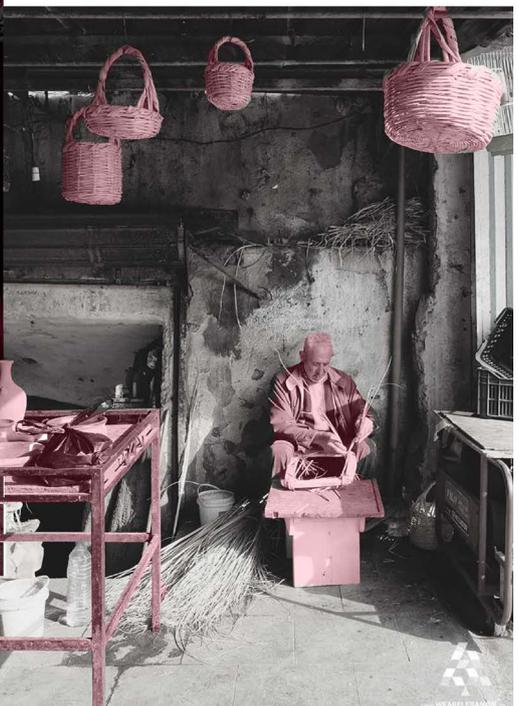
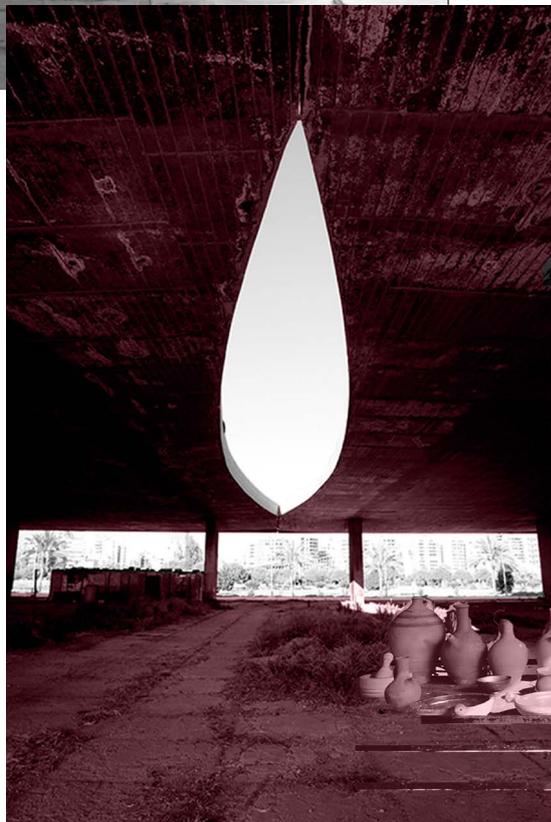




Merging functions found in the historic centers of Tripoli with Tripolitans' needs in the context of a modern node. These functions include markets, workshops, and food and beverages services.

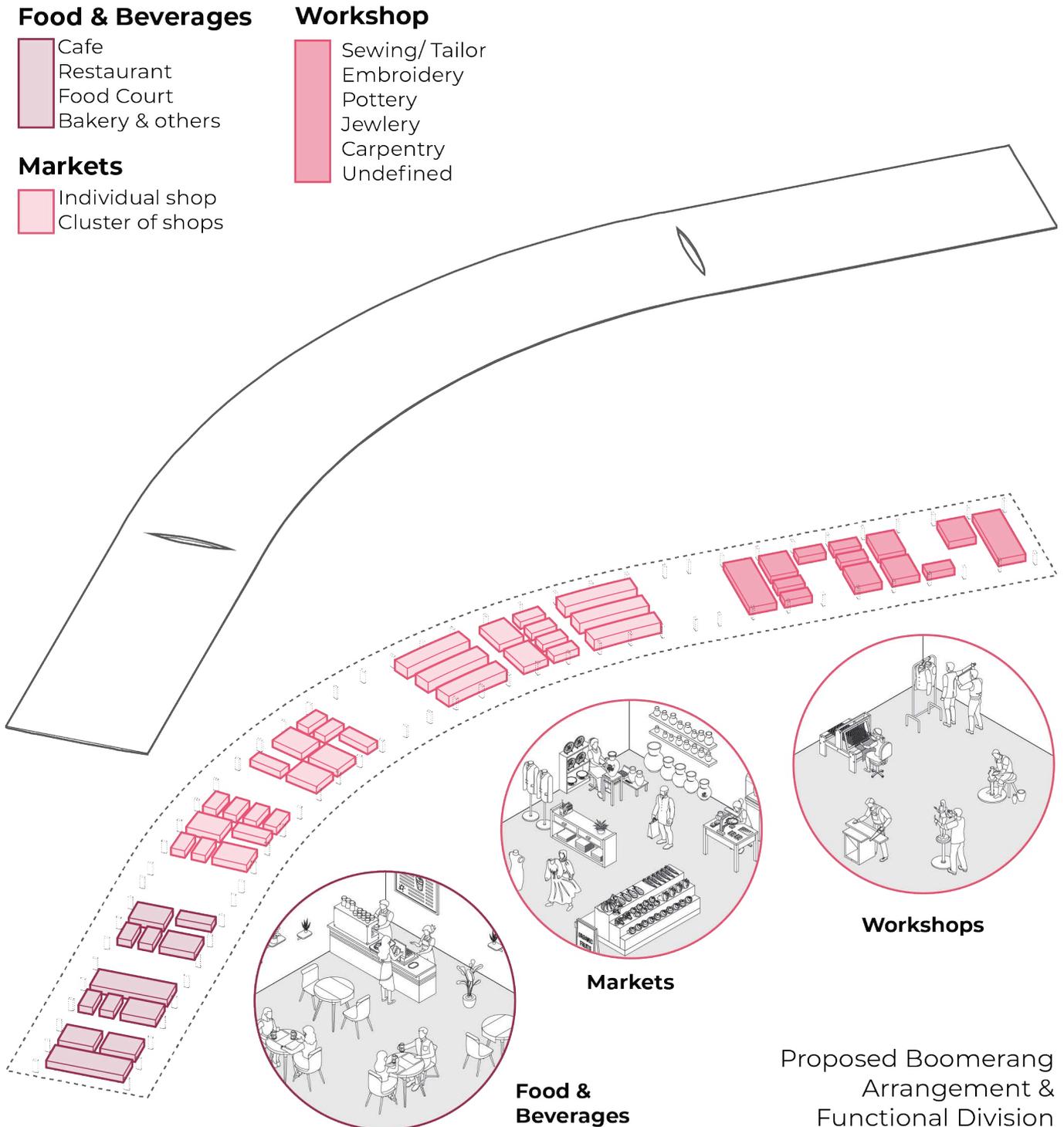
(Left) Boomerang in Tripoli Fairground. November 2023. Photo by Gianluca Ferrero. Retrieved from <https://www.artribune.com/progettazione/architettura/2023/11/fiera-incompiuta-niemeyer-tripoli-libano/>. (Right) Tailors' Market in Tripoli. December 2020. Photo courtesy of Live Love Beirut. Retrieved from https://www.facebook.com/LiveLoveBeirut/photos/a.451878981519422/5041506625889945/?type=3&_rdr

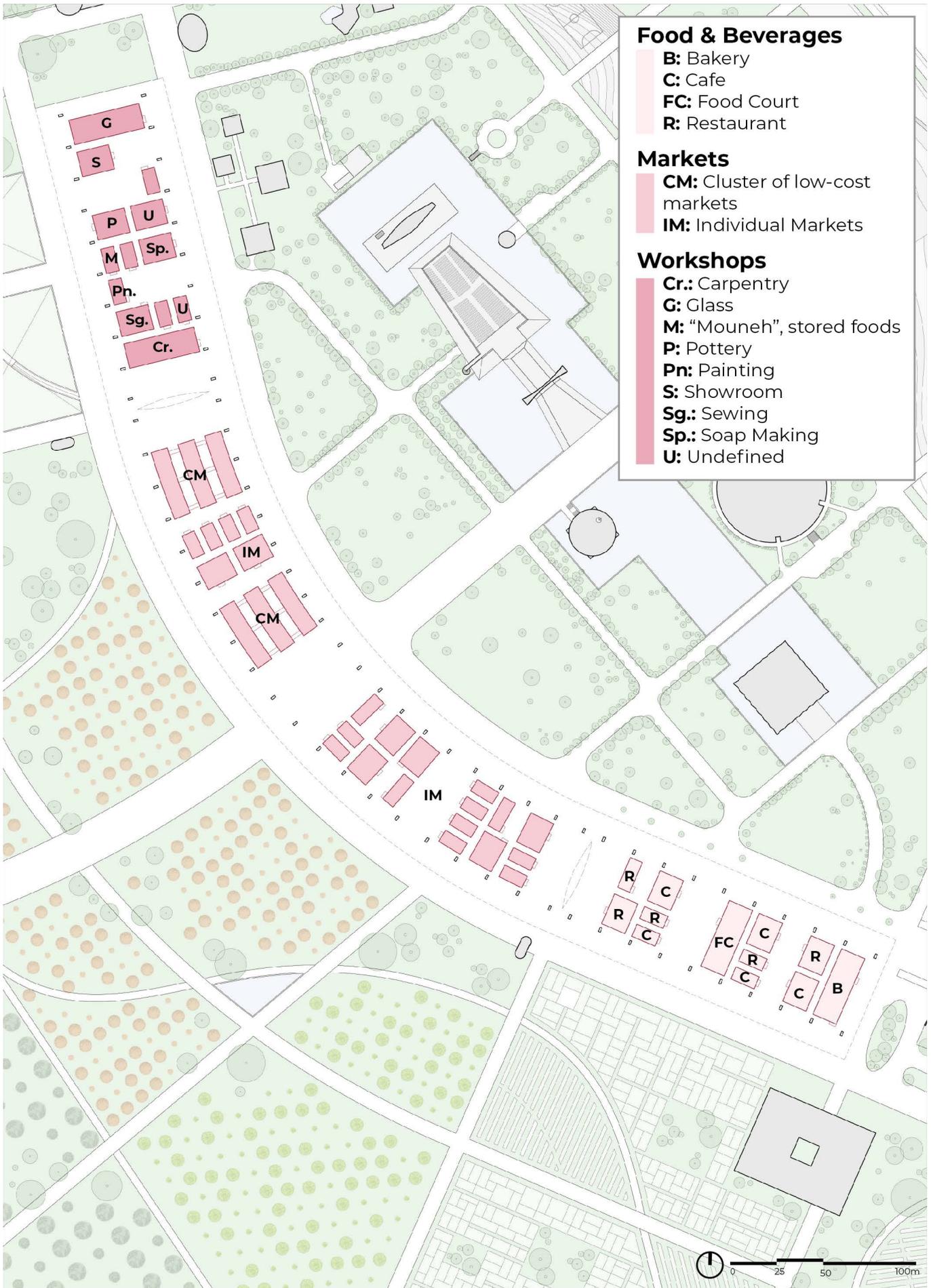
(Left) Slit in the northern end of the boomerang. 2011. Photo by Georges Haddad. Retrieved from <https://officialbespoke.co/oscar-niemeyers-vision-for-tripoli/>. (Right) Traditional handmade crafts in Tripoli. February 2018. Photo taken by Georges Chamoun. Retrieved from https://www.facebook.com/photo.php?fbid=1530883787029727&id=194533623998090&set=a.240986832686102&locale=en_GB



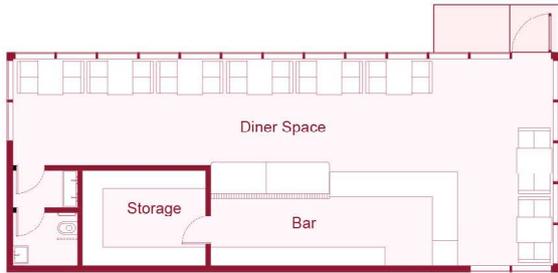
Our suggestion is to bring back the original intention of having a diversity of modular systems. We also intend to break the large span of the façade as Niemeyer intended. However, we wish to create a modular system of boxes within the canopy in order to inhabit the existing boomerang shell while introducing a new space. This system also allows the gradual development of the boomerang while ensuring its use. Finally, having a modular system as will be described below also reduces costs of construction.

In terms of functionality, boomerang is divided into three parts: Food and Beverages, Market Spaces, and Crafts and Trade.

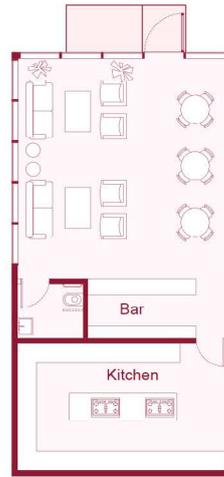




FOOD AND BEVERAGES



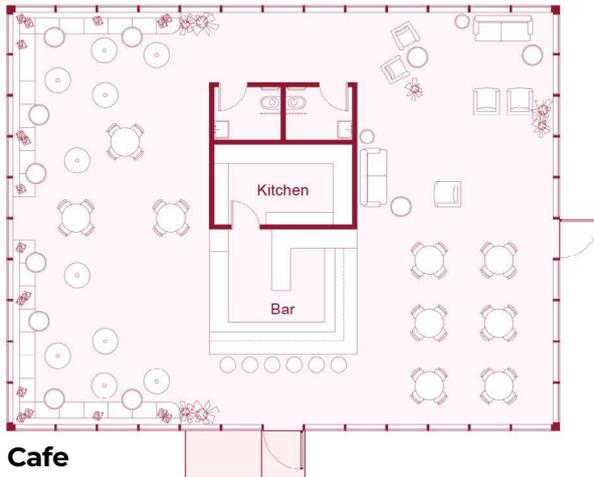
Diner



Cafe



Restaurant



Cafe



Restaurant



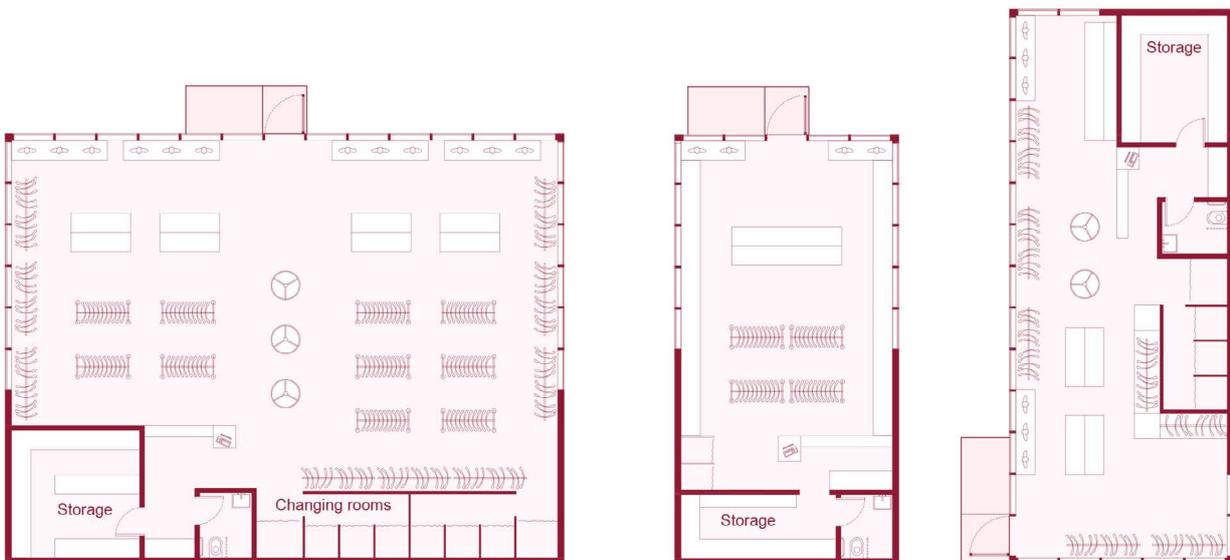
Bakery



FOOD AND BEVERAGES



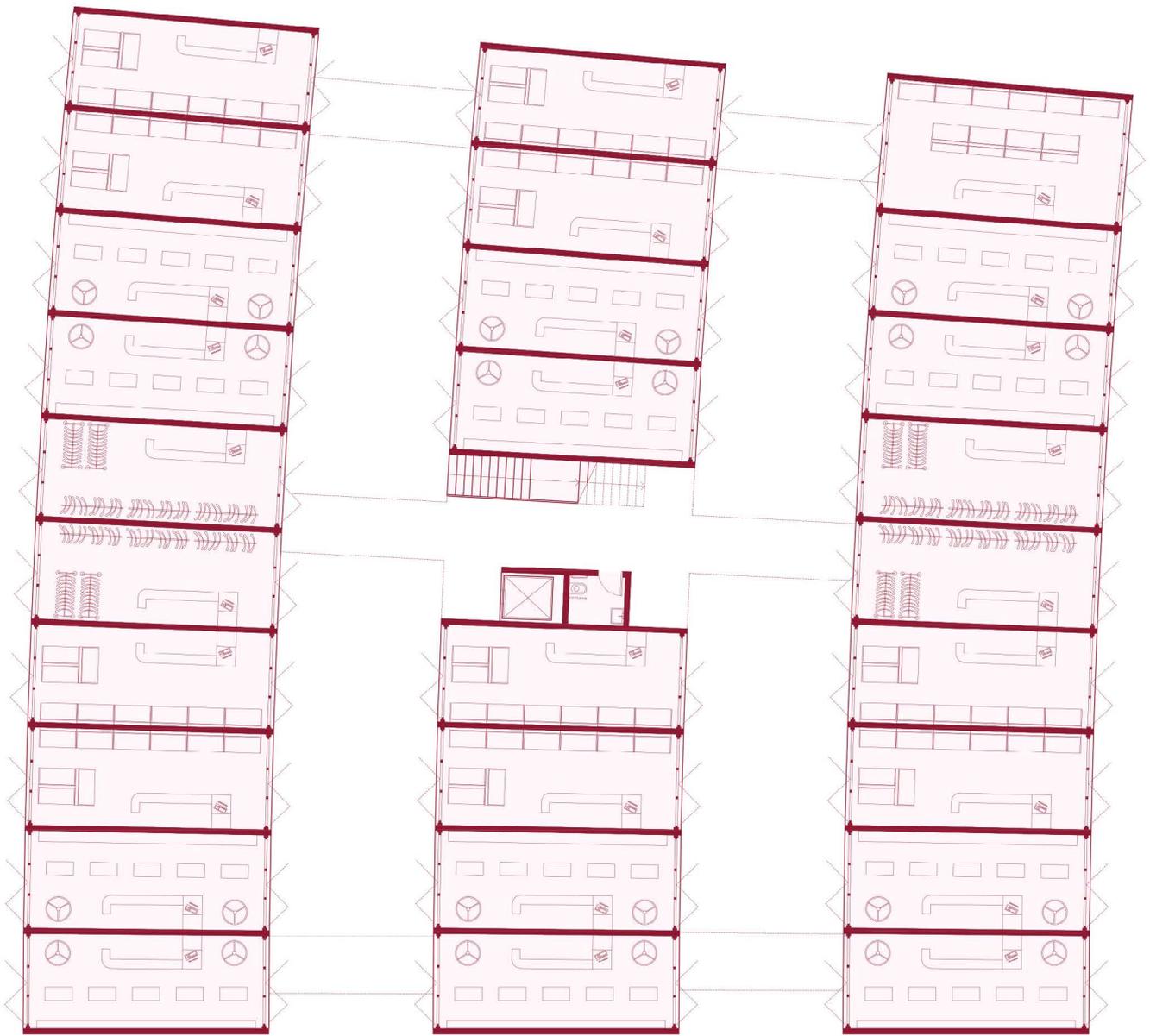
MARKET SPACES



Individual market spaces



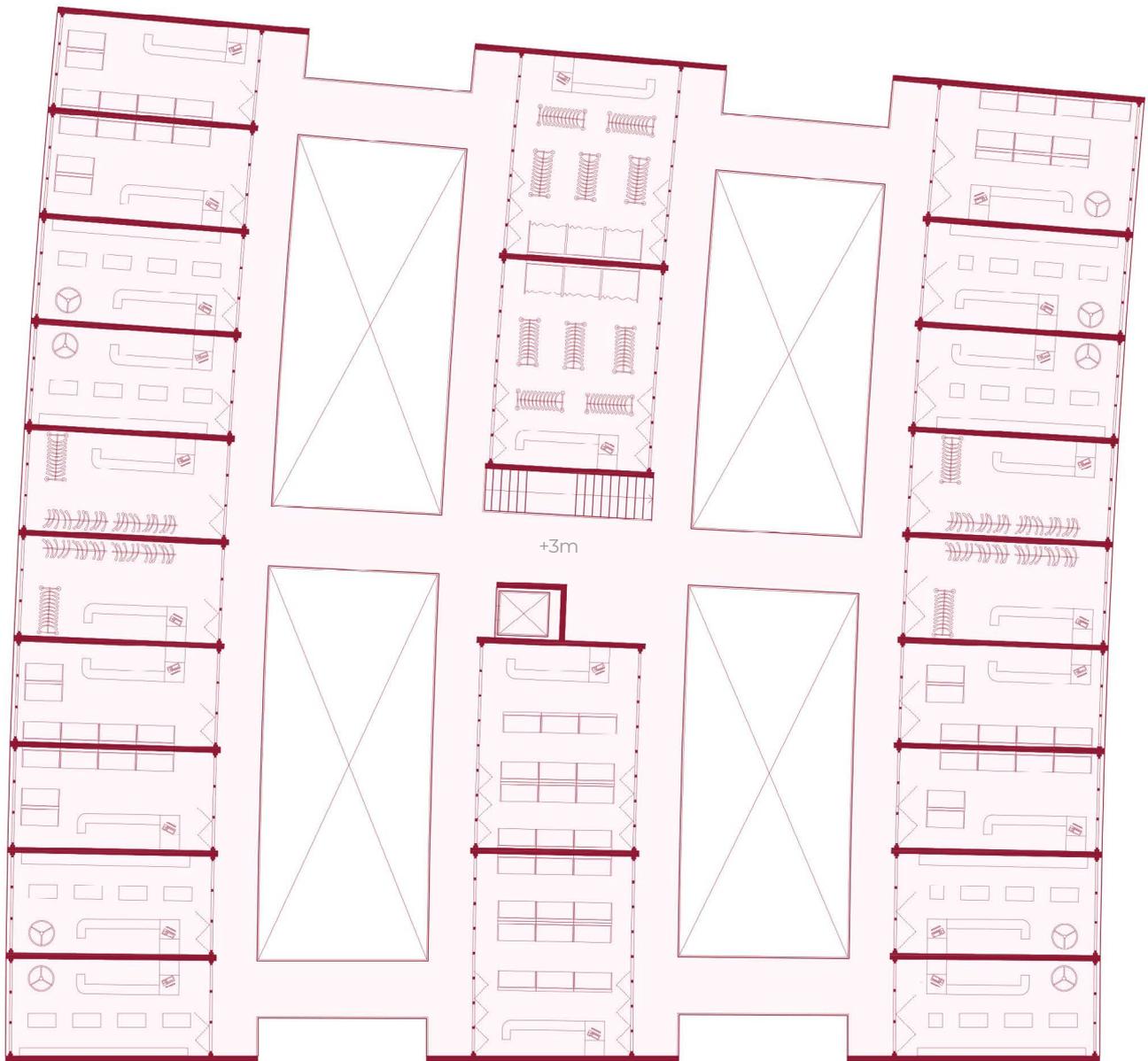
MARKET SPACES



Cluster market space
Ground Floor Level



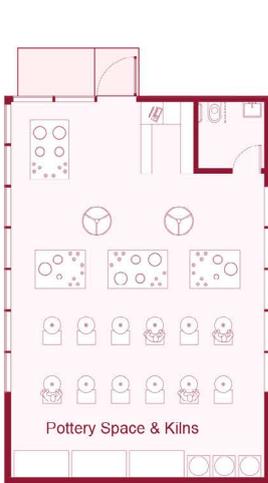
MARKET SPACES



Cluster market space
Upper Floor Level



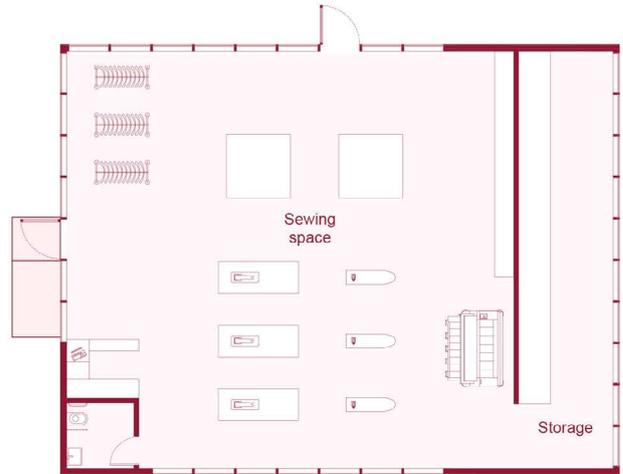
WORKSHOPS



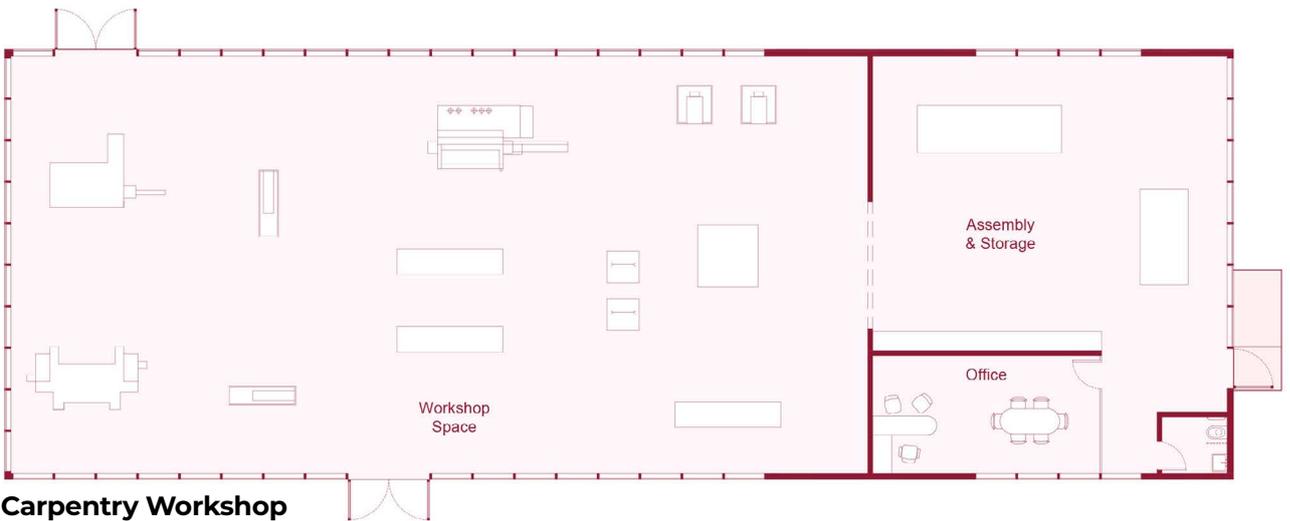
Pottery Workshop



Painting Workshop



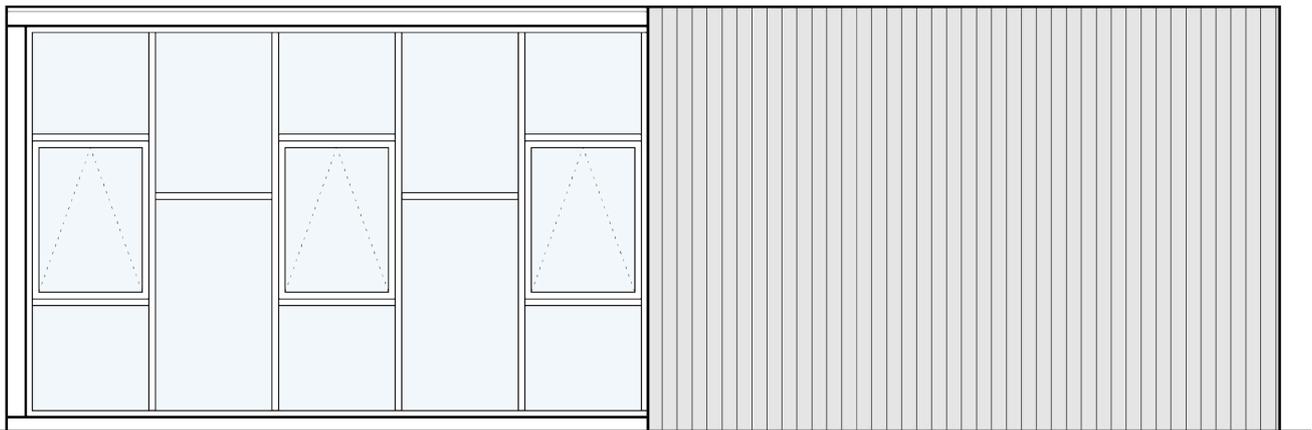
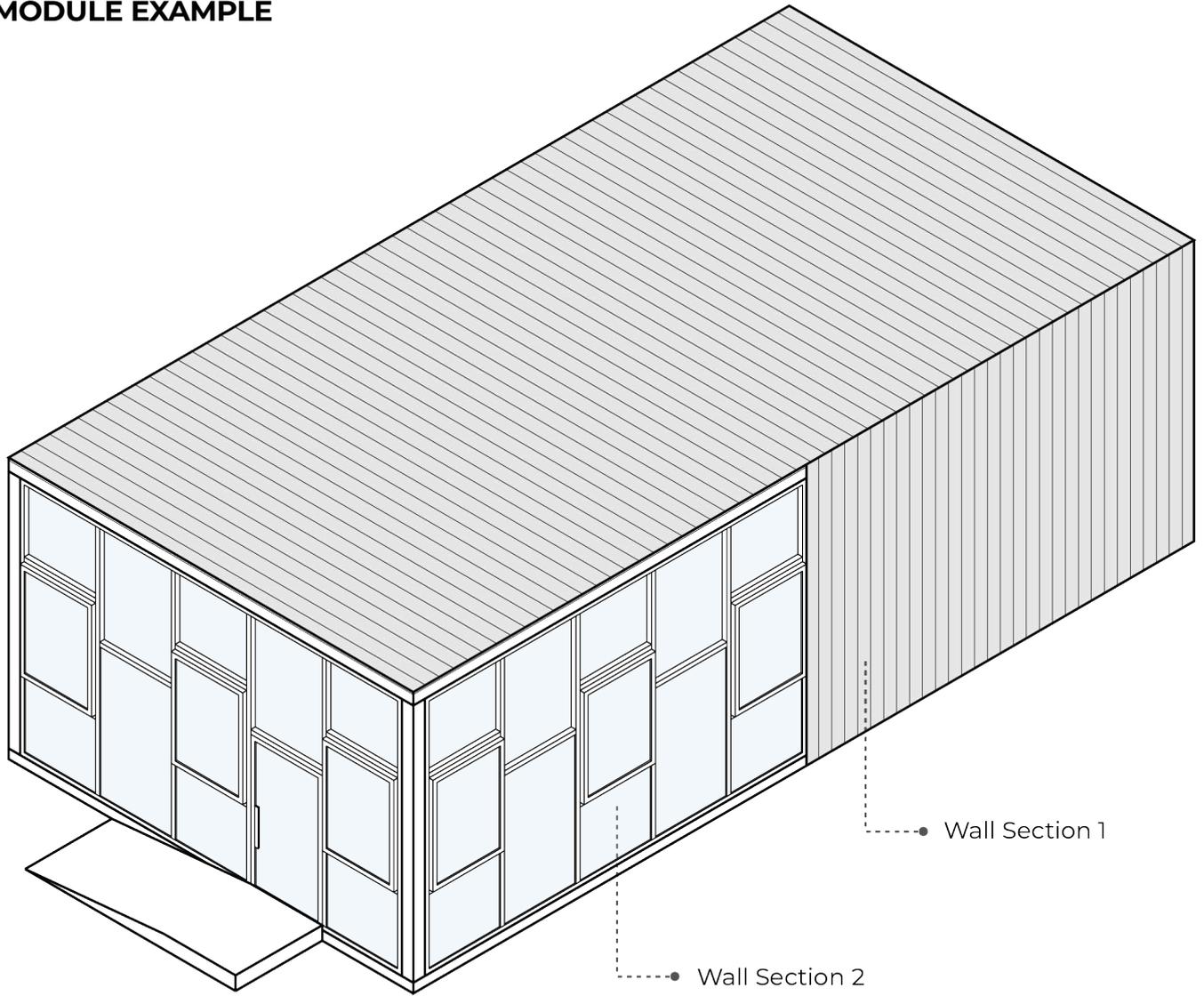
Sewing/ Tailor's Workshop

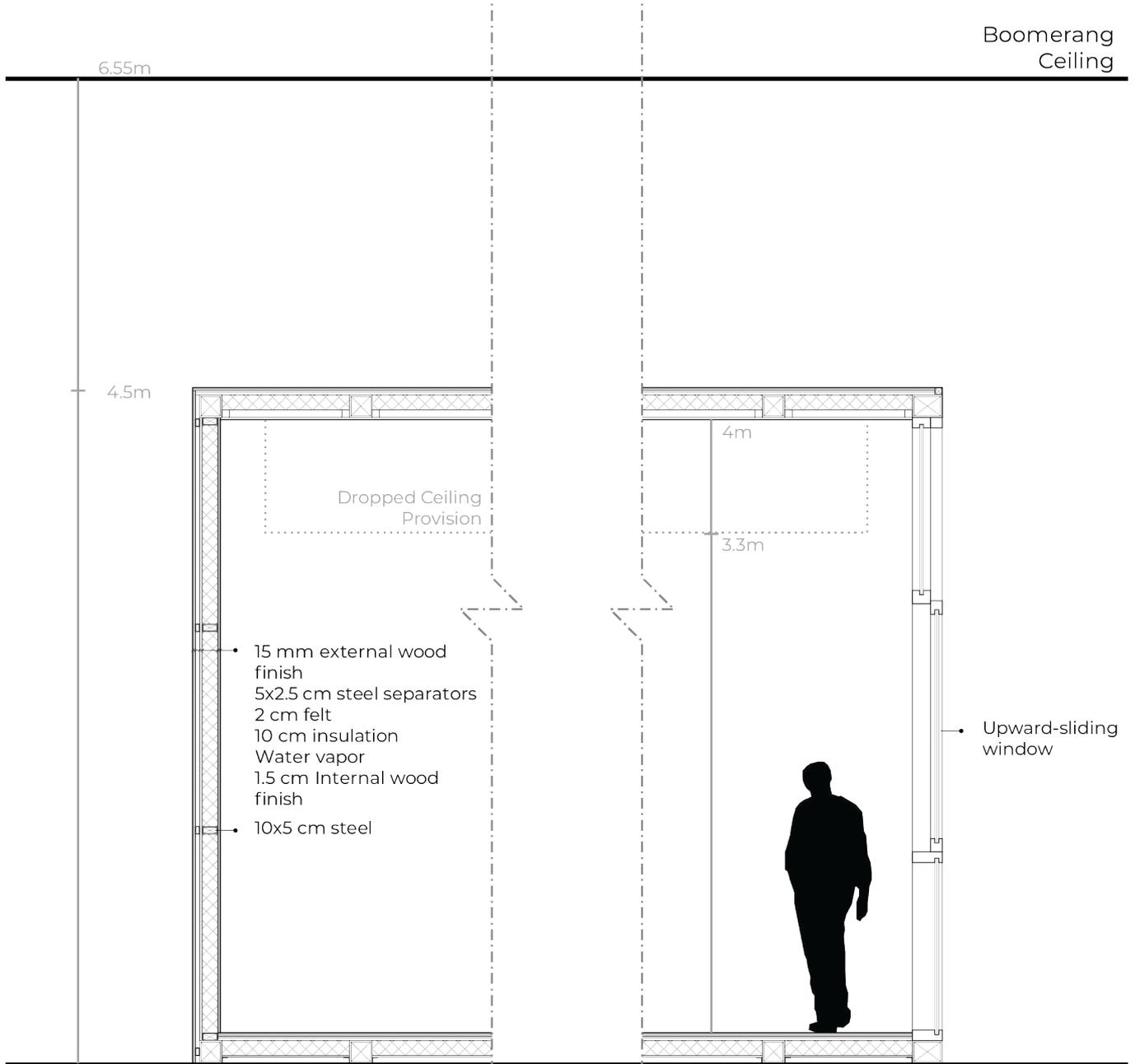


Carpentry Workshop



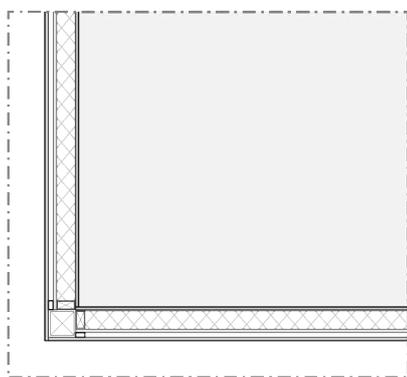
MODULE EXAMPLE



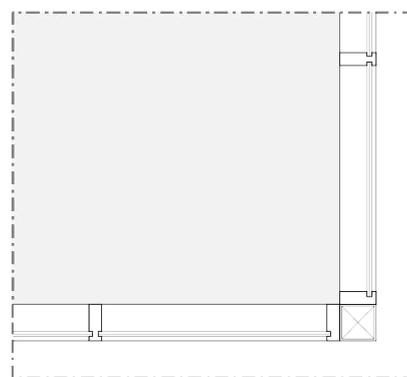


Wall Section 1

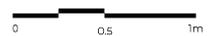
Wall Section 2



Plan cut at 1.2



Plan cut at 1.2







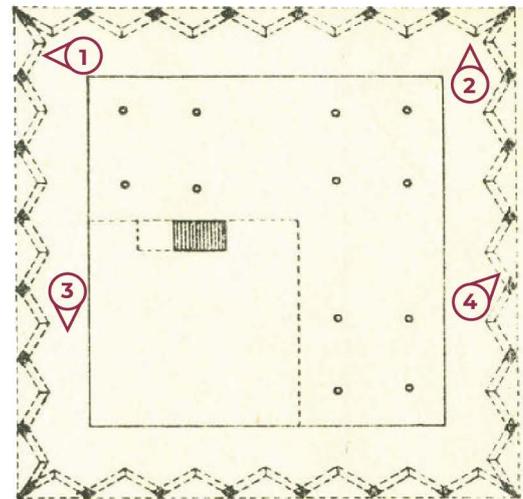
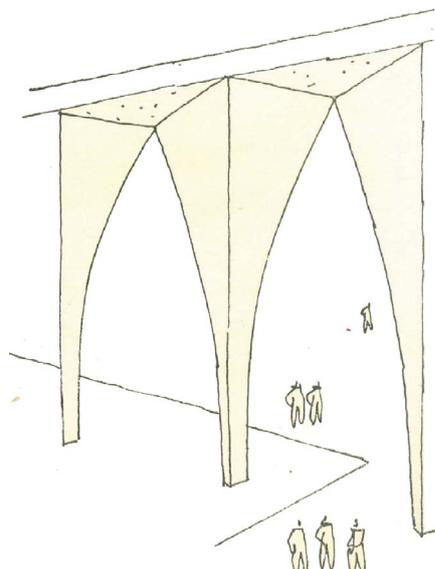
06. Case Studies

B. Lebanese Pavilion

The Lebanese Pavilion was originally meant to host the Lebanese Exhibition. Niemeyer tried integrating Lebanese motifs within his architecture to reflect the use of this building.

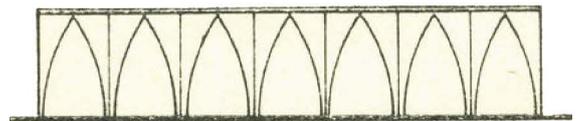
During the war and later years, the glass of this pavilion was broken down and fixtures were stolen. The pavilion was left to decay.

We found that it was important to maintain the sculptural value of the pavilion while highlighting it. We also found that the different views seen from the pavilion offer great points of views into the whole project. In order to highlight these features, we decided that it was important to restore the transparency of the pavilion by reintegrating the glass facades. We also wanted to highlight the concrete structure by maintaining the aged appearance of the concrete.

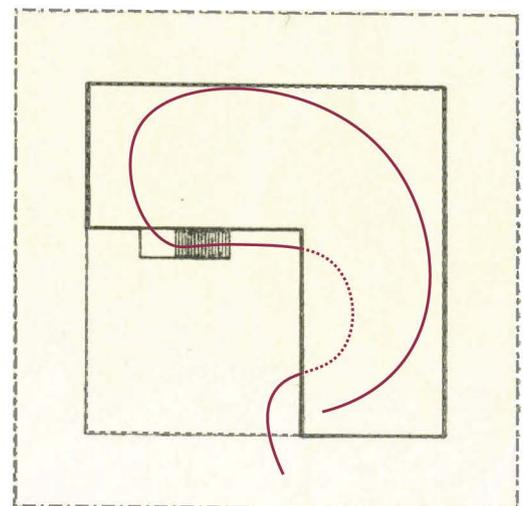


Ground Floor

Views

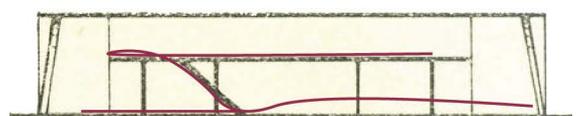


Elevation



Mezzanine

— Circulation - - - Arches
- - - Internal Space



Cross Section

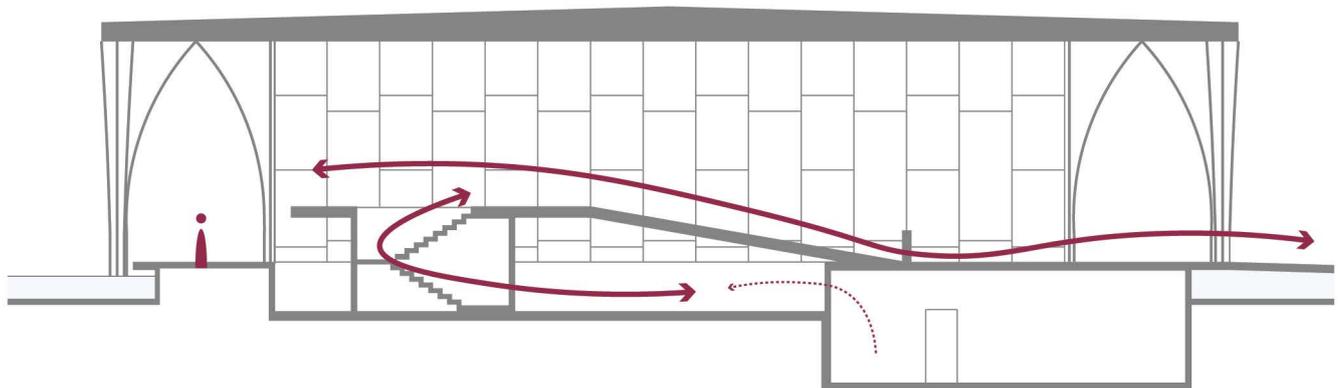
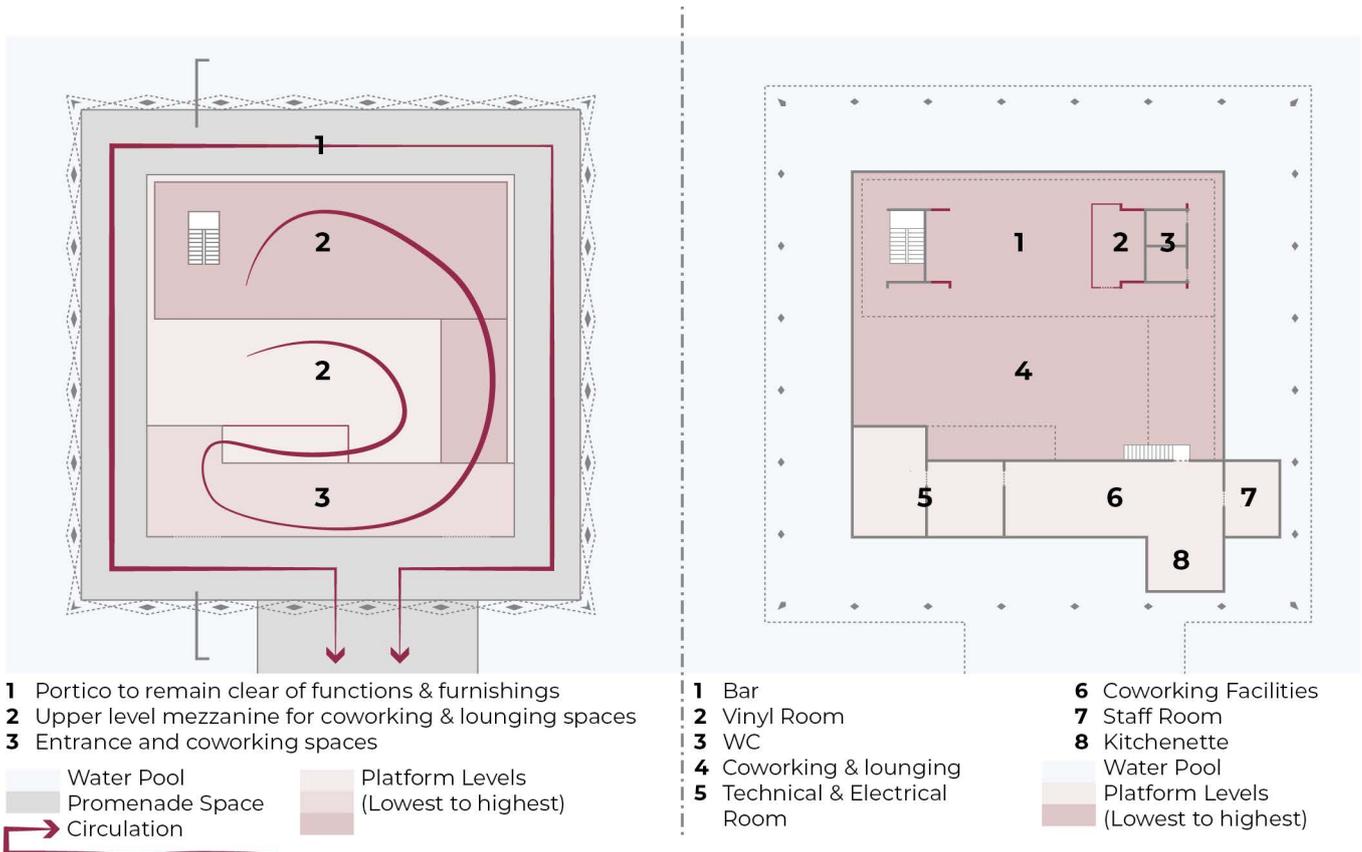
— Circulation

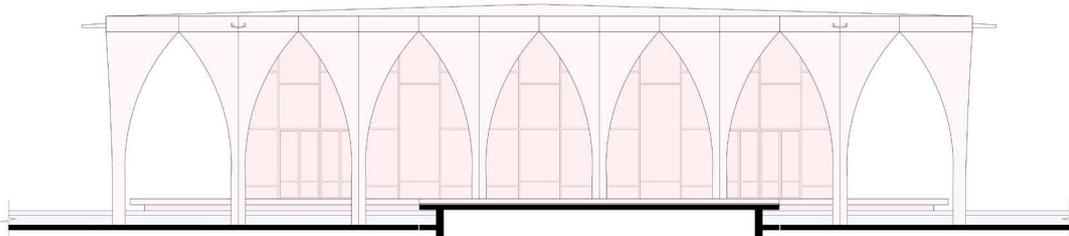
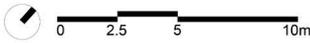
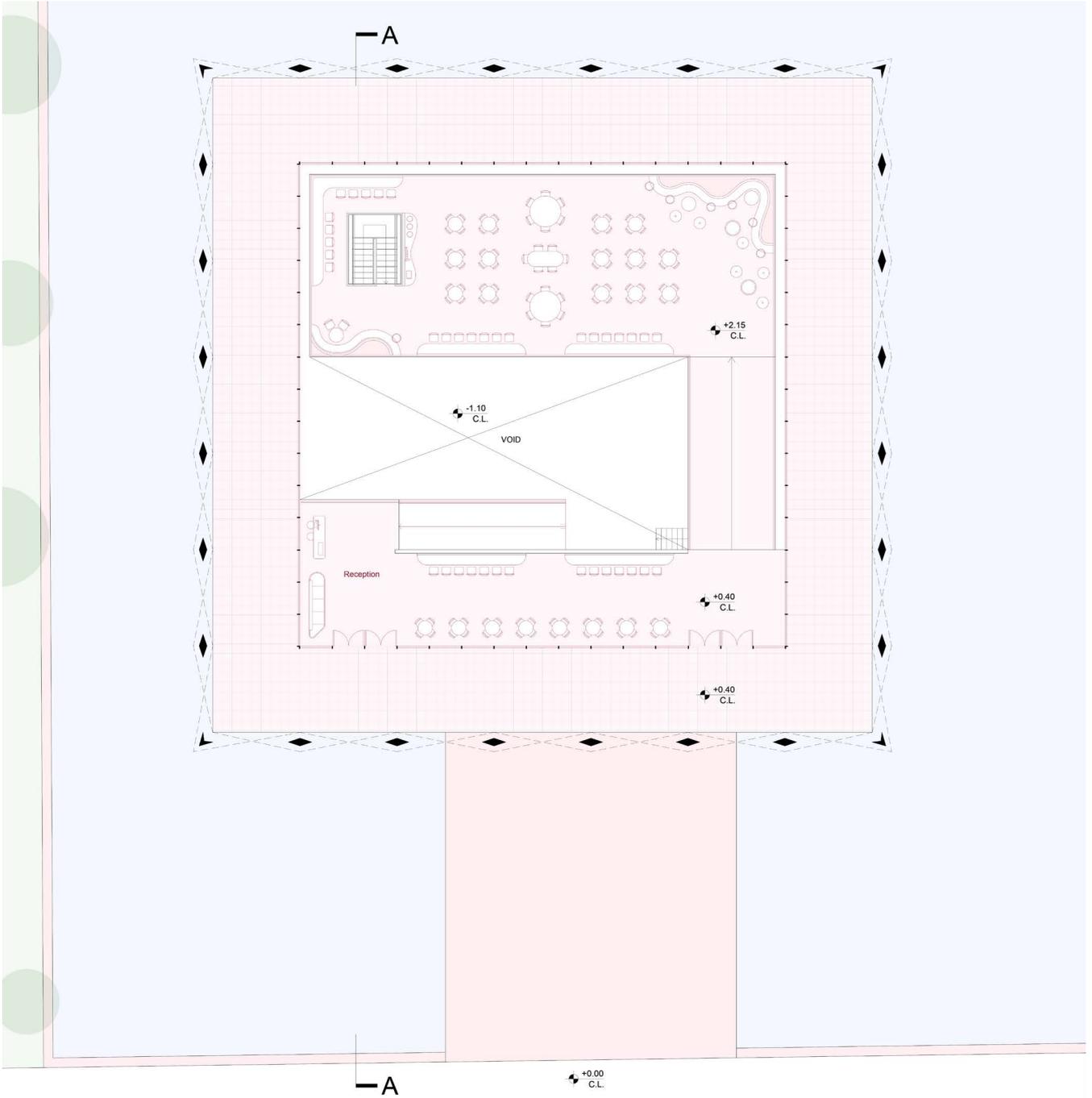


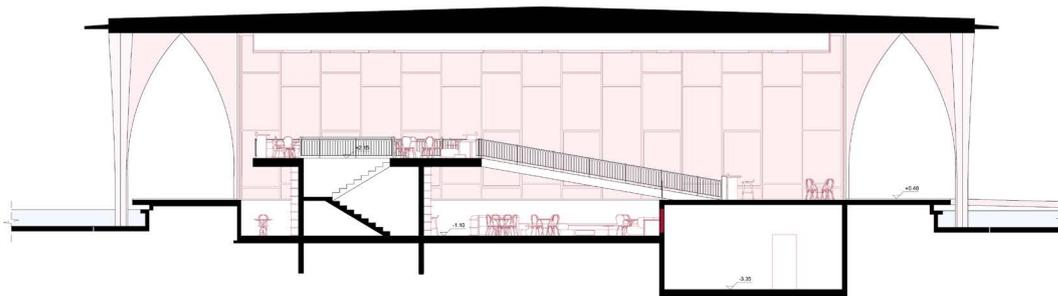
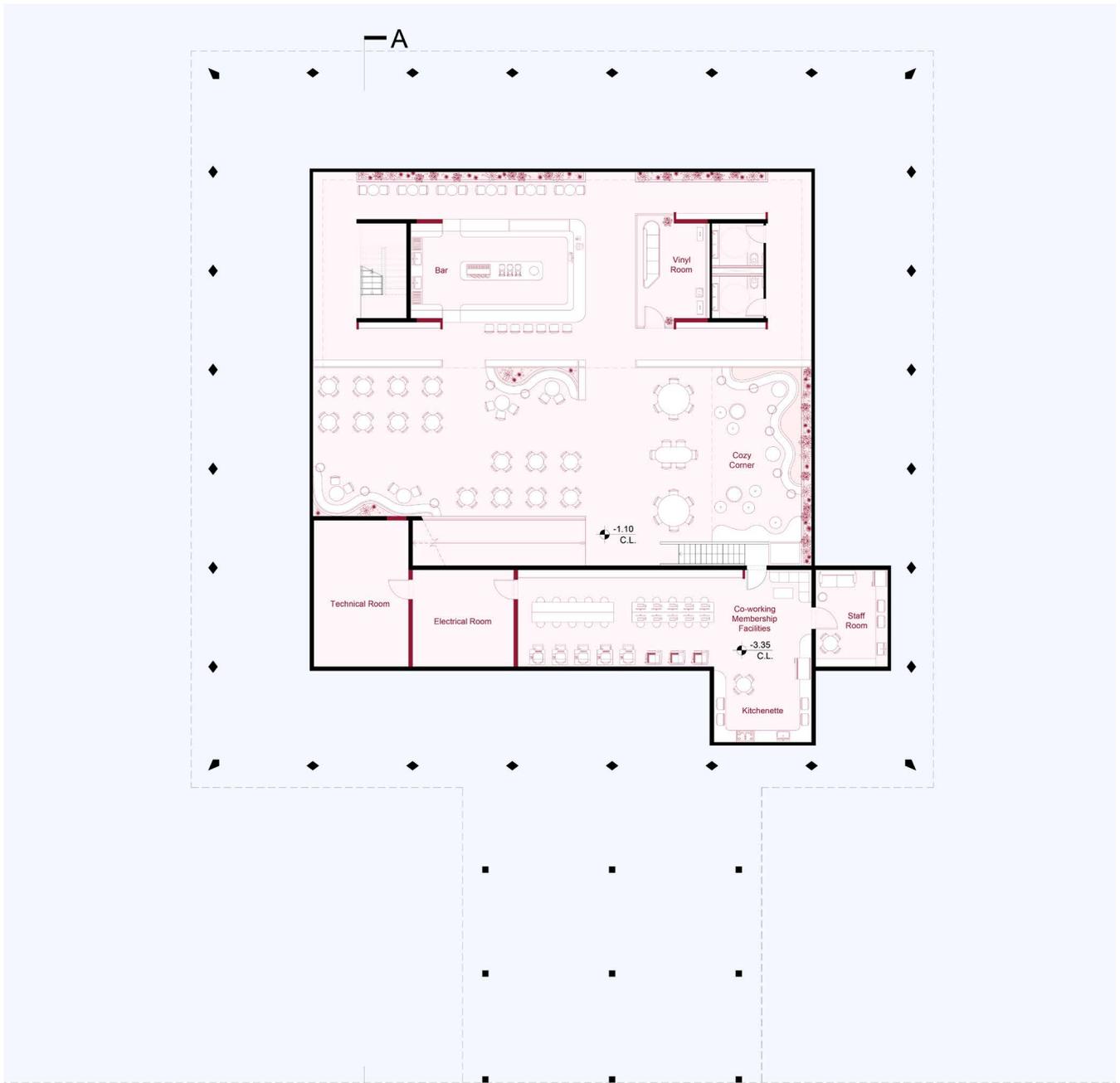
In terms of function, we wanted to make sure that the proposed use ensured accessibility to different people and ensured that the architecture would maintain its transparency. As such, we suggested converting the pavilion into a café with coworking spaces.



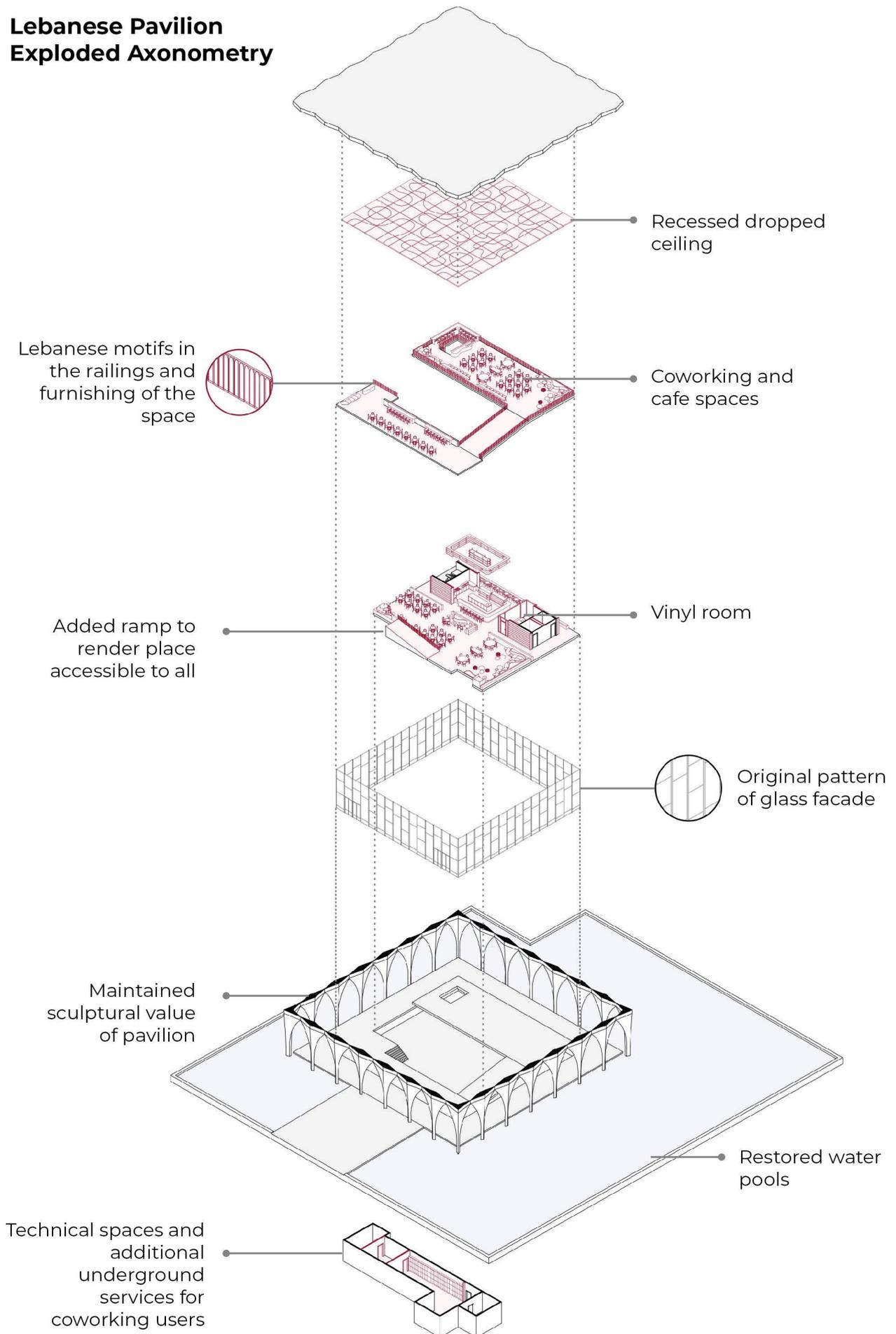
The different motifs within the interior of the space were also made to reflect a Lebanese image. In terms of changes to the original architecture, the main interventions include installing a ramp on one of the stairs in a reversible manner as well as slightly extending the core to accommodate facilities.





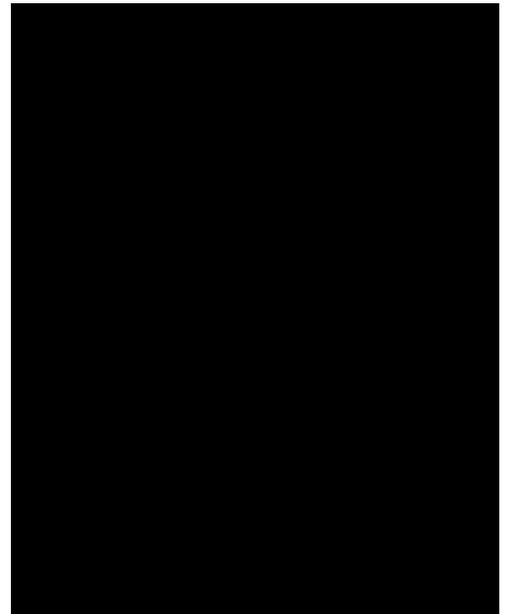
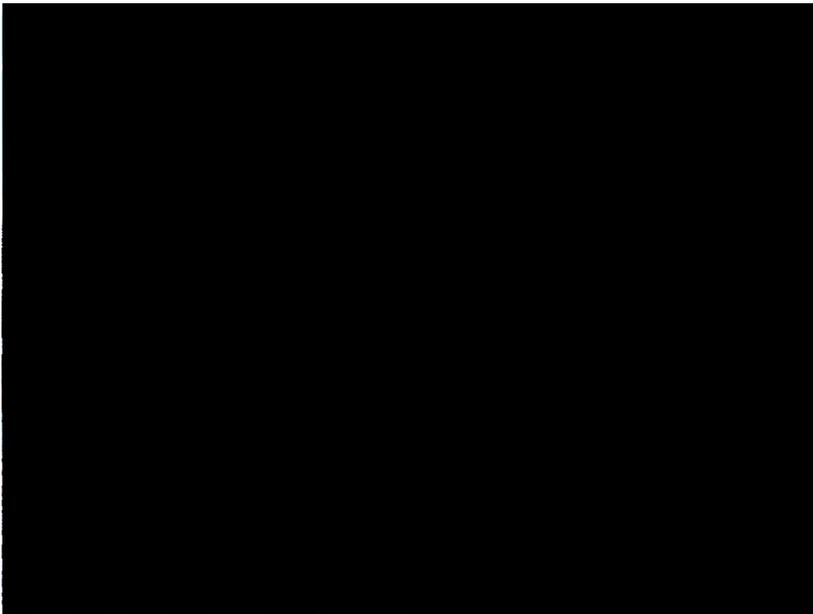


Lebanese Pavilion Exploded Axonometry



Lebanese Pavilion current state.

Image sources: UNESCO. "Developing a Conservation Management Plan for Tripoli Fair." UNESCO, November 2024. <https://www.unesco.org/en/node/164785>, p.75, 159, 123. (Up) Photographed by : Ieva Saudargaite, 2023. (Left) Photographed by Manal Hmeidan, 2024. (Right) Photographed by Hana Itani, 2023.









Bibliography

02. The History of Lebanon and its Architecture during the Golden Age

Arbid, George. "Hôtel Saint-Georges." ACA Archives - Hôtel Saint-Georges (1). Accessed June 13, 2024. <https://arab-architecture.org/db/building/hotel-saint-georges-1>.

Anera. "Inflation Continues Soaring in Lebanon." Anera, February 27, 2024. <https://www.anera.org/blog/inflation-continues-soaring-in-lebanon/#:~:text=According%20to%20recent%20data%20compiled,on%20average%20for%20the%20year>.

Hassan, Tirana. "World Report 2024: Rights Trends in Lebanon." Human Rights Watch, January 11, 2024. <https://www.hrw.org/world-report/2024/country-chapters/lebanon>.

Worldometer. "Lebanon COVID." Worldometer, 2024. <https://www.worldometers.info/coronavirus/country/lebanon/>.

The Editors of Encyclopædia Britannica. "History of Lebanon." Edited by Adam Zeidan and Noah Tesch. Encyclopædia Britannica, March 3, 2022. <https://www.britannica.com/place/Lebanon/History#ref386501>.

UNESCO. Emergency Nomination of Rachid Karami International Fair - Tripoli - Lebanon. Beirut, Lebanon. United Nations Educational, Scientific and Cultural Organization, 2022. <https://whc.unesco.org/document/192804>.

Kaufman, Asher. "Lebanon's Tragic Path from Economic Miracle to Collapse." Kellogg Institute For International Studies, August 5, 2021. <https://kellogg.nd.edu/news/lebanon%E2%80%99s-tragic-path-economic-miracle-collapse>.

Hanna, John. "Endangered Heritage Following Beirut Port Explosion." Centre for Global Heritage and Development, August 17, 2020. <https://www.globalheritage.nl/news/endangered-heritage-following-beirut-port-explosion>.

Perry, Tom, and William Maclean. "Timeline: Lebanon's Ordeal from Civil War to Port Blast." Edited by Mike Collett-White and Ed Osmond. Reuters, December 2020. <https://www.reuters.com/article/idUSKBN28Y0S1/>.

Foppiano, Anna. "Khalil Houry: Interdesign Building, Beirut." Abitare, November 24, 2016. <https://www.abitare.it/en/architecture/2012/09/07/khalil-khoury-interdesign-building-beirut-2/>.

Gaub, Florence. "Lebanon's Civil War: Seven Lessons Forty Years On." European Union Institute for Security Studies, April 2015. https://www.files.ethz.ch/isn/189966/Alert_21_Lebanon_civil_war.pdf.

Tabet, Jad. "Le Projet de Foire Internationale d'Oscar Niemeyer à Tripoli, Liban (1968-1974)." Essay. In *Suspended Spaces#2 - Une Expérience Collective 2*, BlackJacked., 2:22–27. Paris, France: les presses du réel, 2012.

Haugbolle, Sune. "The Historiography and the Memory of the Lebanese Civil War." Portail Sciences Po, October 25, 2011. <https://www.sciencespo.fr/mass-violence-war-massacre->

resistance/fr/document/historiography-and-memory-lebanese-civil-war.html.

Trad, Andre. "Des Architectures Au Liban et Des Concepteurs Etrangers." *Al Muhandess* no. 25, November 2010. <https://www.oea.org.lb/Library/Files/Arabic/Downloads/Reports/magazine/25%20issue%20almouhandess%20english%20french.pdf>.

Haddad, Elie G. "Learning from Beirut: From Modernism to Contemporary Architecture." *Enquiry The ARCC Journal for Architectural Research* 5, no. 1 (May 7, 2008). <https://doi.org/10.17831/enq:arcc.v5i1.28>.

Trad, Andre. "The Legacy of Modern Architecture in Beirut, 1950-1975." *WorldView*, January 2005. <https://aaa-arch.com/index.php/en/worldview>.

Tabet, Jad. "From Colonial Style to Regional Revivalism: Modern Architecture in Lebanon and the Problem of Cultural Identity." Essay. In *Projecting Beirut: Episodes in the Construction and Reconstruction of a Modern City*, 83-105. New York, USA: Prestel Pub, 1998.

Old Beirut. <https://oldbeirut.com/archive>.

Aga Khan Trust for Culture, <https://www.archnet.org/sites/8377>.

Image Sources

Arbid, George. "Hôtel Saint-Georges." *ACA Archives - Hôtel Saint-Georges* (1). Accessed June 13, 2024. <https://arab-architecture.org/db/building/hotel-saint-georges-1>.

Abdallah, Issam. "Lebanon Hopes UNESCO Danger Listing Could Save Crumbling Modernist Fairground | Reuters." *Reuters*, February 5, 2023. <https://www.reuters.com/world/middle-east/lebanon-hopes-unesco-danger-listing-could-save-crumbling-modernist-fairground-2023-02-05/>.

Salvaing, Matthieu. *Koujak Jaber Building par Victor H. Bisharat à Beyrouth*. 2023. <https://www.marieclaire.fr/maison/avec-modernist-beirut-re-decouvrez-les-joyaux-de-l-architecture-libanaise,1462299.asp>.

Fouad Dabbas Collection/Sursock Museum. Retrieved from <https://thewanderingnative.com/2020/09/30/st-george-patron-saint-of-beirut/>

"Lebanon Can Draw Strength from Life of De Gaulle: Former French Minister | Arab News." *Arab News*, September 2020. <https://www.arabnews.com/node/1727636/middle-east>.

Fayad, Roula El Khoury. "[Aalto in Beirut] Contribution, Collaboration and Continuity." *Alvar Aalto Museo*, 2017. <https://www.alvaraalto.fi/wp-content/uploads/2017/12/RoulaElKhouryFayad.pdf>.

Khamissy, Dalia. *Electricite Du Liban Building*. 2017. American University of Beirut. https://www.researchgate.net/publication/349772660_Electricite_Du_Liban_Building.

Khoury, Bernard. *Khalil Khoury's Interdesign Building, Beirut*. 2016.

Smith, Sylvia. "Beirut: How War and Conflict Affect Design." *BBC News*, November 17, 2015. <https://www.bbc.com/news/entertainment-arts-34834414>.

“Riad El Solh Square (1960s).” Old Beirut, May 15, 2014. <https://oldbeirut.com/post/85815337558/riad-el-solh-square-1960s>.

Dictionnaire de l'Architecture au Liban retrieved from Al Mouhandess no. 25, November 2010.

Trad, Andre. “Des Architectures Au Liban et Des Concepteurs Etrangers.” Al Muhandess no. 25, November 2010. <https://www.oea.org.lb/Library/Files/Arabic/Downloads/Reports/magazine/25%20issue%20almouhandess%20english%20french.pdf>.

Verdeil, Éric. « Chapitre 4 - Beyrouth dans les plans de l'IRFED et d'Écochard ». In Beyrouth et ses urbanistes. Beyrouth: Presses de l'Ifpo, 2010. <https://doi.org/10.4000/books.ifpo.2171>.

Life Sciences Campus, Tripoli, Lebanon. Joseph Philippe Karam. 2008. Accessed 2024. <http://www.joseph-philippe-karam.com/2008/01/joseph-philippe-karam-1923-1976.html>.

Jad Tabet. “From Colonial Style to Regional Revivalism: Modern Architecture in Lebanon and the Problem of Cultural Identity.” Essay. In Projecting Beirut: Episodes in the Construction and Reconstruction of a Modern City, 86-88. New York, USA: Prestel Pub, 1998.

City Center Complex (Brochure cover) | 1968. 1968. Accessed 2024. https://x.com/a_alragam/status/938817609230929920.

Ministry of Defense late sixties. 1968. Lebanese Army. <https://www.lebarmy.gov.lb/en/content/black-white>.

Plan directeur de Beyrouth et ses banlieues, 1963. IFA, Archives du xx^e siècle, Fonds Écochard

Arab Center for Architecture and director George Arbid. <https://arab-architecture.org/>

03. Territorial Analysis of Tripoli

Gemayel, Fouad. “Study Warns of ‘drastic Change in Lebanon’s Demographic Fabric.” L’Orient Today, January 11, 2024. <https://today.lorientlejour.com/article/1363988/groundbreaking-study-warns-of-drastic-change-in-lebanons-demographic-fabric.html>.

“Lebanon: Thousands in Tripoli Living in Unsafe Housing a Year on from Devastating Earthquakes.” Amnesty International, March 2, 2024. <https://www.amnesty.org/en/latest/news/2024/02/lebanon-thousands-in-tripoli-living-in-unsafe-housing-a-year-on-from-devastating-earthquakes/>.

MedCities. “Tripoli.” MEDCITIES, May 13, 2024. <https://medcities.org/member/tripoli/>.

“The Tripoli Citadel, Lebanon.” Tripoli, Lebanon: Jewel of the Eastern Mediterranean. Accessed August 13, 2024. <https://tripoli-lebanon.org/citadel.html>.

World Population Review. “Population of Cities in Lebanon 2024.” World Population Review, 2024. <https://worldpopulationreview.com/countries/cities/lebanon>.

BNP Paribas. “Financing the Beirut-Damascus Railway - BNP Paribas.” BNP Paribas, 2023. <https://histoire.bnpparibas/en/financing-the-beirut-damascus-railway/>.

Potkanski-Palka, Monika. “Main Results.” Essay. In Dossier: Lebanon Socio-Economic Survey

2023, 5–8. Vienna, Austria: Austrian Federal Office for Immigration and Asylum, 2023. https://www.bmi.gv.at/114/files/Studie_Lebanon/Bericht_FINAL_Lebanon_2023_Nbf20240206.pdf.

UNESCO World Heritage Centre. “The Rachid Karameh International Fair of Tripoli (Lebanon) Inscribed on UNESCO’s World Heritage List.” UNESCO World Heritage Centre, January 25, 2023. <https://whc.unesco.org/en/news/2516/>.

Azhari, Timour, and Bassam, Laila. “Poverty in Lebanon’s ‘city of Billionaires’ Drives Deadly Migration | Reuters.” Edited by Tom Perry, Samia Nakhoul, and Susan Fenton. Reuters, September 2022. <https://www.reuters.com/world/middle-east/poverty-lebanons-city-billionaires-drives-deadly-migration-2022-09-25/>.

“Tripoli, Lebanon’s Most Marginalised City, Sees Positive Impact of Basic Services.” UN-Habitat, September 22, 2022. <https://unhabitat.org/news/22-sep-2022/tripoli-lebanons-most-marginalised-city-sees-positive-impact-of-basic-services>.

UNESCO. Emergency Nomination of Rachid Karami International Fair - Tripoli - Lebanon. Beirut, Lebanon. United Nations Educational, Scientific and Cultural Organization, 2022. <https://whc.unesco.org/document/192804>.

UN-Habitat. “Tripoli, Lebanon’s Most Marginalised City, Sees Positive Impact of Basic Services.” UN-Habitat, September 2022. <https://unhabitat.org/news/22-sep-2022/tripoli-lebanons-most-marginalised-city-sees-positive-impact-of-basic-services>.

Gebeily, Maya. “Thomson Reuters Foundation: Lebanon’s Most Impoverished City, Tripoli’s Decades-Long Decline Traces the History of Marginalization in Lebanon - and Warns of the Desperation Still to Come.” Olivier De Schutter, November 18, 2021. <https://www.srpoverity.org/2021/11/18/thomson-reuters-foundation-lebanons-most-impoverished-city-tripolis-decades-long-decline-traces-the-history-of-marginalization-in-lebanon-and-warns-of-the-desperation-still-to-come/>.

Khayat, Samir. “Ottoman Period .” Tripoli - Lebanon, July 7, 2021. <https://tripoli-lebanon.com/wp/ottoman-period/#:~:text=During%20the%20Ottoman%20period%2C%20Tripoli,Aleppo%20Eyalet%2C%20and%20%C5%9Eam%20Eyalet>.

Central Administration of Statistics. “Labour Force and Household Living Conditions Survey 2018-2019 in Tripoli.” Lebanese Republic Central Administration of Statistics, 2020. http://www.cas.gov.lb/images/Publications/Labour_Force_District_Statistics/TRIPOLI%20FINAL.PDF.

Elshaikh, Eman. “Read: Ottoman Empire (Article).” Khan Academy, 2020. <https://www.khanacademy.org/humanities/whp-1750/xcabef9ed3fc7da7b:unit-1-the-world-in-1750/xcabef9ed3fc7da7b:1-3-expanding-to-a-global-scale/a/read-ottoman-empire-beta>.

Munioz, Antonio. “Why Franco-Lebanese Ties Transcend Strategic, Economic Interests | Arab News.” Arab News, September 1, 2020. <https://www.arabnews.com/node/1727646/amp>.

Youssef, Al Mezeraani. Thesis. Rashid Karame International Fair in Tripoli, Lebanon: Towards a Conservation Management Plan, 2019. <https://www.politesi.polimi.it/handle/10589/148192>.

The Centre for Social Sciences Research & Action. “Wars in Tripoli.” Civil Society Knowledge

Centre, February 24, 2017. <https://civilsociety-centre.org/content/wars-tripoli>.

UN-Habitat Lebanon. "Tripoli City Profile 2016". United Nations Human Settlements Programme, 2016, updated 2017. <https://unhabitat.org/sites/default/files/download-manager-files/TCP2016.pdf>.

Ginzarly, Manal, and Jacques Teller. "Heritage Conservation in River Corridor Cities: The Case of Tripoli, Lebanon." *Heritage Conservation in River Corridor Cities: The Case of Tripoli, Lebanon*, 2016. https://www.researchgate.net/publication/309297231_Heritage_Conservation_in_River_Corridor_Cities_The_Case_of_Tripoli_Lebanon.

Jamali, Rachid. "Tripoli: The Conflict." *Peace in Progress Bombarded Cities*, no. 26, February 2016. <https://www.icip.cat/perlapau/en/article/tripoli-the-conflict/>

Van der Molen, Irna. Rep. Edited by Nora Stel. *CONFLICT AND ENVIRONMENT IN NORTH LEBANON Vulnerability and Resilience from a Multi-Disciplinary Perspective*. 1st ed. Enschede, Netherlands: Ipskamp, 2015.

Tabet, Jad. "Le Projet de Foire Internationale d'Oscar Niemeyer à Tripoli, Liban (1968-1974)." Essay. In *Suspended Spaces#2 - Une Expérience Collective 2*, BlackJacked., 2:22–27. Paris, France: les presses du réel, 2012.

Nahas, Charbel "Stakeholder Analysis and Social Assessment for the Proposed Cultural Heritage and Tourism Development Project". 2001. Published November 2007. http://charbelnahas.org/textes/Amenagement_et_urbanisme/Cultural_Heritage_Report/E-Tripoli_64-106.pdf

Image Sources

BNP Paribas. "Financing the Beirut-Damascus Railway." BNP Paribas, January 2, 2023. <https://histoire.bnpparibas/en/financing-the-beirut-damascus-railway/>.

"Citadel of Tripoli." MOOVTOO Guide, April 27, 2023. <https://guide.moovtoo.com/LB/en/culture-heritage/detail/chateau-saint-gilles-de-Tripoli-3053#lg=1&slide=22>.

Chahine, Marylin, and Katrine Dige Houmøller. "How Uneven Aid Distribution Creates Divisions in Hay Al-Tanak - Beirut Today." *Beirut Today - Independent, community-based news*, October 4, 2022. <https://beirut-today.com/2021/05/03/how-uneven-aid-distribution-creates-divisions-in-hay-al-tanak/>.

K, Christele. "27 Rare Pictures of Old Tripoli That Will Take You Back in Time!" *the961*, February 22, 2021. <https://www.the961.com/rare-pictures-of-old-tripoli/>.

Dib, Antoine. "When Disasters and Erroneous Governmental Decisions Meet in Historical Centre: The Case of the Old Markets of the Lebanese Tripoli." *International Conference on Urban Planning*, November 2020. https://www.researchgate.net/publication/349947533_WHEN_DISASTERS_AND_ERRONEOUS_GOVERNMENTAL_DECISIONS_MEET_IN_HISTORICAL_CENTRE_THE_CASE_OF_THE_OLD_MARKETS_OF_THE_LEBANESE_TRIPOLI.

Gravier, Étienne. "Veüe de Tripoli de Sirie et Des Tours Qui En Deffendent Le Mouillage (1685-1687)." 2012. Map. Gallica. Bibliothèque Nationale de France, GE DD-226

(9RES). <https://gallica.bnf.fr/ark:/12148/btv1b55000225h.r=Ve%C3%BCe%20de%20Tripoli%20de%20Sirie%20et%20des%20tours%20qui%20en%20deffendent%20le%20mouillage?rk=21459;2>.

Ziegler, Jakob. "Tripolis, Vicinarumq. Terrarum Descriptio I. Z., 1500-1599." 2008. Map. Gallica. Bibliothèque nationale de France, département Cartes et plans, CPL GE DD-2987 (10111). <https://gallica.bnf.fr/ark:/12148/btv1b5964012r/f1.item.r=Tripolis,%20vicinarumq#>.

Bonfils, Félix. Port de Tripoli. Syrie. 2002. Service Des Collections de l'Ecole Nationale Supérieure Des Beaux-Arts. <https://bibliotheque-numerique.inha.fr/iiif/5140/manifest>.

Jidejian, Nina. Tripoli à travers les âges. Beirut, Lebanon: Aleph, 1969.

Institut Français Du Proche-Orient (ifpo). Vue aérienne (Tripoli liban). Photography. Institut français du Proche-Orient (Ifpo) MEAE - CNRS UMIFRE 6 - USR 3135, Tripoli, Lebanon. 1936. (medihal-00488509v1)

Lortet, Louis Charles. La Syrie d'aujourd'hui. voyages dans la phénicie, le liban et la judée. Paris, France : Hachette & Cie, 1884.

Bedford, Francis, Photographer. Tripoli. The Castle Citadel of Raymond de Saint-Gilles, with a Portion of the Town. Tripoli Lebanon Liban-Nord, 1862. Library of Congress. Photograph. <https://www.loc.gov/item/2021671068/>.

Landmarks map picture references

"Discovering Lebanon's Heritage: Private Tour to Byblos & Tripoli, Beirut - Líbano." patagonia.com. Accessed September 1, 2024. <https://www.ruta-patagonia.com/Tour-Detalle.php?t=162045P24>.

"Khan Al-Tamathilitripoli, Lebanon." Archnet. Accessed September 1, 2024. <https://www.archnet.org/sites/2515>.

karam, Karen. "Among the Old Alleys of El Mina." 365 Days of Lebanon, June 1, 2016. <https://365daysoflebanon.com/2016/06/01/among-the-old-alleys-of-el-mina-2/>.

Hamze, Mounzer. "Bersbay Tower." Mounzer Hamze, September 27, 2020. <https://mounzerhamze.com/2020/09/27/bersbay-tower/>.

Domat, Chloe, Hagar Hosny, and Michal Kranz. "Plans to Revive Lebanon's Ghost Railways Gather Steam." Al Monitor, August 28, 2017. <https://www.al-monitor.com/originals/2017/08/hope-of-revival-for-lebanese-trains.html>.

Merdim, Emine. "The Rachid Karameh International Fair of Tripoli Inscribed on UNESCO's World Heritage List." Arkitera, January 25, 2023. <https://www.arkitera.com/en/news-en/the-rachid-karameh-international-fair-of-tripoli-inscribed-on-unescos-world-heritage-list/>.

Ekinci, Ekrem. "Ottoman-Era Clock Towers Telling Time from Balkans to Middle East." Ekrem Buğra Ekinci. Accessed September 1, 2024. <https://www.ekrembugraekinci.com/article/?ID=770&ottoman-era-clock-towers-telling-time-from-balkans-to-middle-east>.

Rosa, Nathalie. "Souks of Tripoli." SOBEIRUT. Accessed September 1, 2024. <https://www.sobeirut.com/souks-of-tripoli>.

Ford, Ursula Kiener. "8 Things You Should Do in Tripoli, Lebanon." Yo de Viajes. Accessed September 1, 2024. <https://yodeviajes.com/8-things-you-should-do-in-tripoli-lebanon/>.

Rahayel, Anthony. "The Beautiful 'Khan El Askar' in Colors :: Nogarlicnoonions: Restaurant, Food, and Travel Stories/Reviews - Lebanon." NoGarlicNoOnions, June 12, 2017. <https://www.nogarlicnoonions.com/the-beautiful-khan-el-askar-in-colors/>.

"Tripoli." Cazabeit. Accessed September 1, 2024. <https://cazabeit.com/products/tripoli>.

Hamze, Mounzer. "Al Mansouri Great Mosque." Mounzer Hamze, September 24, 2020. <https://mounzerhamze.com/2020/09/24/al-mansouri-great-mosque/>.

"Citadel of Tripoli." MOOVTOO Guide, April 27, 2023. <https://guide.moovtoo.com/LB/en/culture-heritage/detail/chateau-saint-gilles-de-Tripoli-3053#lg=1&slide=22>.

04. Site Analysis

Aga Khan Trust for Culture. "Plan Directeur de Beyrouth et de Sa Banlieuebeirut, Lebanon." Archnet . Accessed September 12, 2024. <https://www.archnet.org/sites/8377>.

Anera. "Inflation Continues Soaring in Lebanon." Anera, February 27, 2024. <https://www.nera.org/blog/inflation-continues-soaring-in-lebanon/#:~:text=According%20to%20recent%20data%20compiled,on%20average%20for%20the%20year>.

Britannica, Editors of Encyclopaedia. "2006 Lebanon War." Encyclopædia Britannica, March 28, 2024. <https://www.britannica.com/event/2006-Lebanon-War>.

Shehadi, Lemma. "Trade Revival: Carpentry Workshop in Tripoli, Lebanon, by East Architecture Studio and Oscar Niemeyer." The Architectural Review, April 26, 2024. <https://www.architectural-review.com/buildings/trade-revival-carpentry-workshop-in-tripoli-lebanon-by-east-architecture-studio-and-oscar-niemeyer>.

UNESCO. "Developing a Conservation Management Plan for Tripoli Fair." UNESCO, 2024. <https://www.unesco.org/en/node/164785>.

Worldometer. "Lebanon COVID." Worldometer, 2024. <https://www.worldometers.info/coronavirus/country/lebanon/>.

Dagher, Leila, and Sumru Altug. "The End Game to Lebanon's Woes: IMF Reform and Political Willingness: Gjia." Georgetown Journal of International Affairs, November 12, 2023. <https://gjia.georgetown.edu/2023/11/10/the-end-game-to-lebanons-woes-imf-reform-and-political-willingness/>.

Torres, Agnese. "Unpacking Casa Das Canoas (1953), Oscar Niemeyer: Making Concrete Sexier." Lampoon Magazine, June 18, 2023. <https://lampoonmagazine.com/article/2023/06/19/casa-das-canoas-oscar-niemeyer/>.

Budin, Anne Claire. "Roberto Burle Marx." Floraviva, June 18, 2022. <https://www.floraviva.it/news/il-paesaggista/roberto-burle-marx.html>.

- UNESCO. Emergency Nomination of Rachid Karami International Fair - Tripoli - Lebanon. Beirut, Lebanon. United Nations Educational, Scientific and Cultural Organization, 2022. <https://whc.unesco.org/document/192804>.
- Kaufman, Asher. "Lebanon's Tragic Path from Economic Miracle to Collapse." Kellogg Institute For International Studies, August 5, 2021. <https://kellogg.nd.edu/news/lebanon%E2%80%99s-tragic-path-economic-miracle-collapse>
- Rami Rizk, May 2021. Retrieved from https://x.com/rami_rizk/status/1393904471084765189.
- Aoun, Imad, and Nadim Younes. "Digital District - Knowledge and Innovation Center - MDDM Architects: Architecture & Interior Design." MDDM Architects | Architecture & Interior Design, July 1, 2020. <http://www.mddm.me/portfolio/digital-district-knowledge-and-innovation-center/>.
- Hanna, John. "Endangered Heritage Following Beirut Port Explosion." Centre for Global Heritage and Development, August 17, 2020. <https://www.globalheritage.nl/news/endangered-heritage-following-beirut-port-explosion>.
- Perry, Tom, and William Maclean. "Timeline: Lebanon's Ordeal from Civil War to Port Blast." Edited by Mike Collett-White and Ed Osmond. Reuters, December 2020. <https://www.reuters.com/article/idUSKBN28Y05I/>.
- El Hussein, Adonis. Thesis. Oscar Niemeyer's Iconic Ensemble for Lebanon's International Fair Complex in Tripoli, 2019. https://bib.kuleuven.be/english/ebib/collection/publications/Doctorates_and_theses.
- Naghi, Wassim. "The Legend of Niemeyer in Tripoli." Civilization. April 2018. <https://www.attamaddon.com/2018/04/article-3202.html>.
- Regnier, Isabelle (2018) Architecture : la Foire de Tripoli, l'héritage libanais d'Oscar Niemeyer, in Le Monde online newspaper article, published on October 1, 2018 : https://www.lemonde.fr/architecture/article/2018/10/01/architecture-la-foire-de-tripoli-l-heritage-d-oscar-niemeyer_5362615_1809550.html
- Abdallah, Sanaa. "LA FOIRE INTERNATIONALE DE TRIPOLI." Université Libanaise Institut des Beaux-Arts, 2015.
- Tabet, Jad. "Je n'irai Pas à Brasilia." Essay. In *Suspended Spaces # 3– Inachever La Modernité*, Beaux-Arts de Paris éditionsed., 244–49. Paris, France : ENSBA, 2015. https://www.suspendedspaces.net/entrance/book-Suspended_space3.html.
- Kihlgren, Giacomo. "NIEMEYER. LYING ON THE GROUND." FAmagazine no. 25, 2014. https://www.festivalarchitettura.it/festival/En/Magazine_Detail.asp?ID=129&pmagazine=8&pagecomm=1.
- Nader, Fadi H., 2014. *The Geology of Lebanon*. Scientific Press. p. 79.
- Lahoud, Adrian. 2013. "Architecture, the City and Its Scale: Oscar Niemeyer in Tripoli, Lebanon." *The Journal of Architecture* 18 (6): 809–834. doi:10.1080/13602365.2013.856931.
- Tabet, Jad. "Le Projet de Foire Internationale d'Oscar Niemeyer à Tripoli, Liban (1968-1974)

." Essay. In *Suspended Spaces#2 - Une Expérience Collective 2*, BlackJacked., 2:22–27. Paris, France: les presses du réel, 2012.

UNESCO. "Developing a Conservation Management Plan for Tripoli Fair." UNESCO, November 2024. <https://www.unesco.org/en/node/164785>.

Robroek, Roman. "The Beit Beirut Building in Lebanon in 15 Beautiful Photos." Roman Robroek | Urban Photography, June 27, 2024. <https://romanrobroek.nl/i-photographed-the-beit-beirut-building-in-lebanon/>.

World Heritage Centre, UNESCO. "The Operational Guidelines for the Implementation of the World Heritage Convention." UNESCO World Heritage Centre - The Operational Guidelines for the Implementation of the World Heritage Convention, September 2023. <https://whc.unesco.org/en/guidelines/>.

Fann, Kate. "How to Remove Mold from Concrete: 5 Potential Methods." Angi, October 28, 2023. <https://www.angi.com/articles/remove-mold-from-concrete.htm>.

UNESCO. Annex for Emergency Nomination of Rachid Karami International Fair - Tripoli - Lebanon. Beirut, Lebanon. United Nations Educational, Scientific and Cultural Organization, 2022. <https://whc.unesco.org/document/192804>.

Ghostshield. "How to Remove Efflorescence from Concrete ." Ghostshield Concrete Sealers, June 7, 2021. <https://ghostshield.com/articles/remove-efflorescence-concrete>.

Piferi, Claudio. 2018. "Materials and Innovative Methodologies for Restoring Fair Faced Concrete". *TECHNE - Journal of Technology for Architecture and Environment* 16 (May):258-69. <https://doi.org/10.13128/Techne-23013>.

Piffaretti, Paola, and Giacinta Jean. "Non-Invasive Interventions to Restore Exposed Raw Concrete Surfaces and Enhance Durability." Essay. In *Conservation of Fair-Faced Concrete: From Minimum Intervention to Reconstruction: Examination of Case Studies*, 11–15. Firenze, Italy: Nardini Editore, 2018.

Arreghini, Cap. A06 Protection and Rehabilitation of Concrete. Portoguardo, Italy: Cap Arreghini, September 2017. https://www.caparreghini.it/wp-content/uploads/2017/09/06_PROTECTION-AND-REHABILITATION-OF-CONCRETE.pdf.

El Asmar, Jean-Pierre. "Part I: Conservation Policies for Twentieth-Century Architectural Heritage; Asia: Lebanon." Essay. In *Time Frames: Conservation Policies for Twentieth-Century Architectural Heritage*, 153–55. London, New York: Routledge, 2017.

Grignolo, Roberta. "Part II: Short Critical Lexicography; Conservation: Law and Regulations." Essay. In *Time Frames: Conservation Policies for Twentieth-Century Architectural Heritage*, 443–452. London, New York: Routledge, 2017.

International Scientific Committee on Twentieth Century Heritage, ICOMOS. *Approaches to the Conservation of Twentieth - Century Cultural Heritage: Madrid-New Delhi Document*. ICOMOS. 2017. Accessed 2024. https://openarchive.icomos.org/id/eprint/2682/1/MNDD_ENGLISH.pdf.

Vittorini, Rosalia. "Part II: Short Critical Lexicography; Conservation: Technology." Essay. In

Time Frames: Conservation Policies for Twentieth-Century Architectural Heritage, 453–465. London, New York: Routledge, 2017.

“Beit Beirut - Museum and Urban Cultural Center.” Beit Beirut, 2016. <https://www.beitbeirut.org/english/thehouseen.html>.

Rajab, Mousbah. Les grands projets de Tripoli. Systèmes de décisions et besoins de réappropriation. Conquérir la ville. Réappropriation urbaine : Acteurs, mécanismes, jeux, June 2006, Lebanon. <https://shs.hal.science/halshs-00587593>

Harmandayan, Diran. “Municipality Management Using GIS Conference.” In Directorate General of Urbanism. Damascus: Ministry of Public Works, 2002.

Petit, J. (1996). Niemeyer: parole di un architetto. Lugano: Fidia.

Dar Al-Handasah. The Rachid Karamé International Fair Complex - Tripoli - Lebanon. Vol. III of L9458. Tripoli, Lebanon: Dar Al-Handasah, 1995.

Hijazi, Ihsan A. “Lebanese Premier Is Assassinated in Copter Blast.” The New York Times, June 2, 1987. <https://www.nytimes.com/1987/06/02/world/lebanese-premier-is-assassinated-in-copter-blast.html>.

Niemeyer, Oscar. “Foire Internationale et Permanente Du Liban à Tripoli.” Architecture d’Aujourd’hui, 33, no. 105 (January 1963): 96–100.

L’Orient-Le Jour. “Le Président Karamé Présente à La Presse La Maquette de La Foire Internationale de Tripoli « L’idée d’un Bâtiment Unique, Tel Que Conçu Par Oscar Niemeyer (...), Est Révolutionnaire ».” L’Orient, September 4, 1962. <https://www.lorientlejour.com/article/942501/le-president-karame-presente-a-la-presse-la-maquette-de-la-foire-internationale-de-tripoli-lidee-dun-batiment-unique-tel-que-concu-par-oscar-niemeyer.html>.

Niemeyer, Oscar. “Description of the Project for the International and Permanent Fair of Lebanon in Tripoli”. The project presented to Prime Minister Rachid Karami, September 1962, (L’Orient-le Jour archival newspaper published 4 September 1962). Retrieved from the Supplementary information of the UNESCO Nomination of Rachid Karami International Fair-Tripoli (1702), July 2022, p.27-28. <https://whc.unesco.org/en/documents/195063>

Niemeyer, Oscar. “Lebanon Permanent International Fair at Tripoli”. Modulo Magazine, no.30 October 1962, p.1-23

Image Sources

UNESCO. “Developing a Conservation Management Plan for Tripoli Fair.” UNESCO, November 2024. <https://www.unesco.org/en/node/164785>.

“During the construction of the Tripoli International Fair, benefits and advantages”, accessed 2024, http://33shamy.blogspot.com/2016/08/blog-post_9.html.

Hmeidan, Maya. "Oscar Niemeyer's International and Permanent Fairground of Lebanon: The Challenges of Conserving a Utopian Vision." Essay. In *Keeping It Modern: Heritage Under Pressure. Perspectives from the Global South*, 58–94. Toronto, Canada: University of Toronto, 2023.

"Oscar Niemeyer's International and Permanent Fairground of Lebanon: The Challenges of Conserving a Utopian Vision." Essay. In *Keeping It Modern: Heritage Under Pressure. Perspectives from the Global South*, 2023.

Senado, Agencia. Oscar Niemeyer National Congress. Archdaily. Flickr, January 2023. <https://www.archdaily.com/773568/ad-classics-national-congress-oscar-niemeyer/55f64d2fe58ecec1f8000088-ad-classics-national-congress-oscar-niemeyer-photo>.

UNESCO. Emergency Nomination of Rachid Karami International Fair - Tripoli - Lebanon. Beirut, Lebanon. United Nations Educational, Scientific and Cultural Organization, 2022. <https://whc.unesco.org/document/192804>.

East Architecture Studio. 2021. <https://www.architecturalreview.com/buildings/traderevival-carpentryworkshop-in-tripolilebanon-by-eastarchitecture-studioand-oscar-niemeyer>

AG, S. "Oscar Niemeyer." Kernig Krafts, December 2019. <https://kernigkrafts.com/blog/oscar-niemeyer/>.

MDDM. Knowledge & Innovation Center. 2019. MDDM.

Philippou, Styliane. *Oscar Niemeyer: Curves of irreverence*. New Haven, USA: Yale University Press, 2008.

Rajab, Mousbah. *Les grands projets de Tripoli. Systèmes de décisions et besoins de réappropriation. Conquérir la ville. Réappropriation urbaine : Acteurs, mécanismes, enjeux*, June 2006, Lebanon. <https://shs.hal.science/halshs-00587593>

Niemeyer, Oscar. (1968) *Quase memórias, viagens: tempos de entusiasmo e revolta, 1961-1966*, Rio de Janeiro: Civilização Brasileira.

Mayez El Adhami archives, 1966. https://www.facebook.com/tripoliinblackandwhite/photos/a.701548436545618/2092900630743718/?locale=es_ES

Niemeyer, Oscar. "Foire Internationale et Permanente Du Liban à Tripoli." *Architecture d'Aujourd'hui*, 33, no. 105 (January 1963), p.96-100

Niemeyer, Oscar. "Lebanon Permanent International Fair at Tripoli". *Modulo Magazine*, no.30 October 1962, p.1-23

Arab Centre for Architecture. <https://arab-architecture.org/>

Pavilion Images

UNESCO, 2024. <https://www.unesco.org/sites/default/files/medias/fichiers/2024/03/Contacts%20FR.pdf?hub=421>.

Janine Pendleton, October 2023. Retrieved from <https://www.obsidianurbexphotography.com/other/rachidkarami-international-fair-of-tripoli-lebanon/>.

East Architecture Studio. "The Niemeyer Guest House Renovation / East Architecture Studio" (15 Jun 2022). ArchDaily. Accessed 5 Oct 2024. <<https://www.archdaily.com/983625/the-niemeyer-guest-house-renovation-east-architecture-studio>> ISSN 0719-8884

UNESCO. Annex for Emergency Nomination of Rachid Karami International Fair - Tripoli - Lebanon. Beirut, Lebanon. United Nations Educational, Scientific and Cultural Organization, 2022. <https://whc.unesco.org/document/192804>.

UNESCO. Emergency Nomination of Rachid Karami International Fair - Tripoli - Lebanon. Beirut, Lebanon. United Nations Educational, Scientific and Cultural Organization, 2022. <https://whc.unesco.org/document/192804>.

Youssef, Al Mezeraani. Thesis. Rashid Karame International Fair in Tripoli, Lebanon: Towards a Conservation Management Plan, 2019, p.82. <https://www.politesi.polimi.it/handle/10589/148192>.

05. Concept

UNESCO. "Developing a Conservation Management Plan for Tripoli Fair." UNESCO, November 2024. <https://www.unesco.org/en/node/164785>.

Robroek, Roman. "The Beit Beirut Building in Lebanon in 15 Beautiful Photos." Roman Robroek | Urban Photography, June 27, 2024. <https://romanrobroek.nl/i-photographed-the-beit-beirut-building-in-lebanon/>.

World Heritage Centre, UNESCO. "The Operational Guidelines for the Implementation of the World Heritage Convention." UNESCO World Heritage Centre - The Operational Guidelines for the Implementation of the World Heritage Convention, September 2023. <https://whc.unesco.org/en/guidelines/>.

Fann, Kate. "How to Remove Mold from Concrete: 5 Potential Methods." Angi, October 28, 2023. <https://www.angi.com/articles/remove-mold-from-concrete.htm>.

UNESCO. Annex for Emergency Nomination of Rachid Karami International Fair - Tripoli - Lebanon. Beirut, Lebanon. United Nations Educational, Scientific and Cultural Organization, 2022. <https://whc.unesco.org/document/192804>.

Ghostshield. "How to Remove Efflorescence from Concrete ." Ghostshield Concrete Sealers, June 7, 2021. <https://ghostshield.com/articles/remove-efflorescence-concrete>.

Piferi, Claudio. 2018. "Materials and Innovative Methodologies for Restoring Fair Faced Concrete". *TECHNE - Journal of Technology for Architecture and Environment* 16 (May):258-69. <https://doi.org/10.13128/Techne-23013>.

Piffaretti, Paola, and Giacinta Jean. "Non-Invasive Interventions to Restore Exposed Raw Concrete Surfaces and Enhance Durability." Essay. In *Conservation of Fair-Faced Concrete: From Minimum Intervention to Reconstruction: Examination of Case Studies*, 11–15. Firenze, Italy: Nardini Editore, 2018.

Arreghini, Cap. A06 Protection and Rehabilitation of Concrete. Portoguardo, Italy: Cap Arreghini, September 2017. https://www.caparreghini.it/wp-content/uploads/2017/09/06_PROTECTION-AND-REHABILITATION-OF-CONCRETE.pdf.

El Asmar, Jean-Pierre. "Part I: Conservation Policies for Twentieth-Century Architectural Heritage; Asia: Lebanon." Essay. In *Time Frames: Conservation Policies for Twentieth-Century Architectural Heritage*, 153–55. London, New York: Routledge, 2017.

Grignolo, Roberta. "Part II: Short Critical Lexicography; Conservation: Law and Regulations." Essay. In *Time Frames: Conservation Policies for Twentieth-Century Architectural Heritage*, 443–452. London, New York: Routledge, 2017.

International Scientific Committee on Twentieth Century Heritage, ICOMOS. *Approaches to the Conservation of Twentieth - Century Cultural Heritage: Madrid-New Dehli Document*. ICOMOS. 2017. Accessed 2024. https://openarchive.icomos.org/id/eprint/2682/1/MNDD_ENGLISH.pdf.

Vittorini, Rosalia. "Part II: Short Critical Lexicography; Conservation: Technology." Essay. In *Time Frames: Conservation Policies for Twentieth-Century Architectural Heritage*, 453–465. London, New York: Routledge, 2017.

"Beit Beirut - Museum and Urban Cultural Center." Beit Beirut , 2016. <https://www.beitbeirut.org/english/thehouseen.html>.

Annex

LAW N° 274

Dated 07/03/2022

Published in the Official Journal, no. 11 on 10/03/2022

Law

Reorganization of Rachid Karami International Fair

Article 1:

This law aims to reorganize the Rachid Karami International Fair, which was established by Decree 4027, issued on May 4, 1960 and its amendments. It defines the Fair's functions, aims at achieving the reconstruction of its structures and/or their rehabilitation and/or refurbishment, and/or their operation and/or maintenance, as well as determines the conditions of operating and managing the Fair and the works that can be commissioned.

The Rachid Karami International Fair is a public entity with moral identity, as well as financial and administrative autonomy. This public entity is exempt from the General Rules of Procedure for Public Agencies, promulgated by Decree No. 4517 dated December 13, 1972, and the General Rules of Procedure for Public Agencies, promulgated by Decree No. 4517 dated December 13, 1972.

Article 2:

These words in this law shall have the following meanings:

The Fair: Rachid Karami International Fair, in the sense of decree 4027, issued on May 4, 1960, and its amendments.

The Board: Board of Directors of Rachid Karami International Fair.

The Project: Every activity, whether permanent or temporary, held in the fair or any of its components.

The Occupant: The physical or moral person who, in exchange for a fee or free of charge, occupies a covered or an open-air area within the Fair for a set period in relation to an event or activity.

The Occupation Contract: is the contract between the Fair and an occupant who is occupying a specific space for a set period in exchange for a fee or free of charge to hold an event or activity.

The Operator: The physical or moral person who is responsible for operating all or some of the artistic, technical, administrative, and/or environmental sections of the Fair (for the benefit of the Fair management or on behalf of the Fair management)

Operation Contract: The contract that the Fair concludes with an operator in exchange for a fee. It outlines the services required, the action plan, the needed employees, the materials,

tools, and all what is needed for routine maintenance and other things to complete the operator's mission.

The Investor: The physical or moral person who is responsible for implementing, on his own dime, a project within the Fair premises, such as the building the Fair constructions, and/or rehabilitating existing structures, and/or refurbishing all or some of its sections in order to exploit them, for a set period of time.

The Investment Contract: is a contract between the Fair and an investor for a set period of time, whereby the latter invests funds in all or part of the Fair facilities with the hope of making profit that will provide the investor a return on his funds.

Chapter 1: The Fair mission

Article 3:

The Fair oversees:

- a- Organizing and/or hosting: exhibitions, conferences, seminars, meetings, festivals, and different celebrations particularly in the fields of economics, commerce, culture, art, tourism and sports.
- b- Exploits the Fair's facilities or grounds to set up business ventures that do not contradict with the objectives of the Fair and/or provide various sorts of services, primarily in the domains of tourism, knowledge economy, information technology and sport.

Chapter II: The legal status of the Fair

Article 4:

The Fair is exclusively bound by the terms of this law and its own rules.

Article 5:

a-The Ministry of Economy and Trade, exercises sole administrative tutelage over the Fair in the following areas:

- 1.Approval of all regulations prepared by the Fair's Board of Directors pertaining to its operation, including the investment regulations at the Fair.
- 2.Approval of investment and operation contracts.
- 3.Approval of the annual budget, closing accounts, profit and loss account, public account balance, and annual materials inventory.
- 4.Loans;
- 5.Donations and reconciliation contracts.

b-The tutelage authority must make decisions subject to its approval within a period of one month from the date of receiving these decisions.

This time frame is reduced to 15 days when it comes to the authentication of bids, investment

contracts and occupation contracts. Maintenance contracts are not subject to authentication.

Decisions subject to ratification are considered ratified by the expiry of the ratification deadline.

If the tutelage authority demands written clarifications or documents in connection to decisions subject to its authentication, it could do so all at once, then the period will be extended one time for a maximum of 10 days in the case of bids and 15 days in the case of other decisions, as of the date the clarifications and supporting documents are received.

Article 6:

a-The Fair is subject to post control of the Court of Account.

b-The Fair is neither subject to the Civil Service Board nor to the Central Inspection.

Article 7:

a-The Board shall establish the following Fair regulations:

- Rules of procedures of the Board of Directors.
- Financial regulations;
- Fair's cadre, ranking and salary scale of the employees, and procedure for their nomination and recruitment.
- Rules and regulations for employees.
- Investment and operation rules;

b-These decisions will become effective following their ratification by the minister of tutelage.

Article 8:

The revenues of the Fair consist of the following:

a-Contributions allocated in the State budget;

b-Revenues and allowances derived from the Fair management, as well as the operation and occupation of the Fair facilities;

c-Other resources authorized by its laws and regulations;

d-Donations and other earnings.

Article 9:

a-The Board assumes the authority of decision making in the Fair.

b-The Board is composed of a chairman and six members, appointed for a renewable five-year term by a decree of the Council of Ministers upon the recommendation of the Minister of Economy and Trade.

c-The chairman and members of the Board must meet the following requirements:

1.To have Lebanese citizenship for more than ten years, with full exercise of civil rights, and no conviction of an offense or have been removed from any position in a public administration or a public institution.

2.To have at least a recognized Bachelor's degree, with the Board having among its members an architect, a lawyer, an IT specialist or a computer engineer, a finance specialist, a management, business development and innovation specialist, a civil engineer, and an entrepreneur.

3.To be competent and to have at least 7 years of experience in their field of specialization.

The Board of Directors shall meet at least twice a month.

d-At the end of its term, the Board continues to carry out its functions until a new Board is appointed.

e-Two months before the expiration of the Board's term, the tutelage minister shall recommend to the Council of Ministers either the renewal of the Board for a second term or the nomination of a new Board.

Article 10:

According to paragraph (d) of Article (9) of this law, the chairman of the Board assumes the executive authority at the Fair in this capacity as well as in his capacity as a director general, and he shall exercise his functions in accordance with the provisions of this law and the Fair regulations throughout the term, including the extended one.

Article 11:

Throughout the Board's term and within two years of its expiration, the chairman, Board members, their spouses, parents, and children are prohibited from dealing and/or being associated directly or indirectly with any of the people or entities connected to the Fair through a contract or an agreement or a partnership or a proxy.

Article 12:

a-Except for resignation, the term of the Chairman and one or more of the Board members may be terminated by a decree of the Council of Ministers at the recommendation of the Minister of Economy and Trade, for a gross breach of the duty obligations, in accordance with Chapter 1 of Part 3 of the Second Book of the Penal Code, or for a grave error in conducting business, or for abandoning duties at the Board. If the chairman or any member of the Board is absent from four consecutive meetings or more than eight sessions in a calendar year without a legitimate reason, their membership will be automatically terminated. The Board must notify the minister of tutelage to begin the process of naming a replacement. The chairman's term will also be terminated for violating the fulltime function requirement.

b-The chairman and members of the Board shall be removed if they commit an infraction or gross negligence as defined in the Penal Code, by a decree issued by the Council of Ministers upon the recommendation of the Minister of Economy and Trade.

Article 13:

The remuneration of the chairman and director general, and Board members is determined by a decree of the Council of Ministers at the recommendation of the Minister of Economy and Trade after consultation with the Minister of Finance.

Article 14:

I. The Chairman of the Board of Directors assumes the following duties:

a. Chairs Board meetings, moderates discussions and calls for regular and urgent meetings based on an agenda distributed to members at least 72 hours before the meeting date, except for urgent meetings.

b. As administrative director of all employees, supervises their work, guides them, and takes disciplinary measures against them in accordance with the Employees' status and general law.

c. Implements all decisions by the Board of Directors.

d. Represents the Fair both locally and internationally, as well as before courts, administrations, and third parties.

e. Signs on behalf of the Board.

f. Works to ensure coordination with public administrations and institutions, municipalities, and other entities concerned with the Fair status.

g. Exercises the powers delegated by the Board of Directors.

h. Submits to the Board, the transactions subject to the Board's competence, within 10 days of receiving it.

i. In the absence of the chairman or the vacancy of his position, the vice-chair exercises all his powers, and if not available, the eldest member so does.

II. The Board's functions

The Board oversees all legal work and procedures required to achieve the Fair's objectives, particularly the following tasks and competencies:

a. Establishes the rules and regulation of the Fair, especially:

1. Financial regulations and accounting record design;

2. Investment regulations, which should include investment rules as well as methods for containing infractions and imposing fines and sanctions;

3. Employees' status and Fair's cadre, as well as recruitment requirements, categories, ranks, and salary scales, workers' status, and general by-laws;

b. Establishes the annual budget and its closing accounts, as well as the annual public budget and the gain and loss account, the general balance of accounts, and the annual

total inventory.

c. Use of the general reserve, determining ways to allocate gains and cover losses.

d. Loans.

e. Procurement of supplies, services, or works through any procedure that complies with the provisions of the Public Procurement Law.

f. Providing contributions and financial assistance to non-employed workers of the institution.

g. Accept donations and voluntary contributions.

h. Purchase of movable and immovable property.

i. Prosecution before the judiciary.

j. Management, exploitation, development and maintenance of the Fair; and for this purpose, initiating all necessary construction, administrative, financial, and commercial work.

k. Grants the right to occupy parts of the facilities and spaces for a fee or for a short limited time free of charge.

l. Establishes investment projects in the Fair.

m. Oversees the quality of the services to be provided to the occupant, operator, and investor.

n. Approves operation contracts prior to ratification and signing.

o. Approves investment contracts prior to ratification and signing.

p. Receives applications for work permits for foreigners, submits applications for work permits for investors and issues these permits in accordance with a special legal status.

q. Any other tasks required for the proper functioning of the Fair.

Chapter III: Legal status of the Fair structures

Article 15:

The Board may enter contracts with investors to provide some services at the Fair and for the Fair's exclusive needs, such as the production of electrical energy, communication services, and water supply.

Article 16:

The operating contract for the Fair, as well as any similar or subsidiary contract, shall not exceed thirty years. Non-investment operating contracts can be signed for a maximum of 9 years and are renewable.

Article 17:

The Board or the investor may lease the occupant part of the covered interior spaces within the premises of the Fair or its open spaces and collect rent from the tenant, whether the

tenant is the Fair or an authorized operator.

The Board may grant the investor the right to charge a fee to the occupants and other investors in exchange for performing certain services related to the investment activities that the investor offers or provides.

Article 18:

The Board, investors, and occupants must preserve the authenticity of the built structures in the Fair and take into consideration the external architectural character and cultural value of these structures, as confirmed by its inclusion in the UNESCO tentative world heritage list, in accordance to the attached image, which is considered an integral part of this law and divides the Fair premises into two parts: zone (A) is a red-hatched rectangle on the map 800 m long and 500 m wide. The rectangle includes the structures designed by Architect Niemeyer, and Zone (B) covers the rest of the premises and consists of the green-hatched area on the map and serves as a buffer zone for the heritage installations.

Zone (A) and its facilities are subject to UNESCO conditions for inclusion on the World Heritage List, and any intervention for restoration, reconstruction, or internal development must be approved by the Ministry of Culture.

Zone (B) is subject to the conditions of Buffer zones. Its uses, as well as new constructions in it are subject to UNESCO requirements for buffer zones of the sites nominated for the World Heritage List, and new constructions are subject to the approval of the Ministry of Culture.

Article 19:

Physical and moral persons who engage in an activity at the Fair are subject to the conditions specified in their permits, as well as all health and environmental requirements stipulated either in laws and regulations or in Board decisions.

Chapter 4: Labour and Social Security System

Article 20:

Notwithstanding any other provision, work relations between employees and entities operating at the Fair relating to terms of remunerations and dismissal are subject to the contractual Agreements between the Parties, provided that the indemnities set in the contracts in favour of the workers and employees, are no less than the rights provided for in Labour law.

Article 21:

Applications for work permits and renewals for foreign employers or workers who entered Lebanon to work at the Fair are submitted to the Board. The Board has the right to grant or renew these permits according to the provisions of this law.

Article 22:

A foreigner who is the owner of an authorized investment project is granted a work permit at the Fair, regardless of the nature of the investment project, if the permit is consistent

with the provisions of this law.

Article 23:

Employees and workers employed by the investment entities established at the Fair are exempt from the provisions of social security. Employers who hire these workers at the Fair are exempt from the obligation to disclose, register, and pay contributions to National Social Security Fund. Employers who benefit from the above-mentioned exemptions must provide health allocations to their employees and dependents, comparable to or exceeding the allocations provided by the National Social Security Fund to its subscribers. The Board committee should confirm the employers' commitment to these obligations.

Chapter 5: Incentives and exemptions

Article 24:

The project that will be held within the Fair premises shall be exempt from custom fees, including the minimum fee charge, consumption tax, value added tax, and import and export tax, on the equipment, tools, materials, and products required for the project, provided that the fees and taxes are paid if any of these items are removed from the Fair and introduced to the Lebanese market.

If necessary, a Lebanese customs checkpoint can be set up within the Fair premises to collect the necessary custom fees if the products are withdrawn from the Fair and introduced to the Lebanese market.

Article 25:

Profits of projects established in the Fair are exempt from income tax if the following conditions are met:

a. The value of the fixed assets used in the project or its capital should not be less than \$150,000 USD, or its equivalent in Lebanese pounds or any another currency.

b. The percentage of Lebanese workers should be at least (50%) of the total number of employees and workers hired for the project.

Article 26:

Salaries and their supplements that are reimbursed to employees and workers hired in projects held at the Fair are exempt from income tax.

Article 27:

Construction license fees, allotment fees, municipality fees, and real estate tax are waived for buildings and structures built or to be built at the Fair.

Article 28:

Corporate companies whose goal is to establish and/or manage a project at the Fair will be exempt from the requirement of having a Lebanese citizen or a Lebanese moral entity on their board of directors.

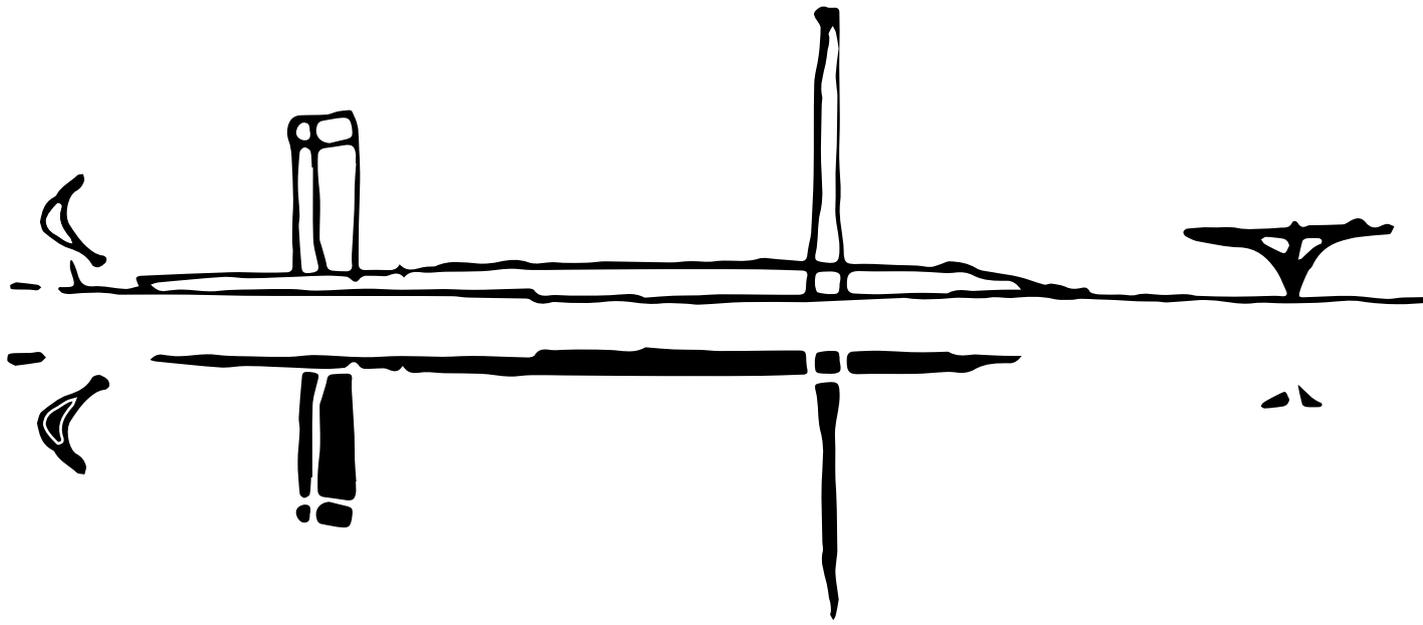
Chapter 6: Transitional provisions

Article 29:

All texts that are contradictory or do not comply with the provisions of this law and are included in the decree number 4027 dated 4 May 1960 and its amendments, as well as all decrees, implementing and regulatory decisions issued under the aforementioned decree, shall be repealed, providing that the regulatory decrees and implementing texts governing the Fair continue to be applicable, in accordance with this law, until they are amended or new regulations are enacted.

Article 30:

This law becomes effective once published in the Official Journal.



POLITECNICO DI TORINO

Master's Degree Thesis in
Architecture for Heritage, 2024