

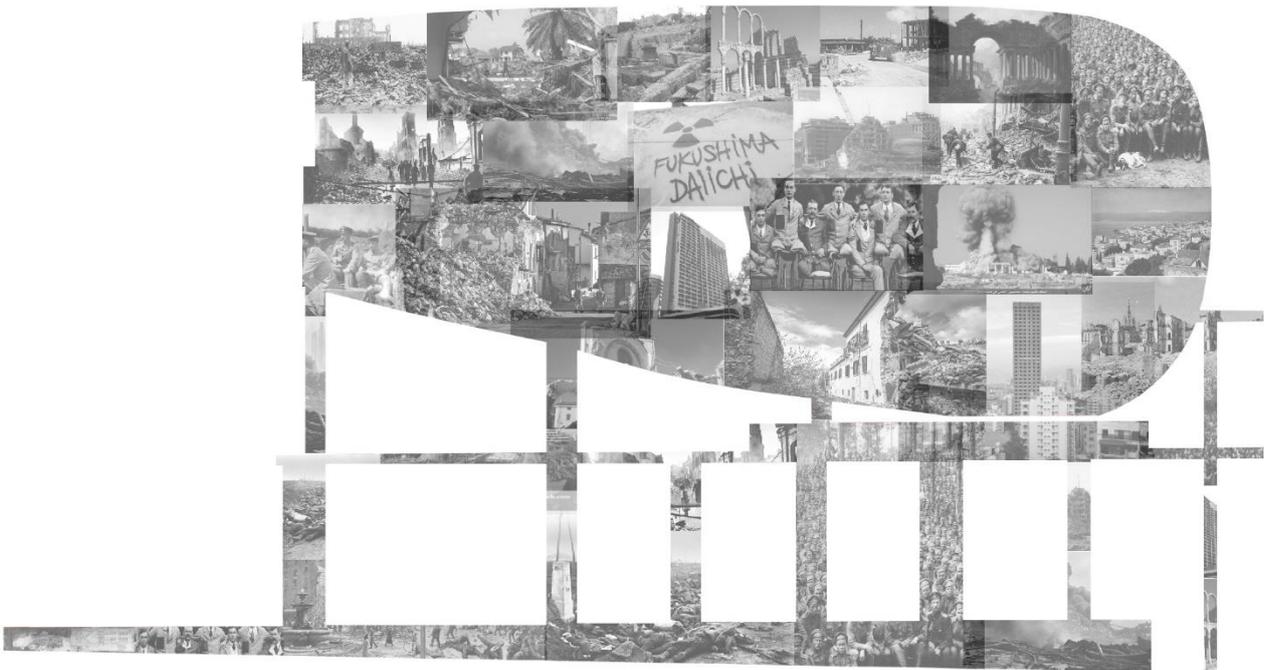


**POLITECNICO
MILANO 1863**

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PLANNING CONSTRUCTION ENGINEERING

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Heritage Preservation in Post War scenarios The case of the Egg, Beirut



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Abstract:

The world has always been suffering from disasters and crises whether of natural phenomena or war disasters. Post crises, people usually lose part of their history as a result of the damage which affects their heritage, monuments, and urban fabrics. The main dilemma in this situation is “Demolition Vs Renovation”. In this thesis, we will analyze several post disaster case studies from different parts of the world going through main focuses such as psychology, Identity, culture and memory. In addition, the role of social media in such situations will be strongly highlighted through the description and comparison of case studies of different periods.

Beirut City Center, also known as “the Egg”, is the case study of this thesis. It is located in Beirut, the capital of Lebanon. One of the biggest tragedies that Lebanon suffered from in the 20th century is the Civil war that lasted for 15 years from 1975 till 1990. From the first part of this thesis we will come to a conclusion that will guide us towards a conservation and reuse proposal regarding our case study “the Egg”. As a first step, “the Egg” will be studied in details starting from its context, its history, its design reaching the interventions it has undergone through time as well as its importance today as a monument for the Lebanese people. All these factors led to saving this complex from being demolished.

Keywords:

Conservation, War, Natural disasters, Post Traumatic Scenarios, Heritage, War remnant, Psychology, Identity, Memory, Society, Culture, Social Media, Lebanon, Beirut, Civil war, BCD, Solidere, The Egg.

Sommario:

Il mondo ha sempre sofferto di crisi e disastri, siano essi fenomeni naturali o disastri di guerra. In seguito a tali crisi, a causa dei danni a cui sono stati soggetti il patrimonio culturale, i monumenti ed il tessuto urbano, le persone hanno perso parte della loro storia. In queste circostanze, il dilemma principale è "Demolizione Vs Rinnovo". In questa tesi analizzeremo diversi casi di studio, da diverse parti del mondo, focalizzandoci su aspetti psicologici, d'identità, culturali e di memoria, in seguito ai disastri avvenuti. Inoltre, verrà fortemente evidenziato il ruolo dei social media in queste situazioni, attraverso la descrizione ed il confronto tra casi di studio di periodi diversi.

Il Beirut City Center, conosciuto anche come "the Egg", è il caso di studio analizzato in questa tesi. Esso si trova a Beirut, capitale del Libano. Una delle più grandi tragedie che hanno colpito il Libano nel 20th secolo è stata la Guerra civile durata 15 anni, dal 1975 al 1990. Dalla prima parte di questa tesi si giungerà ad una conclusione che, successivamente, ci guiderà verso una proposta di conservazione e riutilizzo dell'edificio in questione, "the Egg". Per prima cosa, "the Egg" verrà studiato in maniera dettagliata a partire dal contesto, dalla sua storia, dal suo design, sottolineando anche gli interventi a cui è stato sottoposto nel tempo e l'importanza che oggi ha, dal momento che rappresenta un vero e proprio monumento per i Libanesi. Tutti questi fattori spiegano il motivo per cui questo edificio non è stato demolito, almeno fino ad oggi.

Parole Chiave:

Conservazione, Guerra, Disastri Naturali, Scenari Post Traumatici, Patrimonio, Resti di Guerra, Psicologia, Identità, Memoria, Società, Cultura, Social Media, Libano, Beirut, Guerra Civile, BCD, Solidere, The Egg.



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INTRODUCTION

Cultural heritage defines traces of human history and allows a healthy growth for future generations. Heritage loss is both a consequence of war and natural disaster. Moreover, civil wars have a great impact on societies and cultures. This has become a major debated issue by countries all over the world.

This thesis will include two main parts: the first part tackles heritage in post-traumatic scenarios by examining many case studies from around the globe, while the second part is concerned about the case study of Beirut and the Egg as a war remnant.

The first chapter highlights the importance of preserving culture and history for the sake of protecting the identity of the society and its heritage. Most of the countries that participated in World War II suffered from heritage loss. France under the German attack, for example, lost a great deal of its monuments and the counter attacks of the allies on Germany led to the destruction of its most prized historical buildings. The important aspect of this work is to recognize the reconstructive strategies that countries followed to regain its cultural heritage. Today, the world continues to suffer from the same recurrent matter. Modern wartime in the 20th century are extremely affected by technology, it led to creation of horrific weapons and machinery, thus creating catastrophic events. Mentioning the Mostar Bridge, the Bamiyan Buddha, Syria and the Twin Towers, these examples show how damage intentionally targets symbolic objects and monuments affecting their image in relation to their context. Later on, the effect of natural disasters will be discussed, showing that this kind of destruction cannot be controlled by man and its damage cannot be anticipated. These phenomena include but unlimited to tsunamis, earthquakes and fires.

The second part is mainly concerned with Lebanon and specifically Beirut. The main topics discussed are Lebanon's history, heritage and the effect of the civil war (1975-1990) on the country and its role in shaping the capital Beirut.

Beirut is a city filled with heritage and many cultures passed through Lebanon during the years ever since prehistory. This legacy was never well preserved especially during the civil war. The new urban plan that was designed by Solidere for Beirut Central District "BCD" erased most of the important remains of Beirut leading to the frustration of the citizens and generated a big opposition against the foreign countries that are transforming Lebanon into an "object for sale".

One of the few surviving monuments in Beirut specifically in the Beirut Central District is “the Egg”. Being itself a war remnant, the Egg gained major importance for the Lebanese people, not only for its previous function that directly linked it to the Golden Age of cinema during the 1970s, but also for the sentimental meaning it holds for the citizens of this small country that consider it as a remnant of their past.

The complex has always been considered to have a strategic localization; during the civil war, it stood on the borders of the “green line” that separated East and West Beirut (main fronts of the battles), and today it overlooks the Martyr’s Square which continues to be the gathering point of political riots. Thus, this building has become an eye witness for Beirut’s tragedies and glories over the years.

Some people supported the demolition of the Egg and encouraged the shift towards modernization. Whilst others totally refused its destruction, considering that losing the Egg means losing their Lebanese identity. This topic has witnessed so many conflicts and arguments, but until today no specific decision has been made regarding its fate. However, the complex was saved several times from demolition mainly by the efforts of social activists on social media.

At the very end of this research work, and after thorough synthesis, a conservation plan will be suggested for the Egg and a re-use design will be proposed. This proposal will take into consideration the preservation attempts, the interventions and the introduction of the new function.

PART 1 – HERITAGE AND POST TRAUMATIC SCENARIOS

1. CONSERVATION ISSUES

In this chapter, the concept of **Conservation** will be defined, with reference to the **20th Century Conservation** process. The chapter also illustrates the different **objects** of conservation and their importance in the conservation process. The **subjects** of conservation are also identified and the role of community-based conservation is discussed. The role of the **community** is highlighted as the main factor for deciding on and giving meaning to objects. The argument about **Renovation vs. Demolition** is debated thoroughly taking into consideration various effective factors. **Case studies** of different buildings are illustrated in this chapter, recognizing the diversity in the conservation process and the **learned lessons** of each. As far as **Urban Planning Transformation** is concerned, this chapter studies the cases of cities that have undergone a major transformation taking into consideration their **design challenges, strategies** they followed, **outcomes** and possible **challenges** of these strategies, and **conflicts or catastrophes** that had effected their growth.

1.1. Defining Conservation

1.1.1. Nineteenth Century Conservation

Conservation is usually defined as a planned management of something (as natural resources or historic places) to prevent waste, destruction, damage or neglect.¹ However, conservation in the nineteenth century took a different approach. It was once considered as the simple act of “maintenance” or “repair” of an object, while now it requires special realization and skills performed by conservators. This new concept of conservation came to be recognized when people began to appreciate certain objects as “heritage”. In the nineteenth century, the idea of publicizing culture and arts became acceptable. Romanticism consecrated the idea of the artist as a special individual and exalted the beauty of local ruins; nationalism exalted the value of national monuments as symbols of identity. As a result, artworks- and artists- acquired a special recognition. (Munoz-Vinas, 2015)

For Ruskin, the past should be preserved as it is without any present intervention and the act of rebuilding of damaged buildings must be stopped. In his book, *The Seven Lamps of Architecture*, John Ruskin speaks about what he considered as the “seven lamps”: sacrifice, truth, power, beauty, life, memory and obedience. “Creation is reflected from things more precious in their memories than it, in its renewing.” (Ruskin, 1889) As an opposing view, Eugene Viollet-le-Duc stated that an architect’s role is to restore a building to perfect condition that may have not existed before, thus keeping it in coherence with the building itself.

Later on, other ideologies surfaced. Some theorists tried to find balance between these two contrasting approaches while others followed the principles of reversibility or minimum intervention. Furthermore, others defended the artistic value of objects and accordingly allowing aesthetic values to make conservation decisions. In the twentieth century, aesthetic values coexisted with scientific conservation. As a conclusion, different conservation ideologies may exist, and then it is up to the country or region to decide the conservation approach.

1.1.2. Twentieth Century Conservation

Overall, it is not enough to define conservation as the planned management of historic places to prevent destruction, damage or neglect.¹ There are several issues in the definition of conservation, and according to Munoz-Vinas it is due to multiplicity of terms that are used to describe the various conservation related actions. Another factor is the variety of conservation objects. As conservation became a notable activity in the twentieth century, its objects became numerous and limitless. Conservation, being a broad activity, involves various professionals from several fields. The conservator is directly linked to the object being

¹ Defining “Conservation”, Merriam-Webster Dictionary

conserved. But activity is not limited to the conservator himself, other professionals like politicians, curators and even individuals like museum visitors or art lovers can be involved in the process as non- conservators.

1.1.3. Conservation Diagram

To understand the notion of conservation, we may refer to the following diagram:

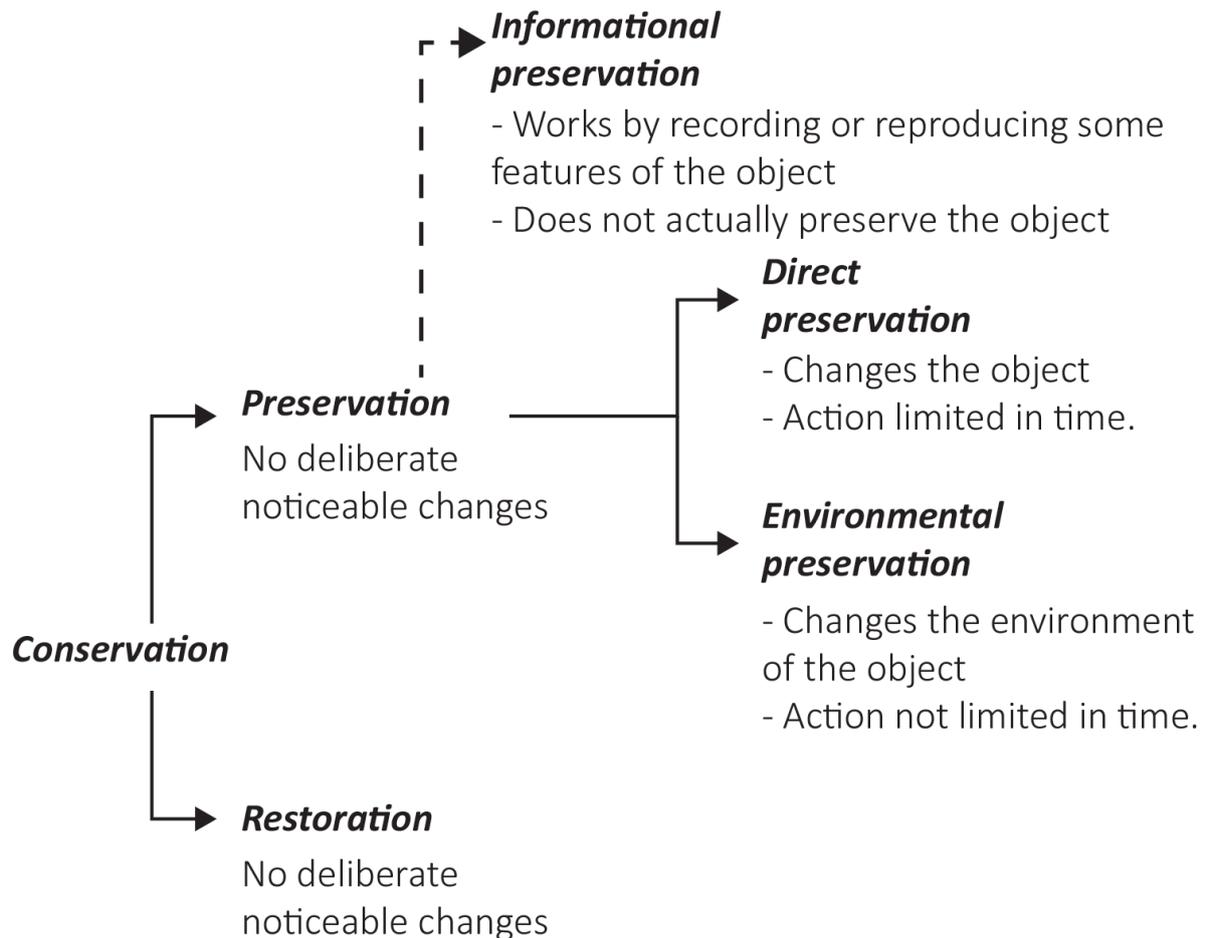


Figure: Classification of activities of Conservation. (Munoz-Vinas, S. 2015)

Generally, preservation is the act of keeping an object as it is without any elimination or addition. Preservation does not display any deliberate noticeable changes. Restoration, on the other hand, means to return an object to its previous glory. Preventive preservation is an activity to prevent foreseen damage to an object. Informational preservation is another form of preservation where the object itself does not undergo preservation, but by producing copies, documentations or photos of the object to display while keeping the object hidden. This act of hiding an object from human contact is done to lessen the effect of potential damage.

1.1.4. Preservation vs. Restoration

1.1.4.1. Definitions

Preservation is defined as the act of keeping something as it is, without it being subject to alterations in any form. Heritage Preservation, for example, is considered as the activity that avoids alterations of an object over time. According to Denis Guillemard, “Preservation has the goal of extending the life expectancy of cultural heritage.” (Munoz-Vinas, 2015)

Restoration is another concept of the conservation process. To restore something means to return it to its former state. If restoration fails to return an object to an “unimpaired”, “perfect” state, it will not qualify as restoration. (Munoz-Vinas, 2015)

1.1.4.2. Preservation and Restoration Act Together

Even though preservation and restoration are clearly defined as distinct processes, in practice they are linked to each other and are part of the same operation. There is a great overlap between preservation and restoration since preservation sometimes relies on restoration during the conservation process of objects. Vinas compares this link to Siamese twins that cannot be separated; each one relies on the other to continue living. This inherent mutual dependence is another important reason for preservation and restoration to be regarded as parts of the same activity. (Munoz-Vinas, 2015)

1.1.4.3. Preservation and Restoration Are Different

While preservation and restoration act together, these two concepts are quite different. Preservation should not be understood as a form of restoration. Preservation is the act that keeps the perceivable features of the object in its present state as long as possible. It attempts to repair the unnoticeable. In contrast, restoration is the act that modifies an object’s perceivable features. It attempts to change the noticeable features of an object.

1.1.5. Importance of the Subject

1.1.5.1. Conservation as a Creative Process

In contemporary conservation, attention is given to the subject rather than the object; it depends on the subject’s ability to come up with a meaning from the object. According to Munoz-Vinas, conservation doesn’t “restore meanings or objects,” instead it adjusts them to “present-day expectations and needs”. (Munoz-Vinas, 2015) Conservation should be a creative process; it must be flexible and open towards different meanings and uses. As part of contemporary conservation, objects must be preserved as we want them to be, rather than conserving them “as they are”.

1.1.5.2. *The Argument*

Throughout the years, people's tastes and ideas have changed; this justifies the fact that conservation rules also changed. For conservation specialists like McLean, Cosgrove and Zevi, creativity in conservation is highly desirable, "true re-creations are not possible, but pure creations are." (Munoz-Vinas, 2015) The opposition to this ideology considers objects of conservation, such as historical buildings or works of art, as untouchable and un-modifiable. They do not belong to us, but to our ancestors before us therefore our only job is to conserve them "as they are" for future generations. This idea is falsified by contemporary conservators; they consider that we are allowed to use our heritage as we see fit. Since it belongs to "us", a large group of people, decisions concerning these objects are "socially accepted decisions." (Munoz-Vinas, 2015)

1.1.6. Importance of the Community

1.1.6.1. *Role of Community in Giving Objects Meaning*

Community defines the meanings of an object; an object becomes a conservation object if it conveys a message and meaning to a large number of people. According to Munoz-Vinas, "Collective meanings occur because there is a basic agreement on the part of the interpreters on what a symbol means." (Munoz-Vinas, 2015) Conservation objects exist because groups of people agree that they have a meaning. Affected people are the reason conservation is done. It is also their duty to preserve and restore these objects. As an example, Munoz-Vinas described objects as entities that are "produced, maintained and cared for" because they are useful to "us", we use them and abandon them when they are no longer of use to us. (Munoz-Vinas, 2015) This is to say that in the contemporary theory of conservation, subjects are the most important actors.

1.1.6.2. *The Stakeholders*

A stakeholder is a person or a group of people that are investing, sharing, or are interested in something², this is also a valid definition for the people for whom a heritage object is meaningful. The stakeholders can be professionals such as architects, conservators, art historians, archaeologists and scientists that are able to take decisions concerning conservation treatments because it is supposed to be done by experts. Stakeholders can also be laypersons, who are authorized to give their opinions along the conservation process. Taking the opinion of non-experts can make the conservation process a more successful one. Decision making in conservation can also be a collective process, it is considered a useful method. It allows different opinions to be formed and ideas to be exchanged. This allows the public to have a positive contribution in the decision-making procedure.

² Defining "Stakeholder", Retrieved from Dictionary.com

1.1.6.3. *The Faro Convention*

Definition and Aims

The Faro Convention of 2005 addresses the “Value of Cultural Heritage for Society.” This convention is regarded as an effective tool for “complex and cultural challenges.” (COE, Workshop: The Faro Convention in Research-Action: Community Involvement in a Post-Disaster Heritage Revitalisation, 2017) The aim of the Faro Convention is to encourage a “multi-heritage community involvement” in Europe in order to strengthen the collective heritage of the European territory. This so called “heritage community” is an emblem of shared of shared ***remembrance, understanding, identity, cohesion and creativity.*** (COE, 2017) It aims at achieving a great union between members of the Council of Europe and works to safeguard common heritage and respect for human rights. It is agreed that everyone has the right and responsibility to benefit and respect one’s own cultural heritage and that of others. The Faro Convention confirms that the European states have a shared responsibility towards cultural heritage; the states play an important role in promoting public participation, fostering a shared responsibility, integrating cultural heritage in all levels of education, as well as monitoring and protecting the values of cultural heritage. (COE, 2005)

Call for Community Action

On 22 September 2017, the Faro Convention initiated a workshop for research-action in Fontecchio, Italy. Being a small medieval village and located in a seismic zone, Fontecchio is a relevant example for research-action on cultural heritage. The workshop will focus on preparedness, response and revitalization for territories during and after major crises and disaster. This workshop also aims at “making local communities in line with Faro Convention principles and values, bringing the local experience into a larger context, ensure NGO involvement, providing research-action visions and setting an example for annual events.” (COE, Workshop: The Faro Convention in Research-Action: Community Involvement in a Post-Disaster Heritage Revitalisation, 2017)

1.2. Specifying the Objects of Conservation

1.2.1. Conservation Objects

To undergo the process of conservation, one must ask oneself: “What shall be conserved? And what identifies an object as an object of conservation?” Objects of conservation clearly define conservation for what it is. Conservation objects vary between works of art, antiquities, cultural heritage to archaeological objects. The “Mustang Paradox” explains that if an object has artistic, etc. value then the mere actions of maintenance, repair, and servicing become activities of conservation. (Munoz-Vinas, 2015)

The objects of conservation evolved from being antiquities, to works of art with the growing interest of people in artists, to archaeological objects known as historical objects, and finally cultural heritage.



“I am a Monument,” Drawing by Robert Venturi, 1972.

1.2.2. Monuments

What is a monument? It is, according to Riegl, a work of man erected for the specific purpose of keeping particular human deeds or destinies alive and present in the consciousness of future generations. (Riegl, 1928) At first glimpse one might consider the word “monument” to be associated with large buildings or statues, but for Riegl it is any object with artistic or historic value. In this book, Riegl discusses the artistic and historic values stating that an object that possesses historic value is an object that once was and is no longer and that art is also a historic monument since it represents a particular stage in the development of arts. On the other hand, some buildings have become monuments of our recent past regardless of the intention of the architect. This phenomenon can save famous buildings and perhaps even unknown buildings from the risks of neglect and deterioration. (Biase, 2009)

1.2.3. Values

Riegl also writes about the relationship between other important values; age values, historical value, deliberate commemorative value, use value and newness value. “Modern man at the beginning of the twentieth century particularly enjoys the perception of the purely natural cycle of growth and decay. Thus modern man recognizes part of his own life in a monument

and any interference with it disturbs him just as much as an intervention upon his own organism.” This is what Riegl considers as the **age value** of a monument. According to the author, the signs of decay are the mere aesthetic value of a monument and condemn all efforts of conservation and restoration. “One can certainly say that ruins become more picturesque the more they are subject to decay.”

He also explains that as far as the **historical value** of a monument is concerned, in contrast to the age value, decay and distortions lessen the value of an object. Historical value concerns itself with maintaining the best image of a monument so as to be kept for future generations. **Deliberate commemorative value** aims to keeping the monument alive. “Deliberate commemorative value simply makes a claim for immortality... without restoration monuments would soon cease to be deliberate.” (Riegl, 1928)

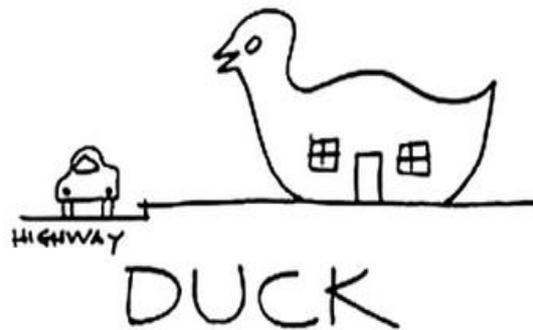
Use value on the other hand requires the continuity of a monument and therefore it requests unceasing maintenance of the old building in order to accommodate visitors safely. “Use value is basically indifferent to the kind of treatment a monument receives, as long as the monument’s existence is not threatened.” In some cases, it is required to create a replica of the original monument if it becomes out of use or for the reason of protection or avoiding restoration. As Riegl put it: “in works of man they wished to see only the creatively triumphant effect of human power and not the destructive force of nature.” (Riegl, 1928) The **newness value** is in total contrast with the age value, restoration plays a major role here and traces of age and decay must be removed. Monuments, according to the age value, must appear anew.

1.2.4. Symbolism

Another well-known conservational term is “significance”. The notion of “significance” as a feature of conservation objects traces back to the Venice Charter (ICOMOS, n.a.); this notion was later considered as **symbolism**. A **symbol** is an object that tends to represent something else. “Almost every society has evolved a symbol system whereby, at first glance, strange objects and odd types of behavior appear to the outside observer to have irrational meanings, each symbol system reflects a specific cultural logic, and every symbol functions to communicate information between members of the culture in the same way as conventional language.

Significance is very often related to personal identification. A person’s own meaning and identification is added when reading or understanding a certain symbol. “Personal memories” and “meanings” are linked to the different significances of objects. The same object may convey different meanings to different people or social groups, and in contrast objects can convey the same meaning to people within the same social groups. “Group- Identification meaning is one that is related to characteristics that create group identities.” (Munoz-Vinas, 2015)

As an example, conservation objects, like the Basilica di San Marco in Venice, have a powerful **ideological meaning** in moral, religious and political sense. Sentimental meanings are derivatives of personal feelings and memories; they differ from those we learn from schools, media and traditions.



Photograph and Drawing by Robert Venturi, *Learning From Las Vegas*, 1972.

In Las Vegas for example, commercial signs have become the symbol for the city, as explained in Robert Venturi's book: **Learning from Las Vegas**. Venturi states that commercial persuasion and the skyline of signs serve the purpose of civic and cultural significance. "These signs make verbal and symbolic connections through space, communicating a complexity of meanings through hundreds of associations in few seconds from far away. In this case, spatial relationships are made by symbols (signs) rather than by forms (architecture)". In other instances, the building itself becomes the sign, his famous example of "The Long Island Duckling" where the duck store in the shape of a duck is both a sculptural and architectural symbol. Venturi compares this symbolism to that conveyed in the Baroque domes. He considered that these domes were symbols as well as spatial constructions; "they are bigger in scale and higher outside than inside in order to dominate their urban setting and communicate their symbolic message". (R. Venturi, 2017)

1.2.5. Heritage



Temples of Baalbek, Lebanon.

Nevertheless, in the age of loss of identity and cultural value, heritage plays a major role. Beginning from the twentieth century, “heritage” became a widespread notion. Heritage is anything that has been transmitted from the past or handed down by tradition.³ There are two meanings to culture: one is *hi- cult* which refers to the knowledge and taste of cultured people, the other is in *anthropological sense* where culture is explained in a broader sense as the sum of beliefs, values, knowledge and uses of a social group. Culture is not limited to only objects but also to intangible heritage like language, rule of behavior, technical knowledge and skills, and even religion. (Munoz-Vinas, 2015)

In the 20th century, conservation and heritage fields have experienced great expansion from mere objects to include vernacular architecture, collective buildings and landscapes. The changes in society affected how we interpret and create Heritage. Cultural Heritage is regarded as “a dynamic process where cultural aspects are being transformed, defined and redefined, valued and devalued” and research efforts on values and social context show a broader character of cultural heritage which “transcends the aesthetic model” and instead reflects the ways “people invest meaning in and come to understand the buildings, landscapes, places and objects around them”. (Bluestone, 2000)

1.2.6. Conservation of Landscapes

1.2.6.1. Introduction

In recent days, a great consideration was given to landscapes as objects of conservation. Several international documents provided guidance on how to deal with cultural landscapes.

³ Defining “Heritage”, Collins English Dictionary

The Venice Charter, for example, highlighted contextual events that influenced the field of cultural heritage allowing it to become broader and more inclusive. This led to opportunities and challenges for cultural landscape preservation. The Venice Charter was a great influence to the 1982 Florence Charter on Historic Gardens which sets forth the principles and guidelines for the preservation of living monuments. (C.Goetcheus, 2014) In 1992 the World Heritage Convention began to fully recognize and protect cultural landscapes and since then, landscapes sites began to be acknowledged and enlisted in the World Heritage list.

1.2.6.2. *The Importance of Modern Landscape Architecture*

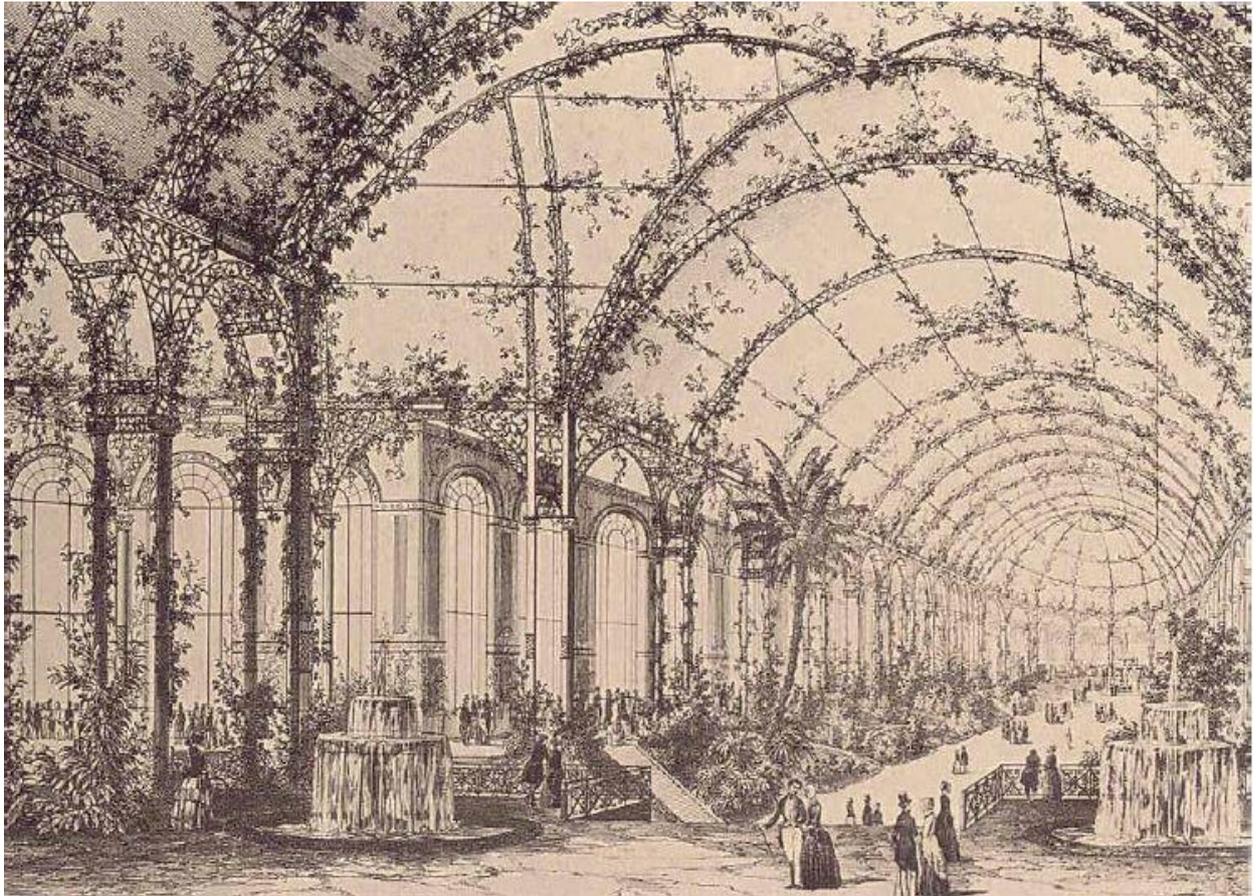
It is just to consider that the landscape architectural works of the master modern landscape architects require protection. In a time where significant works are becoming *invisible*, altered and rapidly vanishing without a trace or public debate, we must reinforce the idea of protection. (Birnbaum, 2003) As far as invisibility is concerned, the way to reduce its effect on designed landscapes is done by with listing and recognition. By *recognizing* the significance of landscape architectural design, a greater opportunity to safeguard their integrity arises. According to Birnbaum, pursuing nominations for designed landscape sites provides public and professional awareness. He also mentions that the following strategies add to this contribution: publishing and perishing, documenting threatened works and creating partnerships to ensure ongoing preservation and management. In this way, he believes that a great public interest will be created for modern landscape architecture. (Birnbaum, 2003)

Objects of Landscape Conservation

The Objects of Landscape Conservation remain an ambiguous idea, and the problems are compounded. What should be considered as designed landscape works? Does a piazza qualify as a designed landscape? Is agriculture a cultural expression worth regarding as a designed landscape? For Marc Treib, there are five arenas of consideration for the designed landscapes works: the garden where the thinking in landscape in twentieth century took place, the park which serves as an access to nature in urban sites, the campus that contains a particular balance between building and vegetation/ open space, the plaza which is the public open space where society comes to meet, and land art that requires preservation although works are landscapes. (Treib, 2003)

1.2.6.3. *Royal Botanic Gardens as Heritage, Kew, United Kingdom*

In the 17th and 18th century, greenhouses became a trend in gardens and palaces. With the introduction of new materials (metal and glass), it was possible to create flexible constructions, forms and functions in architecture. Greenhouses were not only structures to hold plants, in Paris during the 1847, for example, they were considered as gathering places. They were used as concert halls, theatrical stages and centers for social activities.



Old greenhouse in Champ Elysees, Paris, France, by Meynadier & Rigoler (1846-1847), destroyed in 1852



OUR PLACE the World Heritage Collection by Amos Chapple

Kew's Botanic Gardens are located in South West London; there are six green houses on 120-hectare site which is home to one of the world's most extraordinary collection of plants. The Gardens at Kew began life in 1751 as a royal garden. A huge variety of plant species has been

collected from around the world. The green houses here house some of the world's rare species. This historic landscape garden includes work by internationally renowned landscape architects Bridgeman, Kent, Chambers, Capability Brown and Nesfield illustrating significant periods in garden design from the 18th to the 20th centuries. (UNESCO, Royal Botanic Gardens, Kew, n.a.)

In 2003, the Royal Botanic Gardens at Kew were listed as World Heritage. The gardens along with all the buildings on the site were listed as monuments of the past since they reflected the stylistic expression of the various periods. The works of architecture retained their authenticity in terms of design, material and function, while the landscaped garden areas represented the past, present and future as interwoven and difficult to separate. Landscape design is a link between the artistic achievements of the past and the successes of the different periods. (UNESCO, Royal Botanic Gardens, Kew, n.a.)

1.3. Discussion about Demolishing vs. Renovation

1.3.1. Renovation

We are now at a turning point where a discussion about demolishing vs. renovation arises, each of which promotes its own side issues. Renovation is a part of the Principle of Preservation; it comes along with the processes of conservation and restoration. Renovation is considered to be the final resort of the preservation process. "Renovation aims particularly at achieving aesthetic unity in a monument in the sense of *making new again*". (Petzet, 2004) On the other hand, demolishing is the most contradictorily principle in the Preservation process; it is defined as the act of tearing down or purposely destroying a building. Demolishing aims at *replacing the existing with a new object and use*. Several questions arise. Should all historic buildings be renovated or should these buildings be demolished and replaced with improved ones? Should some of these buildings be demolished to give way to new land use?

As it is stated in the introduction of the Venice Charter, people are becoming more aware of the cultural heritage and the responsibility to safeguard it for future generations. By the process of renovation, man is able to protect these monuments and maintain their symbol. "Imbued with a message of the past, the historic monuments of generations of people remain to the present day as living witnesses of their age-old traditions. People are becoming more and more conscious of the unity of human values and regard ancient monuments as a common heritage. The common responsibility to safeguard them for future generations is recognized. It is our duty to hand them in full richness of their authenticity. (ICOMOS, n.a.)

“Despite the manifest popularity of building preservation, there is relatively little knowledge of the nature of buildings or the history of architecture in the population at large. Instincts may be sound enough, but an ability to argue at any other level is often lacking. Many a preservation battle begins with a confrontation between those who know that part of their heritage is under attack but cannot effectively defend it and those who have no real understanding of what the fuss is about but are well able to look after their own interests”.

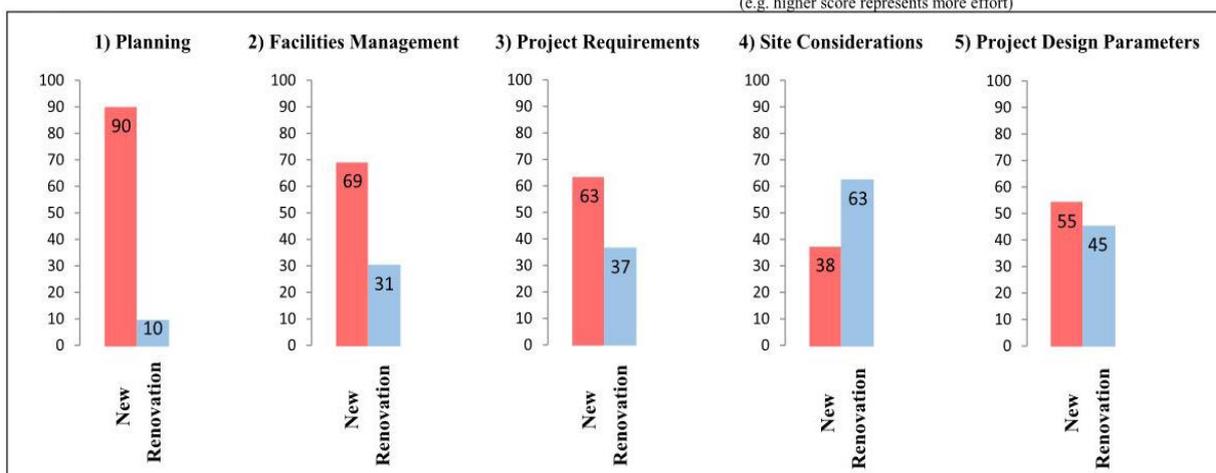
*John Earl, Building Conservation Philosophy,
Third Edition, Donhead Publishing, 2003*

1.3.2. Demolition

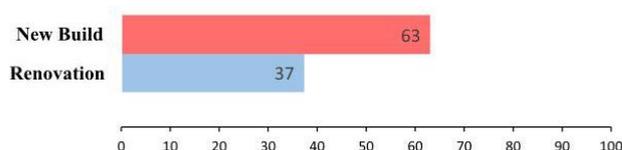
On the contrary, in a constantly changing world, more people are seeking modernization and shifting away from cultural heritage. (Biase, 2009) Societies are asking for demolition because they consider the increasing demand for land the need for new building uses. This gave rise to many legal legislations and laws regarding demolishing in constantly growing cities. In the United States, for example, there has been the adoption of “Demolition Review Laws”. This law is not only placed to protect historically significant buildings, rather “it allows for review of applications for demolition permits to assess a building’s historical significance. If the building is deemed significant, then issuance of the permit may be delayed for a specific period of time to pursue landmark designation, or alternatively, to explore preservation solutions such as selling the property to a purchaser interested in rehabilitating the structure or finding alternative sites for the proposed post-demolition project.” (Miller, 2006)

RENOVATION vs. NEW BUILDING EFFORT EVALUATION

Note: Score reflects the amount of effort required for each building strategy (e.g. higher score represents more effort)



Overall Effort Score



Section and Overall Scoring Summary of Decision Tool

From an economic stand point, building owners are often challenged with deciding between renovating an existing building or demolishing it and replacing it with a new construction. This choice between the two can affect the overall budget, schedule and quality of the project. The decision must be based on individually assessing projects. In some cases, assessment shows that renovation is less costly than demolishing and effort to maintain the actual building is prosperous. While in other circumstances, demolishing seems to be the more economically suitable option and the final resort when all efforts to renovate fail. During the 20th century, for example, concrete deterioration and decay required a high cost of maintenance. Not only was it considered a costly process, maintenance was said to require a difficult procedure. (Biase, 2009) Research has been conducted through the years to create a renovation versus new building support decision tool; this process includes assessment of each category description, scoring and ranking as well as prioritizing each category, and finally decision making. (C. Pope, 2016)

1.3.3. Historical Examples



Aerial Photos of Berlin, Germany after World War II (1945) by Hein Gorny / A.C. Byers / Collection Regard

In post-war countries, renovation was considered the tool to preserve historic and cultural significance of buildings. Those who advocated historical faithfulness in Germany after World War II believed that it would be “downright ahistorical or even a type of repression to wipe out the traces of the past, which consisted of so much more than the 12 disastrous years of Nazi rule”. (R. Leick M. S., 2010) In West Berlin, the identity of the city before the war was restored; symbolic buildings and neighborhoods were maintained. For instance, the City Hall building suffered heavy damage during World War II. It was rebuilt in the 1950s and regained its former glory and neo-Renaissance style. (FederalStateofBerlin, n.a.) Most of the buildings constructed between 1933 and 1945 survived the collapse of the National Socialist regime. There was no consideration for demolishing the undamaged structures, instead most of the churches and factories of the 1930s were restored, Nazi buildings were converted to apartments or offices, Hitler Youth houses were converted to youth recreation centers and barracks and forced labor camps were transformed to emergency housing and workshops. (Donath, 2006)



Hitler's New Reich Chancellery

From an opposing viewpoint, many were in favor of a new beginning and the total removal of the traces of war, turmoil and mass destruction. “Absurd ideas were debated, such as the proposal to just abandon the ruins and rebuild the cities nearby”. (R. Leick M. S., 2010) In contrast, East Berlin had a fewer opportunity to renovate and a greater tendency to modernize. “The Reich Chancellery, as a symbol of the fallen dictatorship, was the only structure to be deliberately demolished after 1945. All salvable material, however, was used to rebuild elsewhere. Marble from the New Reich Chancellery was used for the Soviet Memorial in Tiegarten and for the redesigned subway station at Thalmannplatz (today's' Mohrenstrasse)”. (Donath, 2006)

1.3.4. Recommendations

As already discussed, Renovation vs. Demolition is a continuous discussion. Some may consider that demolition is the approach towards modernization, the solution for old buildings and the mean to cover the scars of war and struggle. But demolition is not always the best approach; architects, preservers, governments and stakeholders are always exploring the more favorable alternative of renovation, rather than demolishing. In conclusion, decision making should be based on thorough assessment under legal legislations. Communities, societies, governments and professionals must place the basic grounds for this debate. Professional analysis should be made to weigh the pros and cons of either keeping the structure as it is and renovating it or removing it and building anew. According to Carolina di Biase, an investigation on the building should be held, identifying its history and the changes it has undergone. This will help in recognizing the fate of the building. (Biase, 2009) Never-the-less, the greatest importance must be given to the safeguarding of architectural heritage and historical and cultural significance of buildings for future generations. Historical and cultural worth should be identified so that no part of human heritage is lost.

1.4. Urban Planning Transformation: Then vs. Now

Cities can undergo change either in dramatic speed or unrecognizable alteration within decades. But what is certain is that urban transformation is an eminent aspect of many of the world's greatest cities. Conflicts and catastrophes have long been a leading cause of transformation for cities. Beirut, for example, underwent drastic after the civil war of 1975; the city that was once flourishing turned into a city of rubble and debris. Since then, the urban fabric of Beirut transformed dramatically. Most of the buildings were torn apart, making place for a modern post-war reconstruction. Today we can mention several examples of cities that have undergone major and notable urban planning transformations of this kind.

	Design Challenge	Design Strategy	Outcomes	Challenges	Conflicts/ Catastrophes
Baghdad	Overlapping Historic Fabric	Newly Constructed Urbanism	Interrupted Urban Pattern	Constantly Changing Urban Fabric	War of 2003
Brasilia	Building a New Capital City	Oscar Niemeyer's Urban Plan	Brasilia Today	Unanticipated City Growth	Brasilia's Heritage in Danger
Paris	Reconstruction after WWII	Hausmann's Paris	New Paris	City Growth Today	Loss of Parisian Heritage
Shanghai	Breaking the Barriers	The Revolution	China After the 1970s	Meeting Contemporary Challenges	Loss of Chinese Heritage

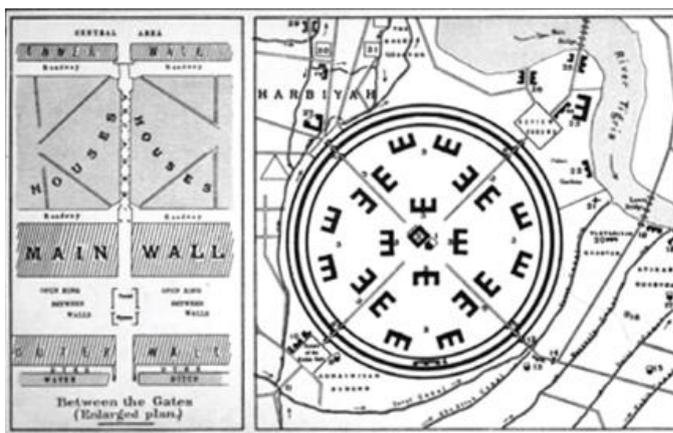
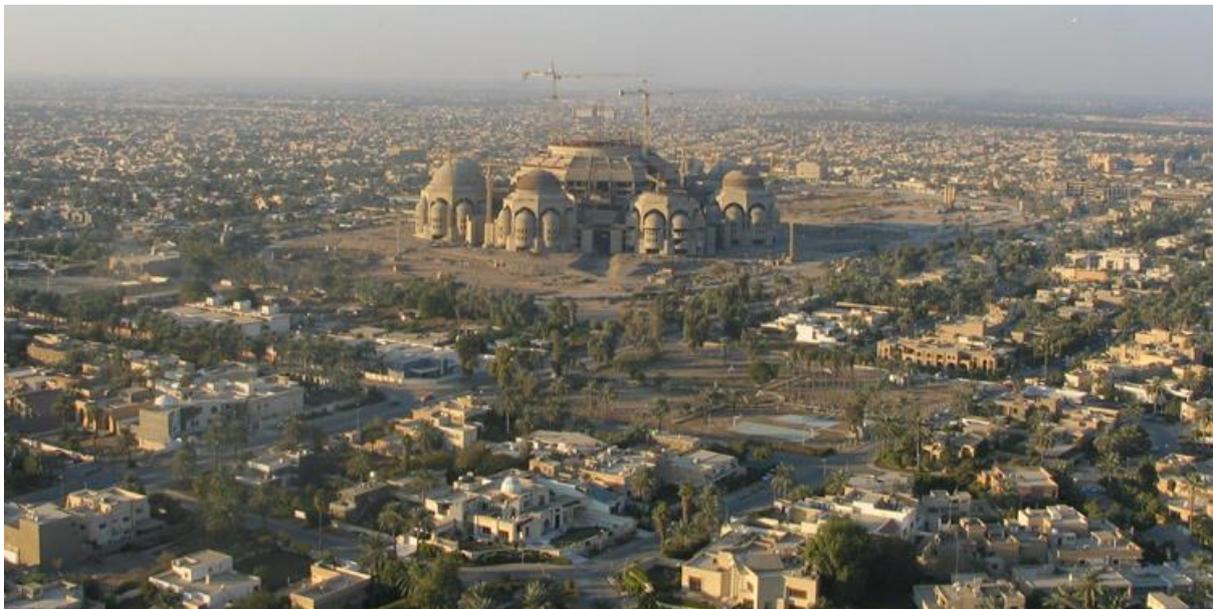
1.4.1. Baghdad, Iraq

1.4.1.1. Introduction

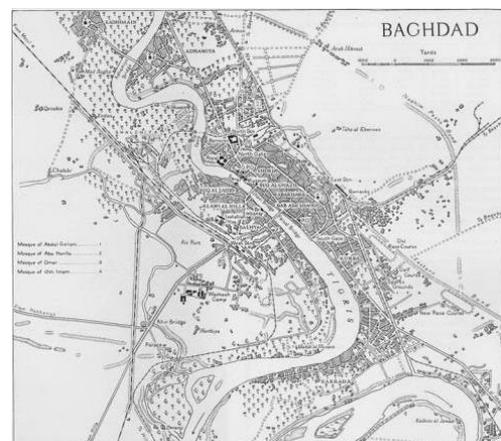
Baghdad is the capital city of the Republic of Iraq; its great population makes it the largest city in Iraq and the second largest city in the Arab world. The city grew along the Tigris River and it witnessed great transformations in its urban features throughout its different historical periods.

1.4.1.2. Overlapping Historic Fabric

Baghdad is a city rich with a historic urban fabric; it is composed of various historic layers overlapping one another. Baghdad is continually facing multiple transformations in both physical and cultural environments under the direct influence of natural and political issues.



The Round City of Baghdad



The City of Baghdad along the Tigris River

From a Geometric Circular City to an Organic Pattern

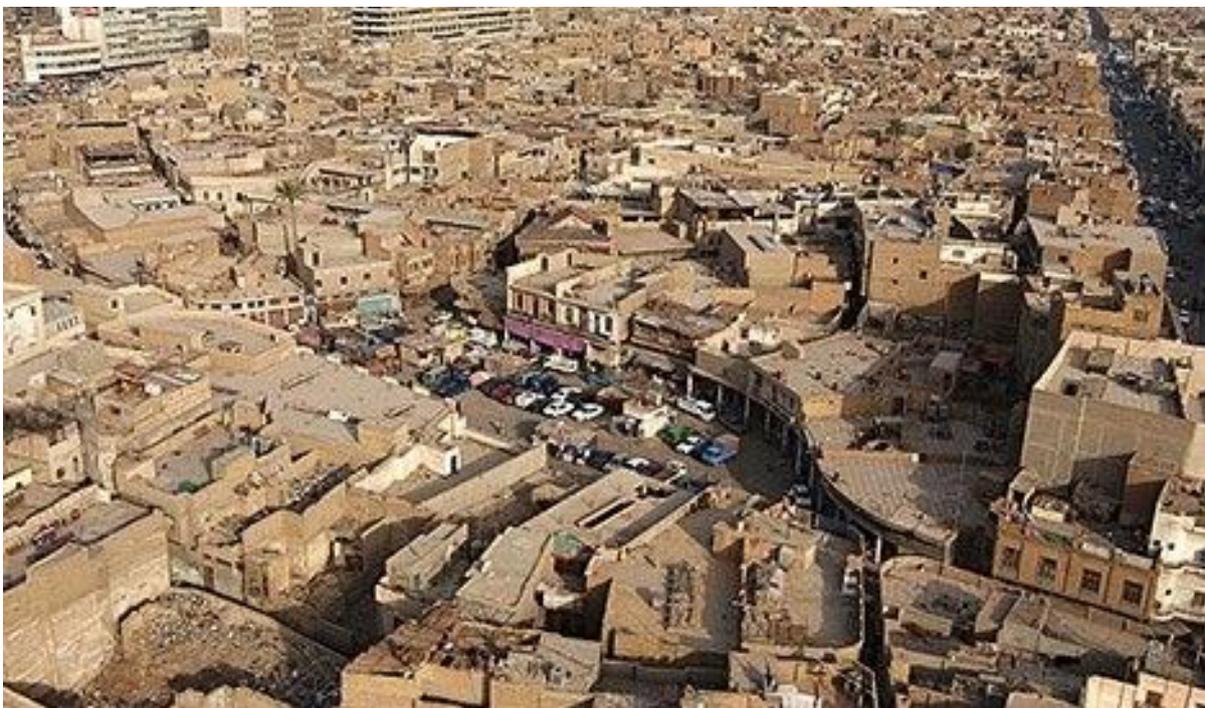
The city at the beginning of its composition was called the “round city” due to the circular fortified form. With the increase in population, the round city suffered limited and insufficient space availability for expansion. As a result, the city began to expand beyond the wall. (Al-Hasani, 2012)

Under the Ottoman Rule

The city of Baghdad was defeated and occupied several times by different cultures up until the 20th century. The Ottoman rule was one of the first influences on the urban development style of the city. The Ottomans started to line the first street-axis in Baghdad, and consequently the city was ordered and integrated and a hierarchal relationship and connection was created. (Al-Hasani, 2012)

1.4.1.3. Newly Constructed Urbanism

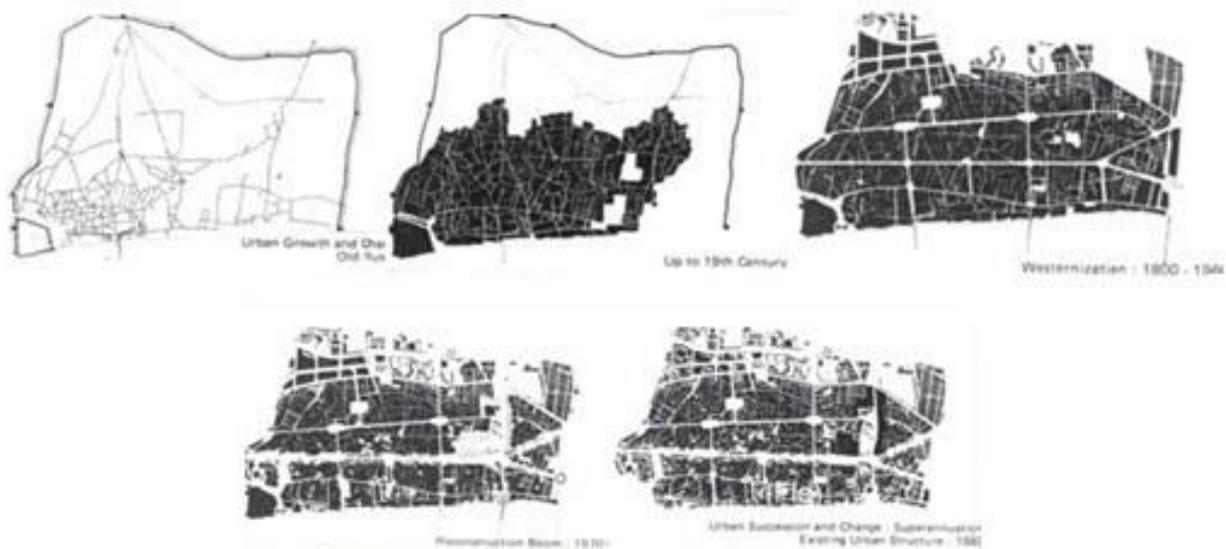
After the British colonization, prior to World War I, Baghdad underwent newly constructed urbanism and later, with the establishment of the higher council for reconstruction in 1950, a modern planning concept for the city was set. As a result, a new axis for the city was built to connect the main points of the city. In the early 20th century land use was categorized into the following: religious, governmental, residential and commercial. These land uses were mixed together making up what characterized Middle Eastern cities. It is worth mentioning that the important reason behind Iraq’s development is the commonness of state-owned land which allowed a large expansion in governmental buildings and state sponsored projects. (Al-Hasani, 2012)



Historical Center of Baghdad

1.4.1.4. Interrupted Urban Pattern

During the last decades, Baghdad underwent major urban space transformations. This affected the uniformity of the urban fabric of the city; there are various pieces of diverse urban patterns. Historical patterns coincide with new urban patterns and modern formations, creating two different space languages interrupting each other. As Al Hasani suggested in his article, “the new added urban elements have created an interrupted urban pattern, which were so far from having continuity, coherence and integrity with the surroundings.” (Al-Hasani, 2012)



Urban Transformation in Baghdad

1.4.1.5. Constantly Changing Urban Pattern

As far as restoration and conservation were concerned, the urban development programs **neglected the old heritage sites**. Many projects were executed inside the heritage city, rather than in the empty undeveloped areas around it, thus damaging the historic and cultural context.

A “**western middle class style**” started to appear on the outskirts of the old city. New neighborhoods began to appear as the city expanded horizontally away from the old city center in a multidirectional manner. These new neighborhoods did not reflect the traditional housing styles anymore.

In addition, due to the **fast expansion** of the city throughout the years, the master plan of Baghdad was constantly changing. A new plan was established in 1956 proposing a road system connecting the old urban center with new river bridges and outlined zones. Then again in 1958 and 1970, development plans were placed for Baghdad.

Due to *continuous instability* in Baghdad since 1990, the conservation and the urban development projects were not as ambitious as they were in the 1980s. There have been several development proposals. None of these projects had been seriously implemented. (Al-Hasani, 2012)

1.4.1.6. *Possible Solutions*

To avoid the continuation of uncontrolled development, as Al Hasani suggested in his article, “Baghdad needs to redefine the spaces according to the historical background, urban structure, policies and regulations, adaptive reuse and new functions. Establishment of balance between economic and residential factor will be the key to reorganize the spaces inside the old city core”. The author also adds that accessibility should be ensured for these spaces to create a transition zone and to ensure continuity. (Al-Hasani, 2012)

1.4.1.7. *The War of 2003*

The City after the War

After the war in 2003, the old city center of Baghdad became infiltrated with military operations and terrorist acts. Concrete barriers formed around Baghdad, affecting the space configuration, accessibility and functions of the city. These barrier walls isolated the city center from the surrounding areas such as the main commercial and public streets.

The Role of UNESCO World Heritage

Destruction and looting of Iraq’s most famous heritage sites was the devastating outcome after the war of 2003. UNESCO played an important role in the efforts to protect the country’s cultural heritage. An exhibition was created as a post-conflict response. The purpose of the exhibition was to clearly demonstrate the added value that UNESCO makes to a country in a Post-conflict Post-disaster context: firstly by providing assistance to national authorities in the field of education, natural sciences, culture and communication, secondly by advising on the development of evidence-based educational, cultural, scientific and media policies that reinforce sustainable transition from emergency contexts towards reconstruction and development, and also by recognizing and safeguarding of cultural aspects and traditional knowledge of local communities, which represent important coping mechanisms and sustain local capacities. (UNESCO, Exhibition on Iraq: UNESCO and Post-Conflict Response, 2009)

1.4.2. Brasilia, Brazil

1.4.2.1. Introduction

Brasilia is considered as the definitive example of 20th century modernist urbanism. It was created between 1956 and 1969 as the Brazilian capital. Brasilia is estimated to be the country's 4th most populated city.

1.4.2.2. Building a New Capital City

Brasilia was built under the patronage of President Juscelino Kubitschek, as part of his national modernization project. His plan was to build a new capital city for Brazil outside Rio de Janeiro. So, the new capital was located in the central western part of the country above the Brazilian uplands. Therefore, the city was laid out along a monumental east-west axis, crossed by a north-south axis curved to follow the topography as a transportation thoroughfare. This layout, made by the city's urban designer Lucio Costa, was called the "Plano Piloto". Oscar Niemeyer's architectural creations were most powerfully reflected in the intersection between the monumental and thoroughfare axis. (UNESCO, Brasilia, n.a.)



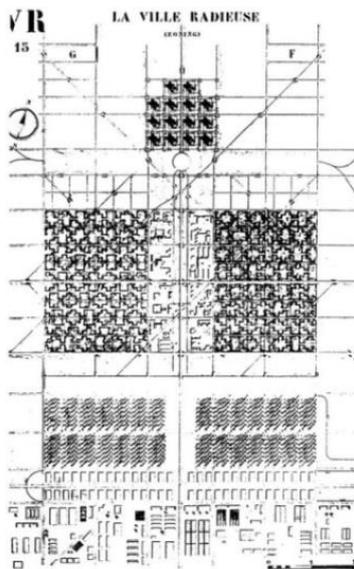
The Esplanade of Ministries in Brasilia. The National Congress complex, by Oscar Niemeyer. Photo: Vesna Petrovic.

1.4.2.3. Oscar Niemeyer's Urban Plan

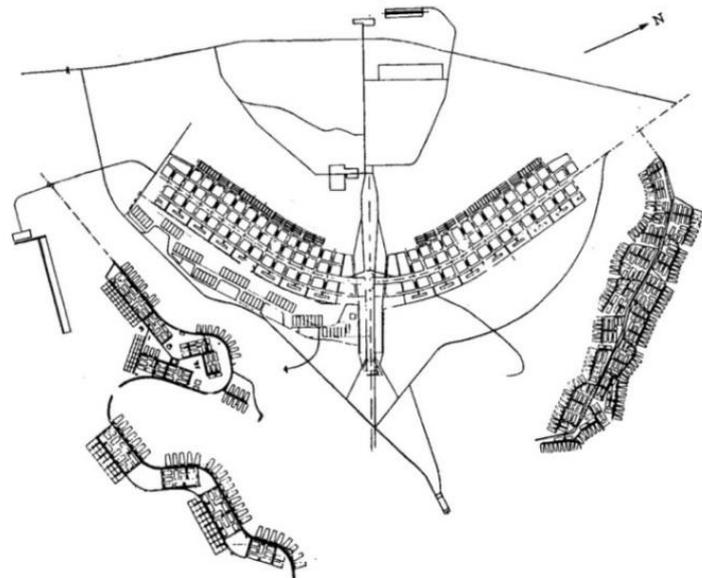
It is evident that Brasilia is highly influenced by the Athens Charter and the work of Le Corbusier. The Athens Charter of 1933 was a documentation about urban planning and Le Corbusier's ideas around how to perceive urbanism. The work was based upon the architect's Ville Radieuse (Radiant City). The Radiant City represents a well ordered environment, it is a linear based city that resembles the abstract shape of a human body with a head, spine, arms and legs. The city upheld the idea of high-rise housing blocks, free circulation and plenty of green spaces. The housing blocks were raised on pilotis to provide continuity of green space on the ground level and contained roof gardens. Zoning was the core of Le Corbusier's plan;

there was a strict division of the city into segregated commercial, business, entertainment and residential areas. (D.S. Macedo, 2013)

Lucio Costa's plan of Brasilia saw the city as a manifestation of a Functional City. Like the Ville Radieuse, it had strong axes. There is a great deal of zoning in the master plan of Brasilia, monumental buildings are located along the east-west axis while residential quarters are placed along the north-south axis. Similar to Le Corbusier's concept, greenery plays a crucial part in the plan of the city. Costa and Niemeyer, like Le Corbusier before them, aimed to create a city based on equality and justice. (Philippou, 2008)



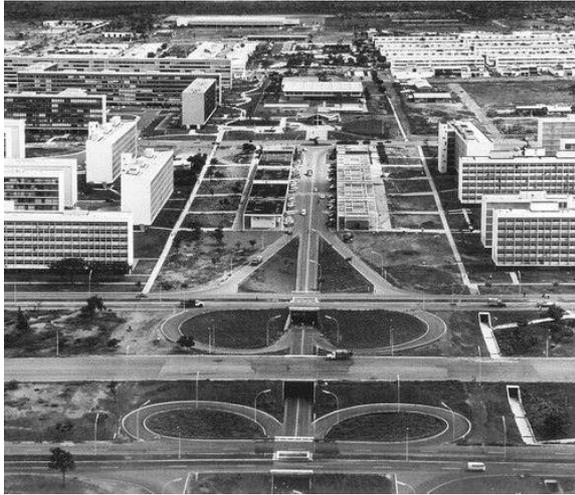
Ville Radieuse, Le Corbusier



Brasilia, Lucio Costa and Oscar Niemeyer

1.4.2.4. *Brasilia Today*

The outcome of the collaborative work of Niemeyer and Costa is a city containing the main feature of the Plano Piloto. It contains the distinction between monumental buildings such as the administrative **civitas** and the everyday **urbs**. The public buildings such as the Esplanade of Ministries, the Three Power Plaza and the National Congress are aligned to the monumental east-west axis. While, on an arched north-south axis, residential quarters with their commercial, educational and health services, neighborhood units and modulated superblocks are located along the thoroughfare. For the **civitas**, world renowned architect Oscar Niemeyer (1907—2012) and his team designed the executive, legislative, and judiciary palaces, Brasilia's celebrated icons. (D.S. Macedo, 2013)



Brasilia Urbs: Residential Blocks



Brasilia Civitas: National Congress

1.4.2.5. Unanticipated City Growth

Several years after the construction of Brasilia, the city witnessed **a rapid growth**. It became the home for more than two and a half million citizens. Yet, only 10 percent of this population actually lives in the Plano Piloto area. Most of this population lives in satellite towns southwest of the Plano Piloto area and linked to it by few highways. (D.S. Macedo, 2013)

The city began to fall back and suffer from a lack of **mass transportation, segregation, neglected public spaces**. Today there is an urgent need of revision of some of the weaknesses of the Modern Movement principles. Some of these principles are integrated in the Plano Piloto, such as road specialization and mono-functional zoning. (D.S. Macedo, 2013)

1.4.2.6. Brasilia's Heritage in Danger

Brasilia as World Heritage

In December 1987, after fulfilling its requirements for UNESCO's candidacy, Brasilia was awarded the title of World Heritage Site thus making the Pilot Plan one of the first modernist sites on the list. "Brasilia is a singular artistic achievement, a prime creation of the human genius, representing, on an urban scale, the living expression of the principles and ideals advanced by the Modernist Movement and effectively embodied in the Tropics through the urban and architectural planning of Lucio Costa and Oscar Niemeyer." (UNESCO, Brasilia, n.a.) Therefore, the International Council of Monuments and Sites recommended that additional legislations should be passed to ensure the preservation of Brasilia.



National Congress, Brasilia.

Heritage at Risk

In 2012, UNESCO decided to intervene, a team of experts were sent to evaluate whether Brasilia should be placed on the list of “World Heritage Sites in Danger.” As far as preservation is concerned, few of Niemeyer’s buildings were individually listed. There were no clear protection regulations for the conservation of buildings and many mistakes were made in the planning process. (D.S. Macedo, 2013) The outcome of the 2012 intervention was the reinforcement of the necessity of Brasilia to comply with conservation rules placed by the UNESCO to maintain its enlisting and to safeguard its architectural heritage.

1.4.3. Paris, France

1.4.3.1. Introduction

Paris is the capital and the most populated city of France; it has become one of Europe’s major centers of finance, commerce, fashion, science and arts. It is common knowledge that Paris is home for various architectural and artistic eras, traces of which are shown in its museums and grandiose architectural landmarks and monuments.



1.4.3.2. *Reconstruction after WWII*



Street View Example of pre-Haussmann Paris

In the time of Napoleon III, Paris was overcrowded and the population doubled between 1800 and 1850. This rapid growth resulted in a great strain on Paris's infrastructure; the capital was dirty and riddled with diseases, especially with the open gutters on the streets which carried sewage. And to make the matters even worse, the city's layout was composed of unplanned narrow streets with no open spaces. (Willsher, 2016)

1.4.3.3. *Hausmann's Paris*

Georges-Eugène Haussmann is famous internationally for transforming the French capital with a bold program of urban planning. Haussmann lived from 27 March, 1809 till 11 January, 1891 as a son of a well off merchant family. His big break came while Emperor Louis Napoleon III was looking for someone to undertake his grand vision to rebuild Paris as a modern capital, so Haussmann was appointed as the prefect of Seine in 1853. With an urgent need for light, air, clean water and good sanitation, the plan for a new Paris was initiated. The old cramped houses of the medieval city were destroyed, and streets were widened and transformed into boulevards. (Alvarado, n.a.)

1.4.3.4. *The New Paris*

Haussmann aimed to rebuild Paris as a modern city: sewage networks were widely expanded, public building regulations were formulated, monumental buildings were constructed, a uniform façade for the city was adopted, a symmetrical road system was organized and street furniture was added, parks and piazzas were constructed, and districts were formed within the city thus expanding its limits. (Alvarado, n.a.)



Aerial View of Paris post-Hausmann

1.4.3.5. City Growth Today



Aerial View of La Defense

Nowadays, with the great urban growth that affected Paris; the city had to grow elsewhere. A huge lot just west of the city limits of Paris was chosen to become the new business district. La Defense acquired a strategic location on the horizontal axis extending from Champ-Elysees, linking the new part of the city to the historic center. Before the transformation, La Defense consisted of rundown houses and small factories for the engineering and automotive industries, bordered by slums and the occasional farm. Between 1958 and 1964, La Defense began to take shape, and from then on buildings and skyscrapers were constructed. It was not until February 1970 that the RER suburban rail line was put to service, connecting La Defense to the Place de l'Etoile. From that point onwards, the fundamental role that public transportation would play in La Defense's success was truly understood. (LaDefense, n.a.)

1.4.3.6. *Loss of Parisian Heritage*



Even though Haussmann is behind the “City of Light” that we know today, there are many conflicting standpoints that make him a controversial urban planner in history. Many Parisians to this day still consider him as a vandal who ripped the historic heart out of Paris to help crush the popular uprising at the time. Patrice de Moncan, a historian and “Haussmann expert”, noted that critics portrayed Haussmann as a villain whose “critics accused him of filling Paris with cobbled streets, bland buildings with stone facades, and wide, dead straight avenues so the army could repress the masses.” Parisians still believe that Haussmann was the reason behind the loss of the Paris’ medieval architecture, even Victor Hugo in his novel “Les Miserables” accuses him of destroying the city’s “medieval charm”. (Willsher, 2016)

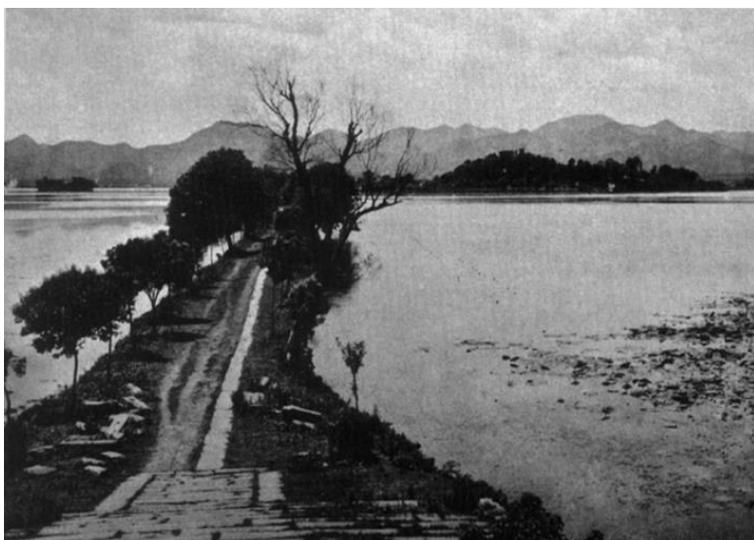
1.4.4. Shanghai, China



1.4.4.1. Introduction

Situated on the banks of the Yangtze River Delta, Shanghai is the largest city in China. Shanghai is regarded as the climax of modern economy, commerce, culture, finances, industry and communication in China. This remarkable city is an outstanding example of cities that rose up into bustling modern metropolises in a short period of time.

1.4.4.2. Breaking the Barriers



Hangzhou, China, 1900

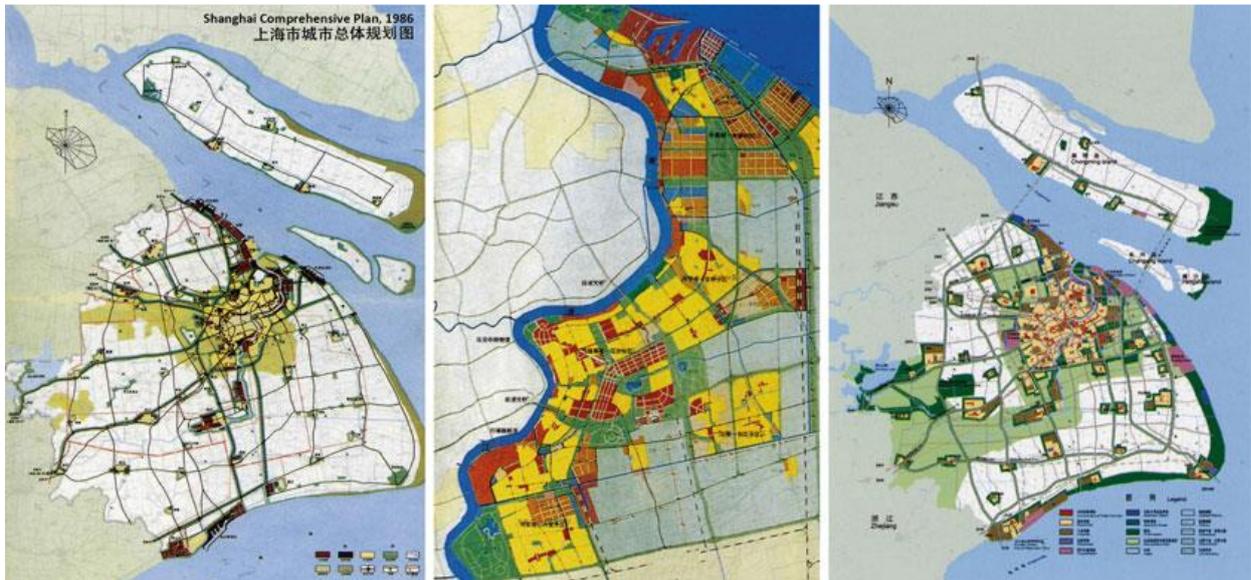
During the first half of the 20th century, China was still a collection of walled settlements based on traditional architecture and urban design. By the end of the same century, the cities of China underwent a dramatic boom due to the industrial revolution and the overflow of external investments, a transformation that is still in process today.

1.4.4.3. The Revolution

After 1949, a revolutionary notion occurred in China, the rule was influenced by Maoist thinking and the cities transformed national economy and urban life. The newly established government seized the opportunity to rebuild the cities as models of socialist organization and ideology. (Gaubatz, 1998) Agricultural fields became towns, skyscrapers began to appear,

bridges stretched across waterways, dirt roads were paved, and infrastructure became more complex. (Rogers, 2016)

1.4.4.4. *China After the 1970s*



Shanghai Plans: 1986, 1991 and 1999.

In the late 1970s, China became the center of attention of the world; foreign investments flourished leading to the transformation of urban form, functions and living. To accommodate the needs of the booming country, Shanghai was consequently transformed into an international port. These contemporary transformations are evident in Shanghai through the changing city skylines and commuting patterns and the emergence of new urban districts around the city. (Gaubatz, 1998) In 1991, Shanghai was released from the Maoist era and it became the center of foreign investments, and a year later it was Asia's second busiest cargo port. As an outcome, the city developed into a "megacity" and was divided into three dynamic scales: the central city, the suburban satellite orbit, and the metropolitan region. (Walcott, 2009)

1.4.4.5. *Meeting Contemporary Challenges*

Shanghai has undergone a rapid and large-scale urbanization after 1991. This urbanization process was effectively "controlled" and "planned" and avoided many development problems; there was never a lack of infrastructure or poor environmental quality, nor was there an extreme contrast in the living quality of different cities. The only prominent problem that Shanghai faced was that of "land use efficiency." With respect to Shanghai's growing population size and available land assets, much of these resources are being wasted. This wasteful use of land led to an instability in ecological and environmental sustainability. A plan to divide Shanghai was placed in the 1990s, yet this was impossible today since the city cannot be separated into one-third for urban development, one-third for agriculture and one-third for eco-lands and forests. (Sha, 2014)



Shanghai Port, 1920



Shanghai Port, 2009

1.4.4.6. Loss of Chinese Heritage

In the past, a problem concerning historical culture rose; not much attention was taken for the conservation of cultural heritage in Shanghai and the city began to lose its traditional ethnicity. China's hasty urbanization meant that modern buildings replaced traditional houses. Even though efforts were made to conserve registered historical areas and buildings



by spreading the awareness regarding the city's cultural and historical values and the need for protection, the problem still exists. There is still insufficient consciousness about the seriousness of this heritage loss. This is due to the "loss of sense of humanity about the city." (Sha, 2014)

Jing'an Temple, Shanghai, China

1.5. Conservation of XX century buildings: case studies

Conservation has always been a process influenced by the factor of time, passing from the early 20th Century, to the time after the Second World War, to the modern day. The process of conservation has undergone various challenges and changes in principles that have been documented by various charters such as the Venice Charter (1964), Nara Document (1994) and the Stockholm Declaration (1998) and ICOMOS Charters (2003). This leads to diversity in examples of Heritage Conservation in a worldwide scape.

	Design Concept	Conservation Strategy	Challenges	Outcomes	Lessons Learned
Case 1: <i>Schröder House</i>	The De Stijl Ideals	Schröder House Restoration	Failure of Rietveld's Intention	Schröder House as World Heritage Museum	Conserving Stylistic Phenomenon
Case 2: <i>Bauhaus Building</i>	Gropius and the Bauhaus	The Restoration Project	Building Still in Use	Bauhaus Current Situation	Conservation of Building Still in Use

1.5.1. Rietveld Schröder House, Utrecht, Netherlands



1.5.1.1. Introduction

The Schroder House, located on the edge of the city of Utrecht in the Netherlands, stands out from its adjacent neighbors. It was built against the wall of the adjacent brick house. It was commissioned by Ms. Truus Schroder Schrader as a family house. The architect, Gerrit Thomas Rietveld, designed the house and built it in 1924. Rietveld, known to be one of the pioneers of the De Stijl movement in the Netherlands in the 1920s, designed this one-family house with flexible interior spatial arrangement with visual and formal qualities.

1.5.1.2. The De Stijl Ideals

The Schroder House was considered the manifesto of the De Stijl ideals, and since then it has been considered as one of the icons of the Modern Movement in architecture. It also differs from other significant buildings of the early modern movement, such as the Villa Savoye by Le Corbusier or the Villa Tugendhat by Mies van der Rohe. The difference lies in particular in the treatment of architectural space and in the conception of the functions of the building. (UNESCO, Rietveld Schroderhuis, n.a.)

Flexibility of spatial arrangement is an important feature of the house; it allows changes in space in accordance to changes in functions. The flexibility of space meant that there was no hierarchical arrangement of rooms in the floor plan. The building also has a great artistic merit; there is an obvious influence by the paintings of Piet Mondrian which was marked by primary colors and pure ideas. The interiors and furniture are an integral part of its design and each piece was designed by the architect following the same principle of the De Stijl movement. (UNESCO, Rietveld Schroderhuis, n.a.)

1.5.1.3. Schroder House Restoration

Since the Schroder house was used as a private residence for sixty years, changes were made according to the evolving needs and uses. In the 1970s and 1980s, the house was restored to its original condition of the 1920s by Bertus Mulder, one of Rietveld's assistants. The building has maintained the authenticity of its design concept and structure. The restorations of the 1970s and 1980s were done with great care, making every effort to preserve what was possible. All the original furniture was restored and positioned as in the 1920s. Missing objects were remade on the basis of records and existing evidence. Due to their poor conditions, some of the materials were replaced. (UNESCO, Rietveld Schroderhuis, n.a.)



1.5.1.4. *Failure of Rietveld's Intention*

Even though the Schroder House was built for greatness, it was not built to survive for eternity. In the maintenance and restoration process of the Schroder House, Rietveld emphasized on the importance of conserving the house “*as it is,*” staying true to the original concept as much as possible. Yet, various alterations were made to the house and its interior spaces. At some point, Rietveld considered demolishing his work rather than accepting its altered state. However, Truss Schroder refused this proposition, devoting herself to the preservation of the house as a monument of the De Stijl movement and safeguarding it for future generations.

1.5.1.5. *The Schroder House as World Heritage*

Since the Schroder house was considered an icon of the Modern Movement in architecture and an expression of human creative genius in its purity of ideas and concepts as developed by the De Stijl movement, it was no surprise that the house was enlisted as a World Heritage site. The Rietveld Schroder House was listed as a national heritage site under the 1988 Monuments and Historic Buildings Act. With its radical approach to design and the use of space, the Rietveld Schroder House occupies a seminal position in the development of architecture in the modern age. The Schroder House was transformed into a museum so that its genius can be shared with the world. The house is continuously being restored and maintained in good condition under the care of the Central Museum of Utrecht.

1.5.2. Bauhaus Building, Dessau, Germany.



1.5.2.1. Introduction

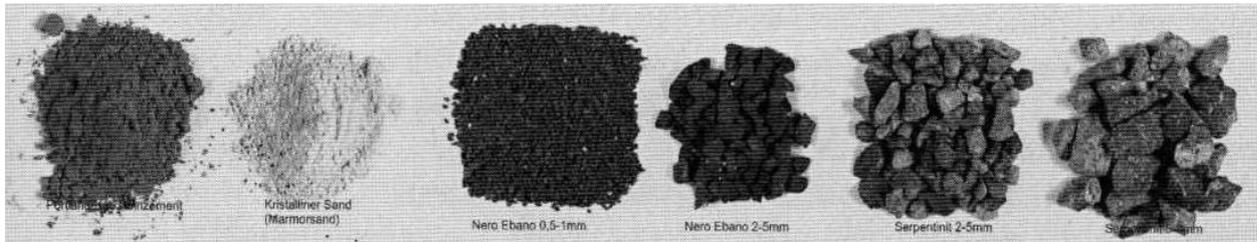
The Bauhaus building was designed by Walter Gropius in 1926, the founder of the Bauhaus. It is considered today to be the “materialized manifesto of Bauhaus ideas”. (Markgraf, 2006) He was commissioned by the city of Dessau that financed the project and provided the building plot. In this building, glass façade on the load-bearing framework allows a view of the interior spaces; all the interior fittings were made by the Bauhaus workshops.

1.5.2.2. Gropius and the Bauhaus

Gropius designed the various sections of the building differently, separating them consistently according to function. He positioned the wings asymmetrically; the form of the complex can thus be grasped only by moving around the building with no central view. (Bauhaus, n.a.)

1.5.2.3. Restoration Project

Restoration was carried out on various times throughout the years of the use of the Bauhaus building. For example, after the renovation of 1976, damage and numerous flaws had appeared in the Bauhaus Building. Twenty years later in 1996, a general renovation for the building had been carried out. A significant level of financing was provided by funds from the German Federal Republic, the federal state of Saxony-Anhalt and the municipality of Dessau for the planning and building measures could begin. European funds and private sponsors and other sources of capital were also found.



Material Sampling, Image from Book: Archaeology of Modernism: Renovation Bauhaus Dessau, Monika Markgraf

Building research, survey and analysis are tools to define objectives of renovation, since the old records, drawings, contract specifications, invoice and building measures failed to reveal required information needed for the renovation work. This building research included understanding the different layers of changes implemented over the years. It gives us an understanding of the building's history, construction and material technology. Materials, component parts, records and documents of the Bauhaus are stored to create a research archive for future use. "This provides a basis for both further research and for actual construction-related problems. The objective, in addition to the acquisition of informed insight into the renovation of the architecture of Classical Modernism, is the development of a foundation that will facilitate the classification and evaluation of this building within the architectural history of the 20th century". (Markgraf, 2006)

The renovation project included defining guidelines which were summarized as the "historical monument preservation objectives". These guidelines included:

- Preservation of the structure of the building and reconstruction of the structure where it is damaged.
- Adaptation to the use of the building with minimal technical configuration.
- Protection of the traces of history, without disfiguring the building.
- Conservation and preservation of the monument as it is today.
- Reconstruction of the original setting where components are missing and scientifically founded reconstruction is possible.
- Minimum intrusion into the substance and built fabric of the Bauhaus to avoid unforeseen damaging consequences.

The main priority of the work carried out in the Bauhaus building was the preservation of the original material; everything was documented on-site or stored in building archives and in 1998 served as the base of the "Bauhasbauten Dessau" research project. (Markgraf, 2006)



The Bauhaus Building in Dessau: Then & Now, <http://www.bauhaus-dessau.de>

1.5.2.4. Building Still in Use

Due to the need of renovation, the Bauhaus building was refurbished between 1996 and 2006. “The purpose of the renovation project was to meet the requirements of **contemporary use** and primarily to preserve and make visible the historic and artistic value of the building”. (Markgraf, 2006) The buildings that belonged to Classical Modernism were rarely considered as historical and artistic objects worthy of research and protection. But with its inclusion in the list of World Heritage sites in 1972, this modern building gained increasing recognition as a cultural monument with the growing appreciation of modern buildings.

1.5.2.5. Bauhaus Current Situation

Since the Bauhaus building is listed as one of the World Cultural Heritage sites, and due to its historic, artistic, cultural and scientific importance, it was declared as a cultural monument. Being so, the Bauhaus building’s preservation process required understanding and prioritizing the different areas of the building into areas: red, green and brown. **Red zones** are the zones related to **restoration** and **reconstruction**, to preserve the value of the monument and safeguard and highlight the aesthetic virtues of the monument. The **green zone** included **upkeep** and **repair**, characterized by the 1976 Reconstruction where the Bauhaus was restored after suffering from damage. The **brown zone** included **maintenance** and **new elements**; here preservation or creation of historic context does not have priority. (Markgraf, 2006)

2. WAR AND NATURAL DISASTER DESTRUCTIONS

Destruction and ***heritage loss*** can be caused by both ***war atrocities*** and ***natural disasters***. Throughout history and specifically during the time of WWII, bombing and destruction had led to a grand heritage loss in Europe and the world. This chapter will discuss the case of Poland, Japan, Italy, Germany, UK and France and how these nations dealt with the post war damage. Contemporary bombing and destruction is also discussed by referring to examples of the 21st century: The Mostar Bridge of Bosnia, the Bamiyan Buddha of Afghanistan, the historic cities of Syria and the Twin Towers of New York. The chapter also embraces the threats that natural phenomena such as fires, earthquakes and tsunamis have on cultural heritage.

2.1. WWII Bombing and Destruction in the World



Bombing of Milan in World War II

After Hitler's invasion of Poland in 1939, Britain and France declared war on Germany and thus World War II began. Until its end in 1945, the war was considered the most lethal and destructive war in the history of mankind. It left behind the loss of 60 million lives, the destruction of many cities and towns, and a great loss of social and cultural heritage. Although the war has caused unprecedented hardship, it was also a starting point for change and many of Europe's cities began to rise from the ashes (MacMillan, 2009). The **rebuilding task** was complex and obstacles were enormous since the majority of the cities had been greatly destroyed. Under U.S. sponsorship, the Marshall Plan was initiated to help rehabilitate the economies of 17 European countries under a unified plan (Britannica, 2016). This was the case in most of the world's post-war countries.

2.1.1. Warsaw, Poland

In August 1944, violent clashes broke out between the Polish resistance and the Nazi forces that had occupied Warsaw. The resistance intended to liberate the city from the dark Nazi occupation. They succeeded in inflicting serious damage on their oppressors killing and wounding around 20000 Nazis. The greatest loss suffered was that of civilians that counted 150,000 people killed by air strikes and hostile acts across the city. More than 85% of the city's heritage turned into ruins. This damage was intentionally created by Hitler and his Nazi forces as an act of vengeance against the Polish nation after the end of the combat.



Historic Center after Nazi Attacks, Warsaw, Poland, 1944.

2.1.1.1. Poland after the War

In the summer of 1947, the architect Hermann H. Field led a small group of American designers to study the post-war reconstruction of Europe. They visited England, Czechoslovakia and Poland where they surveyed Warsaw, Kraków, Katowice, Wrocław and Szczecin. Their photographs captured what became the topos of post-war urban ruination: the exposed innards of buildings.

In addition, Warsaw's archive footage from British Pathé shows the buildings in 1950 falling arbitrarily. Across much of the city, only basements, low walls and occasional ground floor sections of buildings remained. The Polish grass-lined alleys bring to mind the ruins of Pompeii, with rubble and ruins everywhere. Later on, suggestions were made regarding the fate of the remains of the city and one idea was that it should be left as it is to memorialize the war and the entire capital should be relocated.

2.1.1.2. Reconstruction

From the start of the rebuilding process, the city's own rubble was utilized in the reconstruction process, and original fragments of Old Town buildings were recovered. "Rubble from the former ghetto district was used to produce new bricks for the modern quarter, while architectural details from demolished buildings in the Old Town were put on to the reconstructed facades" (Guardian, 2016). While much of this work was done by construction workers and specialized builders, Malgorzata states that local people were required to help clear the vast amounts of debris. "The entire nation builds its capital" became the city's rallying cry (Guardian, 2016).

Bellotto's Paintings and Reconstruction

Bellotto, the assigned court painter of the Polish king in 1768, had once created beautiful and accurate paintings of Warsaw's buildings and squares. It is testimony to the veracity of his works that almost 200 years later those paintings were used to help transform the historic city center from wreckage and rubble into what is now a UNESCO World Heritage Site. When the rubble available was not sufficient, more material was imported from neighboring ruined cities.

To ensure the rubble was all put back in roughly the right place, Bellotto's cityscapes were used as references for key locations. Throughout history, the artist's 22 street scenes had been hotly contested and removed from Warsaw's Royal Castle on numerous occasions. By this time, Bellotto's paintings were especially prized because so many of the works documenting Poland's history had been blacklisted by the Nazis.



Painting of the Church of the Holy Cross by Bellotto.

Since 1984 the paintings have been exhibited in the Royal Castle's Canaletto room. Bellotto's paintings, along with the expertise of Polish architects, art historians and conservators, enabled the reconstruction of the Old Town to take place in an impressively short period of time. Most of the work was finished before 1955 although additional construction continued into the 1980s. The city is arguably still feeling the impacts of the Second World War even today. The contemporary city is not, however, an entirely accurate recreation of Bellotto's

images. For one, Bellotto used the *“camera obscura”* technique to trace pencil drawings of the architecture. Later these drawings were transferred on to the canvas and finished off with watercolors. This technique was considered relevant since the use of this optical device led to some minor inaccuracies.

2.1.1.3. *Warsaw After the Reconstruction*

A lot of Citizens complained that the city doesn't remind them of their childhood, even though the new reconstruction attempted to redo the paintings as they were portrayed.



Regardless of the complaints from citizens after the reconstruction, it is clear that without Bellotto's accurate record of the city, it would surely look very different today. It was the work of a single artist that provided the crucial blueprint.

2.1.2. **Hiroshima, Japan**

In 1945, the US forces dropped an atomic bomb over the city of Hiroshima. This explosion caused the devastating wipe out of the city. Millions of lives were lost due to the attack and later due to the radiation exposure. Among the losses was that of Hiroshima's cultural and historic heritage and immediately the city turned into rubble and ruins.

2.1.2.1. *The Dome of Hiroshima*

The **Hiroshima Dome** or the **Atomic Bomb Dome** was originally designed by the Czech architect Jan Letzel. The design included a distinctive dome at the highest part of the building. His building was completed in 1915 and was formally opened in August of the same year. The Hiroshima Prefectural Commercial Exhibition, as it was named at the time, was located in the large business district and was primarily used for arts and educational exhibitions.

Miraculously, the Hiroshima Dome withstood the drastic blow and was one of the few buildings that survived the atomic attack. This led the people of Hiroshima to consider it as a monument of their city and the testament of this catastrophe of 1945.

Various discussions began to arise regarding the fate of the Hiroshima Dome. At one end, many people refused to rebuild it and instead requested to keep it as a ruin considering that it is more valuable in this form. On the other hand, many wished for it to be removed as a starting point to shift towards a new Hiroshima. Eventually, the decision was made to preserve the ruins of the Dome due to its growing symbolism for the city; this decision made the architectural feature a symbol of peace and anti-nuclear war.



The Dome of Hiroshima, Japan, 1945

2.1.2.2. *The Reconstruction of the Dome*

The structure of the Genbaku Dome⁴ was in danger of collapsing due to the exposed metal dome framework at its apex. For the officials of the city demolition of the whole complex seemed to be the solution and annihilation was scheduled. Afterwards, demolition plans were delayed since the majority of the building was still intact. Once again, the Dome became the subject of controversy; some locals wanting it torn down while others wanted to preserve it as a memorial of the bombing and a symbol of peace. Ultimately, when the reconstruction of Hiroshima began, the skeletal remains of the building were preserved.

Subsequently, from 1950 to 1964, the Hiroshima Peace Memorial Park was established around the Dome. In 1966, the Hiroshima City Council adopted a resolution for the permanent preservation of the Genbaku Dome, officially naming it "***the Hiroshima Peace Memorial***". The Genbaku Dome has undergone two minor preservation projects to stabilize the ruin, notably between October 1989 and March 1990. Changes were minimal and were meant only to ensure the stability of the structure. Today, the Genbaku Dome stands almost exactly as it did after the bombing on August 6 1945 and the Dome continues to be the park's primary landmark and the city's most prized monument.



The Genbaku Dome in the Hiroshima Peace Memorial Park, 2016

⁴ Genbaku Dome: the common name used for the Hiroshima Dome building, "A-Bomb".

2.1.3. Italy

During World War II, major cities in Italy such as Milan, Turin, Genova and Rome suffered great damage to their urban fabric and monumental heritage. In April 1945 and at the end of the WWII, Italy began to recover from its scars, left behind by the fascist forces. (Salvatore, 2011)



Piazza Fontana, Milan, 1943, by ANPI di Lissone

2.1.3.1. Milan

Loss of Heritage

Milan, as an example, was repeatedly bombed from 1940 to 1944. The city was destroyed as a result of bombings, fires and even by demolition which took place during the reconstruction process. Half of the buildings protected by the heritage authorities, even those under protective measures dictated under Fascist government, were damaged. (StorieMilanesi, n.a.)

Reconstruction

Reconstruction of the city took place, yet the loans obtained by the municipal government during 1944 were not sufficient for all the works. As the population doubled after the war, the demand for housing increased. This growth led to the modification of the city layout; wealthy neighborhoods began to disappear and were replaced by numerous affordable housing units. Teatro alla Scala was reconstructed and reopened on 11 May, 1946. A new image of the city began to appear and Milan started to shift towards *modernization*. The Torre Velasca (BBPR, 1956-8), the Pirelli skyscraper (Gio Ponti, 1956-61) and the Padiglione d'arte Contemporanea (Ignazio Gardella, 1951-4) are symbols of this modernity. Montestella, the

artificial hill of the QT8 district by Piero Bottoni (1947), was made entirely by the war debris and thus became the symbolic reminder of the war. (StorieMilanesi, n.a.)

2.1.3.2. *Fascist Architecture Today*

Unlike France and Germany, Italy did not intend to dismantle all the monuments or get rid of all the Fascist symbols. Instead these memorials were left to survive. When Mussolini rose to power in 1922, he knew that through architecture the Fascist imprint would survive. Mussolini directed what types of architectural buildings were constructed with respect to style. (Ben-Ghiat, 2017) The Fascist government constructed several buildings: from government buildings, hospitals, and post offices to stadiums, housing, Fascist party headquarters and ceremonial spaces. Infrastructure projects such as roads, railways and bridges bore the imprint of Fascism. (SAH, n.a.)



Fendi Headquarters, Rome. Previously the Palazzo della Civiltà Italiana. Photo by Stephen Bisgrove/ Alamy

However, ridding Italy of all fascist memorials could have been ironical. The afterlife of fascist architecture underwent a great adaptation and re-use. The Palazzo della Civiltà Italiana is a living example. It was originally built by Mussolini in the late 1930s to host the 1942 World Fair in Rome. The Palazzo was known as the Square Colosseum because of its rectangular form and facades of arches and Neo-classical statues. The Palazzo was recognized as a site of cultural interest in 2004 and it was restored in 2010. Later, it became the headquarters of the Fendi fashion house. Today, it is still considered as an emblem of Fascist architecture. On the other hand, only the most obvious and unaesthetic monuments of that period were destroyed. (SAH, n.a.)

2.1.4. Germany



Aerial View of Cologne, Germany, 1945

2.1.4.1. *Loss of Heritage*

Germany experienced a rebirth after World War II and the country was reconstructed miraculously. During the war, a great number of Germany's historic buildings were destroyed and the country's greatest cities were devastated. Rubble filled the cities and more than half of the country's historic buildings were demolished. (R. Leick M. S., 2010)

2.1.4.2. *Reconstruction Debate*

In the case of Germany, the country required a vast reconstruction plan; never before had an entire country been rebuilt. This reconstruction phase lasted until the 1980s. Some of Germany's historical buildings were rebuilt and re-used while others were wiped off to make way for new constructions. The decisions regarding rebuilding and demolition were the starting point for the reconstruction debate. (R. Leick M. S., 2010)

With regard to civic architecture and authority building, it was argued about what image they must convey in order to fit in with Post-War Germany. For more than a century, the most important buildings in German cities were those of political authority. These buildings shaped the identity of the cities. In the post-war reconstruction era, authorities and architects were facing difficult choices; to rebuild and repair the structures as their pre-war forms, or to erect new buildings in a modern style. Some believed it was possible to return the cities to their pre-war state. Others viewed it as a chance to create a new identity and new political form.



Nuremberg, the Zeppelinfeld Stadium Entrance

The Nazi imprint was quite eminent on these building, in fact by 1930 city government offices were filled with Nazis and police forces were centralized and controlled by the SS. It is without question that “architectural form embodied particular meaning”. This was the aim of Adolf Hitler and his architect Albert Speer; they created monumental buildings to represent the power of the Nazis. Architects believed that because the government shifted towards democracy, government buildings should be transparent made of glass rather than stone. (R. Leick M. S., 2010)

Town Halls and Police Headquarters

Town Halls and Police Headquarters played a crucial role in Nazi Germany. After the war, the issues regarding their renovation were complex. Town Halls played an important role in society at the time. Their conservation was based on separate case studies. They were divided into two categories: those built before the 18th century and those built in the 19th and 20th century. Town Halls of pre-war Germany were in some cases renewed and reused, in other cases they were expanded due to the new needs of the growing government. (Diefendorf, 2016)

Police Headquarters were a symbol of terror and violence for Germans under Nazi rule. This is why the situation was complicated; the scars and memories of the Nazi regime were still imprinted on these buildings. A dilemma was formed regarding the treatment for these structures; in several cases damaged buildings were repaired and Nazi ornamentations were removed. Others were demolished leaving behind no traces of the past. (Diefendorf, 2016)

2.1.5. The United Kingdom



Coventry, UK, 1940

2.1.5.1. *The Blitz*

The United Kingdom, like most of the countries affected by the Second World War, underwent aerial bombardment. At the time, air power was seen as the most effective and prevalent component in warfare. The “aeronautical age” made the urban landscape vulnerable. Cities, railways and canals were completely exposed, thus making their destruction possible. (Larkham, 2016)



The Blitz over St. Paul's Cathedral, London, UK

2.1.5.2. *London After the Blitz*

The Blitz opened on London on 7 September 1940. Due to this act, London suffered from concentrated and fragmented damage patterns. This damage created visible scars, affecting the rising destruction across the city. (Woolven, 2016)

2.1.5.3. *Reconstruction*

The Argument

When the time came for reconstructing after the war, a plan began to prosper. Action was needed and the service of 5000 soldiers was required to remove the debris. Local Rescue Parties dealt with clearing debris and repairing damaged roads. (Woolven, 2016) As part of the planning process, it was important to decide what actions should be taken with respect to the bombed sites. In England many bombed sites were reused as surface car parks. Other sites were rebuilt, particularly those that seriously suffered from the Blitz. Some cities aimed to show the marks of conflicts, while others refused to do so and were more interested in looking forward. (Larkham, 2016)

Today most of the scars of destruction have gone, but the scars of memory live on for some.

BBC People's War website

Actions for Reconstruction

As part of the rehabilitation of England, debris was cleared from the streets, unsafe structures were demolished and useful building material was saved. Roads were repaired, gas was redistributed once again and water was supplied via new networks. (Woolven, 2016) Attention shifted from urban scale to individual buildings; civic buildings, town halls and police headquarters were reconstructed. (Larkham, 2016)

2.1.6. France



Aerial View after the Bombardment in Vire, Normandy, 1944

2.1.6.1. Restarting from Zero

With 1,804,000 buildings damaged and destroyed, dwellings turned into rubble, industrial buildings completely destroyed and agriculture scares, World War II left France at a restarting stage. (MonthlyLaborReview, 1945) The ports, train tracks, roads and bridges were in shocking state. Half a million hectares of the country's land was mined. At the time, De Gaulle's government placed an enormous aid program, to finance the industry, energy and transport sectors. Post-war years provided the initial steps toward modern France. (Davis, 2015)



2.1.6.2. *The Modern Movement*

Need for New City and Immediate Housing

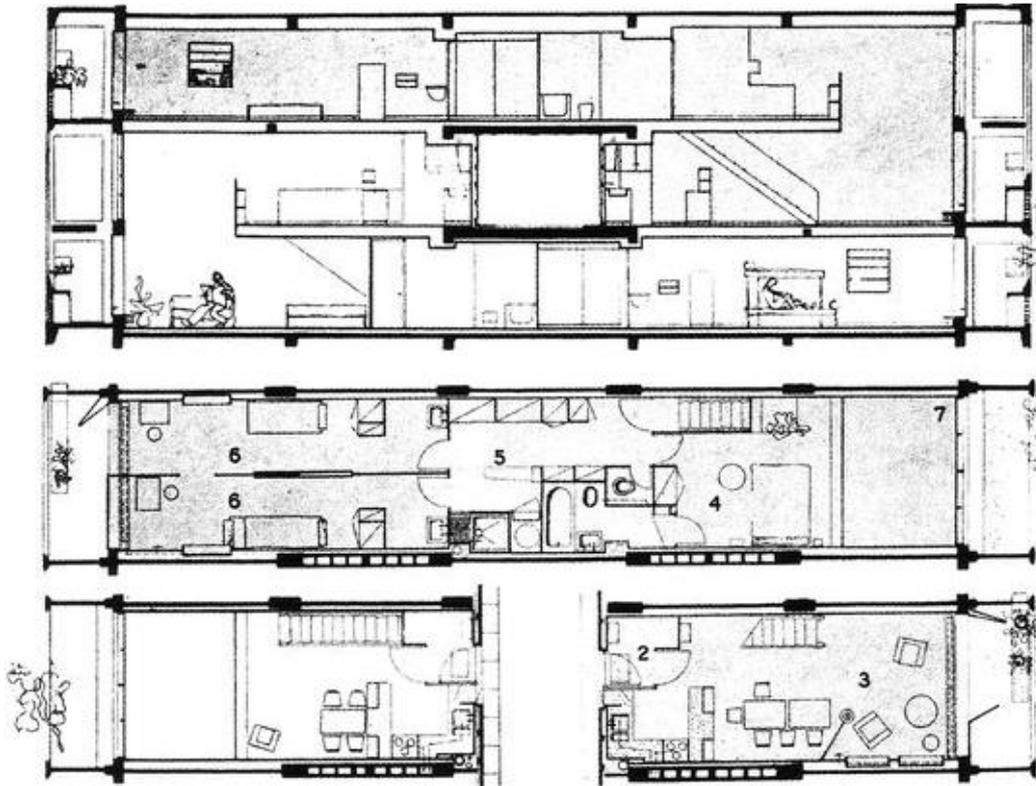
After the war, France was faced with the problem of destruction. The French government initiated projects for transforming the rural country into modernized urban country. The state encouraged construction of mass housing and town development. (N.A., 2012) The major problem that the war had left behind was the loss of dwellings and housings, there was a countless need for housing construction. Great investments were placed towards housing due to its extensive demand generated by the migration of the population towards the urban areas. This gave way to different fields: the formation of collective housing, the production of housing and the creation of a relationship between housing, the neighborhood and the city. (CriticalUrbanisms, n.a.)



Unité d'Habitation, Marseille, France

2.1.6.3. *Le Corbusier On Social Housing*

The Swiss Architect Le Corbusier was a highly influential character in France at this time. He was the pioneer of the social housing architecture. As an example, the Marseilles Unité d'Habitation was Le Corbusier's first finished building of the time. He imagined it to be a part of a larger plan to reconstruct France. (Clericuzio, n.a.) Le Corbusier was appointed to design a multi-family residential housing project for the people of Marseille that were dislocated after the bombings on France. The building was constructed using reinforced béton-brut, which is rough cast concrete. This was the least costly material during the economic crisis in post-war Europe. The project is based on living units linked together to form diverse layouts responding to the needs of its residents. (Kroll, 2010)



Residential Units of Unité d'Habitation, Marseille, France.

2.1.6.4. *Architecture Prefabriqu *

With the beginning of the Industrial Revolution, architecture shifted towards prefabrication. After World War II, France had a major housing shortage, therefore prefabricated housing seemed a radical solution. This technique was adopted in the country to increase the speed of construction with respect to the evident shortage. Pol Abraham, the French architect, promoted this idea in his book "Architecture Prefabriqu ". He writes that prefabricated elements have always existed in the construction process, such as Roman bricks or wooden panels. (Delemontey, n.a.)

2.1.7. **Post-War Reconstruction and Psychological Issues**

In the 20th century, European countries began to realize the importance of heritage, specifically after the destruction the war had caused. Conservation became an important process and its objects have progressively expanded from monumental buildings to collective structures and eventually to the landscapes, thus covering the world people live in. With that said, the relationship between architecture, memory and psychology is highlighted and equally the relationship between restoration, psychology and interior design is to be discussed.

ARCHITECTURE

MEMORY

PSYCHOLOGY

2.1.7.1. *The Restoration Process*

Architectural restoration allows the building to recover its function and preserve it. It is a method that allows the work of art to be appreciated for its materiality and its historical and aesthetic duality with a view of transmitting it to the future. It is not just important to return the building to its physical appearance but also to give it a figurative character (Anzani & Caramel, 2017). It is vital to respect the building whilst preserving it; this is done by maintaining its independency from the added work and by making the new elements recognizable.

In 1964, a group of architects and specialists of Historic Buildings published the Venice Charter that held 13 resolutions as the base for the creation of ICOMOS (International Council of Monuments and Sites). The publication of the Charter improved common understanding and awareness of the concept of **preservation** and spread its consciousness by including the **conservation** and **restoration** works of the historic buildings. Its application varies between different countries considering their social, economic and cultural conditions, as well as the technical qualifications of those implementing it. Beginning from the World Heritage Convention (Anzani & Caramel, 2017), some of the limited explanations in the Venice Charter were revised. Historic monuments did not only include buildings but also groups of buildings and sites. Later on, the Nara Document on Authenticity (1992) carried out the responsibility to clarify the authenticity related issues which were expressed in the articles 6 and 7 of the Venice Charter.

- **Article 6.** The conservation of a monument implies preserving a setting which is not out of scale. Wherever the traditional setting exists, it must be kept. No new construction, demolition or modification which could alter the relations of mass and color must be allowed.
- **Article 7.** A monument is inseparable from the history to which it bears witness and from the setting in which it occurs. The moving of all or part of a monument cannot be allowed except where the safeguarding of that monument demands it or where it is justified by national or international interest of paramount importance.

Conservation is senseless if it is not meant as a continuation of the historical process. In addition to aesthetical values, meanings that buildings provide for the city and its landscape should be taken into account.

2.1.7.2. *Psychological Aspects*

2.1.7.2.1. *Dealing with the Past*

The past is a multi-voice narration: the narrative truth that shows things as they are narrated, and the paradigmatic issue that shows how things could have been. When working on ancient and historical buildings, the research of new values of character and atmosphere finds itself involved in the exploration between the past and the future.

2.1.7.2.2. *Preserving the Memory of Buildings*

When looking at the different destructed buildings of the post-world war time we realize that the psychological aspect is an important feature, unlike the aesthetical and the historical aspects since it is a representative of memory. The debate concerning the extent of an exact reconstruction of a building and its faithful in a changed context has been questioned for decades; therefore, preserving the memory is a crucial point.

What makes a place hospitable and how does it become so? It is clear that when people notice a fulfillment of their expectations for a space, both in emotional and functional terms. A place is considered hospitable when people are capable of experiencing and creating a connection with their predecessors. It is necessary to provide hospitable spaces by exploring a common field between restoration and interior design; this is accomplished when people find a relationship with the architecture they are exposed to (Anzani & Caramel, 2017).

According to Pane every external modification implies an inner reflex; this shows that there is a reason why particular objects are still considered necessary because they are still part of people's psyche (Pane, 1987). Places containing memory possess the quality of making people feel intimate towards them. Therefore, when aiming towards designing these spaces the most important point is to consider the human dimension both physically and culturally, in relation with all the sensitive and perception qualities. This applies specifically to the destruction of buildings that hold so countless memories, causing instantly the destruction of a person's belonging to a place.

It is important to avoid the situations of abandonment and negligence to ward off the loss of the sense of place. Therefore, before any intervention on the material, giving meaning to the building should be prioritized so as to give the building back its soul.

The Role of Communities

The community in many cases is itself responsible for any kind of neglect bestowed upon monuments or historic buildings. They are the ones that can decide whether or not a building is significant and should be restored. Choices do not depend solely on the conceptual abstraction, but on what people love, what they see important, and the images they choose to preserve. The concept of a historic monument embraces not only the single architectural work but also the urban or rural setting in which is found the evidence of a particular civilization, a significant development or a historic event (Anzani & Caramel, 2017). The balance between nature and people with economic, social and cultural factors must be orchestrated in an attempt to reach the complete ecology.

2.1.7.2.3. *Preserving the Memory of Cities*

The city is the greatest work of art since it belongs to imagination, “when cities are loved they keep people around and don’t let them go away”. By improving the cities people are improved thus changing the outside world is as therapeutic as changing the subject’s feelings (Anzani & Caramel, 2017).

The way cities are imagined, the way their goals are designed and the way their beauty is increased defines each person’s self-interpretation of them. The city is considered as a tangible expression of the community’s soul. Individuals perceive their environment with respect to their own needs and ideas. For example, if persons were asked to describe a city, they would each unconsciously shape the buildings differently since the city is engraved in a different way in their minds.

The most important thing to include is the psychological needs of people and to activate their psychic reality by considering both aspects of the past and the future. In this way people will be capable of recognizing themselves in the city space (Anzani & Caramel, 2017).

2.1.7.2.4. *Multi-cultural Memory*

Memory is not in people’s minds; it is in the world. The intimate quality of a place is not only due to the perception of its climate and geography, but also due to the imagination. As a result of today’s newly adopted globalization, people feel attached to the place where they belong and find themselves establishing a bond with distant places and people. Therefore, existing buildings allow people to keep these memories alive and to relate them to things.

Architecture is a sequence of memories; it is the work and creation of different generations that marked the world with their special capacity. Here is where the evocative power of architecture stands out due to the fact that in the past, and still in the present, built heritage with great symbolism tends to be destroyed to erase the traces of unwanted thoughts and memories. This was the technique used by the world’s greatest powers.

There are no higher or lower cultures but there are different ones. This is mostly crucial in the countries facing war: restoration is an important tool for saving memory, which in turn contributes to saving culture.

WAR COUNTRIES

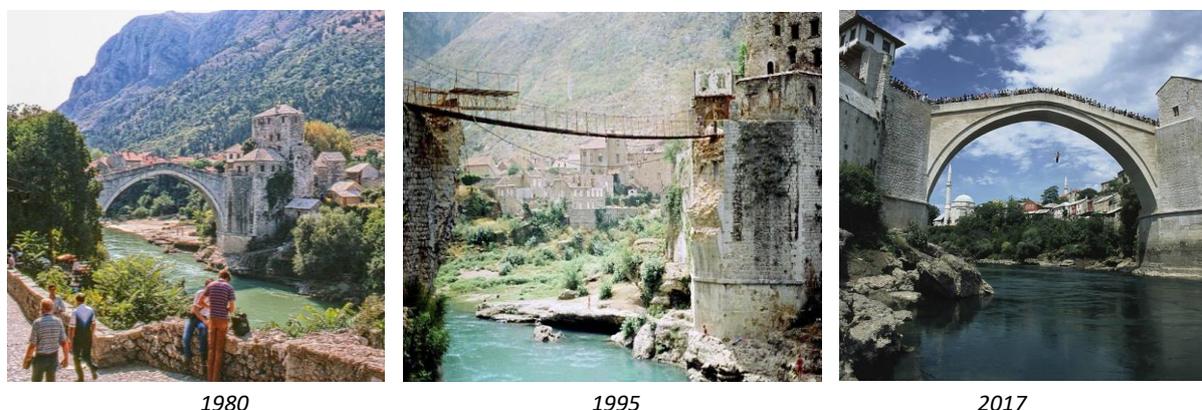
SAVING A MEMORY

SAVING A CULTURE

2.2. Contemporary Bombing and Destruction in the World

Due to ongoing international insecurity, war and conflict remain eminent in our modern world. We live in a world highly affected by political instability, ethical violence and terrorism thus leading to more bombing and destruction. Unlike WWI and WWII, contemporary conflict uses methods and concepts of modern warfare. These concepts are highly complex due to the introduction of military technology. In recent history, there are several examples of violence and damage in many countries that led to yet another trend of social and cultural heritage loss. In this part, the following examples will be mentioned: The Mostar Bridge of Bosnia, the Bamiyan Buddha of Afghanistan, historic cities of Syria and the Twin Towers of New York.

2.2.1. The Mostar Bridge, Bosnia



2.2.1.1. Brief Introduction

Mostar, a historic town established in the 15th and 16th century by the Ottomans, is known for its old Turkish houses and buildings. The city is rich in significant pre-Ottoman symbols built by the renowned architect Sinan: bridges, residential zones (mahalas), religious constructions and bazaars. The Mostar Bridge is a symbol for the town; the city's name comes from Stari Most which literally means the old bridge. (UNESCO, Old Bridge Area of the Old City of Mostar, n.a.)

The historic city of Mostar is a living example of Architecture of tolerance since there is a shared life of Muslims, Christians and Jews. Mosques, churches, and synagogues were adjacent to each other indicating that in this region people of various religions have lived together for many centuries. (UNESCO, Old Bridge Area of the Old City of Mostar, n.a.)

2.2.1.2. Destruction

In 1990, a great conflict broke out, leading to massive destructions in the old town. The war left Bosnia's infrastructure and economy ruined, people displaced and thousands killed. Shops and restaurants were burnt to the ground. The Mostar Bridge, a masterpiece of Sinan, was knocked several times during the time the city was shelled at the beginning of the conflict.

Later it was heavily bombed in 1993 until it eventually collapsed. (UNESCO, Old Bridge Area of the Old City of Mostar, n.a.)

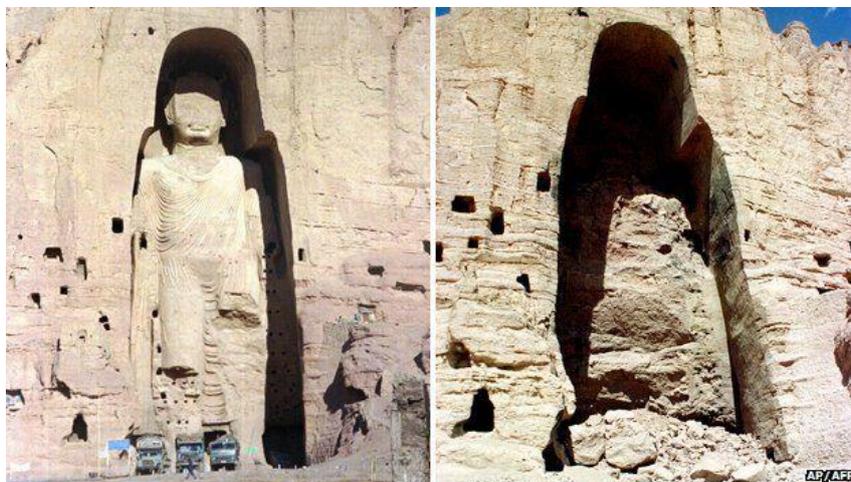
2.2.1.3. Current Situation

With the loss of the Mostar Bridge, the Bosnian town lost its symbol of coexistence; therefore, with the conflicts at an end, the bridge was reconstructed. In 2004 the bridge was rebuilt to assure reconciliation, international cooperation and cohabitation of diverse cultural, ethnic and religious communities. (UNESCO, Old Bridge Area of the Old City of Mostar, n.a.)

The Mostar Bridge and the Old Town are listed as a UNESCO Heritage site; it was rebuilt with its contributions. The bridge was not only monumental for the people of Bosnia alone; it is also a cultural monument for other nations. (UNESCO, Old Bridge Area of the Old City of Mostar, n.a.) Radovan Ivancevic, a Croat art historian and member of this UNESCO commission, wrote recently in the magazine *Bosnia Report* that "While the designer of the bridge was indeed the great Ottoman architect, it was actually built by stonemasons from Croatia, so that in a way it is also a Croatian cultural monument." (Tanner, 2004)

On the other hand, ever since its nomination the Mostar Bridge has gained a contrasting meaning for its people, this notion differs from that of the international communities and politicians. In many cases, the international memory of a World Heritage site opposes that of the local people. In his research work, Dragan Nikolj stated the impression clearly showing both the negative and positive aspects of this sort of symbolism. Considering the Mostar Bridge, its symbol of "pride" and "reconciliation" was converted to that of "injustice" and "victimization." Nikolj emphasizes on the importance of both "cultural heritage" and "people's memories" and the interchange between the two. He also added that there must be a sort of "follow up" policy by authorities after the enlisting of World Heritage sites. (Universitet, 2012)

2.2.2. The Bamiyan Buddha, Afghanistan



The Bamiyan Buddha before and after its Destruction in 2001

2.2.2.1. *Brief History*

The Bamiyan Valley, located in the central highlands of Afghanistan, is a Cultural and Archaeological site that consists of eight separate sites. The sites contain two niches of the giant Buddha carved into the Bamiyan Cliffs and numerous caves of Buddhist monasteries, chapels and sanctuaries dating back to the 3rd and 5th century. Remains of wall paintings and seated Buddha figures are present in caves and niches. (UNESCO, Cultural Landscape and Archaeological Remains of the Bamiyan Valley, n.a.)

Bamiyan had an important location, between the Indian subcontinent and Central Asia, which made it an important division of the Silk Route. The Silk Route was an ancient series of linked trade routes connecting the East to the West; Bamiyan was in a central location of this route, thus making it an important stop for the missionaries and merchants. Buddhism had been an important religion along this route and in this region. This resulted in the appearance of Buddhist caves in the area, one of which is those found in the Bamiyan Valley. (Rod-Ari, n.a.)



The Bamiyan Buddha After its Destruction in 2001.

2.2.2.2. *Destruction*

In 1999, Taliban the extremist Islamic movement in Afghanistan took control of the mountainous region of Bamiyan. After months of fighting, the captured city's locals either fled or were held captive by force. (Qarizadah, 2015) Taliban ordered the elimination of the Buddha statues and in 2001 they were completely destroyed. With this act, the heritage site

suffered a major loss of its integrity. This act of destruction came as a shock to the world after all methods of prevention of this catastrophe failed.

2.2.2.3. *Current Situation*

After the shocking destruction, the UNESCO World Heritage Center enlisted the Bamiyan Valley as a heritage site in 2003. Protection and management laws were implemented to safeguard the site. (UNESCO, Cultural Landscape and Archaeological Remains of the Bamiyan Valley, n.a.) There had been several attempts to reconstruct the Buddha statues to their original glories, yet this gave rise to many opposing viewpoints. A controversy arose as to what measures should be undertaken to honor the fallen Buddha. The two opposing thoughts were either to completely reconstruct the statues or to honor the ruins left behind after the great monstrosity. (Bobin, 2015) In 2015, a Chinese couple made a donation to reconstruct the Buddha statues in 3D light projection where the statues once stood. According to an article by Steven Davy, the illumination brought relief for many of the locals who had been oppressed by the Taliban in 2001 to destroy the Buddha statues. (Davy, n.a.)

2.2.3. **Historic Cities of Syria**



Bombing in Historical Site of Palmyra

2.2.3.1. *Brief Introduction*

Ever since the start of the conflicts from multiple sides, Syria suffered from an estimate of a quarter of a million deaths according to the United Nations. Not only did the country suffer from human tragedies, it was subject to landscape, urban and cultural heritage loss. The

country had six UNESCO World Heritage Sites, now they are either destroyed or severely damaged. (Henderson, 2016) These heritage sites included: Aleppo, Bosra, Damascus, Ancient Villages of Northern Syria, Crac des Chevaliers, Qal'at Salah El-Din and Palmyra. (UNESCO, Syrian Arab Republic)

2.2.3.2. *The Destruction of Aleppo*

Brief History

Aleppo, the country's largest city in the north, has been completely devastated by the war. Now the city drowns in the rubbles of its previous touristic historical center. (Henderson, 2016)

The old city of Aleppo, according to the UNESCO World Heritage Center, was influenced by various historical periods. This is shown in its architectural fabric. The city contains great remains of various cultures such as remains of Hittite, Hellenistic, Roman, Byzantine and Ayyubid periods. The city's Citadel, for example, shows traces of all these cultures in its structures and architectural elements. The 12th century's masterpieces are encompassed in the Great Mosque founded by the Umayyads, the madrasas, souks and khans. (UNESCO, Ancient City of Aleppo, n.a.)



Aleppo 2008



Aleppo 2016

Destruction of Monuments

After the stop of gun-fire and the evacuation of the armed forces from the city, Aleppo is now beginning to look upon the damage left behind six years of conflict. The Umayyad Mosque that was built between the 8th and 13th century is now left in ruins, it has been bombed and shelled and its 11th century minaret completely destroyed. This is the fate of most of the city's most monumental structures. (BBC, Aleppo: Before and After Images, 2016) More than 150 heritage buildings and traditional houses suffered different levels of damage. Aleppo's ancient souk was burnt to the ground during the fighting in September 2012. Even though damage is eminent in every corner of the city, the urban fabric of the city and several buildings remain mostly intact. (Stoughton, 2017)



Umayyad Mosque Before Conflicts



Umayyad Mosque After Conflicts

*The war will end, the politics will change,
but our heritage remains for all of us, for our
descendants, and for us to share with the
whole world.*

Maamoun Abdulkarim, Syria's Director
General of Antiquities and Museums

2.2.3.3. *Current Situation*

In July 2015, 24,000 pieces of artifacts were transferred from the National Museum of Aleppo to Damascus to prevent looting or destruction. This measure was taken to safeguard cultural heritage. Also, several steps have already been taken towards reconstruction, the rubble and debris is starting to be removed from Aleppo's most famous landmarks: the citadel and the Umayyad Mosque. Yet, with all the ongoing discussions about emergency measures to restore Aleppo, Abdulkarim (Syria's Director General of Antiquities and Museums) believes that no major restoration project can begin unless the conflicts in Syria come to a total end. (Stoughton, 2017)

2.2.4. **The Twin Towers, New York**



2.2.4.1. *Brief History*

Manhattan's World Trade Center with its iconic twin towers were the international symbol of New York City. They were the signature of America's economic and financial strength. On February 1967, the construction of the twin towers began; it was designed to be the world's tallest building. The architect, Minoru Yamasaki, designed these two towers of 110 stories with a structural design of a structural skin capable of holding the building. Construction initiated in February 1967, three years later the construction was completed and in April 1973 it was officially open. (HistoryStaff, 2009)

2.2.4.2. *The 9/11 Catastrophe*

The first act of violence on the World Trade Center came on February 26, 1993. A bomb was planted by Islamic extremists in the parking garage of the basement. Damage was fixed and the towers were reopened 20 days later. (HistoryStaff, 2009) Yet, the devastating blow came on the 11th of September, 2001. Hijackers hit two jetliners into each of the towers. Fires stormed from both towers and the damage was spread of a great number of floors, leading to a collapse. (Schmemann, n.a.)



World Trade Center, Ground Zero



9/11 Memorial Fountain

2.2.4.3. *Rebirth*

After the attack of 9/11, reconstruction works last for years, works such as digging out of debris piles, excavation works and restoration of transit lines and preparation for the new buildings; foundations were completed. In 2011, the memorial opened, it consisted of two cubic voids with water falling from all sides. (TIMEMagazine, n.a.) The architect, Daniel Libeskind, had a vision for the new World Trade Center to show it rising again to its former glory. In his words, Libeskind considers the project to be a "healing of New York", a "site of memory" and "a space to witness the resilience of America". (ArchDaily, 2012)

2.3. Destruction due to Natural Disasters

Natural disasters have always been a threat to cultural heritage. They are able to strike worldwide and cause inevitable and sometimes irreplaceable damage. Some examples of natural disasters include: earthquakes, fires, floods and hurricanes. A country's geographic location determines how much it is exposed to the danger of natural disaster. (Nat, 2017) Even though measures have been taken to lessen the effects of such disasters through warning systems, preparation and management programs, it is impossible to always predict the strength of the strike. (Jayaram, 2013)

2.3.1. Fires

Fires can be caused by climate change and dry weather, but they can also be due to human error. Fires can be the source of severe damage to cultural heritage buildings and landscapes. Some of the damage caused by fires include: content harm to objects and building elements by burning, damage caused by smoke and destruction of natural habitat of landscape heritage sites. Fire also lets the objects that it affects become vulnerable to any secondary damage. (Taboroff, n.a.)



Old Town Edinburgh after Fire, December 2002



Old Town Edinburgh before Fire, August 2002

2.3.1.1. Old Town Edinburgh, Scotland

Edinburgh is the capital city of Scotland since the 15th century, it consists of two districts: The Old Town which includes a medieval fortress and rows of buildings and the New Town influenced by the European urban development. The city is a combination of these two different historical eras. In 1995, Edinburgh was enlisted as a World Heritage site because of this unique character. (UNESCO, n.a.)

2.3.1.2. Edinburgh Fire

In December 2002, a major fire broke out in Edinburgh's historic Old Town; it took fire fighters two days to finally extinguish the massive flames. The blaze broke out in one area and eventually spread fast and uncontrollably, reaching business and residential properties. Several buildings have been burnt to the ground and were feared to collapse. The architecturally significant building of the Adam House was successfully saved from severe

damage; the fire was stopped before reaching the site. The property therefore suffered manageable damage from the smoke. (BBC, UK Scotland Edinburgh Fire 'Could Last for Days', 2002)



Putting Out Fire, Edinburgh, Scotland

The narrow nature of the streets made the extinguishing of the fire a difficult task. There was a spreading fear that some buildings could collapse. Some buildings already suffered from collapsed floors and unsteady frontages. (BBC, UK Scotland Edinburgh Fire 'Could Last for Days', 2002) The nature of the old buildings made the fire operation very difficult to control. After initial inspections, it was found that some buildings would require demolition due to the danger they could expose upon the town. (CNN, n.a.)

2.3.2. Earthquakes

Earthquakes cause direct and indirect harm to cities. They create a range of damage to cultural heritage sites; this damage varies from structural collapse and damage of component structures and objects to affecting the infrastructure of the city. Monuments and buildings can be damaged and weakened, making them more vulnerable to secondary damage and reducing their life span. (Taboroff, n.a.)

2.3.2.1. Norcia, Perugia, Italy

In August 2016, an earthquake of magnitude 6.6 struck the town of Norcia, a medieval walled town in Central Italy. Norcia's city assessor, Guisepina Perla, explained that the aftermath of the earthquake was severe; it felt "as if the whole city fell down". Norcia had suffered previously from repeatedly powerful earthquakes; this led to the weakening of the structure of many significant buildings, churches, monasteries and chapels and eventually their collapse. (ABCnews, 2016)

The Basilica of San Benedetto, a basilica and monastery complex dating back to the 13th century, was among the destroyed monuments of the town. The whole structure was reduced to rubble. This destruction has not only been a loss for the city of Norcia, but to Italy as a whole. The destruction of the basilica was considered a significant loss for the country. (BBC, Italy Quake: Norcia Tremor Destroys Ancient Buildings, 2016)



San Benedetto Basilica After Earthquake, Norcia, Perugia, Italy

2.3.2.2. Reconstruction and Prevention Plan

As the first step towards reconstruction, decisions should be made regarding the buildings. Here local authorities ask the following questions: Are homes left behind safe enough to be re-inhabited? Or are they unsafe to be demolished and constructed anew? Another controversy rose after the region's recurrent earthquakes. According to Cecilia Anesi, an investigative journalist, the next big issue is whether the government should rebuild the towns according to modern techniques, or should it resort to previous traditional techniques in order to maintain the region's stylistic architectural heritage. She feared that by adopting new methods of reconstruction, the city will lose its historical center. (Kirchgaessner, 2016) A year after the catastrophic earthquake, the process of reconstruction still seems to be complicated. Committees are trying their best to pressure authorities on fast-moving their efforts to find rapid solutions. In a recent article, "Post-quake Italy considers prevention for a change," a more serious take on post- earthquake situations is considered. Italy is now aware the importance of a prevention plan, not just a rebuilding plan. (DW, 2016)

Tsunamis

Strong tidal waves cause tsunamis; they are common in coastal regions principally in the Pacific basin. When the waves reach the shore, they can cause damage and destruction. The damage caused by tsunamis can act on properties and cultural heritage loss. This damage ranges from destruction or loss to collapse or movement of the building structure due to excessive force of water. (Taboroff, n.a.)

2.3.2.3. Indian Ocean Tsunami: Galle, Sri Lanka



Aftermath of Tsunami, Galle, Sri Lanka, 2004

On 26 December 2004, a tsunami struck the coast of Sri Lanka, the Indian Ocean tsunami came as a result of an earthquake of a 9.3 magnitude off the coast of Indonesia. This tsunami had caused a never before seen amount of damage to both humans and properties. Before the devastating disaster of 2004, Sri Lanka had never before suffered from any of the eminent tsunamis of the Indian Ocean. The reported casualties of this natural catastrophe listed: 26,807 killed, 23,189 injured and 62,533 houses fully damaged. Other damages include the loss of libraries, cultural objects, along with cultural and religious buildings. (H. Meier, 2007)

2.3.2.4. Effects on Cultural Property

The coastal belt of Sri Lanka is rich in cultural heritage; it contains the oldest religious buildings of Buddhist, Hindu, Christian and Muslim origins, civic buildings, markets, libraries and lighthouses. Since it has been colonized by Portuguese, Dutch and British, this is a clear combination in the coast's architectural styles. It combines the vernacular style of the country with the international stylistic influence (H. Meier, 2007).

The tsunami affected the cultural layer of the coast of Sri Lanka, in some area monuments survived yet damage ranged between "severely damaged" to "damage beyond repair". In other areas, monuments collapsed inevitably, leaving behind nothing but rubble.



Hindu Temple after Tsunami, Batticaloa City, Sri Lanka, 2004

2.3.2.5. ICOMOS Sri Lanka

Since the local state sector provided limited funding and logistics, help had to be found elsewhere. After the disaster, development plans and projects needed to be prepared so that the country could receive international aid and funding. ICOMOS Sri Lanka played an important role in the reconstruction. Soon after the tsunami, this small committee carried out surveys of cultural properties and raised funds to conserve World Heritage buildings. ICOMOS Sri Lanka emphasized on the urgent need to conserve the historic buildings and safeguard them, thus numerous proposals were submitted, including urban plans for these historic areas. (H. Meier, 2007)

2.3.3. Conclusion

As a conclusion, it is just to acknowledge cultural heritage as a fundamental human right. There is no specific ownership because heritage belongs to all people. Therefore, it is the duty for those who come to help the cities or countries of that have suffered from natural disasters to respect and help to safeguard cultural values. In the aftermath of some disasters, monuments are left unaffected while in other cases monuments are left damaged. (H. Meier, 2007) Even though communities affected by natural disaster should also have a futuristic view in order to rebuild, restore and reconstruct, our job as citizens of the same world, according to the Venice Charter of 1964, is to “safeguard our heritage for future generations and hand them on in full richness of their authenticity”. (ICOMOS, n.a.)

2.4. Armed Conflict and Heritage: the UNESCO position

2.4.1. Cultural Heritage and Globalization

Cultural heritage consists of art objects, archaeological sites and historic monuments, and the values that people assign to them. These values do not just have meaning to communities or nations to which they belong, but also to the international public. “At present, as never before, trade globalization, migrations, and tourism, as well as telecommunications and telematics, are rapidly adding more and more exchanges to the web of cultural exchange”. (Arizpe, 2000)

2.4.2. UNESCO World Heritage Center

After World War II, the awareness of creating an international movement to protect heritage arose. The UNESCO World Heritage Center played an important role in doing so. The United Nations Educational, Scientific and Cultural Organization is an agency of the United Nations that contributes to peace and security through education, science and cultural reforms.

The organization’s primary aim is to protect both tangible and intangible cultural heritage. As part of its mission, the UNESCO preaches about the importance of heritage, encourages identification, protection and preservation of cultural heritage around the world with outstanding human value. (UNESCO, UNESCO World Heritage Center, n.a.) It promotes cultural diversity by safeguarding heritage in its various dimensions and enhancing cultural expressions, and also endorses social cohesion by fostering pluralism, intercultural dialogue, and a culture of peace, as well as securing the central role of culture in sustainable development. (UNESCO, Mission Statement of UNESCO World Heritage Center, n.a.) After the Convention of “the Protection of the World Cultural and Natural Heritage” in 1972, it began to aim not only to protect cultural sites, but also natural ones. (UNESCO, The World Heritage Convention, 1972)

2.4.3. The World Heritage List

After the convention of 1972, the World Heritage List was established. This list considers all the sites that have “World Value” and must be safeguarded by everyone and is to be considered as an international responsibility. (UNESCO, The World Heritage Convention, 1972) The World Heritage List gives additional value to the sites with local pride by sharing it so that the pride of a few becomes the pride of all. “Thus, it is the interaction between local and global valorizing that gives strength and continuity to the World Heritage List. A most interesting aspect of the World Heritage List is that while its main purpose is to ensure the safeguarding of world cultural heritage, it is also being interpreted as inventory of cultural achievement”. (Arizpe, 2000)

2.4.4. Argument

Even though most specialists believe that the World Heritage List has been successful in protecting significant sites, others claim that some of the sites listed are suffering a decline. Even though there were attempts to create a wider representation of World Heritage by including cultural landscapes and twentieth century heritage, others still argued that the World Heritage List was not completely representative of all heritage sites around the world. (Arizpe, 2000)

2.4.5. Armed Conflict and Heritage

In 1954, the “Convention for the Protection of Cultural Property in the Event of Armed Conflict” appeared, and its Second Protocol of 1999 helped rebuild broken communities, re-establish their identities, and link their past with their present and future. This convention is the first international treaty with a world-wide vocation focusing on the protection of cultural heritage in the event of armed conflict. It covers immovable and movable cultural heritage, including monuments of architecture, art or history, archaeological sites, works of art and manuscripts. This convention spares cultural heritage from consequences of possible armed conflicts through the implementation of the following measures:

- Adoption of peacetime safeguarding measures such as the preparation of inventories, the planning of emergency measures for protection against fire or structural collapse, the preparation for the removal of movable cultural property or the provision for adequate in situ protection of such property, and the designation of competent authorities responsible for the safeguarding of cultural property;
- Respect for cultural property situated within their own territory as well as within the territory of other States Parties by refraining from any use of the property and its immediate surroundings or of the appliances in use for its protection for purposes likely to expose it to destruction or damage in the event of armed conflict; and by refraining from any act of hostility directed against such property;
- Consideration of the possibility of registering a limited number of refuges, monumental centres and other immovable cultural property of very great importance in the International Register of Cultural Property under Special Protection order to obtain special protection for such property;
- Consideration of the possibility of marking of certain important buildings and monuments with a distinctive emblem of the Convention;
- Establishment of special units within the military forces to be responsible for the protection of cultural property;
- Sanctions for breaches of the Convention
- Wide promotion of the Convention within the general public and target groups such as cultural heritage professionals, the military or law-enforcement agencies.

(UNESCO, Convention for the Protection of Cultural Property in the Event of Armed Conflict, n.a.)



2.4.6. UNESCO and Post-Conflict Response Example

World Heritage Committee experts often find solutions before the occurrence of armed conflict and damage of the site. Similarly, it helps restore or launch international safeguarding campaigns. On 21 September 2017, the UN General Assembly held an urgent meeting to urge the need to enhance the protection of cultural heritage from terrorism and mass atrocities. The meeting stressed on the international responsibility of safeguarding heritage sites from deliberate acts of destruction. The assembly feared that these acts of violence will affect peoples' historical identity. (UNESCO, Our Responsibility to Protect Cultural Heritage from Terrorism and Mass Atrocities, 2017)

Recent events in Libya have underlined numerous dangers to the country's cultural heritage. This led the World Heritage Committee to place Libya's World Heritage sites in "danger" because of the threatening acts of violence and destruction that was laid upon them. These sites include: the archaeological site of Cyrene, the archaeological site of Leptis Magna, the archaeological site of Sabratha, the rock-art sites of Tadrart Acacus and the old town of Ghadamès. (UNESCO, Libya's Five World Heritage Sites put on List of World Heritage in Danger, 2016)



Photo of The Temple of Zeus, World Heritage site at Cyrene, Libya by Sean Smith

Among the threatened sites in Libya is that of the archaeological site of Cyrene. Its artworks, sculptures and mausoleum carvings dating back to 12,000 years. The situation in Libya has become extremely dangerous after the events of 2011, thus keeping track of the damage was impossible. (TheGuardian, Lybia's Cultural Heritage 'Being Destroyed and Plundered by ISIS', 2015) Until today, UNESCO is working hard to reinforce cultural heritage protection in Libya. With the help of Libyan professionals, UNESCO is working on ensuring “rapid assessment, documentation and monitoring of heritage.” According to the Director-General of UNESCO, Irina Bokova, efforts will not be spared in “supporting Libyans to protect their heritage, as a source of dignity and confidence for the future of all Libyans.” (UNESCO, UNESCO’s Director General Calls on all Parties to Cease Violence and to Protect the World Heritage Site of Sabratha in Libya, 2017)

2.4.7. Other UNESCO Conventions

Further conventions were later contained within the UNESCO World Heritage Organization. This includes conventions such as “The Convention for the Safeguarding of the Intangible Cultural Heritage” which ensures the continuous transmission of cultural knowledge and skills to future generations, “The Convention on the Protection of the Underwater Cultural Heritage” that includes all traces of human existence partially or totally under water, “The 2005 Convention on the Protection and Promotion of the Diversity of Cultural Expressions” to defend cultural diversity and protect freedom of expression, and “The Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property” by applying preventive measure to stop the illegal transfer of cultural properties.

3. THE ROLE OF SOCIAL MEDIA

At the Beginning of the “Social Media” phenomenon, people, especially adults, considered it a waste of time; Facebook, twitter, Instagram and many others were just platforms where you can chat with your friends and see their photos and updates.

Nowadays, the social media’s potential has expanded way beyond its initial function of communication among a small network of friends. Gradually, people realized the power of social networking and the social impact that media can have; it became a very important tool in broadcasting accurate information at the right timing to global citizens in order to make more informed choices concerning particular crisis.



Our research deals with disasters’ cases where news and information are provided by both the mainstream media and the social media in the post-catastrophe situation like wars and natural disasters. It explores the situation from a completely new perspective, the one of the citizens concerned by the traumatic experience. It analyzes how citizens participate in producing and broadcasting news.

Long time ago, catastrophes were considered “affairs of public authorities rather than affairs of citizens”. However, we can clearly notice a significant paradigm shift with the sociology of disasters where people are no longer considered only as victims and communication dynamics are not anymore analyzed from top-down perspectives. Citizens are not seen any more as people to be rescued but rather as active participants.

Conventional or Mainstream media refers to newspapers, magazines, TV and radios, whereas Social media refers to blogs on YouTube and Twitter and social networks like Facebook, etc.

Though, it is essential to mention that social media has weak points with respect to conventional ones.

In the upcoming sections we will be developing three case studies from around the world where we will explain for each case the reasons that pushed people to broadcast their news via social media, its pros and cons and what was its impact on their lives’ post traumatic situation.

The case studies are:

- Fukushima nuclear disaster in Japan
- L'Aquila Earthquake in Italy
- World War I



3.1. Fukushima, Digital Archive of Japan's 2011 disasters



On March 11 2011, an earthquake of 9.0 magnitudes created a 15 meters' tsunami that flooded the Fukushima nuclear Power Station in Japan. The power was disabled to three reactors and the cooling systems failed causing a grave nuclear accident where huge amount of radiation was released immediately into the environment. Therefore, more than 100,000 people were evacuated causing the separation of family groups. Massive stress was put on family relations in addition to other impacts of the tragedy that were hidden away from the public.

Several days and weeks after the accident and until now, Fukushima prefecture was in chaos and the rest of Japan was in the dark because of the seriously nuclear radiation spilled into the environment. The government responded with two words: don't panic. But the opposite happened; people who could afford to leave did so promptly, but more than 85% of non-evacuated residents remained at home (Davies & Alexis-Martin, 2016).



Right after Fukushima disaster, people living in Japan and beyond harnessed social media such as Facebook, Twitter and YouTube to spread different kind of knowledge that they used for individual and collective ends. Mass media and blogospheres reported the Fukushima nuclear crisis as “**unprecedented crisis**” (Ng & Lean, 2012).

Many articles were written after the crisis about how the potential of social media wasn't enough tapped, and how it caused public's distrust of authorities. However, these articles didn't forget to mention the good use of social media and how it helped people post the crisis.

In the following, we will discuss the motivation behind using these technologies by people and its limits. Moreover, we will be showing many online pages that were created by citizens for different purposes. In addition, a comparison of the coverage between Fukushima and other nuclear accidents will be done.

3.1.1. Reasons behind production of Social Media

As we mentioned previously, Social media played an important role in Fukushima citizen's life which was turned upside down after the crisis in 2011.

The main purposes of the use of Social media after the Crisis were

- To reconnect shattered families
- To inform people about radiation zones
- To spread awareness among people about precautions from radiations
- To ensure a better coverage of the situation and reach a wider audience
- To get as many donations as possible
- To share sense of despair with people

As in the case of any tragic accident, Fukushima people lost **communication** with each other and families were shattered since not all their members managed to evacuate together. Generally, following any tragedy, people used to wait days and weeks for their government to report the identities of dead, injured and lost people which used to cause anxiety within the community. Fortunately, this was not the case of Fukushima. Nowadays, and thanks to social media, people can do this job on their own within a shorter period of time.

As we all know, Fukushima nuclear accident was a unique kind of disasters causing the emission of huge dangerous radiation in the environment. So people's concern was not just to reconstruct the city but to ensure that the area is safe to live in. They had to be aware of this nuclear emergency in order to take precautions. At that time, the government was assuring people that the disaster was under control but people were aware of the dangerous conditions via the media: breaking news headlines, bloggers, social media followers' comments, etc. This situation motivated Fukushima people to take actions in accordance with their government in order to fix what's lost.



Jorge Stolfi
@JorgeStolfi

Follow

Data from [#TEPCO](#) about [#Fukushima](#) seems to get scarcer as time passes. Day 13, and they still cannot tell what is in the smoke/steam.

11:51 PM - 23 Mar 2011



Chris L
@Reactor2012

Follow

[#TEPCO](#) [#CNN](#). ALL! 'Officials' in [#Japan](#) are Lying about Radiation Levels at [#Fukushima](#). The [#UN](#) must use Force(NOW) to Take over operations.

11:32 AM - 24 Mar 2011

There was an **urgent need to improve public information**, educational action and efforts had to be done and this led to the creation of many online groups which we will be tackling in the next section of this chapter.

Mainstream media was doing the job using scientific language which most people cannot understand. This is where social media had an advantage over the conventional media; people on social media were using plain language in order to reach a **wider audience**.

A big example on the importance of social media was when it was revealed that The Maebashi District Court in Gunma Prefecture found both TEPCO and the government responsible for the nuclear disaster and ordered compensation totaling 38.55 million yen for 62 plaintiffs. TEPCO and the government could have foreseen a towering tsunami hitting the Fukushima No. 1 nuclear plant and have taken measures to prevent the disaster as late as 2006 to prevent the disaster. (Takiguchi, 2017)

Thus, we can deduct from above that social media has an **impact on political decisions** nowadays, and people in power are not allowed anymore to take decisions on behalf of their people without these latter's "direct" agreement.



Finally, social media was also used to get as many donations as possible to help Fukusima people after the Tsunami, Earthquake and the nuclear accident that hit their city, killed its people shattered its families.



3.1.2. Weak Points of Social Media

However, it is important to mention the weak points of social media with respect to the mainstream one. Below are the major cons:

- Non-Professionalism
- Subjectivity and impulsivity in some cases
- Wide range of Channels

First, people using social media are not journalists, they are **not professional** in reporting news so sometimes they **fall into emotional, irrational and abusive content** instead of being objective.

Second, despite that social media coverage is more up-to-date since it is instant, the mainstream media is more careful in journalism work and take time before publishing any article; it is not impulsive. Sometimes **false reports** (sms, blogs, comments, statuses, pictures) can cause panic and anxiety in the whole country.

In addition, while conventional media ensure a moderated broadcasting of news (limited number of TV channels and journals), social media have a **wide range of information** that are not all in high quality and nobody can control the quality of the news written or shared.

3.1.3. Online Pages

Several groups, pages and organizations were created online and made major contribution to Fukushima's citizen life. Each had its own approach in dealing with the situation but the goal was common: spreading awareness among people in order to protect them from radiations, helping Fukushima's citizens financially, supporting them morally and finally helping them to share their feelings with the world.

Below are good examples:

- CRMO Citizen radiation monitoring organizations
- Safecast's DIY Geiger counter
- Project Fukushima
- Ryoichi Wago's tweets win French literary award

3.1.3.1. Citizen radiation monitoring organizations CRMO

Social consequences of Fukushima accident were broad and far-reaching. The prospect of exposure of citizens to danger was the social issue after the 2011 disaster. Children and women were hit the hardest by radiations regardless of their socio economic status.

Since radiation is invisible, it was hard for people to realize the risk they were exposed to; radiation can be detected only by using specialized scientific equipment.

Local government and media used the concept “*Fūhyōhigai*” that means “*harmful rumor*” to stop local women’s concerns about radiation exposure promoting that these radiations are weak and unscientific. Women of Fukushima refused to be subject of these rumors and decided to take care of the situation on their own, so they bought monitoring equipment forming the **CRMO** citizen radiation monitoring organization. Using social media, they managed to reach as many women as possible and raise awareness among them. These women led to a cultural shift in Japan and were known as “*Fukushima’s radiation brain moms*”. In that way, women helped themselves and refused any kind of social and cultural injustice or inequality (Davies & Alexis-Martin, 2016).

A positive seismic shift in both the government and scientists’ attitudes toward concerned mothers and community monitoring was noticeable after wise.



3.1.3.2. Safecast's DIY Geiger counter



DIY Radiation Monitors



DIY Kit

In the weeks that followed the nuclear explosion in 2011, Safecast was founded in Tokyo. It measures nuclear radiation using a DIY (do-it-yourself) device and shares the data on an open map. The team behind this project is a catalyzing mix of communicators, engineers, and volunteers. With the help of Google Maps, Arduinos, crowdsourcing and laser cutters, a small team of proactive concerned individuals built a portable, autonomous device that systematically can measure radiations' levels while moving, in a way that can distribute it as an open source DIY kit then share results on an online map.

Geiger-reading communities use social media to connect people in order to produce collectively generated knowledge regarding the level of nuclear radiation.

That's how the interaction between the distributed power of social media and the scientists through concentrated power of mass media increased people's knowledge on radiation risks.

At one point there were a Shortage of Geiger counters; people were not able to define the radiations zones anymore. At that point the government announced average level of radiation for cities and ordered arbitrary evacuations in order to calm the population. People were not satisfied and they started to share through chats and forums on social media the nuclear radiation level measured by the DIY. The founders of Safecast, in addition to as small group of people created a website with a map where they displayed all the data already existing online.

Moreover, the Safecast crew lent volunteers travelling to Fukushima some devices in order to help them complete the data missed on the website (Fong, 2014).



Safecast Co-founders holding a meeting in Tokyo

Yasuhito Abe Tells his Story with DIY movement

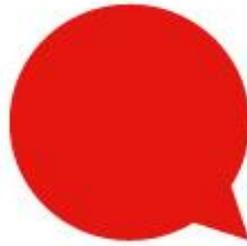
Doctoral Student at the Annenberg School for Communication & Journalism at the University of Southern California



“When the 311 disaster occurred, I was at home in Little Tokyo in Los Angeles. It was an indescribably horrible experience for me to keep monitoring the news via TV and online. I was a bit depressed, and I could not help but wonder why I was staying not in Japan, but in sunny Los Angeles. I felt a sense of guilt. At the time, I had been studying the role of social media in diplomacy, but my 311 experience completely changed my academic interest. In fact, I was motivated and inspired by the people who participated in the production of knowledge through social media after the disasters. They appeared to be “laypeople” with no expertise in nuclear power, but they persistently contributed to myriad forms of DIY projects. Despite residing in L.A., I began to feel that I might be able to contribute to helping people through my personal use of social media. I myself began harnessing social media to participate in circulating the data the DIY movement collected. This experience made me realize that I should use my research to do something for people who are suffering from not knowing the risks of unknown exposure to nuclear radiation in Japan”. (Abe,2012)

3.1.3.3. Project Fukushima Page

P R O J E C T FUKUSHIMA!



Fukushima has something to tell the world.

P R O J E C T
FUKUSHIMA!



8.15
Worldwide
Festival



School
FUKUSHIMA!



DOMMUNE
FUKUSHIMA!



Call for
Donations
DIY
FUKUSHIMA!

This is a page created online by three Japanese persons who could not stay calm after Fukushima accident (Ryoichi Wago, Michiro Endo, Otomo Yoshihide). They had to do action; so they created project Fukushima in order to let people's voice reach the whole world.

Above are two photos showing the home page and the Menu Bar of the Page.

The Mission was "Synchronized Worldwide Festival FUKUSHIMA!" and here are parts of the messages sent to the public by the founders who explained clearly the idea of the project and the festival:

"We are swayed by doubts and fears in this war against an invisible enemy. What we need to do now is to send a message from the land of Fukushima, to inform people of the truth we are facing, and to release our pain, anger, frustration, sorrow, fear and resentment. We must band together to protect our children, those most vulnerable among us." (Endo, 2011)

"Even if some places have been made uninhabitable, we want to believe in Fukushima's rebirth.

That is why we need a festival. We need music.

We need a place where people can gather to converse.

We need hope, a motivation to live. In order to prevent Fukushima from being forgotten, and to retain Fukushima's connection with the outside world, we want to make the festival a stepping-stone for the future." (Yoshihide, 2011)

“Humans made music. And humans made nuclear power. I cannot help but feel that God is testing the “good power” of humans now” (Chang, 2011).

In order to raise funds for the project that was free and open to public, they set up “DIY Fukushima” (inspired by the DIY Device idea); it is a venue for artists like poets or musicians who would like to share their visions with a larger audience. Profits were generated from sale of the digital content; here are some samples of it.



3.1.3.4. *Ryoichi Wago's poems tweets win French literary award*

Ryoichi Wago is a high School teacher who wrote a series of verses on twitter following the Fukushima nuclear disaster and won a French poetry award “Prix de la Revue” after he edited his poems tweets and published them in a book called “Shi no Tsubute” (Pebbles of Poetry).

His poems were special because of the depth and purity of the poetic language that arose from tragic circumstances.

His goal was to **share his sense of despair with others**; that’s when he decided to start posting poems on twitter five days after the disaster. He tweeted “I would just end up with tears. I shall give my body and soul to making poem”, “Radiation is falling/ It is a quiet night” (Izawa, 2017) and the number of his followers increased fast on twitter to reach 14,000.

In addition, he wanted to **deliver messages of Fukushima to the world**. For many years before the crisis he was writing poems but having no answers. Wago said “People appreciate the true virtue of spring only after experiencing winter, I believe there is a language that can reach people around the world precisely because it comes from Fukushima” (Izawa, 2017).

3.1.4. Comparison of Fukushima with other nuclear accidents (Difference & Similarities)

In the following, we present a comparison of the coverage of three nuclear disasters showing the differences and the similarities between these accidents that took place at different times.

- Three Mile Island, United States
- Chernobyl, Ukraine
- Fukushima, Japan

ACCIDENT	THREE MILE ISLAND	CHERNOBYL	FUKUSHIMA	
				
DATE	1979	1986	2011	
COUNTRY	Pennsylvania, United states	Pripyat, Ukraine	Fukushima, Japan	
DIFFERENCES	Era before internet / No cellphones	Era before internet / No cellphones	Internet / Smart phones	
	Reporters with marginal knowledge about Radioactivity	Controlled Press	High activity on Social Media (Fb, Twitter, YouTube..)	
	Language gap between scientists, engineers and journalists	Rare information within the first two weeks	Google returned 75 million results for Fukushima (4month after the accident)	
	Hardly any explanation of radiological context	Limited effort to explain radioactivity (few glossaries, graphics)	Extensive radiation coverage with explanation	
			Gap between coverage and information needs	High amount of information
			<i>Speculations</i>	Active citizen participation
			"Just as much a mess as ever"	News collection worldwide
SIMILARITIES	Inaccurate information short after the accident			
	Language gap			
	Rare Specialized Reporters			

(Stieghorst & Hampel)

3.2. L'Aquila, 2009



The Italian media as well as the political scenario also presents many anomalies that were behind the explosion of grassroots information phenomenon right after the L'Aquila earthquake that destroyed the Italian city and its surrounding villages in 2009, killed 300 people and made 6500 people homeless.

Citizens had the ability to capture events immediately on the spot before any national and international TV could arrive; forms, blogs and social media flooded with posts, comments, videos, pics etc.

In this section we will explore the motivations that pushed ordinary people to produce "citizen journalism" at that time as well as the obstacles that faced citizens who published grassroots information related to the post-earthquake situation.

First, let us define the expression "citizen journalism"!

Citizen journalism, also known as citizen's media, is the journalism work done by amateurs and unpaid people. Some authors, such as Gillmor refer to it as "a movement". It is when ordinary people create, collect, report, analyze and disseminate news. The factor that played a pivotal role in the creation of this movement is the internet; they used it to bypass "traditional gatekeepers". Together the online platforms with the digital technologies (cameras, phones, etc.) were the essential tools to tell reality (Farinosi & Treré, 2014).

3.2.1. Motivations to produce it:

The citizens of L'Aquila were influenced by a mix of intrinsic and extrinsic motivations.

- Contrast Mainstream Media
- Document real situation and every day's life
- Share points of view with other citizens
- Cast light on their "out of ordinary" experiences
- Addressing Pressing and Political Problems

The main reasons behind producing "grassroots information" are the superabundant and the distorted mainstream media reporting, as well as the necessity to document their every day's lives and share it with other citizens in order to reconnect their broken social ties.

People watching the news post the earthquake were not able to get a clear picture of the situation. Thus, when mainstream media fails to cover correctly the situation, citizens can become journalists and use numerous online platforms to spread news from their own perspective.

This applies to the case of L'Aquila where mainstream press marginalized the local citizens after the earthquake; this drove them to use digital media in order to provide an alternative version of the one presented by the Italian mainstream media. They used blogs, Facebook accounts and YouTube to clarify the city's situation in its real aspects. Just like that, amateur journalists avoided traditional gatekeepers and directly shared their points of view online.



biagiod

@biagiod

Follow



Bertolaso afferma: "La peggiore tragedia dall'inizio del millennio" [#terremoto](#) [#laquila](#)

Translated from Italian by bing

[Wrong translation?](#)

Bertolaso said: "the worst tragedy since the beginning of the Millennium" [#terremoto](#) [#laquila](#)

11:35 PM - 5 Apr 2009

After the earthquake, many families were dispersed; some people died, some were lost and some others were injured. Social media was the fastest way for families to get in touch; while government was not able to give answers, online platforms did the job. Through Facebook, twitter, Instagram and many others, citizens were able to communicate and reconnect with families and friends. Thus, the citizens who were obliged to leave city aftermath, were able to stay updated thanks to the information shared online. Online Platforms re-established broken ties and acted as a gathering place instead of the destroyed public spaces of L'Aquila.

In addition, people felt the need to express deeply their emotions and document their lives; they started to publish posts, videos, tags, comments, reports, picture, etc. about their experience. Some narrated how they left their houses and slept in the cars, others told the story of the way they rejoined their families, many others about the pain they felt when they saw their city in ruins.

Lastly, after the L'Aquila earthquake, hyper-local media acted as 'micro watchdogs' because it highlighted the pressing problems at the local level and drew attention to the failures of the media system in Italy, and the privileges of Italian politicians.



Alberto Barenghi

@ilbarenghi

Follow

Il silenzio dell'Aquila, la censura dei giornali
<http://ow.ly/2r9zj> #laquila

Translated from Italian by  bing

Wrong translation?

The silence of l'Aquila, censorship of newspapers <http://ow.ly/2r9zj> #laquila

12:50 AM - 18 Aug 2010

In 2009, Silvio Berlusconi was the Prime minister of the country. He decided to take advantage of the situation and turn the L'Aquila tragedy into opportunity to strengthen his consensus. Thus, he deployed a complex media strategy; mainstream media coverage focused on the "miraculous reconstruction" of the city instead of people needs and their everyday struggles. He appeared almost every day on TV channels speaking about the "miracle" which was in contrast with real life where ruins dominated the city center and people were living in camps and cars. While some people were not able to afford a tent to stay, Berlusconi appeared on a German TV and said: "Of course their current lodgings are a bit temporary but they should see it like a weekend of camping" (Squires, 2009).

His government gave exaggerated promises about reconstruction in order to hide the sad reality of a left alone city once media attention disappeared. The Mainstream media was trying through information bulimia to tell its viewers that everything is under control and that the reconstruction miracle is being realized there (Farinosi & Treré, 2014).

 **Mario Rossi**
@rossimario

[Follow](#)

"yes we camp" <http://ow.ly/gMiq> #l'aquila #G8 #berlusconi #obama

8:27 AM - 8 Jul 2009

 **Antonella Palmieri**
@antoo_palmieri

[Follow](#)

Protest against #G8 governments. Not only in L'Aquila: 8th July - 6pm, Carrobbio, Milan, meeting against G8. #Italy #Berlusconi #Crisis

3:32 PM - 7 Jul 2009



In addition to the promotion campaign for the Italian Government efforts in reconstruction of the city, many news and real scenes were hidden from the public by the mainstream media; only the tip of the iceberg in terms of the post-earthquake situation was shown. Media spent uncountable hours recycling gory portraits from disaster scenes; they were only focusing on the heroics of the rescue workers. The so-called '20,000 protest' on 16 June 2010 was another example about mainstream media's twisted coverage; it was broadcasting only by few small-scale channels.



Paolo Bozzelli

@paolobozzelli

Follow



Cialente: "Lontani dalle case inagibili". Ma non avevano ricostruito tutto, Minzoli?
[#terremoto](#) [#montereale](#) [#laquila](#)

Translated from Italian by bing

Wrong translation?

Cialente: "Far from houses uninhabitable". But they didn't have rebuilt everything, Minzoli?
[#terremoto](#) [#montereale](#) [#laquila](#)

8:43 AM - 31 Aug 2010



3e32 CaseMatte

@3e32

Follow



[#berlusconi](#) [#perdonanza](#) Il nostro odiatissimo premier rinuncia alla sua presenza oggi a L'Aquila. Le virtù della dama della bolla sono salve

Translated from Italian by bing

Wrong translation?

[#berlusconi](#) [#perdonanza](#) Our hated premier renounces his presence today in L'Aquila. The virtues of blister checkers are safe

5:04 AM - 28 Aug 2009

Many studies were done on this subject where hundreds of posts and blogs were analyzed and got to conclude users' motivations for producing grassroots information. In the following we will share some of them that were not cited before:

- To fulfill a social utility (Papacharissi, 2003)
- To entertain and pass the time (Trammell et al., 2004)
- To form and maintain community (Nardi et al., 2004; Liu et al., 2007)
- Recognition needs, cognitive needs (Leung, 2009)
- To own space for life & data storage (Liu et al, 2007)

3.2.2. Obstacles of non-Professional journalists:

Just like any other phenomenon, “citizen journalism” has its pros and cons. Despite the democratic potentials that these platforms have, it is also essential to recognize their limitations, constraints and dangers:

- Risks of fragmentation
- Lack of professionalism
- Lack of funding
- Lack of time
- Visibility

While the mainstream media is a well-structured system, citizen journalism is not, unfortunately; “it’s just crazy fragments moving at random in the cauldron of the network” (Farinosi & Treré, 2014). In fact, amateur journalists are using wide range of platforms constituting a dispersive factor which make it impossible for them to counter the power of mainstream media.

It is true that citizens are able to capture the reality as it is and in a faster time during the crisis, but it is important to note that they are amateurs and **lack professionalism** in journalism. Citizen journalism is a volunteer work where people don’t have enough skills and talents to dedicate. To the contrary, mainstream media is a strong organization that employs only professionals and provides them with professional equipment (Farinosi & Treré, 2014). Furthermore, mainstream media have more money than amateurs who use cheap equipment at their disposal like their own mobile devices or unprofessional digital cameras. At the beginning, citizens did it for free and it was an honor for them but later they couldn’t afford it anymore. They needed equipment, working space, editorial offices etc. but they couldn’t find sponsors and funds! In addition, journalists at mainstream media earn their living from journalism so they can dedicate time exclusively to media production. Meanwhile amateurs can’t do so because of work and family commitments; networking in such cases is a full time-job and is therefore time consuming.

Finally, “We should not confuse the right to speak with ability to be heard” (Farinosi & Treré, 2014); it is true that having an online access will make the posts and blogs visible by lot of people from all around the world, but we do not have to forget that even online some people are more privileged than the others. Internet favors those who are more known and have more followers. In addition, it is impossible for ordinary people to compete with mainstream media who have online financial and political power that is essential to gain public **visibility**.

3.3. Europeana, memories of World War I

In addition to all the roles mentioned in the previous sections, social media has an additional one in post-traumatic situations: archiving, information collection and reinterpretation of the history of war.

3.3.1. Brief summary of World War I

The First World War aka the Great War was an international conflict that lasted from July 28th 1914 till November 11th 1918 during which the central powers were fighting against the Allies. The central Powers were mainly Germany, Turkey and Austria-Hungary whereas the Allies were mainly France, Italy, Great Britain, Russia, Japan and later on in 1917, the United States. In summary, most of the European countries were involved in this war as well as Russia, the Middle East, the United States and other regions. This war was one of the greatest in history; militaries mobilized more than seventy million soldiers including sixty million European. During the war, unprecedented slaughter, carnage, and destruction happened; over nine million soldiers and seven million civilians died including the victims of many genocides.



A Photo from one of Europeana Collection's Exhibitions called "Seven Men, One Leg"



The military Hospital in Great Britain



War ended with the victory of the Allies paving the way for major political changes like revolutions in many of the involved nations; four great imperial dynasties felt in Germany, Austria-Hungary, Russia, and Turkey. The situation in the European society was destabilized, since many rivalries remained unresolved at the end of the war which led twenty-one years later to the Second World War.

During World War I, the most used form of telecommunications by civilians and military were telephones and telegraphs in addition to radio, field telephones and telegrams used only by governments and military. During conflict these telecommunication ways were developed and made more secure. Moreover, news' coverage was available

through newspapers containing printed photographs. Thus, coverage was not as fast and as wide as today; in other words, information sharing between civilians as well as between government and civilians was not that easy.

Recently, hundred years later, some people felt the need to spread the unknown stories of the World War I to the Public. And that is how "Europeana Collections 1914-1918" saw the light.

3.3.2. Europeana Collections 1914-1918



“Explore the untold stories and official histories of World War I in 513,749 items from across Europe” (Europeana Collections 1914-1918,)

As we mentioned before, World War I was an unprecedented scale conflict that affected all Europeans’ lives as well as many other non-European people. This war is still alive today by its memory, victims, victors, events and consequences. It became part of the individual and collective memory of Europe.

In 2014, at the Centenary of the beginning of World War I, “Europeana collections 1914-1918” was created. It is a collection of substantial digital material gathered from ten national libraries of eight different countries that were part of the conflict. The Countries are France, Italy, Germany, Denmark, Belgium, United Kingdom, Austria and Serbia (Europeana Collections 1914-1918, n.d.).

The project digitized more than 400,000 items from the World War I and published them online and for free for the first time; the content was usually hard to reach since it is rare and highly fragile because of the quality of the paper that was deteriorated with time. Generally, it could only be accessible in reading rooms.

The digital collection includes the full selection of national library collections such as books, trench journals, newspapers, maps, music sheets, photographs, children’s literature, pamphlets, posters, religious works, propaganda leaflets, original art, coins and medals.

These materials emphasize the importance that World War I represents a common European identity and reflect the different individual and group experiences on all sides of the conflict such as ethnic, political, linguistic, social and religious differences, in addition to the experience of people who opposed the war. It permits **other interpretations of history** different than the traditional military history; it includes cultural and artistic **reinterpretations of the war experiences** (Europeana Collections 1914-1918, n.d.).

Below we find a sample of Europeana collections



French Patriotic Hymn composed by Louis François in 1915

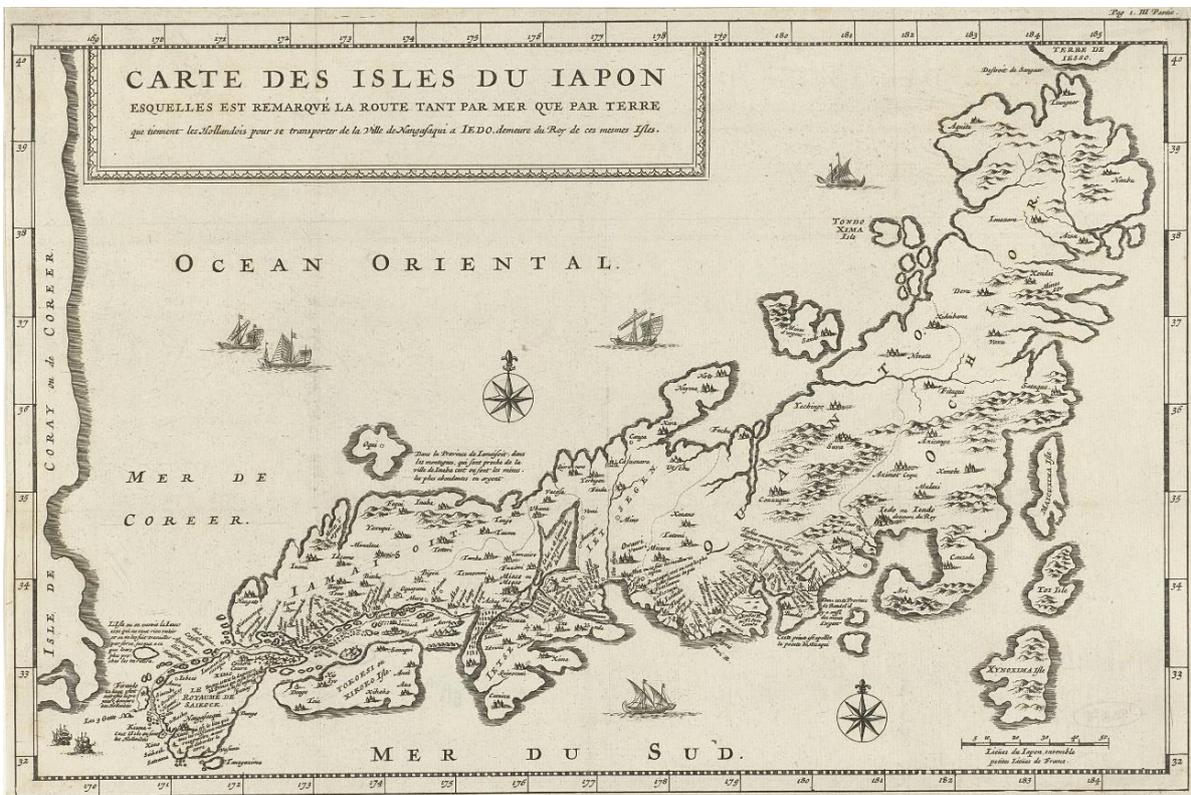


Italian leaflets from the First World War period

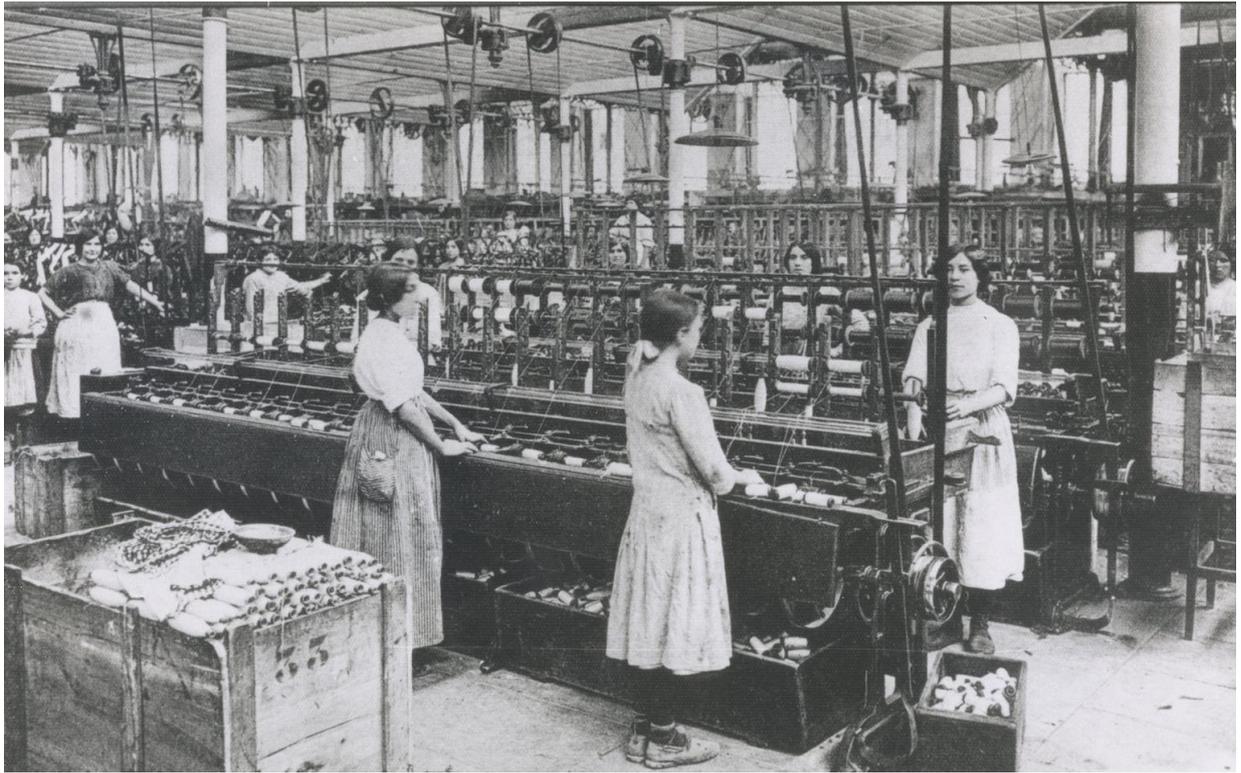
A collection of 2.241 Italian leaflets from the WWI period of which many are considered homeland propaganda as it was intended to solidify soldiers as well as civilian support for the war despite the hardships and the diversion of resources caused to the general population.



A painting by James Gillray called "The State of the War" or "the Monkey-Race in danger"



Map of Isles of Japan by Jan Luyken (h.220mm w.325mm)



Photograph of Female workers winding wire at Fàbrica Gròber by Josep Thomas Bigas



Photograph of Franz Dischinger behind a telescope observing the enemy



A postcard called "The child's longing for Mother Denmark"

3.4. Conclusion

To conclude, we can say that “Citizen Journalism” movement was driven by many different reasons:

- to contrast mainstream media
- to address political problems
- to reconnect shattered families
- to spread awareness among people
- to reinterpret the history.
- to document real situation and every day’s life
- to share sense of despair with people
- to reach a wider audience
- to get donations and funds
- to fulfill a social utility
- to entertain and pass the time
- to own space for life & data storage
- to collect information; archive

However, social media phenomenon has many disadvantages and has faced many obstacles during crisis coverage:

- non-professionalism
- subjectivity and impulsivity in some cases
- risks of fragmentation
- lack of professionalism
- lack of funding
- lack of time
- visibility

Thus, media scene has dramatically changed. It is true that social media surpassed conventional media in many aspects, but mainstream media is still important and we cannot deny its professionalism and thus ignore its role. In the following, we present a simple comparison between social and conventional media following several aspects.

ASPECT	MAINSTREAM/CONVENTIONAL MEDIA	SOCIAL MEDIA
REACH	Mostly regional, National	Global
ACCESSIBILITY / USABILITY	Production requires equipment, Skills	Reduced to a minimum
RECECNCY	Time lag between occurrence and publishing	Nearly instantaneous
PERMANENCE	Articles cannot be altered	Editing possible
QUALITY	Comparatively narrow range	Comparatively wide range
LANGUAGE	Scientific language	Plain Language
ADEQUACY	Insufficient number of Specialized journalists	Excess of Citizen Journalists

In the end, we can conclude that both conventional and social media have their pros and cons and therefore it is optimal if we can improve both of them and combine them for the purpose of serving the community.

Below are new ways conventional media can use in order to improve.

- More space for discriminating / detailed articles
- Multimedia content, discussions, correction of mistakes
- Breaking news on newspaper websites

Stieghorst & Hampel spoke about the tendency of having the conventional media with the integration of multimedia content as well as social media components for example “like” buttons, commentary functions, ... (Stieghorst & Hampel)

PART 2 – CASE STUDY: THE EGG, BEIRUT

4. LEBANON TO BEIRUT

Lebanon is a small Arab country located in the Continent of Asia. It's location on the Mediterranean Sea had always been an advantage since it became the link between the Arab world and Europe. It has the most diverse population among the Middle Eastern Countries since it has 18 confessions. This diversity in religion is due to the rich history that Lebanon had starting prehistory and till now. Phoenicians, Romans, Greek Arabs, Crusaders, Ottomans and French lived in this land over time. Starting 1975, Lebanon faced 15 years of war mainly due to the religious variety as well as due to the foreign interventions. The Civil War led to the destruction of the heritage especially in the Capital Beirut that was mainly the battle field during most years of war. At the end of the war, many of the surviving historical sites were damaged and replaced by new constructions instead of being restored. A masterplan was done to reconstruct and redevelop financially and touristically a big area at the heart of Beirut so-called then Beirut Central District BCD. Unfortunately, after these interventions Beirut became a procession and destination for foreigners and expats. Nowadays, most of the general public cannot afford going to Beirut Central District.

4.1. Flag Description



It consists of three horizontal bands; red on top and bottom and it symbolizes bloodshed for liberation, a double width white band in the middle which denotes purity, peace, and the snow of its mountains, and a green cedar tree in the center. The cedar tree is the symbol of Lebanon which represents eternity, steadiness, happiness, and prosperity.

4.2. Etymology

The name comes from the Phoenician root לבן (lbn) meaning a range of words that have to do with white and whiteness which apparently corresponds to its white peaks. It occurred in different Middle Bronze Age texts from the library of Ebla and in three out of twelve tablets of the Epic of Gilgamesh and appeared nearly 70 times in the Hebrew Bible, as לְבָנוֹן. The name is also recorded in Ancient Egyptian as Rmnn, where R stood for Canaanite L (Lebanon meaning, n.d.).

4.2.1. Lebanon in the Old Testament

In the Bible, specifically in the old testament, Lebanon was mentioned many times as the source of building materials: wood and stone for Solomon's temple (1 Kings 5:6) (1 Kings 5:14-18), and wood for Ezra's temple (Ezra 3:7). Lebanon was also known for its blossoms (Nahum 1:4) and wine (Hosea 14:7). Moses also has mentioned Lebanon as a desirable place (Deuteronomy 3:25, also see Isaiah 35:2) (Lebanon meaning).

Lebanon in Biblical Hebrew

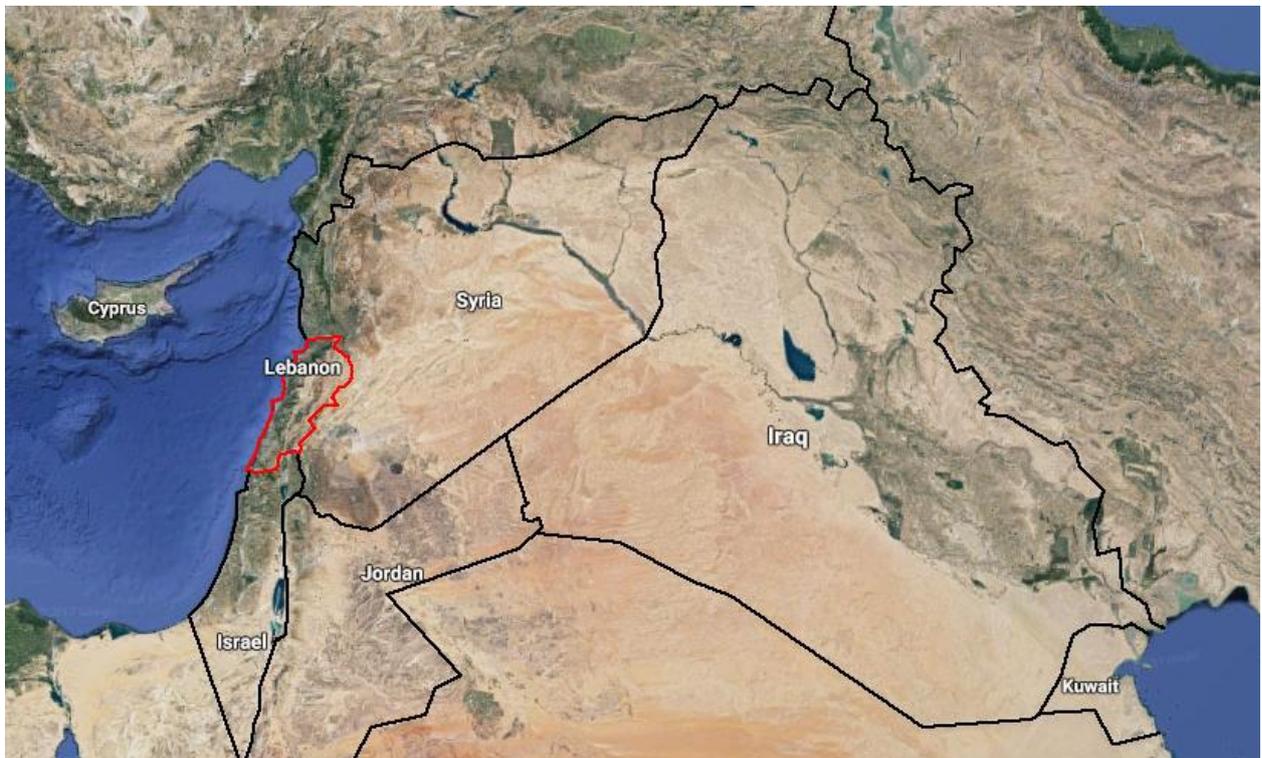
לבנון

Lebanon in Biblical Hebrew

4.3. Geography

Lebanon is an independent state in Western Asia, northwest Arabic region. It has borders of 375 kilometers with Syria to the north and east, of 79 kilometers with Israel to the south and of 225 kilometers with the Mediterranean Sea to the west.

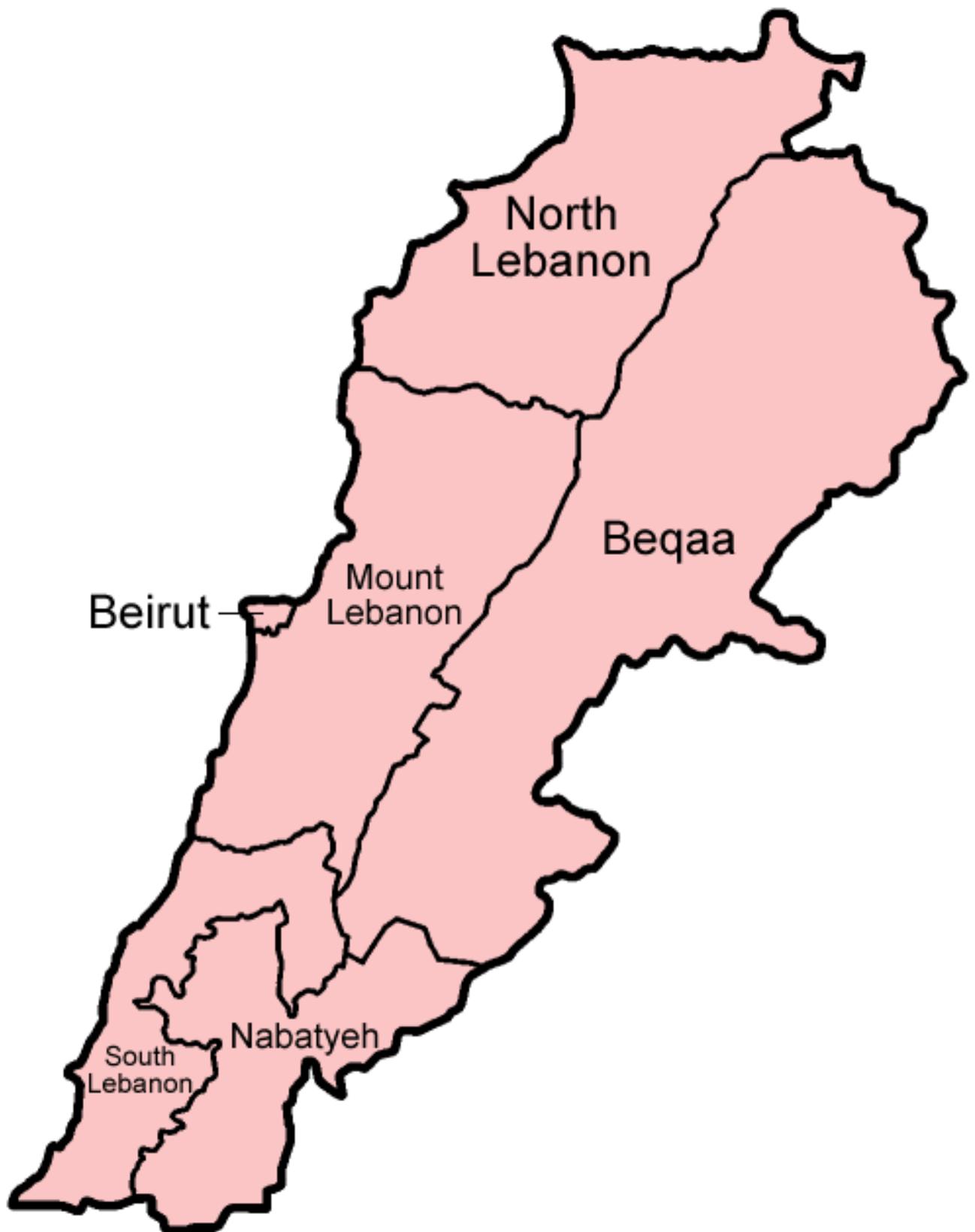
Lebanon has a rich history and a cultural identity of religious and ethnic diversity because of its location in between the Mediterranean Sea and the Arabic neighborhood. It is the smallest country of the entire Asian Continent with an area of just 10,452 km². Its highest point is located at 3,088 m above the sea level at Qurnat as Sawda while its lowest point is the Mediterranean Sea. The water bodies' area is 170 km² in total.



Map showing geographical context of Lebanon

Lebanon is divided into six Governorates, each of which is divided into many districts and has its own capital. They are: Beirut, Mount Lebanon, North Lebanon, Beqaa, Nabatieh, and South Lebanon.

- **Beirut**
Capital: Beirut
No district
- **Mount Lebanon**
Capital: Baabda
Six districts: Jbeil, Kesserwan, El-Metn, Baabda, Aalai, El-chouf
- **North Lebanon**
Capital: Tripoli
Seven Quartiers: Akkar, Tripoli, Zgharta, Becharre, El-Batroun, El-Koura, El-Minieh
- **Beqaa**
Capital: Zahle
Five districts: El-hermel, Baalbek, Zahle, West-Bekaa, Rachaya
- **Nabatiye**
Capital: Nabatiye
Four districts: Al-Nabatiye, Hassbaya, marjeyoun, Bent-jbeil
- **South Lebanon**
Capital: Jezzine
Three districts: Saida, Sour, Jezzine



Map Showing the division of Lebanon into Governorates (Carte régions Liban)

4.3.1. Climate

Lebanon has a moderate Mediterranean climate; hot dry summers and cold wet winters. On the coast, winters are generally cool and rainy while summers are hot and humid. In the mountains, temperature drops below zero during winter season. Lebanon receives a relatively large amount of rainfall, but when measured annually, certain areas in north-east Lebanon receive little because of the rain shadow created by the high western mountain.

Summer is usually the most popular time for people to visit as the temperature ranges between 20°C at night and 30°C during the day and no rainfall is witnessed. Autumn and spring are also good times to visit, with a bit more rain and less humidity. Mountain regions constitute a large part of the country, and are frequently visited during winter because of the presence of many ski resorts.

4.4. Population

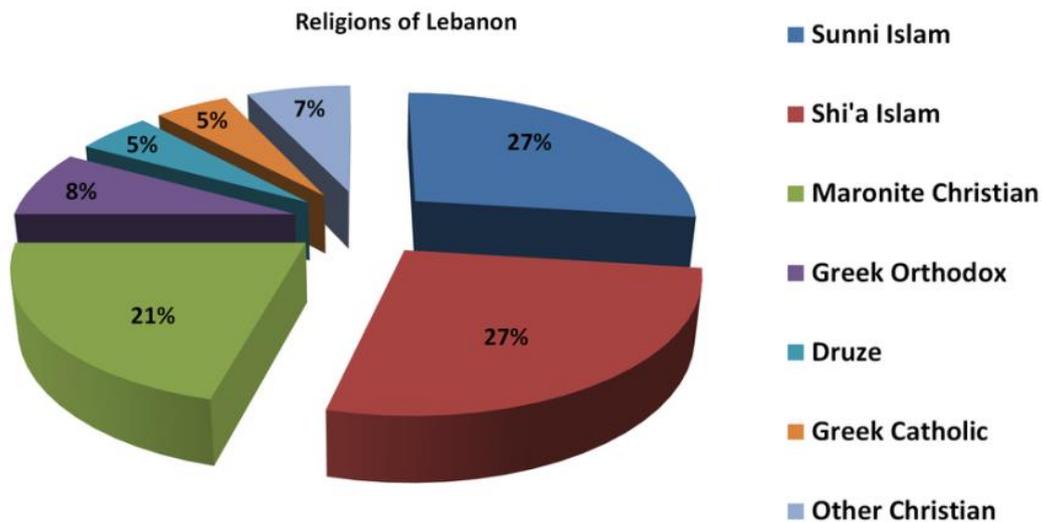
Based on the latest United Nations estimates, the current population of Lebanon is 6,031,529 which is equivalent to 0.08% of the total world population. Lebanon ranks number 112 in the list of countries by population. The population density is 590 per Km² with a total land area of 10,229 Km². 73.5 % of the population is urban, equivalent to 4,437,679 people and the median age is 29 years.

4.4.1. Religion

Lebanon is the most diverse country in the Middle East. It has many main religions comprising 18 confessions. The main two religions are Islam and Christianity; there is also the Druze minority religion.

"Statistics Lebanon" conducted the more recent study and found that approximately Lebanon's population is estimated to be:

- 54% Muslim divided as such: 27% Shia (including ismailis and alawites) and 27% Sunni.
- 5.6% Druze, who do not consider themselves to be Muslims.
- 40.4% Christians divided as such: 21% Maronite, 8% Greek Orthodox, 5% Greek Catholic, 1% Protestant and 5.4% other Christian dominations like Armenian Orthodox, Armenian Catholic, Syriac Catholic, Syriac Orthodox, Roman Catholic, Chaldean, Assyrian, Copt).
- Negligible minorities of Jews (Demographics of Lebanon, n.d.).



Distribution of the Lebanese population by religion

The population is distributed by governorates as such:

- **Beirut**

Population: 1,000,000

Religion: Christians (Maronite, Greek Orthodox, Melkite, Armenian Apostolic, Armenian Catholic, Protestant etc) 50%, Shia 25%, Sunni 25%
- **Mount Lebanon**

Population: 2,500,000

Religion: Christians (Maronite, Greek Orthodox, Greek Catholic) 70%, Druze 20%, Muslims 7%
- **North Lebanon**

Population: 800,000

Religion: Sunni Muslims 54%, Christians 42%, Alawites 3,5%
- **Beqaa**

Population: 750,000

Religion: Shia Muslims 42%, Christians 30%, Sunni 25%, Druze 3%
- **Nabatieh**

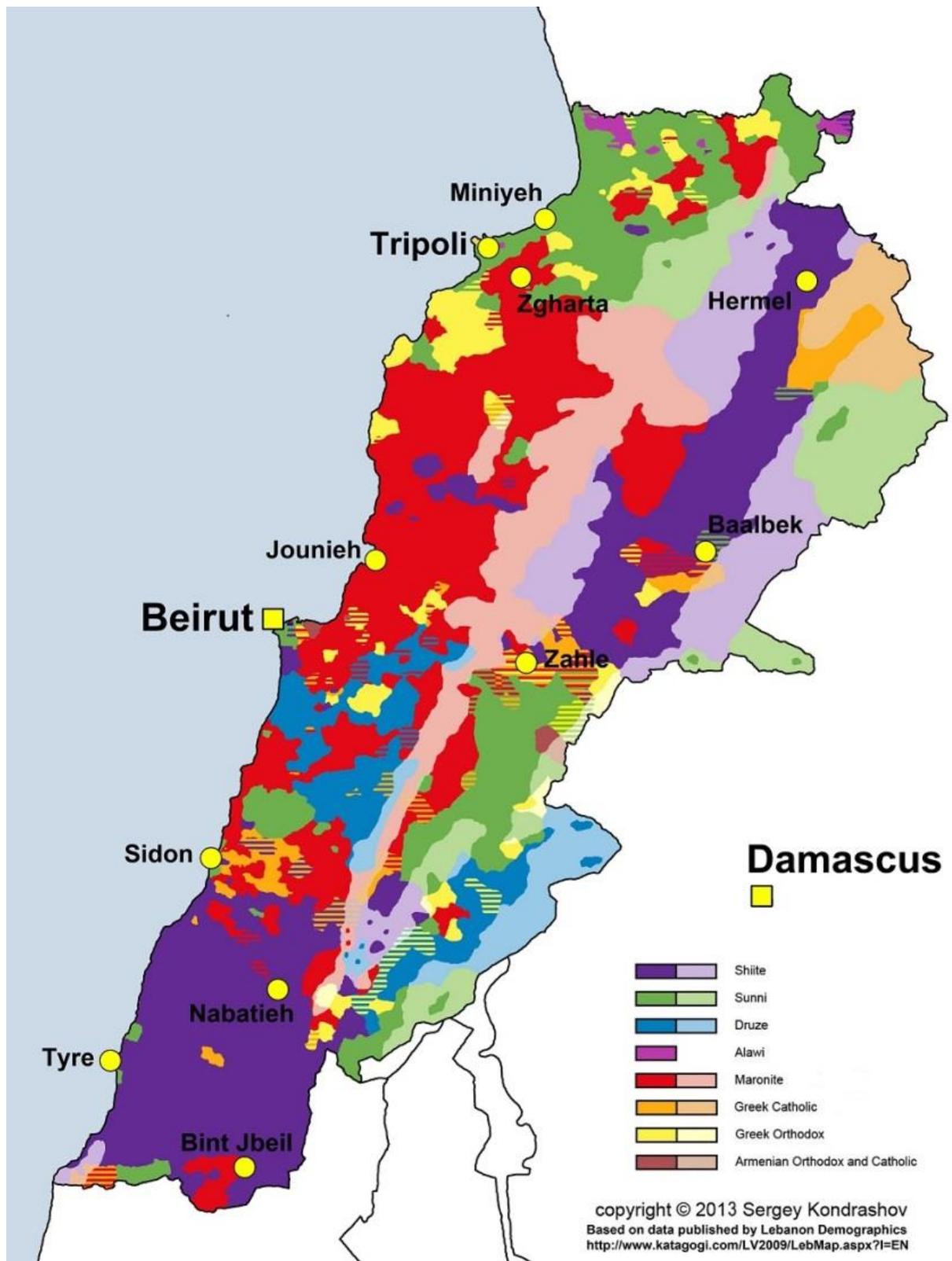
Population: 315,000

Religion: Shia 80%, Christians 10%, Sunni 7%, Druze 3%
- **South Lebanon**

Population: 500,000

Religion: Shia 50%, Sunni 40%, Christians 10%

(Governorates of Lebanon by religion)



Distribution of the Lebanese population by religion

4.5. Language

Article 11 of Lebanon's Constitution states that "Arabic is the official national language. Besides Arabic, English and French are commonly spoken; almost 40% of Lebanese are considered francophone, and another 15% "partial francophone," and 70% of Lebanon's secondary schools use French as a second language of instruction. By comparison, English is used as a secondary language in 30% of Lebanon's secondary schools. A small percentage of the population speaks also Kurdish, Syriac and Armenian.

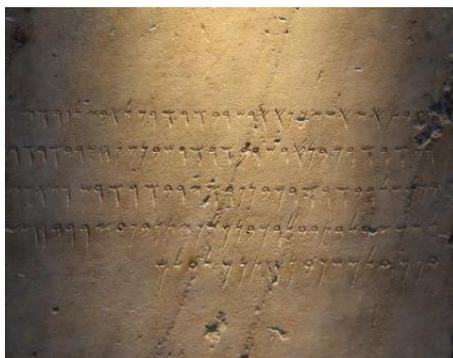
4.6. History

Lebanon has a long rich history starting from the prehistorical period; this is the reason why we can find Phoenician, Egyptian, Greek, Roman, Persian, Arab, Crusader, and Ottoman ruins all over the country. Byblos, Beirut, Sidon and Tyre are among the oldest cities in the world; Beirut is rich with Roman Baths while Byblos is rich in Crusader ruins. In addition, many ancient mosques, synagogues, and churches are spread all over the Lebanese territory (History of Lebanon, n.d.).

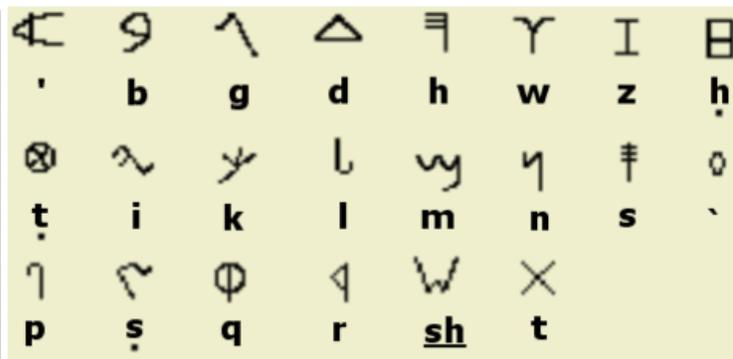
4.6.1. Prehistory and ancient history

Phoenicians arrived in the region (today Lebanon and coast of Israel and Syria) in about 3000 B.C. Phoenicia is a Greek term applied to the coast of Lebanon. In the Bible, they are called Sidonians after the city of Sidon. The Phoenicians were traders, specifically between the Middle East, and countries around the Mediterranean.

They invented the alphabet composed by 22 phonetics and they transported it with them during the trade trips. The Greek alphabet was derived from the Phoenician one and forms today the basis of all European alphabets. As well as the Greek alphabet, the alphabets of the Middle East and India also derive from the Phoenician one.



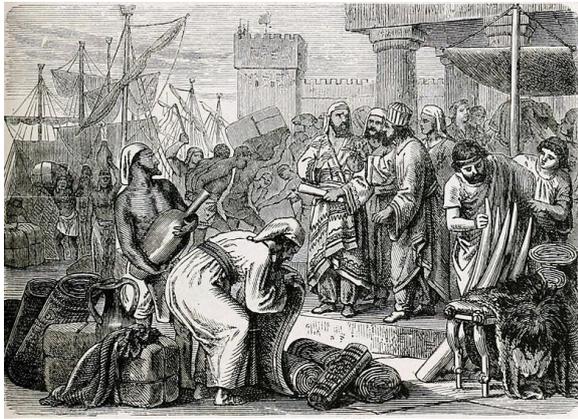
Phoenician obelisk from Cyprus



Phoenician alphabet with latin equivalents

Phoenicians were also transmitters of culture, new inventions, money and more. They discovered and used the North Star (Polaris) to keep their bearings at sea. They also excelled in producing textiles, carving ivory, working with metal, and above all in making glass. They

are also masters of the art of navigation, and they founded colonies wherever they went in the Mediterranean Sea specifically in Cyprus, Rhodes, Crete, and Carthage and established trade routes to Europe and western Asia. Furthermore, their ships circumnavigated Africa a thousand years before those of the Portuguese. These colonies and trade routes flourished until the invasion of the coastal areas by the Assyrians (History of Lebanon).



Phoenician Merchants and Traders



Phoenician Ships

Phoenicians founded Tyre and Sidon as trade centers. Gubla (later known as Byblos today as Jbail) and Berytus (today Beirut) were trade and religious centers. Gubla was the first Phoenician city to trade actively with Egypt and the pharaohs of the Old Kingdom (2686-2181 BCE), exporting cedar, olive oil, and wine, while importing gold and other products from the Nile Valley.



Later, around 2000 B.C, the Amorites -Semitic speaking group who appeared in Babylonia as mercenaries- coming from the east, invaded the Phoenician land and overran the coastal region, burning the city of Byblos to the ground. However, Byblos was rebuilt, and quickly resumed its role as one of the main commercial centers of that era – especially trade with Egypt's pharaohs of the Middle Kingdom.

In 1800 BCE Egypt acquired an empire in the Middle East and invaded and took control of Phoenicia, holding it until about 1400 BC. By the beginning of the twelfth century, Lebanon regained its independence and had its prosperity and freedom from foreign control for a period of three subsequent centuries.

By 1100 B.C. the Phoenicians took their independency from Egypt to be conquered later in 867 B.C. by Assyria. During Assyrian conquer, Phoenicians made many unsuccessful rebellions until they finally succeeded to regain their freedom in 612 B.C. by the help of Babylonia. Babylonians conquered all Phoenicia until the Persian Empire ruled Phoenicia in 540 B.C

By 333 BC, the Persian Empire eventually fell to Alexander the Great, king of Macedonia. He advanced toward the Lebanese coast. Initially the Phoenician cities made no attempt to resist, but later Tyre resisted; a siege of Tyre was carried out. Despite Alexander's death in 323 BCE, his empire stayed in Phoenicia until 64 B.C., when Syria and Lebanon were added to the Roman Empire by the Roman general Pompey (History of Lebanon, n.d.).

4.6.2. Romans and Byzantines

In 64 C.E. Lebanon was conquered by Rome, and governed as part of Syria. Aramaic replaces Phoenician language. Beirut grew into becoming the most important city and became the military and commercial metropolitan of the Romans in the East. A new city was built according to the Roman concept. Byblos and Heliopolis became famous for their temples, Tyre became known as a philosophical study center and Beirut for its school of law.

Christianity spread as from the beginning of the first Christian century. At that time, although the Roman Empire was still pagan and Christianity was not recognized by the officials of the Empire, most Phoenicians became Christians and Phoenicia became famous with its Christian martyrs before the edict of Milan was issued in 313. Upon the death of Theodosius, I in 395 A.D., the empire was divided in two: the eastern or Byzantine part with its capital at Constantinople, and the western part with its capital at Rome. Phoenicia became Byzantine and Beirut held its fame for the teaching of the law. Under the Byzantine Empire, intellectual and economic activities in Beirut, Tyre, and Sidon continued to flourish for more than a century. Under the Orthodox Byzantines, Christianity became deeply rooted. Speaking of Christianity, it is important to note that in 30 C.E. Jesus made his first miracle, when he transformed water into wine at Cana (South Lebanon) during the wedding feast to which he was invited with his disciples and his mother, Mary.

Early in the 4th century, a series of earthquakes and tidal waves ravaged Lebanon, destroying many buildings and cities both on the shore and in the Bekaa. Beirut so far has been destroyed by the sea, and rebuilt again. Around the middle of the 6th century, a series of earthquakes demolished the temples of Baalbek and destroyed the city of Beirut, leveling its famous law school and killing nearly 30,000 inhabitants. To these natural disasters were added the abuses and corruptions prevailing at that time in the empire. Heavy tributes and religious dissension produced disorder and confusion (History of Lebanon, n.d.).



The Roman Empire in 300 A.D



Roman temple of Baalbek in ruins

4.6.3. The Islam Conquest

In 628 A.D. Muslim troops came from Saudi Arabia and invaded the region; the cities of the Lebanese coast fell into the hands of the Arabs whereas the mountain did not. Then, the Muslims fought the Christian armies of Byzantium, whom they called the Roumis. The Byzantines were defeated, and retreated further to north. Lebanon was made part of the Sham territory of the Islamic Empire. Islam became the Law and official religion of the land. Christians and Jews were allowed to worship as long as they paid taxes to the Muslims, and obeyed their laws. Arabic became the official language of the region.

In 637 A.D. the Omayyad regime was tolerant with the Christians, but when the Abbasids took hold of the Muslim power in 750, a Christian rebellion occurred in the Mountain. It was suppressed with savagery; inhabitants were deported, ownership seized. During 760 A.D. Christian peasants revolted against taxes and regulations, but the rebellion faltered, surviving only in local legend (History of Lebanon, n.d.).



Omayyads ruins in Aanjar, Bekaa

From that time and until 1055 many changes happened in the Lebanese religions. A new religion was born and spread by a man called Darazi; this was the beginning of the Druze religion. In addition, the Great Christian Division occurred in 1054, with the Church of Rome and Constantinople; the Christians of Lebanon became part of the Eastern Church of Antioch, and fell under the authority of the Church of Constantinople, except for the Maronites.

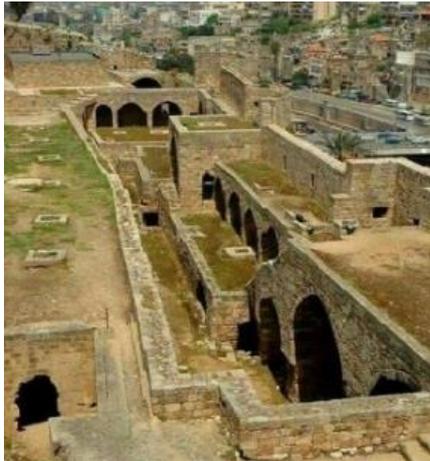
4.6.4. The Crusaders and Mamelouks

In 1098 the first Crusader kingdom was established. In the following two centuries, Lebanon was divided between two crusader kingdoms, Tripoli, and Jerusalem. This period gave strength to the Maronite Christians, who entered a union with the Church of Rome. In 1099, the Crusaders re-conquered Jerusalem, and founded the Kingdom of Jerusalem which also included Beirut, Sayda and Sur. Then, in 1197, a slow Muslim re conquest started. Thirty years later, the crusaders left and the Maronites came under attack from the Mamluks; they made them suffer every humiliation: their Churches were set of fire, their villages plundered, and their vineyards destroyed. Few years later, the other Lebanese cities and regions were controlled by the Egyptian rulers, the Mamluks, who governed the region for two centuries and a half. The Lebanese, Christian and Shiite, became the object of several repressive military expeditions, in the end of the twelfth century and the beginning of the fourteenth century. The Mamluks attacked the Mountain, especially the Kesrouan and Metn; they destroyed the villages and pulled down the Kesrouan. After a century of military administration, the country gained back its commercial activities; Beirut's harbor flourished again and became the meeting point of several commercial nations of the Mediterranean. However, the Lebanese Christians stayed exposed to suffering till the year 1440 (History of Lebanon, n.d.).

Below are some of the Crusaders' monuments in Lebanon.



St. John-Mark Church in Byblos



Castle of Saint Gilles in Tripoli



Castle of the Sea in Saida

4.6.5. Ottoman Empire (1516-1918)

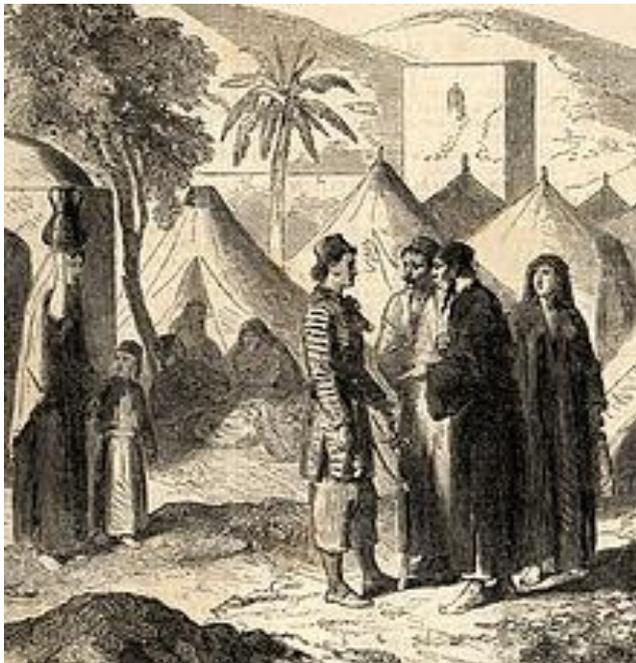


Prince Fakhreddine

The Ottoman Empire occupied the Middle East and Eastern Europe in the sixteenth century. They ruled Lebanon for about 300 years; from 1516 until the end of World War I in 1918. Throughout this period, Lebanon managed to get conditioned independence several times under Ottoman rule. A druze Lebanese Prince Fakhreddine II made a secret agreement with Ferdinand I, duke of Tuscany in Italy against the Ottomans in order to achieve complete independence for Lebanon. The Ottomans discovered this agreement and sent the Prince to exile in Tuscany in 1613. He returned to Lebanon in 1618 and built a regular army that reached 100,000 soldiers of different religious sects of Lebanon.

The Lebanese army won over the army of Mustafa Pasha; Ottoman-appointed governor of Damascus, historical battle at Anjar in 1623.

The Lebanese prince started several steps to modernize the country forming close ties with the dukes of Tuscany and of Florence; he brought architects, irrigation engineers and agricultural experts from Italy and strengthened Lebanon's strategic position by expanding its territory. The Lebanese prince ruled a land that extended from: North to Kelikia (Turkey); South to Arish (Egypt); and East to Damascus (Syria) with Beirut being the Capital. That region was more than three times larger than Lebanon today. In order to stop Lebanon's progress toward complete independence, the Ottomans ordered the Governor of Damascus to attack the Lebanese ruler. Fakhreddine was defeated, and was executed in Constantinople in 1635. In general, Lebanese felt oppressed and were not able to make their living under the Ottoman rule. Many Lebanese, especially Christians, emigrated to Egypt and other parts of Africa as well as North and South America (History of Lebanon, n.d.).



Christian refugees during the 1860 strife between Druze and Maronites in Lebanon

The Ottomans divided Lebanon into districts, separating or adding lands as deemed convenient for them to weaken the country; they annexed part of it to Syrian districts previously known as Greater Syria or "Bilad el-Cham" in attempts to erase the Lebanese identity. In addition, they attributed sectarian divisions and appointed rulers accordingly, to create religious conflicts. In 1860 feudal sectarian conflict between Druze and Christians led to thousands of victims.

After which, European forces came to Lebanon to solve the problem and made the Ottomans award Lebanon regional independence with Lebanese administration and armed forces. Lebanon became a commercial and intellectual center in the second half of the 19th century. Foreign missionaries established schools in the country. The Arabic literature had renaissance era marked by numerous publications where Lebanese authors outshined; it was the Lebanese first prolific press in the East that preserved the Arabic literature from distinction under Ottoman oppression.



Jamal Pasha, Ruler of the Ottoman

After the start of World War I in August 1914, the Turkish (Ottoman) forces in Syria occupied Lebanon and assigned a Turk ruler over the country, but the Lebanese people refused the occupation, so the Turks responded by commandeering Lebanon's food supplies causing famine. The country's condition worsened by a plague outbreak, cutting down its trees by the Turks in order to fuel their trains and military consuming more than half of Lebanon's forests. As a result, more than one third of the Lebanese population back then was lost.

On May 6 1916 the Turkish authorities executed Lebanese leaders in Beirut for being part of anti-Turkish activities. This day is commemorated annually as the Lebanese Martyrs' Day. Lebanon was relieved in September 1918 when the British General Edmund Allenby and Faysal I, son of Sharif Husain of Mecca reached the region. In 1920, the League of Nations gave France a mandate over Lebanon (History of Lebanon, n.d.).



Famine of mount Lebanon Empire during World War I



Martyrs statue, martyrs' square today

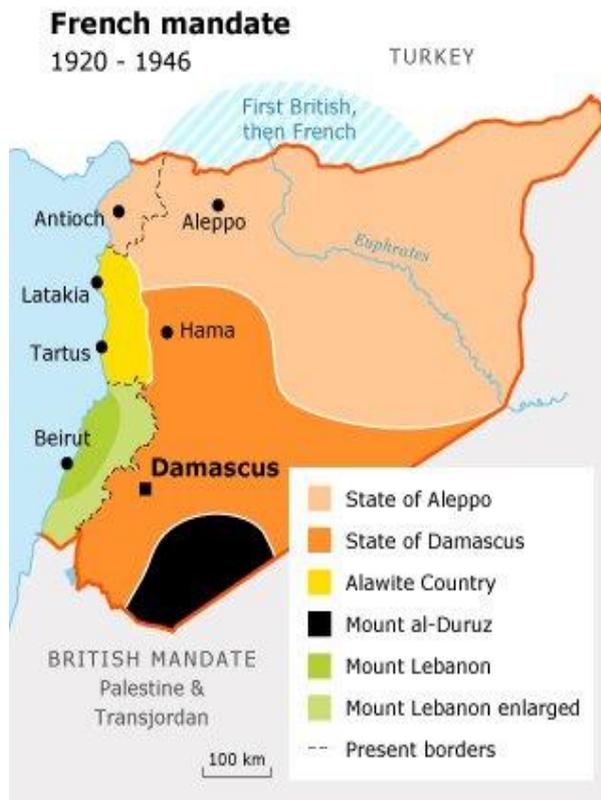
4.6.6. French Mandate (1920-1943)

After World War I, Lebanon became a French mandate. During the 1920s the French created the Republic of Lebanon by redefining Lebanon's borders; they combined the largely Muslim-inhabited coastal plain with the Christian-dominated mountains. In 1926, they modeled the Lebanese constitution; a parliament, a president and a cabinet, with the parliament being elected by the people and the president being elected by the parliament.



When the allies won World War II, Lebanese national leaders requested the end of the French mandate. In 1941, France announced the independence of Lebanon however continued to exercise authority until 1943 when Lebanon ended the mandate by forming its first democratic government of independence and amended the constitution.

Lebanese flag during the French mandate



Lebanon and Syria during the French & British mandate

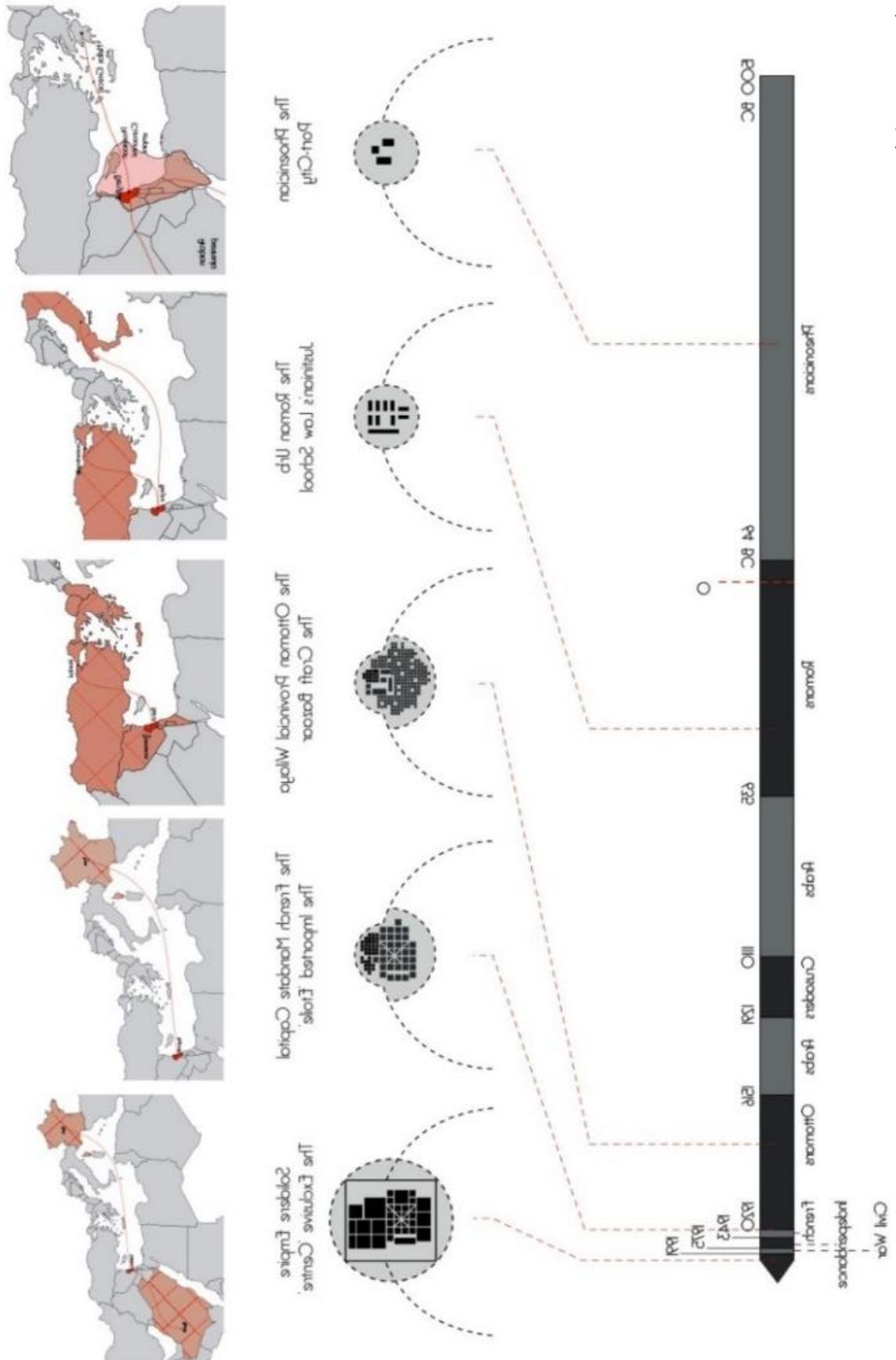
As a reaction, The French authorities arrested and imprisoned the Lebanese president, prime minister and other political figures. Lebanese leaders, Christian and Muslim, united their forces and took advantage from the international and regional influence, to pressure the French government. This worked successfully and the French released the prisoners on November 22, 1943 and recognized Lebanon's complete independence. The French helped to rebuild the Lebanese infrastructure, social systems and economy. They also enlarged the harbor of Beirut and developed a road network that links the major cities. In addition to that, they fundamentally developed the governmental and judicial systems and improved the educational, agricultural and public-health systems (History of Lebanon, n.d.).

4.6.7. Lebanese Civil war

The Lebanese Civil War started from 13April 1975 and ended on 13October 1990 due to internal religious problems and foreign interventions.

During these fifteen years, the war witnessed a continuous changing of Allies on different fronts. This can be noted in the different wars that took place: the so-called “2 years’ war” between Christians and Muslims, the “war of camps” that some Lebanese parties triggered on the Palestinian camps in Lebanon as well as the “liberation war” that led to the liberation of Lebanon from the Israeli forces. Further description will be provided in the next section dedicated to the Lebanese Civil war (4.7)

4.6.8. Lebanon's Timeline Summary



(Chami, 2013)

4.7. Lebanese Civil War (13 April 1975-13 October 1990)

The regional conflict that started in 1948 with the creation of the state of Israel and the Israel-Arab war in 1967 hugely influenced the political scene in Lebanon. At the beginning of the 1970s, the Lebanese people were divided in two parties: Anti-imperialists, defenders of the Palestinian resistance and the Pro-western opposing the armed Palestinian resistance from the Lebanese territory. External factors (the regional situation) and internal factors (the Confessionalism) caused the Lebanese war. The essential factor that led to the start of the war was the arrival of the Palestinians in big number to Lebanon in 1967 and the organization of their military activities against Israel in Lebanon. After being expelled from Jordan in 1970, the “Palestine Liberation Organization” PLO installed her military base in Lebanon. In addition, the multiple Israeli attacks have worsened the political situation in Lebanon.

On April 13 1975 the Lebanese war officially started. It was between “the Palestino progressives” composed by the coalition of Lebanese parties allied to Palestinian organizations and “the Conservatives” composed by the coalition of Christian parties who began to be armed since the beginning of the 1970th in order to face the Palestinian power in Lebanon. Since that date, the battles started to spread throughout the whole country. The militias of the two sides became more and more powerful since the Lebanese army was paralyzed. During the war, many Cease-fires were announced but never respected for more than few days. The chaos stopped on October 13 1990 due to political changes in the regional situation (Yamine, 2011).



Palestinian Fatah fighters in Beirut in 1979

4.7.1. Main factors

Many studies proved that the main two factors of the Lebanese war were the foreign intervention in its political affairs and the religion.

Religion

As we have already mentioned before, the Lebanese population is composed of 18 religious communities where the Maronites, the Sunnis, the Shia constitute the majority of the population but we can say that Lebanon is ethnically homogeneous because none of the communities exceeds 45% of the whole population. However, there were a large division between the Christians and the Muslims. Before the start of the war, the Sunnites were seeking equality in the political repartition; the equality between Muslim community and the Maronite community in particular.

Foreign interventions

The Conflict between the PLO and the Lebanese state increased because of the interventions of other foreign powers.

4.7.2. The major steps of the war

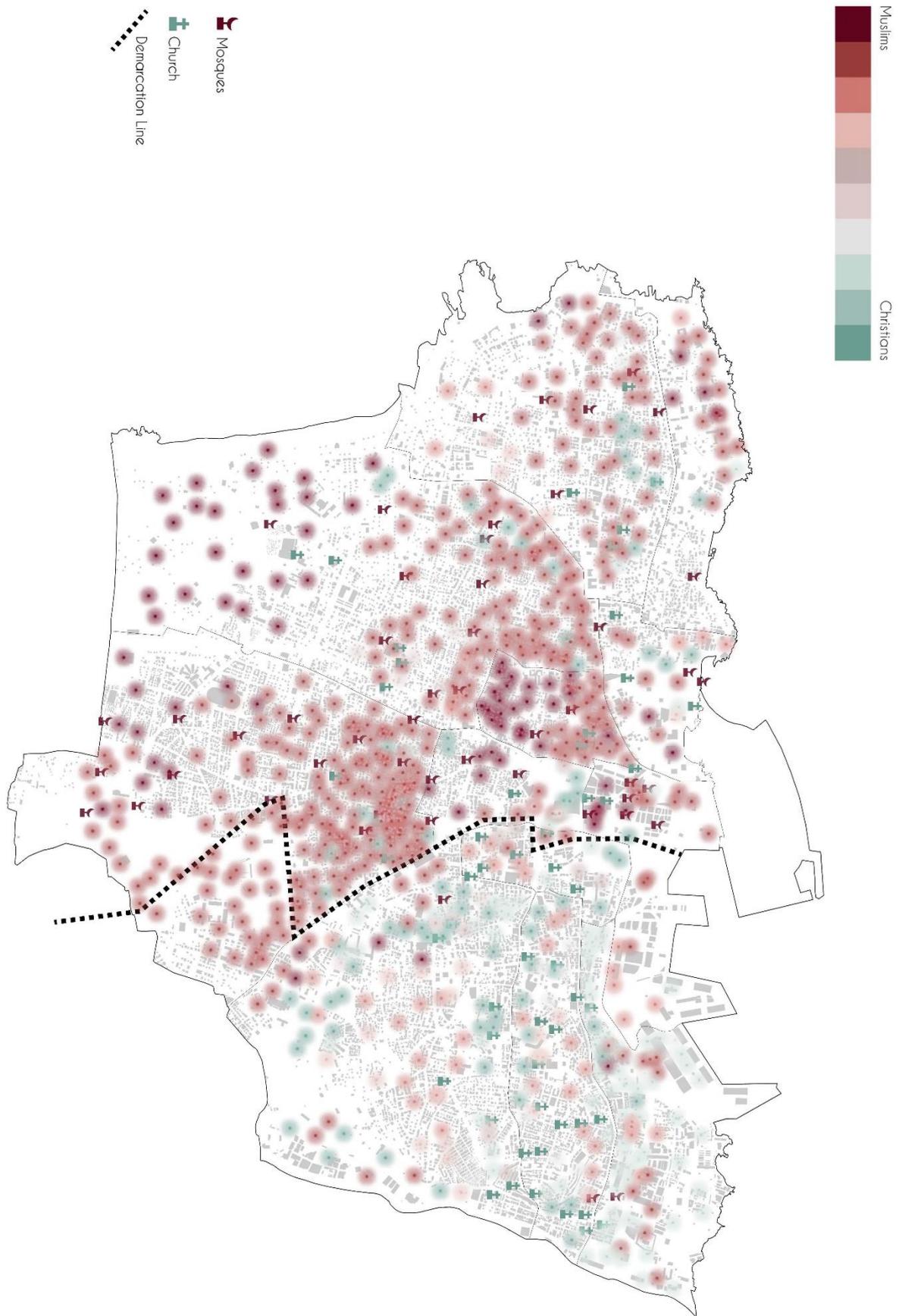


Green Line that separated West and East Beirut

From **1975** till the end of 1976 the battles started between the Lebanese government with its Christian allies and the PLO with its Islamo-progressive's allies. This period was known by "war of two years". During this period Beirut was divided in two parts: East-Beirut and West-Beirut. The Lebanese army and the Christian parties (Phalangists, National Liberal Party) controlled East-Beirut whereas the PLO and its allies controlled West-Beirut. The fights, especially between the PLO and the Phalangists were not limited to the capital but also expanded to the regions where the Palestinians camps were present.

During this war the combatant used the most powerful and sophisticated weapons of the era; this can be explained by the intervention of the foreigners who were feeding the conflict and providing weapons to the militias (Yammine, 2011).

In the following Beirut's map showing East and West Beirut with the Demarcation line in between in addition to the distribution of Churches and Mosques inn that area (Sukkarieh, 2015).





Picture of the Christian militias



Picture of the Muslim militias

In June **1976**, the Syrian forces entered Lebanon after a request from the Christian parties for help. They supported the Lebanese state and its Christian allies in their combat with the “Islam-progressives”. The goal of its intervention was to limit the expansion of the military dominance of the Palestinians and to reduce their political power.

In March **1978**, Israel launches the “Litani Operation” and invades Lebanon till the Litani River and then retreated in June of the same year.

On 4th of June **1982**, Israel invades Lebanon for the second time but this time till Beirut after crushing the Palestinians. In August 21, The PLO left Lebanon aboard ships belonging to the French Navy. In the south of the country the fights were intensifying between the Israeli and the Shia’s militias “Amal” and “Hezbollah”. Meanwhile in the mountains the Maronites and the Druzes were fighting aggressively causing ethnic cleansing. The mountain war ended by the exodus of the Maronites towards the Christian suburbs of Beirut.

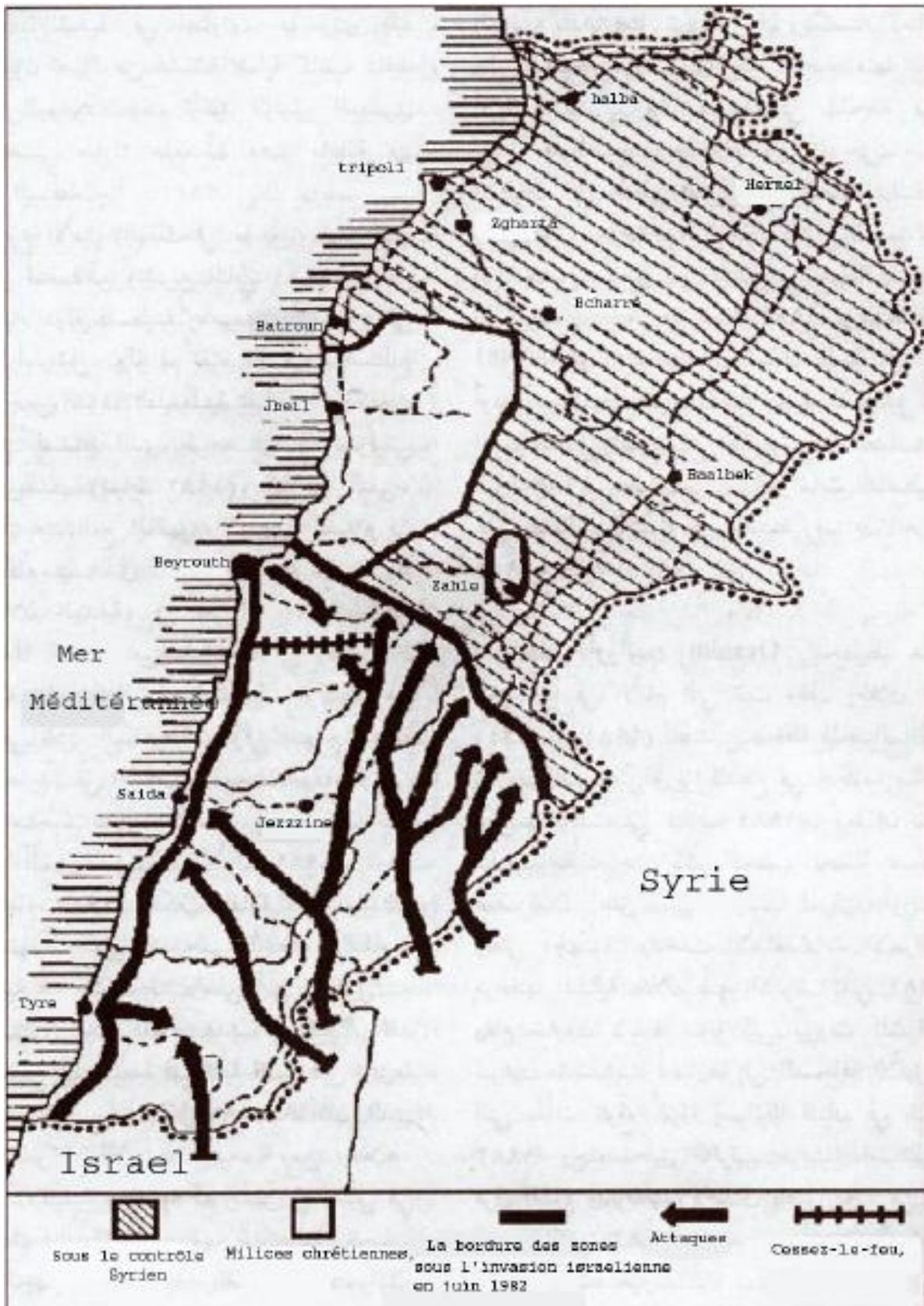
The Israeli army retreated in 1984.



Israeli troops in South Lebanon, June 1982



Picture of the 1983 Beirut barracks bombing



Lebanese Map during the Israeli invasion in 1982 (Yammine, 2011)

During 1982 one part of the Lebanese territory was occupied by the Israeli army and the other by the Syrian army. Only one part of Kesrwan-jbeil and Zahlé were under the control of Christian militias.

From June **1985** till march 1988, the Shiite movement “Amal” and the Syrians lead the “war of camps” by surrounding the Palestinians’ camps. The main battles occurred in Beirut as well as in South Lebanon and Tripoli in north of the country.

In **1988**, Lebanon had no president but had two presidents of council; Muslims and Christians had each a prime minister and a government and the battles continued aggressively. Salim El Hoss was named as the prime minister for the Muslims and Michel Aoun as the prime minister for the Christians. This latter led the “Liberation War” against Syrian forces in Lebanon from March 1989 till September of the same year.

In **1991**, the militias were no more armed; the ports and the infrastructures were recovered by the state thus announcing the end of the war.

By observing the progress of the Lebanese civil war we can notice the modification of the allies in the country. In fact, the rivals at the beginning of the war became allies at its end and vice-versa. This is not what usually happens during civil wars were the allies persists all along the war (Yammine, 2011).

4.8. Beirut-The Capital

Beirut is the country's largest city with a population of over two million persons. It over-looks the Mediterranean Sea and is bordered by mountains. The city 's coast is diverse: rocky beaches, sandy shores and cliffs side by side. The city enjoys a Mediterranean climate with hot and rain-free summers, pleasant fall and spring seasons and cool rainy winters.



The original town is located in the valley between two hills of Sassine (Al-Ashrafiyah) and Basta (Al-Musaytibah). It was destroyed and rebuilt 7 times and this is why it's compared to the Phoenix. Beirut is the most religiously diverse city of Lebanon and possibly in all of the Middle East. There are nine major religious communities in Beirut: Sunni Muslim, Shiite Muslim, Druze, Maronite Catholic, Greek Orthodox, Greek Catholic, Armenian Apostolic, Armenian Catholic, and Protestant. The city was called "Switzerland of the East" for its touristic, cultural, and intellectual role in the Middle Eastern region as well as for its major contribution in commerce, fashion, and media production. However, it is a city of baffling contradictions whose character blends the sophisticated and cosmopolitan with the provincial and parochial.

With an estimate of 1.5 million inhabitants, Beirut is one of the busiest cities in Lebanon in which one third of the country's population resides.

4.8.1. History

4.8.1.1. From Prehistory till the end of Civil War

Beirut's history dates back to over 5,000 years. Under the city's downtown area lie remnants of Ottoman, Mameluke, Crusader, Abbasside, Omayyad, Byzantine, Roman, Persian, Phoenician and Canaanite Beirut. This history of cosmopolitanism is a point of pride for the Lebanese.

The antiquity of Beirut is indicated by its name, derived from the Canaanite name of Be'erōt (Wells), referring to the underground water table that is still tapped by the local inhabitants for general use. Although the city is mentioned in Egyptian records of the 2nd millennium BC, Beirut did not gain distinction until it was granted the status of a Roman colony in 14 BC, during the reign of Herod the Great, and was named Colonia Iulia Augusta Felix Berytus. Unfortunately, it was destroyed later by a triple catastrophe of earthquake, tidal wave and fire in 551A.D.



berytus Roman coin mined in berytus

The Muslim conquered Beirut in 635 and reconstructed it from ruins.

Until the 9th or 10th century, it remained commercially insignificant and was notable mainly for the careers of two local jurists. A return of maritime commerce to the Mediterranean in the 10th century revived the importance of the town, particularly after Syria passed under the rule of the Fatimid caliphs of Egypt in 977.

In 1110 Beirut was conquered by the military forces of the First Crusade and was organized, along with its coastal suburbs, as a fief of the Latin kingdom of Jerusalem. As a crusader outpost, Beirut conducted a flourishing trade with Genoa and other Italian cities; strategically, however, its position was precarious because it was subject to raids by the Druze tribesmen of the mountain hinterland. Saladin re-conquered Beirut from the crusaders in 1187, but his successors lost it to them again 10 years later. The Mamelukes finally drove the crusaders out

in 1291. Under Mameluke rule, Beirut became the chief port of call in Syria for the spice merchants from Venice.

Following the Crusaders and the Mamelukes are the Turks; Beirut, along with the rest of Syria, passed under Ottoman rule in 1516. By the 17th century, however, the city had reemerged as an exporter of Lebanese silk to Europe, mainly to Italy and France. Beirut at the time was technically part of the Ottoman province (eyalet) of Damascus, and after 1660 of Sidon. During the Russo-Turkish War of 1768–74, the town suffered heavy bombardment by the Russians.



View of Beirut 19th century

At the end of World War I, Beirut was occupied by the Allies and the city was established by the French mandatory authorities in 1920 as the capital of the State of Greater Lebanon, which in 1926 became the Lebanese Republic. The accelerated economic growth of Beirut under the French mandate (1920–43) and after produced rapid growth of the city's population.

During the Lebanese civil war (1975-1990) Beirut was a battlefield; the old city center along with its historic churches, mosques, and public buildings faced 15 years of warfare.



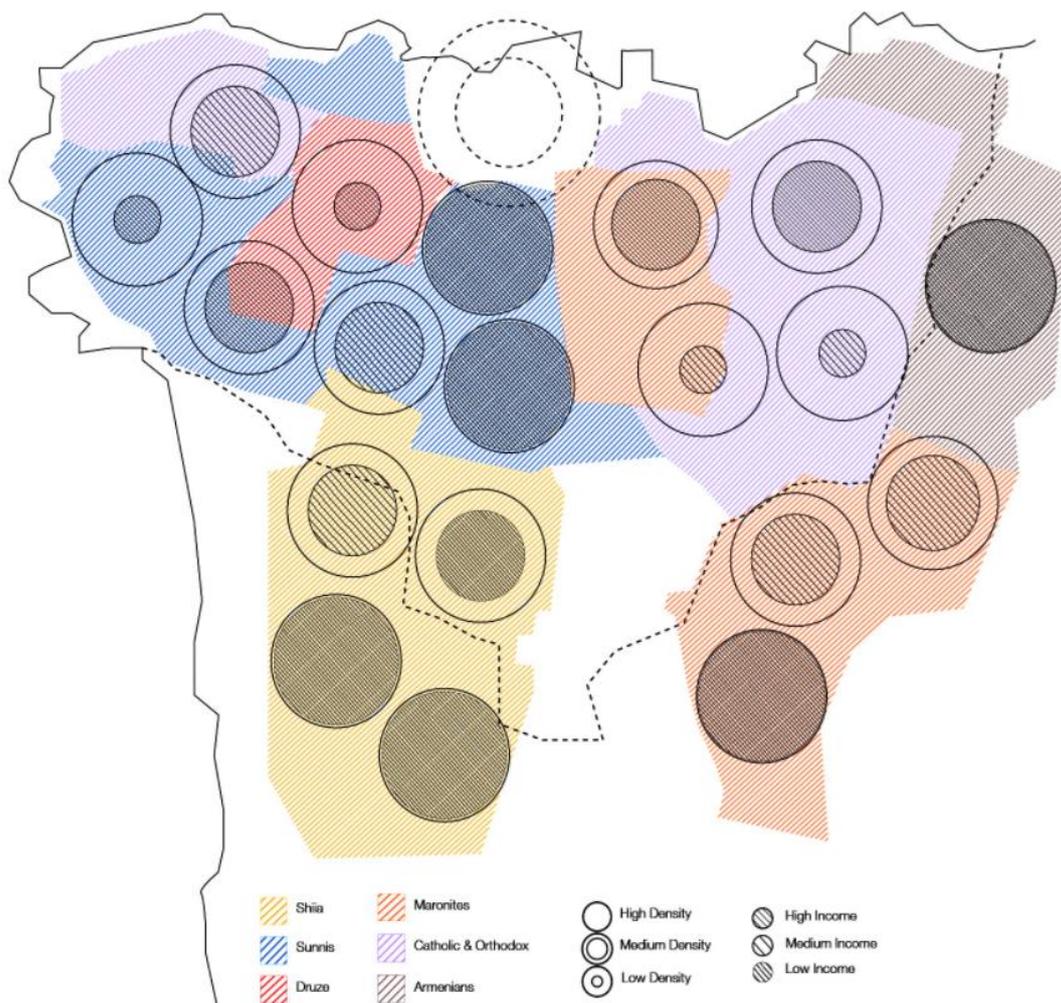
Map Showing the growth of Beirut 1870-1975 (Chami,2013)

4.8.1.2. Post-Civil War

After this war, Beirut lost most of its archeological sites and many historical buildings were either completely destroyed or partly damaged. The losses have been shocking: A Canaanite city wall, Crusader fortress walls and Iron Age tomb.

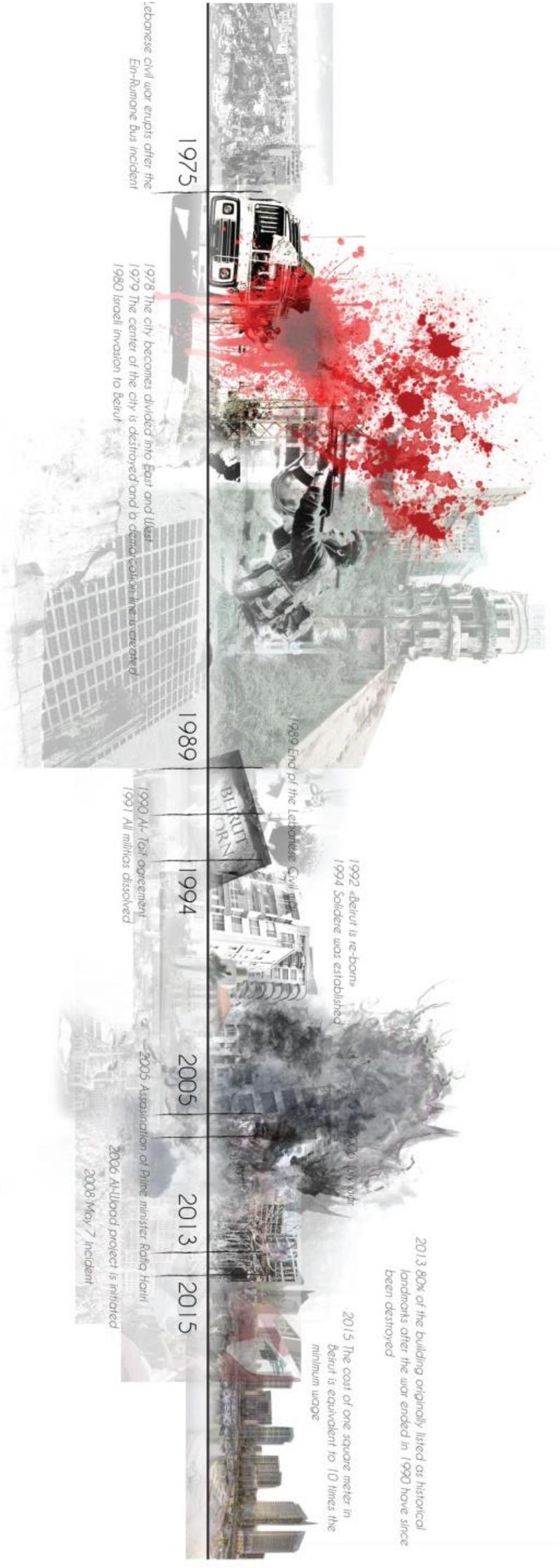
Politics and money played a disproportionate role in the rebuilding of Beirut; Instead of maintaining the surviving monuments, the “concerned party” decided to destroy it. The argument was: “We are in rush to rebuild”. In a span of 14 months the city’s archeological sites have been bulldozed and crushed into cement. The Lebanese press reported the wrecking of mosaics, walls, columns, the old markets which preserved Beirut's 2,500-year-old urban grid, and other archaeological monuments. More than 7 million cubic feet of ancient Beirut have been lost forever. Unfortunately, these archeological sites were demolished to be replaced by hotels, a bars, malls, or office towers.

Archeologist fought to rescue the city’s archeological sites but the answer was “Whether we like it or not, it will be demolished.”



Map showing Beirut as Sectarian Enclaves after the Civil War (Chami, 2013)

In the following page, a Timeline of Beirut post the Civil war till today (Sukkarieh, 2015).



Lebanese civil war erupts after the
Ein-Rumane Bus incident

1975

1978 The city becomes divided into East and West
1979 The center of the city is destroyed and a demarcation line is created
1980 Israeli invasion to Beirut

1989

1989 End of the Lebanese Civil War

1992 Beirut is re-born
1994 Solidere was established

1994

1990 Al-Tajf agreement
1991 All militias dissolved

2005

2005 Assassination of Prime minister Rafiq Hariri

2013

2006 Al-Ulood project is initiated
2008 May 7 incident

2015

2013 80% of the building originally listed as historical landmarks after the war ended in 1990 have since been destroyed

2015 The cost of one square meter in Beirut is equivalent to 10 times the minimum wage

The Surviving Heritage

The historic core of Beirut holds all 13 eras of Beirut's history. It has so many places to be blessed and of worship quality, due to the fact that it has been dominated by so many religious parties. In the following are some of the surviving heritage of Beirut.

4.8.1.3. *The martyr's square*

One of the surviving sites is the **Martyrs' Square** in the heart of the city's Downtown. The square was built by the Ottomans in the 19th century. Its name at that time was Place des Canons referring to the Russian guns placed there in the 18th century. After World War I, it was renamed Martyr Square in the memory of the Lebanese nationalists who were assassinated there by the Ottomans for revolting during the WWI. In the middle of the square a statue was inaugurated in memory of these nationalists. The statue is now riddled with bullet holes from the civil war since it formed the demarcation line which has divided the city in half.



Martyr's Square during the civil war in 1978



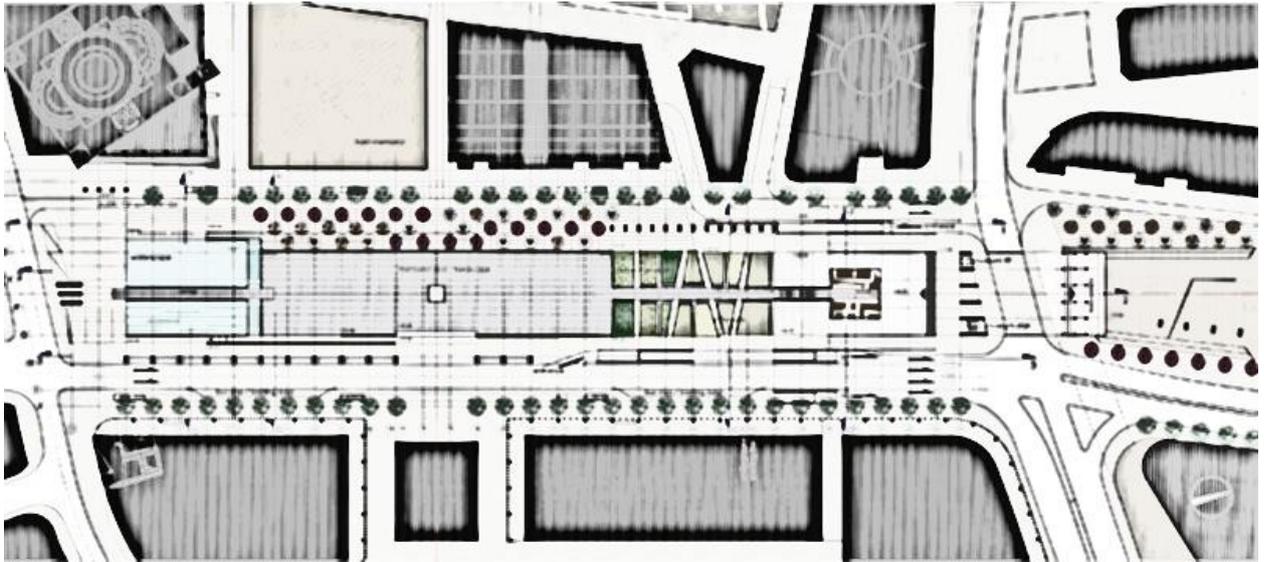
Martyr's statue with war scars; bullets all over

The square was and continues to be till now the gathering point of national events and political riots.

In 2005, a competition was held on this square and the winning design was based on strengthening the connection between the sea from one side and its historical site from another. Several districts are connected on both side of the axis through the Martyr square. Along the axis of the square, several monumental buildings can be found:

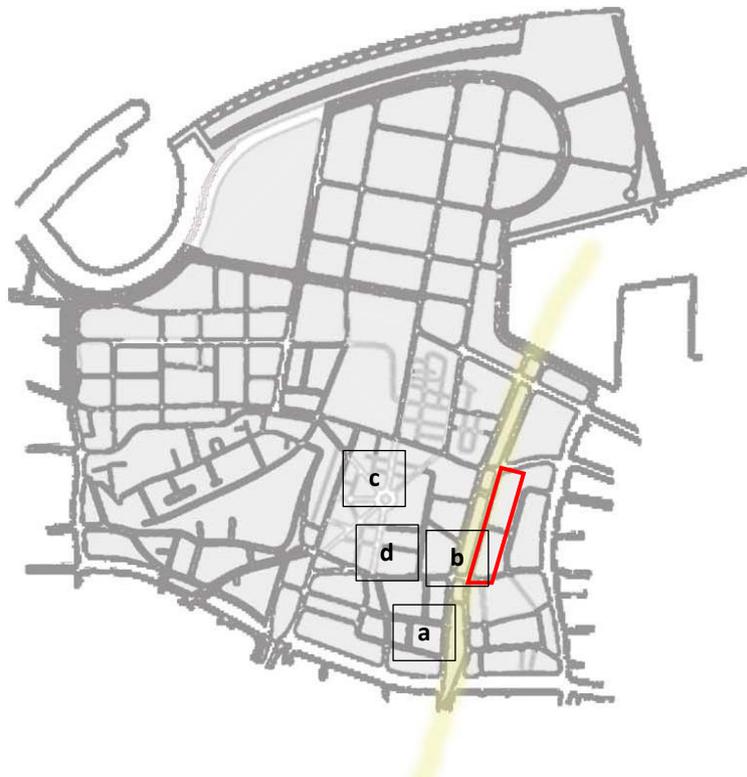
- a. Beirut City Center "The Egg"
- b. Mohamad Al Amine Mosque
- c. Saint George Orthodox Cathedral
- d. Saint George Maronite Cathedral

However, this design and many others were never executed.



Winning plan of the Competition

Landscape Architect	Noukakis & Partners (Greece), competition winners 2005
Area	11,741 sq m
Public Art	Renato Marino Mazzacurati (Italy)



Plan showing martyrs' square location in the Beirut Central District, its axis and the monuments around



a. Beirut City Center "The Egg"



b. Mohamad Al Amin Mosque built in 2005



c. Saint Georges Orthodox Church built in 1764



d. Saint Georges Maronite Church built in 1984 (Neo-classical Architecture)

4.8.1.4. *Beirut Tell Area*

An area that dates back to around 2500 B.C. during Canaanite era when Beirut was a small town called “Biruta”; the photo below shows the ruins of a damaged castle that was never rebuilt.

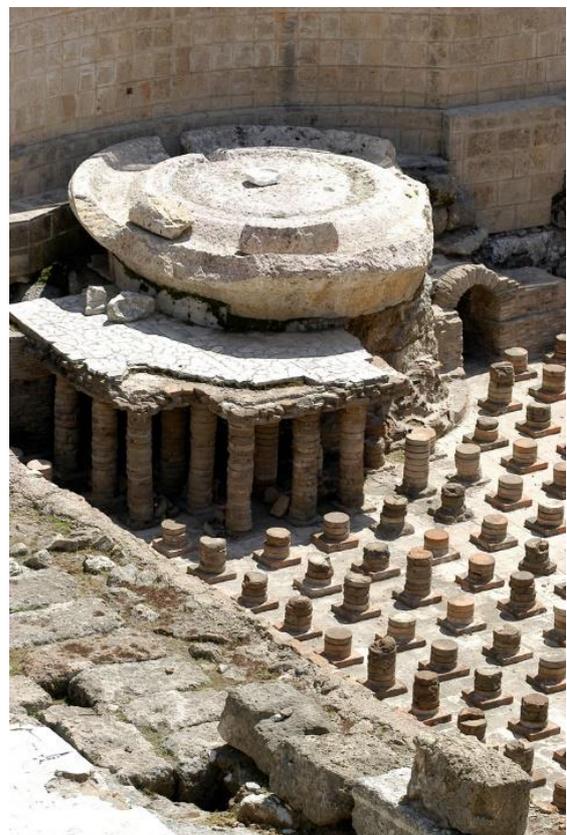


4.8.1.5. *Roman Baths*



Roman Berytus had four major bath complexes (thermae) that were meeting places for all citizens, the remains of the current Roman Baths are shown in the photos below.

Today, the open space around the restored Roman Baths is landscaped with terraces reconstituting the sights and scents of ancient and Mediterranean gardens. The Roman Baths are a favored meeting place for people of all ages and for open-air events. Large crowds are drawn to the popular international concerts that it hosts during the Music Festival which is held in Beirut each summer together with several European cities.



4.8.1.6. Garden of forgiveness (cardo Maximus)

The Roman site located between Martyrs' Square and Maarad Street axes, is an area of archeological ruins revealing some of the complexity of Beirut's rich cultural history. It is surrounded by different places of worship. The Garden of Forgiveness is a place of calm and reflection, of understanding and tolerance.



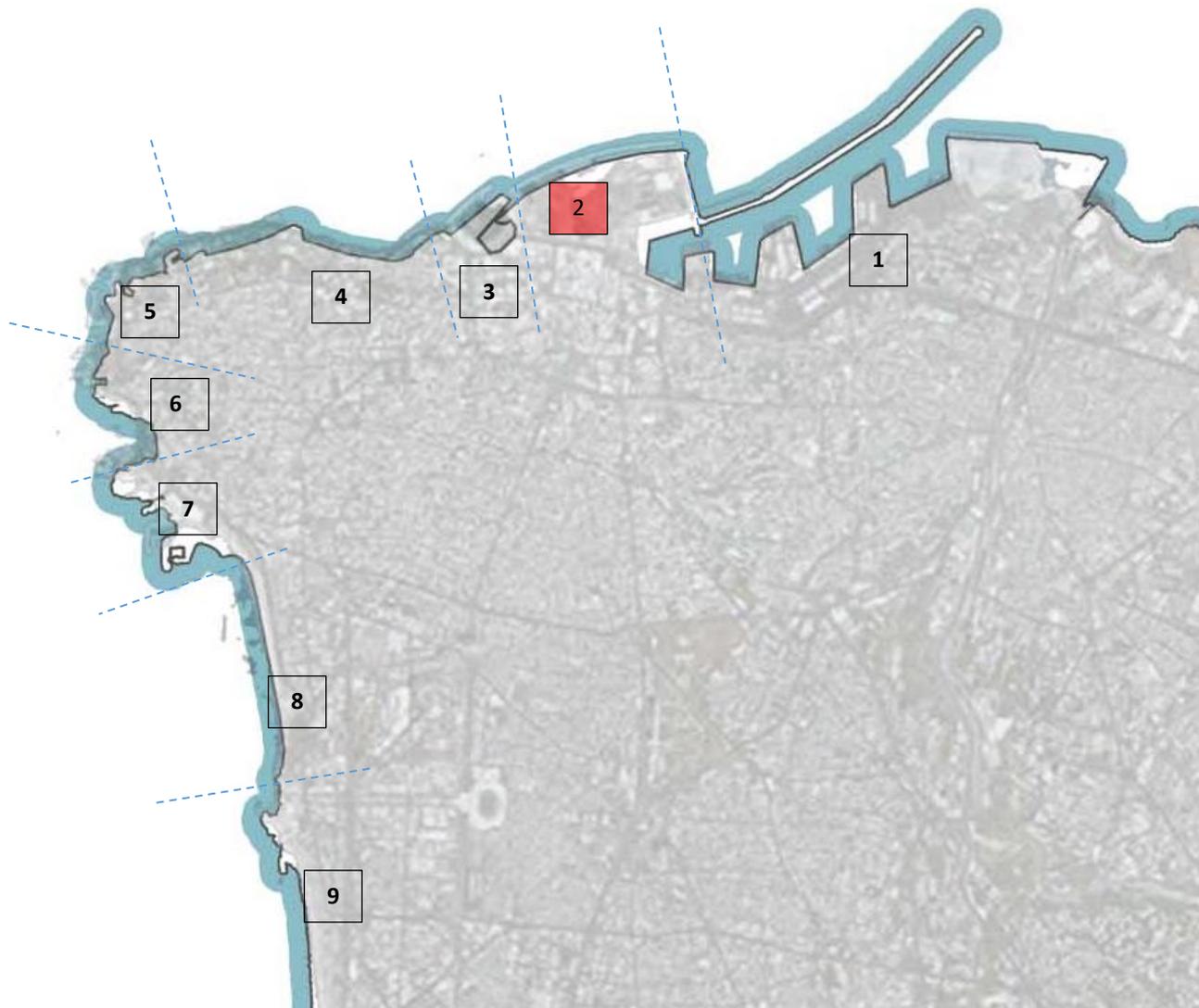
In the following a Photo collage of Beirut's landmarks showing the Manara area, the national museum, the abandoned train station, the Martyr's square, the Rawche, Saint Georges Maronite church, Saint Georges Orthodox church, The Mohamad Al Amine Mosque.



4.8.2. Beirut Coastline

While passing around Beirut's coast line you cannot but notice a huge difference on construction level and social status. It is split into public and private zones. The coastline suffers a huge discrimination. The public areas (4,5,7,8,) are populous and only deprived people go there, whereas private areas (2,3,9) are so sophisticated and only wealthy people can afford it. Unfortunately, this situation is not only imprinted on the coastline, but also reaches the heart of Beirut located in BCD (#2).

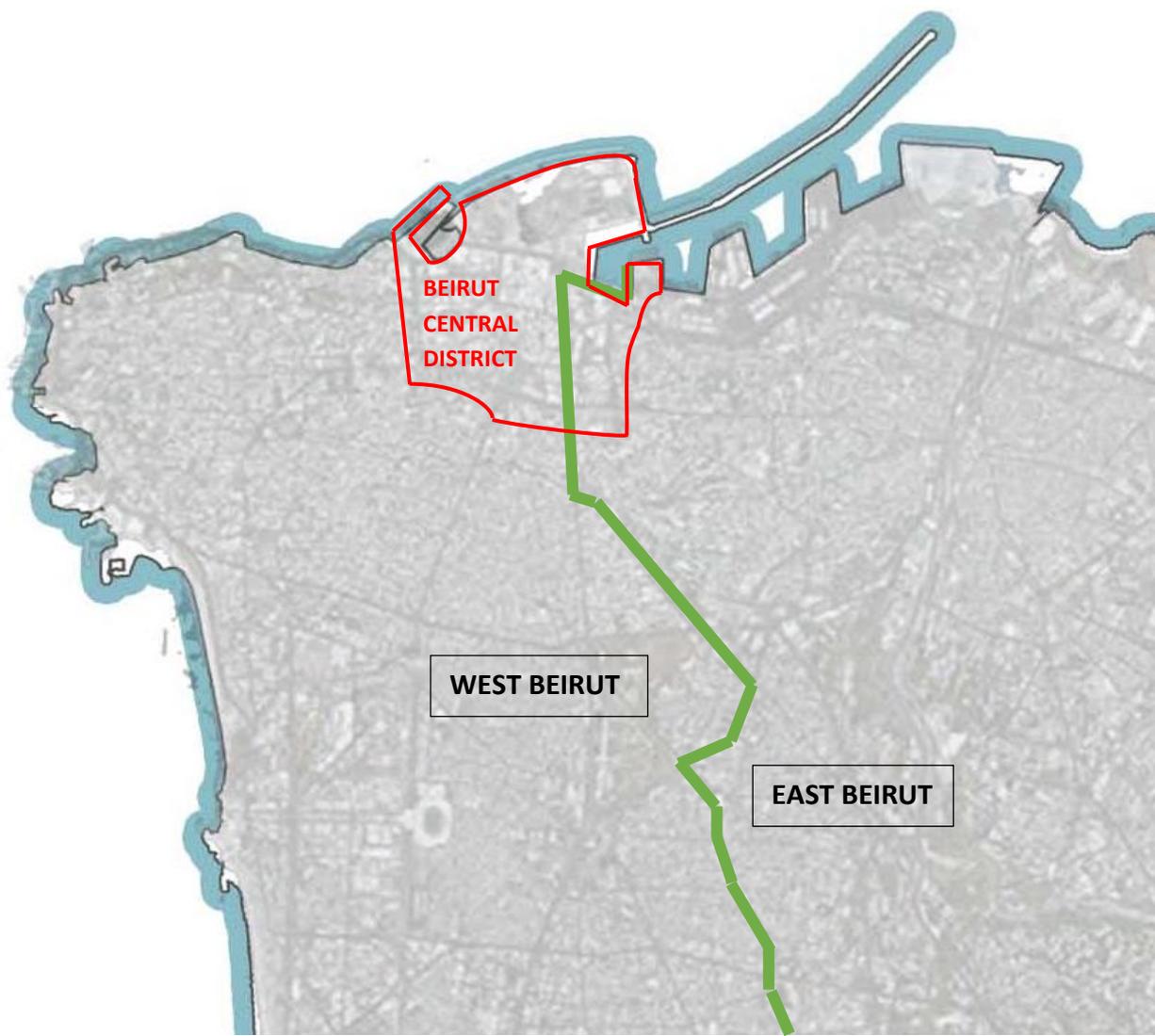
1	Port Beirut	4	Corniche	7	Rawche
2	BCD	5	Manara	8	Public Beach
3	Zaytouna Bay	6	Military Beach	9	Private Resorts



4.8.3. Beirut Central District (BCD)

The so-called **Beirut Central District (BCD)** is Beirut's historical and geographical core; it is an area of great historical value that holds all the financial, commercial, cultural and leisure sectors. It is located at the Heart of the capital on the northern coast of, and is connected by the main highway that passes from the northern till the eastern side of the country. That is primarily the reason why the roads are always congested. It's where our case study is located.

During war, this area has been an attraction for militias because of its central location between the two sides of Beirut: East and West Beirut. This led to major damage of most of the buildings located in that area. Thus, at the end of war, it was necessary to redevelop this area in order to regain its business and commercial importance. That is how Solidere was launched.

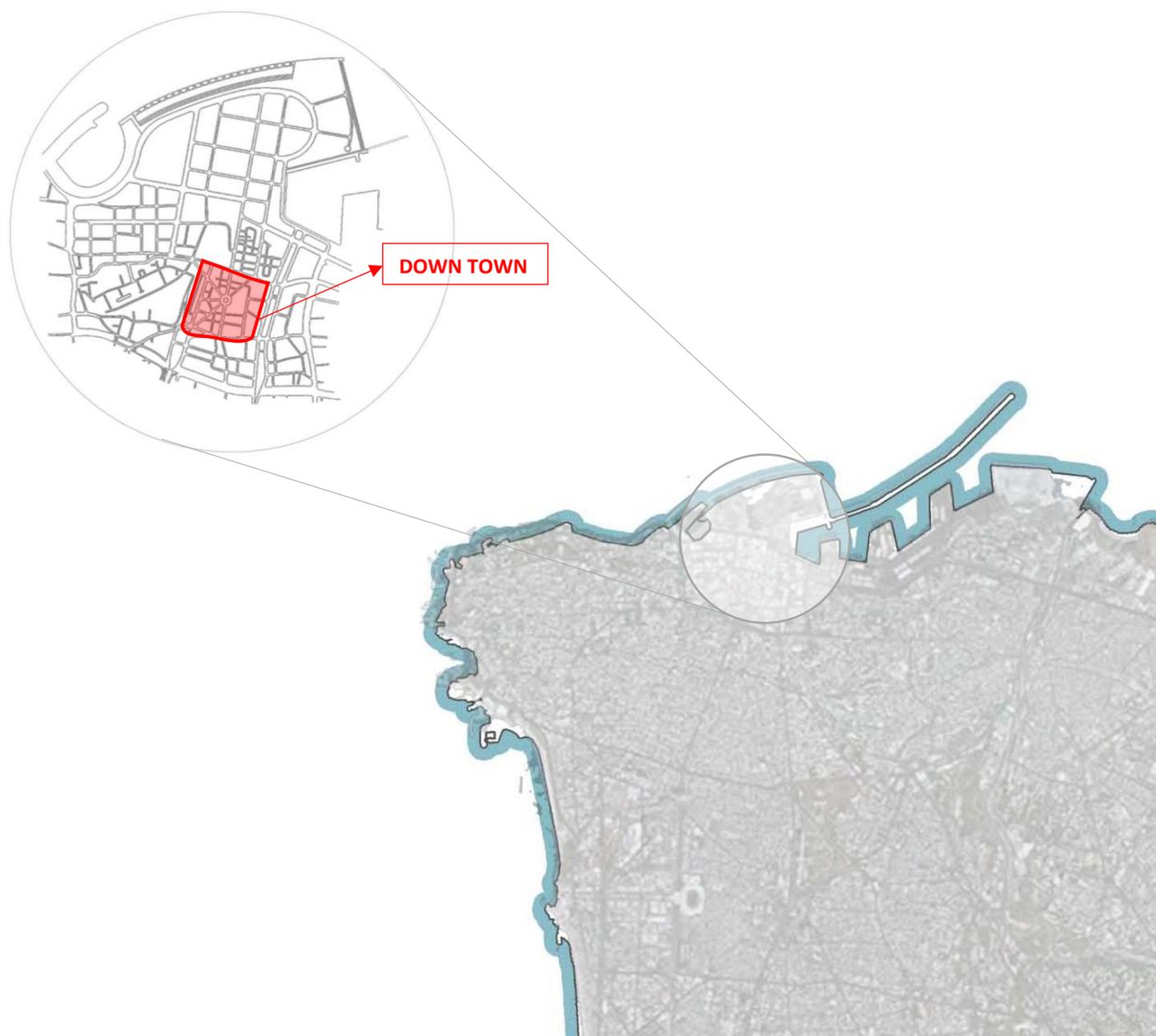


4.8.3.1. Solidere

Solidere s.a.l. is a Lebanese joint-stock company responsible for planning and redeveloping the Beirut Central District following the end of the devastating Lebanese Civil War in 1990.

It was founded in 1994 under the authority of the Council of Development and Reconstruction following the vision of the Prime Minister back then Rafik El-Hariri. Solidere was listed on the stock exchange as a privately owned company. The name is an abbreviation for “Société Libanaise pour le Développement et la Reconstruction du Centre-ville de Beyrouth”, the French term of "The Lebanese Company for the Development and Reconstruction of Beirut Central District".

In 1994, Solidere made a master plan for reconstructing the BCD and the Lebanese Government officially approved it. By agreement with the Lebanese government, Solidere has special powers of eminent domain and a restricted regulatory authority codified in law, making the company a unique form of public-private partnership.



4.8.3.1.1. Solidere's master plan for BCD

Solidere made an online page www.solidere.com where she published the masterplan in addition to texts explaining the design and composition of the masterplan, its main objectives as well as the opportunities it has.

The master plan is based on the cluster of 10 sectors, each with its own regulations, plan and unique character. The design is based on the topography of the land, on the streets patterns, and the old neighborhood structure. The strategy maximizes views of the sea and the surrounding landscapes which involves ocean, mountains and sea. The master plan gives opportunity for more high rise buildings which can lead to the creation of a new set back and the widening of streets. Thus creating more space for parking lots and less space for pedestrian passages and public squares.

The development of the area is planned to be done in 30 years.

The main objectives of the master plan are:

- To install a complete modern infrastructure.
- To reconstruct destroyed buildings whilst preserving the historical ones.
- To create public gardens, squares, promenades and trails.
- To encourage sustainable environment.
- To create poles of attraction for city center renewal.
- To create a 24-hour active downtown.
- To create mixed land usage ranging from business, institutional and residential, cultural and recreational facilities.

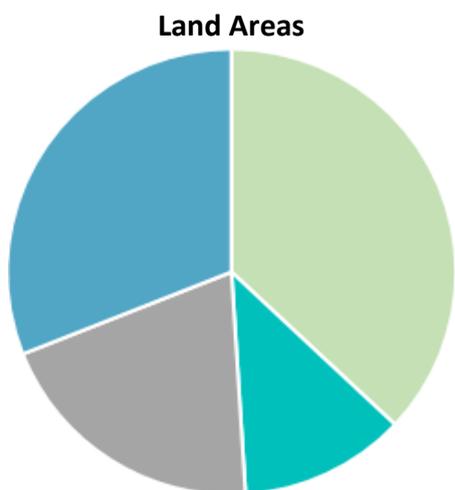


Chart Showing the land areas in the BCD Masterplan

- New developments 37%
- Retained buildings 12%
- Public open space 20%
- Roads 31%

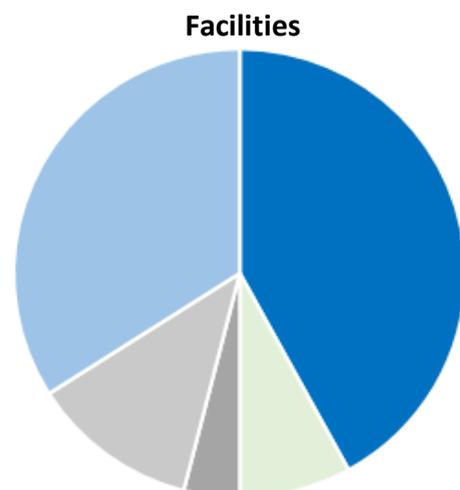


Chart Showing the facilities in the BCD Masterplan

- Residential 42%
- Government & cultural 8%
- Hotels 4%
- Commercial 12%
- Offices 34%



- Pedestrian streets
- Greenery
- Construction below cornice
- Major utilities
- Mediterranean Sea
- Religious buildings
- Retained buildings
- Medium density
- High Density

4.8.3.1.2. Critics of Solidere and its Masterplann

The ultra-modern global cityscape created by futuristic urban landscaping was greatly criticized. The major critiques against the masterplan were:

- The drainage of state resources to transform the center of the city into an island for rich people, while the rest of the country remains underdeveloped and fragmented because of economic inequalities and sectarian divides. In addition to the neglect of continuity with rest of the city and country.
- The marginalization of the State from planning process through the colonization of the public sphere by private enterprise which is expected to be dangerous for the public welfare.
- Office space and apartments in the district are destined for use only by an economic and social upper layer.
- The missing of Public goods needed such as public transport or social housing.
- The Discontinuity from historical bonds. Beirut's historical and cultural memory being erased for the sake of empty modern towers.

(Caner & Bölen, n.a.)

Nowadays, twenty-two years after the start of Solidere's work, the majority of Lebanese citizens consider that their past and history was erased easily. More than 2600 families were relocated (some against their will) to make place for new constructions. People still don't consider the downtown area as part of their own because it is completely different from what it used to be like. The only part that wasn't changed after war is "the Corniche" (number 4 on Beirut's coastline map); that's why it is the only place where people from all classes still gather.

Neither architects and engineers nor archeologists accepted the reconstruction process; they assured that many of these damaged buildings and sites could have been restored instead of destructed. They fought to rescue war remnants during all these years but their efforts failed.

Today, almost more than half of the apartments in the BCD are sold to wealthy foreigners and expats that come to Lebanon occasionally. Thus, the city center is empty most of the times of the year. Recently, Solidere promised to change the situation by building smaller apartments affordable by Lebanese people and classier offices to attract investors from all over the world, thus giving Beirut back its reputation as a "*global city of the region*".

All in all, we can say that city is still ethnically divided (Caner & Bölen, n.a.).

One of the expensive areas that we've mentioned for being used only by an economic and social upper layer in the Beirut Central District today is the so-called "al Maarad" street. However, this street is one of the few legacies that were preserved after the war and returned to its original state.



Al Maarad Street at the end of the war



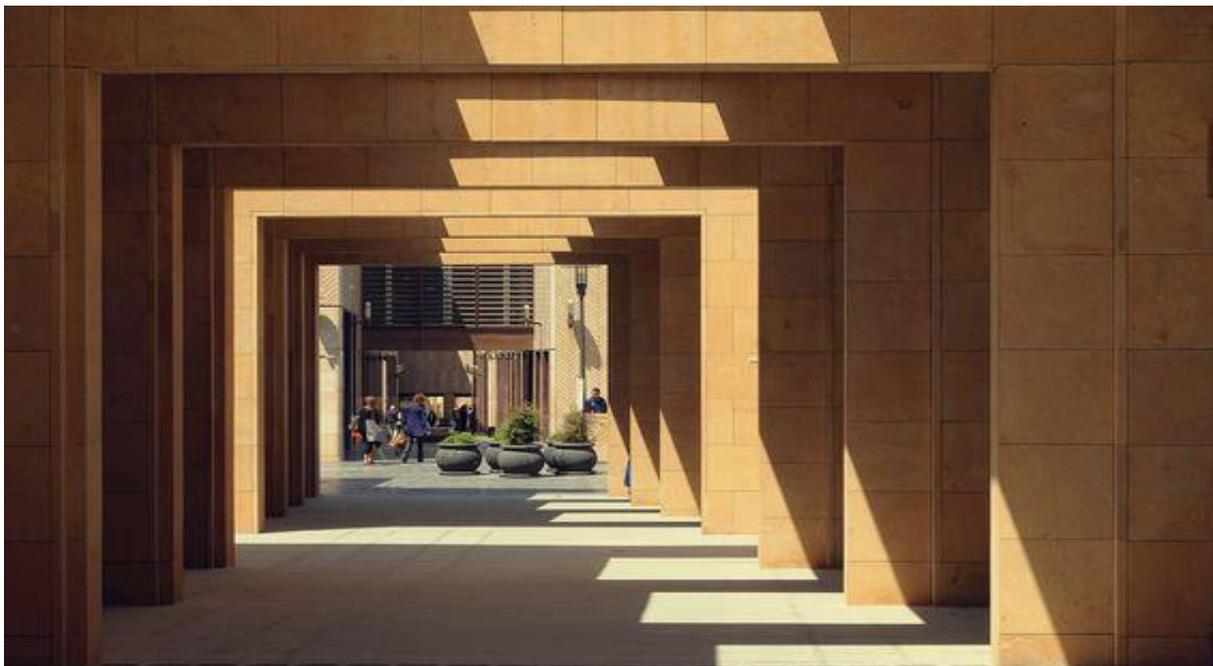
Al Maarad Street today

4.8.4. Architecture of the 21st Century Beirut

Beirut now has a place on the architectural map because of the many famous architects that want to be part of the new development. After 30 years of being off the map, these architects such as Zaha Hadid, Renzo Piano, Herzog & de Meuron, Rafael Moneo and others found it appealing for its long history as a cosmopolitan city of culture and trade.



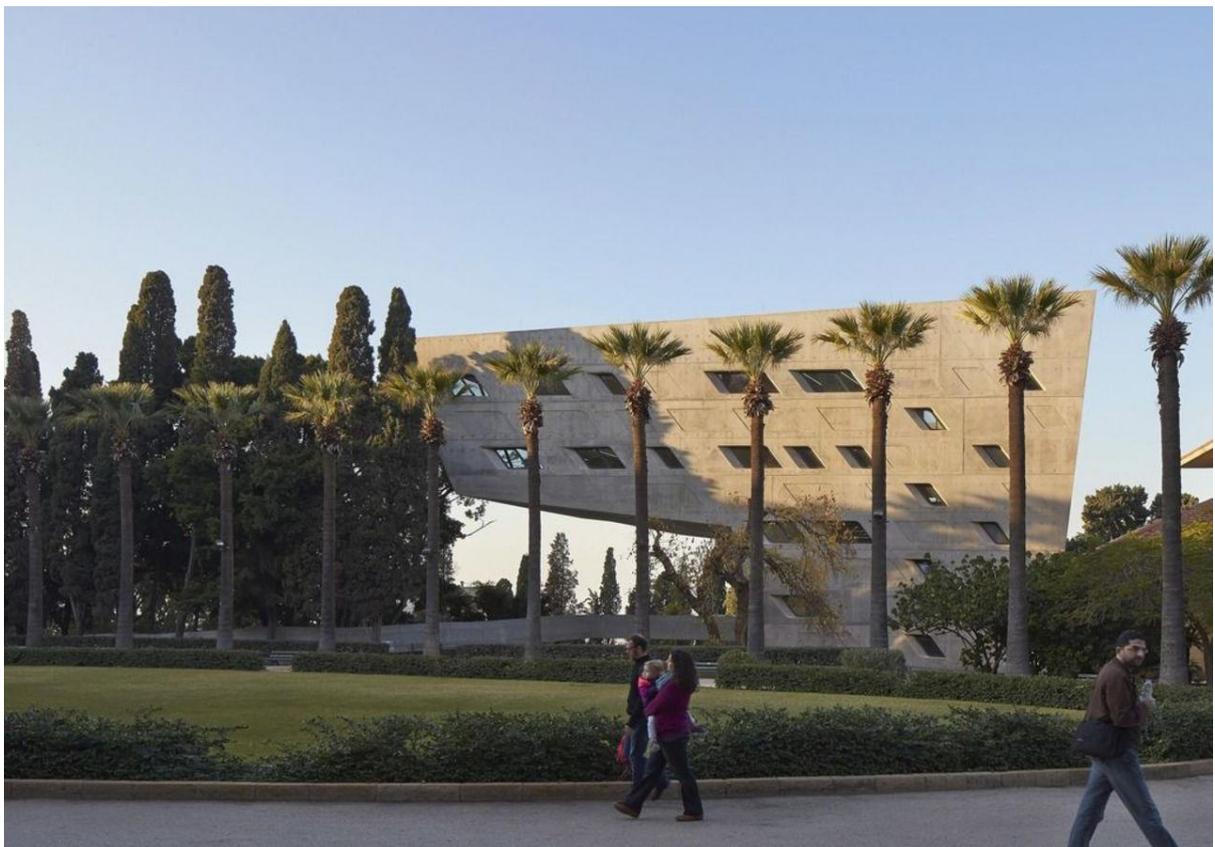
3D Beirut by Norman Foster



New Souk by Rafael Moneo



Beirut Terraces by Herzog et de Meuron



Issam Fares Institute by Zaha Hadid

4.8.5. Reuse Design of a Public Asset in a Historical Context

When dealing with a public asset situated in a historical context, it is very important to take into consideration several aspects for a better understanding of the whole process.

Analytical Phase:

The study of a public asset needs to be approached from different points of view in order to understand its **historical value**, its **relationship with the urban context**, its **geometrical, structural** and **material** character.

HISTORICAL ARCHIVAL RESEARCH:

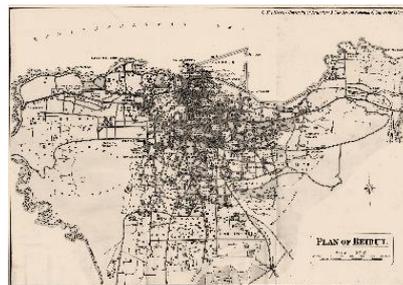
The first step of the **“re-use design”** process could be handled by analyzing the urban evolution of the City, which is done by observing and analyzing different archives and studying the historical cartography, focusing particularly on the area where the public complex is located.

Our case study “the egg complex” is located in the Beirut Central District known to be the vibrant, financial, commercial and administrative hub of the country as mentioned before. Several prehistoric archeological sites were discovered within the urban area of Beirut, revealing periods dating from the Middle Paleolithic and Upper Paleolithic to the Bronze Age. Excavations in the downtown area have unearthed layers of Phoenician, Hellenistic, Roman, Byzantine, Arab, Crusader and Ottoman remains (refer to next page).

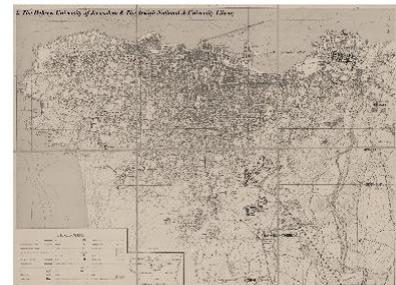
What is critical here is to comprehend the city all through its shape, as a manmade object made out of urban artifacts. The examination ought to be centered around the developments that have been set aside over time and which cultural moments embodied the idea of the city within its form and typology.



Beirut 1912



Beirut 1923



Beirut 1936



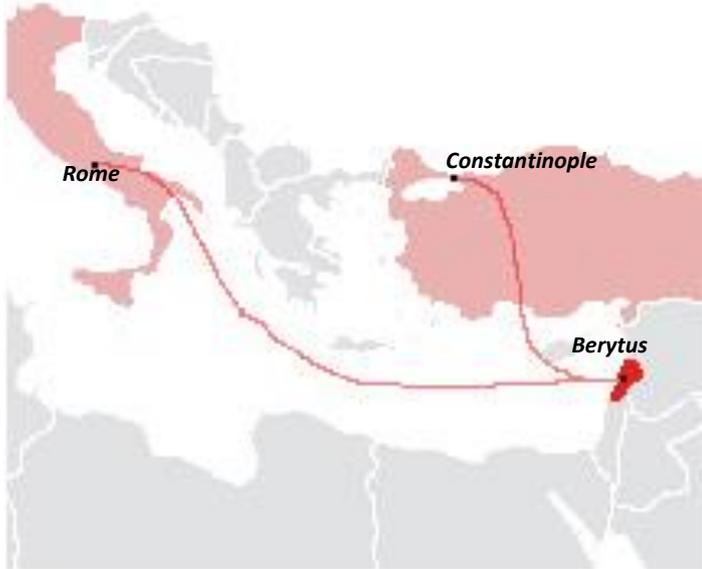
Beirut 1974



Beirut 1980



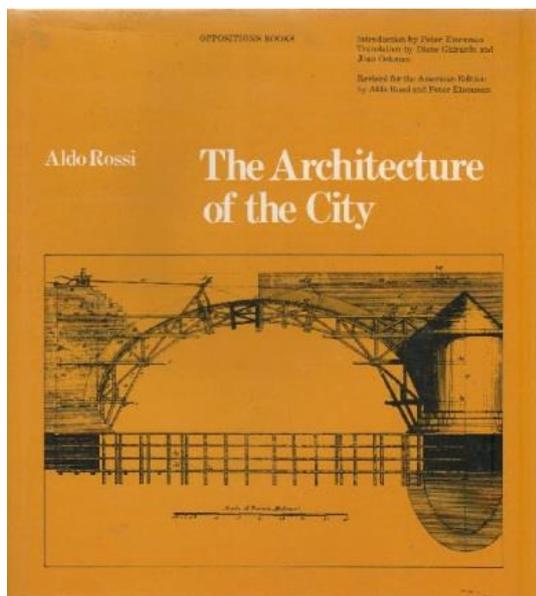
Beirut 1995



After the war, the reconstruction process received by the government might have been principally economic; it was situated towards finance, business, culture and tourism. This system was encapsulated on a limitless urban project, entrusted in 1994 to Solidere, which wanted a methodology of insular urban improvement leading only to a major transformation of the BCD. On the other hand, the peri-central areas and the suburbs were barely, if at all, concerned by the project. The outcomes of the experts' arrangement of the downtown region have been unmistakably centered on expanding productivity and profitability, especially for the attraction of investors through the reconstruction of this area.

To this day, Solidere released a huge number of development rights covering an area twice the size of the pre-war city center. Towers that accommodate offices and luxury apartments, combined with the development of a Western-style shopping mall in place of the former souks, structure a project that has preserved and renovated only a small number of pre-existing city blocks.

4.8.5.1. Aldo Rossi book *"The Architecture of the City"*



A standout amongst those acclaimed designers that worked on the urban improvement of the urban communities is Aldo Rossi, an Italian architect where in his book *"the Architecture of the City"*, has been mostly influenced with his own knowledge and experience of his natal country, and the richness and furthermore layering of Italian and European historic cities. He analyzed his so called *"dead cities"*, or interruptions inside the development of a city. These cities lacked identity and cultural belonging.

Cover page of *"the Architecture of the city"* book by Aldo Rossi

In the case of Beirut, that suffered fifteen years of war, it was reconstructed according to a project where so many historic layers were erased in order to give way to new community with no foundation and identity. The civil war was the main reason that blew the Lebanese economy and the new developments produced the greater radical change in the urban tissue and its appearance. The principles of Aldo Rossi are expressed in both the idea of the rich history and layers on one hand; this had once formed Beirut's center, showing its concern with permanence and collective memory in the perpetuation of identity. On the other hand, it shows Solidere's claims of preservation in their master plan for the reconstruction of the city through an architectural and topological perspective.



Despite the strategies to recreate **contextual architecture** and provide a much needed 'traditional' fabric and historic link to the past of the city, there are major flaws in this conceptualization of the Beirut Souks, and many questions about their authenticity and their attempt at preserving the city's rich history and character. They are inherent to the structure of Solidere and its formation, and are concerned with the totality of the Beirut Central District project; they question the kind of "**âme de la cité**"⁵ that the new central district shows.

4.8.5.2. *The Beirut Souks Reconstruction*

In Rossi's theory of the city, he identifies major values that turned into primary elements of examination of city's character; these values seem to disappear from Solidere's model. While studying the city it is important to examine its **form**, which is shaped by the term **urban artifacts**. The quality of the urban artifacts describes the character of a city. Furthermore this quality is assessed on the groundwork of **individuality, locus, memory and design**. Therefore, the tabula rasa⁶ at the outset of Solidere's project is just the beginning of a complete refusal of the possibility from claiming the potential of most of these values for development.

One of the famous architects that worked on the reconstruction of Beirut was Rafael Moneo whose scheme centers on the preservation of **locus** (place) and **design**, in the assumption that these are enough to maintain **history, memory and individuality**. In the attempt to recreate the old character of the Souks, Solidere's master plan misinterprets this concept and the redesign of this large plot in the image of its past recreating the life it once had. Form and function are foremost the most important elements in rebuilding a virtual reality, in the hope that life will closely follow. However, even though the new character of the souks is a departure from its old traditional one, it still forms a functioning part of the city, and seems to be able to generate a history of its own in the future, and regain the status of landmark it once had.

⁵ Âme de la cité: Soul of the city.

⁶ Tabula rasa: Blank slate.

Yet this reconstruction of the city on the basis of *function* and a *past image* of form are insufficient if the aim is to create urban artifacts and allow a progressive formation and new reality for the city. At the basis of this disagreement is Rossi's theory of *type* and *typology* as the origin of the form of the city, and the embodiment of its essence and experience. The classification or planning in the case of the Beirut Souks of the architecture of the city in terms of *function* reduces its character to a functional one. In Rossi's definition, *type*, the irreducible essence of the city, is concerned more with the traditions and ways of life of the city than the actual form of its architecture. In fact, similar traditional rituals and functions can take many shapes in different cities. Hence what is more important in the case of the Souks than the preservation of its old volumes and forms is an understanding of the ways it operated, and the implicit character of the inhabitants and users projected through these forms. The traditional character of the Old Souks was intimately tied with the ancient history of Beirut as a port-city; the Souks with time had gained their importance as the place where Beirut's mercantile population exhibited and traded local and imported resources, products and crafts. Central to this sort of trade was the familial character perpetuated through particular trades becoming associated with certain families. The variety of trades was synonymous with that of ownership and represented the various classes and groups that inhabited the city.

In the new Souks this has clearly disappeared, as family names and local crafts are replaced by international and corporate brands dramatically preventing any notion of individuality, character or locus from the new Souks. There is little difference between this new retail area and any other shopping area of the city. This loss of character is also a consequence of the change in the scale and structure of the land on which the Souks are built. The notion of type is intimately associated with the structure of urban real property. The transformation of the shape, size and ownership of the plots of land of a city represent the history of the city's urban property and the change in social classes and economic structure. In the case of the Souks, the expropriation of the many plots that formed the Old Souks and their incorporation as one huge lot owned by a variety of shareholders implies a sudden change on two levels.

4.8.5.3. *Revival of the Collective Memory*

4.8.5.3.1. *The Souks of Beirut*

It is worthy to mention that the site of the souks had served as the commercial and residential center of the city since Phoenician times, through Hellenic, Roman, Byzantine, Arab, Mamluk, Ottoman and French periods. This taking over of the deeds for existing tenants and shop owners in exchange of shares automatically deprives them of their right to return and use their old premises, effectively leading to a complete evacuation of the inhabitants of the district, a process initiated by the war. This can only lead to an erasure of the site's character and identity. In the absence of *individuality* there remains no *collective memory* to be preserved or extended. This idea of collective memory is an important question especially in Beirut's context; the city, recovering from fifteen years of division and civil war, can hardly

attempt a process of reconciliation and a new definition of collectiveness, without turning to common historic landmarks and preexisting memories of the city.

The incorporation of archeological ruins and historical monuments into the design of the old souks, in an effort to conserve the memory of the past and create a richer future is then a useless attempt in a context lacking of collective memory. These remaining structures of a past that is no longer experienced lose their ability to act as **'propelling elements'** and become aberrant artifacts in an otherwise completely new fabric. They constitute **'pathological permanencies'** which project their pathological character onto the rest of the city rather than aid in its rebirth. Instead of forming a link to a dynamic past and initiating the revival of the city, they enhance a widespread resentment and nostalgia of a center to which no one belongs.



Old Markets in Lebanon

4.8.5.3.2. The City's Center

All over the world the rules governing the preservation started to change and especially the countries that were just starting to recover from the war, realizing that heritage is part of someone's culture. In the countries affected by the war, heritage is the main target. Being a country that went through a lot of hardships, Beirut which is known as "Switzerland of the East"

contains heritage dating back to at least 5000 years. From the Greek invasion to the Roman conquest, the Ottoman rule to the French mandate, these cultures have left their traces on Lebanese soil. The rebuilt of the city of Beirut started after its independency in 1943, where the city entered through its belle époque. The reconstruction of the downtown area attracted people to it with its fancy café and stylish pedestrian streets.



Street in Downtown Beirut before and after the war

Historic preservation is a movement in planning designed to conserve old buildings and areas in an effort to tie a place's history to its population and culture. Have Beirut and other historical cities of Lebanon been well preserved? Does this conserve the country's culture? Did the reconstruction mask all of the important features that represent what Lebanon is truly about?

As an example, Ras Beirut (the tip of Beirut) became in 1866 the city's intellectual and cultural center and one of the most cosmopolitan districts in the Arab World. Over the centuries, just about every passerby stopped long enough to colonize Beirut. It is here that the legacy of different colonization seems to intertwine.

Many people who live in Beirut today are unaware of their city and what it truly holds. Attaching people to their heritage is by making them more involved and involved in it, thus what Beirut needs is "people who **belong** to the city".

Erasing Memory in Downtown Beirut

After the end of the civil war, a lot of people were concerned that the new reconstruction of the downtown area was not representing the true nature of the Lebanese culture. A lot of protests broke out stating that the new development looked more like the countries of Golf. Lebanon is supposed to be a country for all of its citizens, a country for all social classes and not only for rich people.

Many people talked about the invasion that happened at that time and how not only the houses that have been destroyed were reconstructed but also a lot of untouched buildings were removed in order to give way to a modernized city.

This is where the question of integrity is activated and many doors are opened towards situation of the city of Beirut.



Art Deco Building in Gemmayze

However, on the other side this new image of Beirut attracted lots of tourists and investors to Lebanon; it helped turn its economy. New waterfronts were built and new central business district and commercial environments were added. Effort was made to protect and restore ancient ruins and restored monumental buildings.

Sadly, the current image of Beirut has become that of fancy buildings and luxurious hotel overlooking the sea. Little by little, the historic character is beginning to fade and if the person visiting Beirut needs to hunt down its historical buildings and traditional houses.

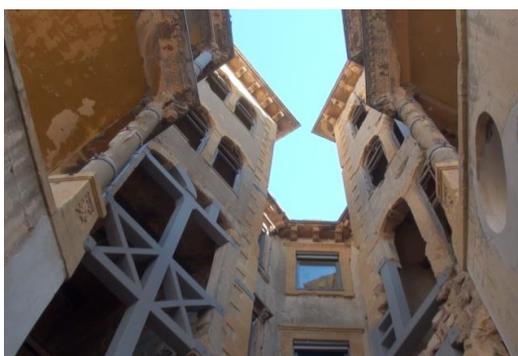


4.8.5.3.3. *Beit Beirut as the only War Memorial*



Map of Beirut, Lebanon, 2017

A quarter of a century after the war's end, Beirut did not construct any war memorial or commemorative site. To date, the only building that can be considered as a memorial site is that of Beit Beirut.



Beit Beirut War Museum

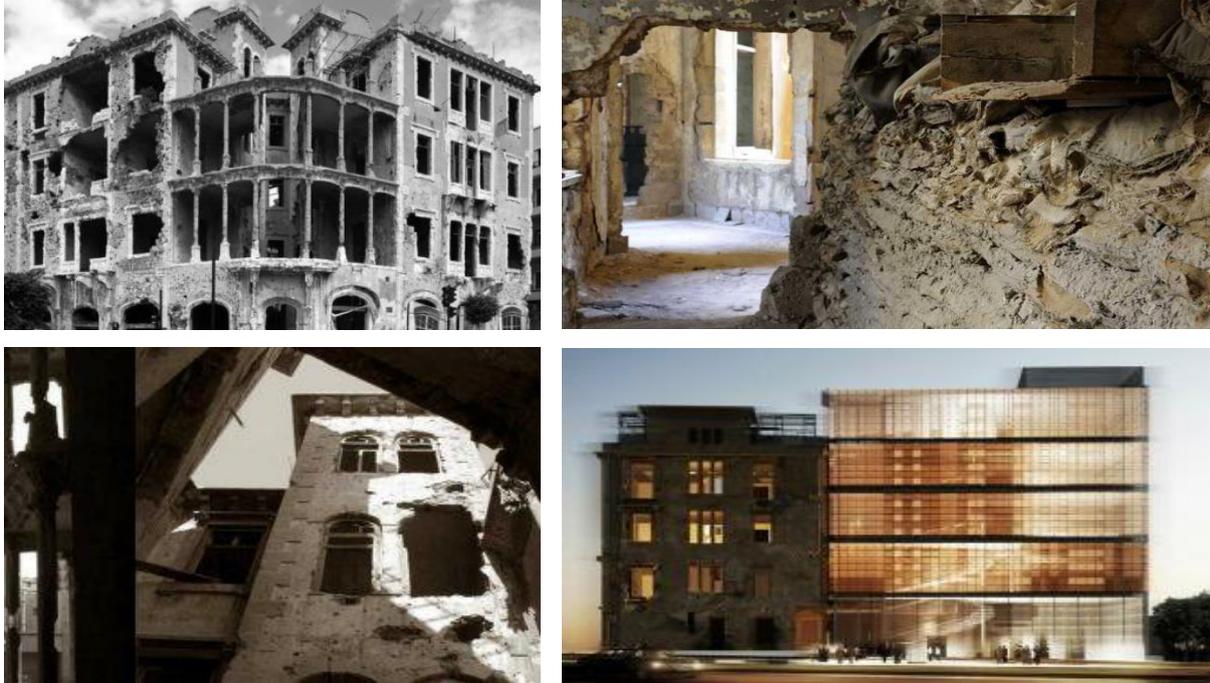


Ex-nest of snipers, future place of memory

Beit Beirut, which is literally translated as the house of Beirut, stands now as the defiant of time. Today the building stands as a combination of both “domestic architecture” and “war architecture”. The walls of the building were left as they are with all the scars of the snipers.

The main addition was the new glass enclosed building that replaced the interior courtyard and raised one floor above Beit Beirut. A ramp with an open center runs around its interior,

linking the two original structures from behind and offering views from the top floor down to the basement auditorium. In addition to the memorial and museum of the city, Beit Beirut houses an urban observatory, an archive center, research offices, a rooftop restaurant, and an 850-square-meter exhibition and event space.



Images of Beit Beirut War Museum

4.8.5.4. *The Re-Use Process*

But where does the building's meaning truly stand? Is it in the decay or its history or in the patina engraved on the building? Without the analysis of the photographic, geometrical and decay phenomena the conservator is not capable of truly understanding the meaning behind the building and the story that it hides. After being able to complete this task, the reuse of the building becomes the main issue, without forgetting that it is a critical activity needed to be considered the deepest knowledge of the existing dimensions of the individual and the collective well-being. As far as reuse is concerned, it is very important to create hospitable spaces that are safe for people that are going to use it and to be aware of the function that is going to be introduced in the building site.

Therefore, looking at references and collecting case studies helps in the analytical process. Also, the S.W.O.T. Analysis helps in understanding the **strengths**, **weaknesses**, **opportunities** and **threats** that the building presents. After proceeding with the analysis, the people involved must be able to figure out the right way to develop the concept of the new project. The main questions to ask are: Who is the target? Who are the users? What activity must be introduced to the building?

5. THE EGG AS AN IMPORTANT WAR REMNANT

The Egg has always been a source of curiosity for the people of Beirut, this domed mass of concrete and steel in the center of Beirut has oddly been in the memory of various Lebanese generations. Today, the egg has become one of the pillars of the city; it is the relic of the atrocities of the Civil War and a window towards a modernized Beirut. This chapter will discuss the architect's intentions from building this complex and how it became influential both during and after the war. It also lists the attempted interventions on the Egg during the years, its risk of demolition, and the social media influence on decision making, "Save the Egg" campaign, which encouraged the public to have a say about the fate of the Egg.





5.1. The Origin

5.1.1. The Architect

The Egg was built in 1965 by the modernist architect Joseph Philippe Karam, as part of a large complex known as the Beirut City Center.



Joseph Philippe Karam

Karam was born on 1923 as the fourth child to a family of a public worker and a homemaker from the Southeast Village in Beirut. He attended the primary and secondary Christian-Maronite school of Jesuit College Notre Dame de Jamhour in Beiteddine. Karam graduated with diplomas in Mathematics and Engineering-Architecture in 1946 from the University of Saint Joseph “Ecole Française d’Ingenieurs et d’Architectes”. In 1951, he married Mona George Hayek, a law school graduate. Karam had a passion for modern architecture and was very dedicated to his work and projects.

In 1920, after World War I and the retreat of the Ottoman Empire, the land referred to today as Lebanon was set under French mandate by the League of Nations, and the proclamation of “Le Grand Liban” was announced. The impact of French culture and language had a considerable influence on the people of Lebanon. Numerous Lebanese Christians had taken to giving their children French names and to sending them to French religious schools.

Thus with the Karam family, the young Joseph, child of Philippe, was educated at Beirut’s French Jesuit school. This openness to Europe drove numerous Lebanese of Karam’s age to embrace the modernist movement in culture, in science and education, in art, and in architecture. Many of Karam’s buildings today are destroyed due to the war that lasted more than 15 years. And the ones that remained are being demolished by the government to make place for the high rise buildings.

The architect died at the age of 53 from a cardiac arrest in Larnaca, Cyprus. Today his sons pay tribute to him by showcasing to the public many of their father’s projects.



Kandara Hotel, Jaddah by Joseph Karam



Life Sciences Campus, Tripoli Lebanon



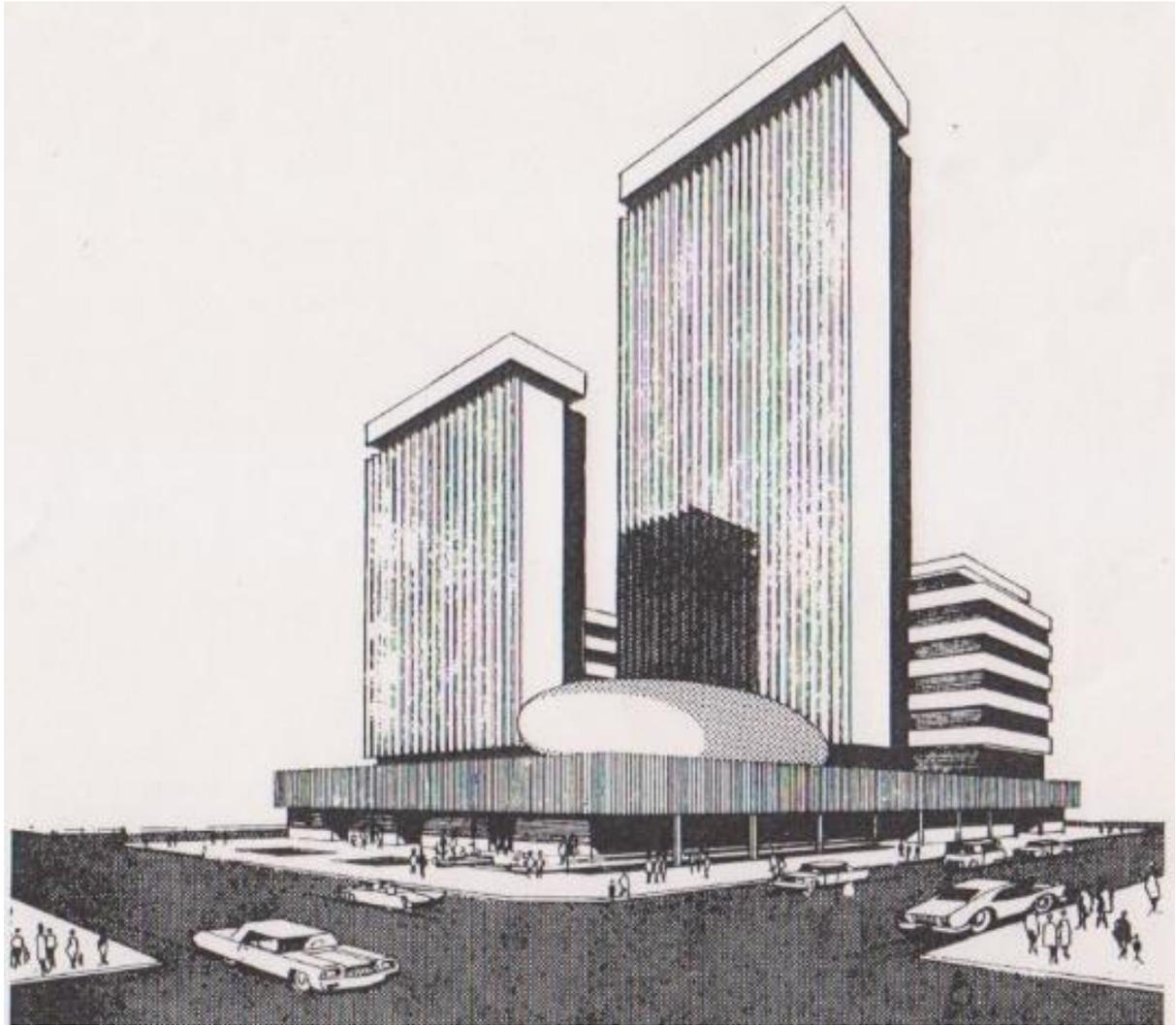
Ministry of Defense, Lebanon

5.1.2. The Project

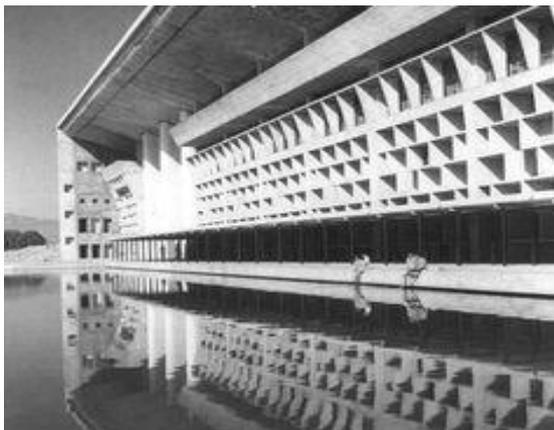
5.1.2.1. Architectural Influence

The Beirut City Center, which is a project designed by the architect himself in 1965, was intended at the time to be the largest multi-use complex in the Middle East, with its Egg-shaped shell housing a cinema and two towers.

Karam was majorly inspired by foreign architects such as Le Corbusier, Oscar Niemeyer and Kenzo Tange. This is clearly shown in the picture to the left which resembles greatly the projects designed during the modern movement.



The Beirut City Center Complex by Joseph Philippe Karam 1965



Chandigarh, Le Corbusier 1964

The Lebanese Modernist era was highlighted by the use of concrete, which made a revolution in architecture and pushed architects towards new boundaries. **Brutalism**, as Le Corbusier considered it, was the word used at that time in order to identify the emerging style of these buildings made of repeated modular elements.

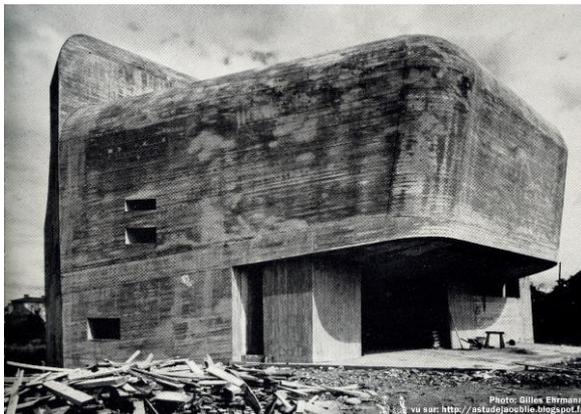


Congress Building, Oscar Niemeyer 1960

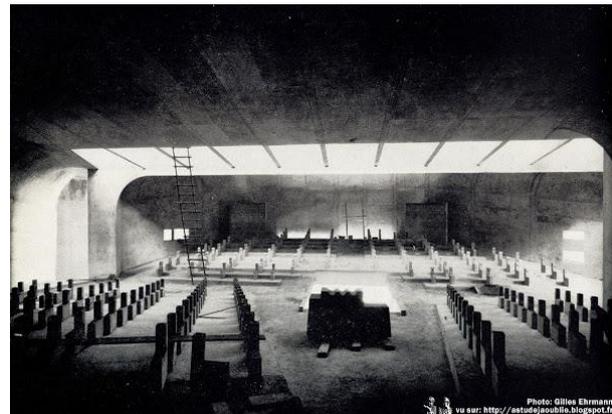


Hiroshima Peace Center Complex, Kenzo Tange 1953

Many architects considered the Egg to resemble the church of Sainte Bernadette of Banlay in France commissioned by the architect Claude Parent. The church was designed from 1963 till 1966, and constructed in 1968. The shape of the building is inspired by shelters since the place around it is allegedly where holy spirits appeared. The material is pure concrete which used to be excessively used during the 20th century. This church survived the Second World War and the nuclear threat. It represents a dark period that France went through, that is what made it monumental and meaningful to people. Today, the church is still standing and its oblique and dynamic geometry has become a research object for many designers.



Église Sainte-Bernadette du Banlay



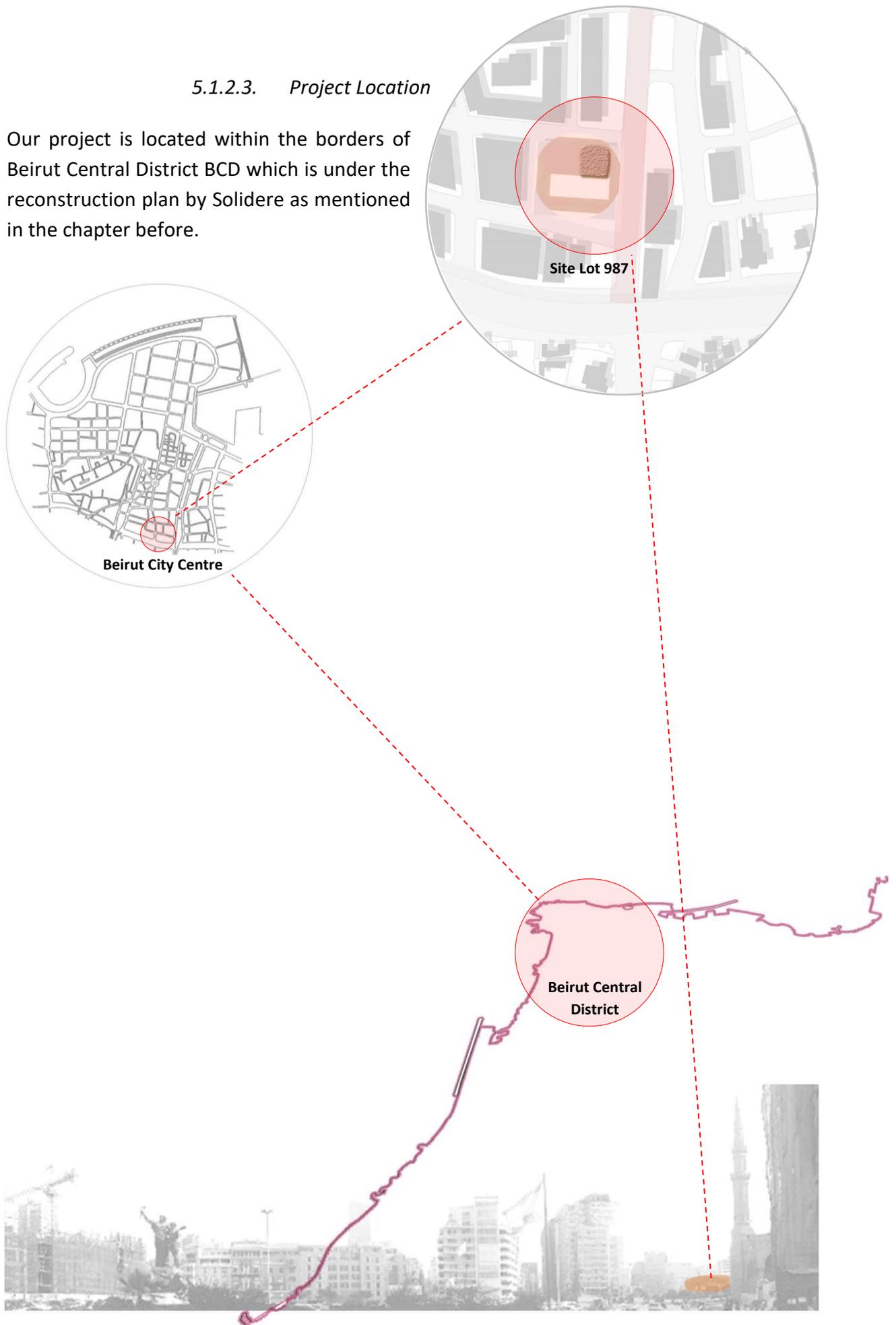
Église Sainte-Bernadette du Banlay

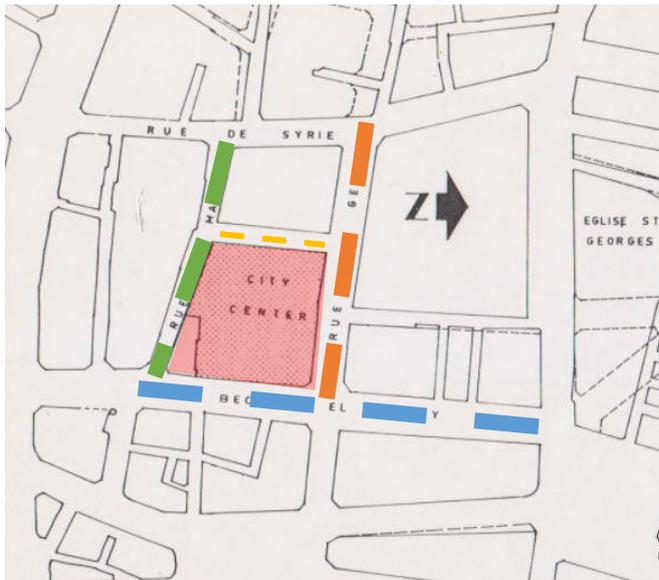
5.1.2.2. *The Beirut City Center During the Civil War*

When the civil war started in 1975, the Complex was supposed to be the center for the gathering of the people of Beirut to attend as spectators, instead the building became the spectator itself of the war. The City Center was then transformed into an asset that continuously changed its role according to the changing theatrics of the city. Only one tower was constructed from the whole complex, but during the years of war the Egg and the large void for the underground parking remained as fragments of Karam's original plan for the Beirut City Center, the separating element between the bombings of West Beirut and East Beirut.

5.1.2.3. Project Location

Our project is located within the borders of Beirut Central District BCD which is under the reconstruction plan by Solidere as mentioned in the chapter before.

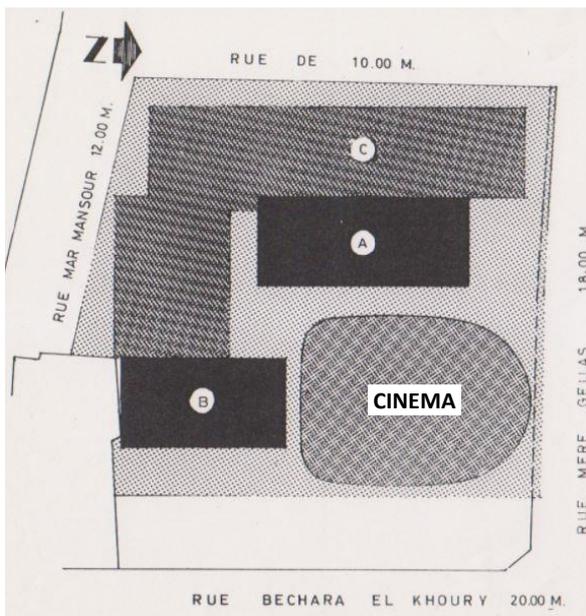




The Beirut City Center is located on the intersection of Bechara Khoury Road and Mere Gelas Road and Saint Vincent Road. Therefore, the complex is accessible from three main roads and a secondary road of 10 meters' width called Central.

- — — — — Bechara Khoury Road
- — — — — Mere Gelas
- — — — — Saint Vincent Road
- - - - - Central Road

5.1.2.4. Original Composition



The center was supposed to be composed by four main blocks

Block A

19 stories of commercial offices.
The upper floors are overlooking Beirut.

Block B

12 stories of commercial offices.

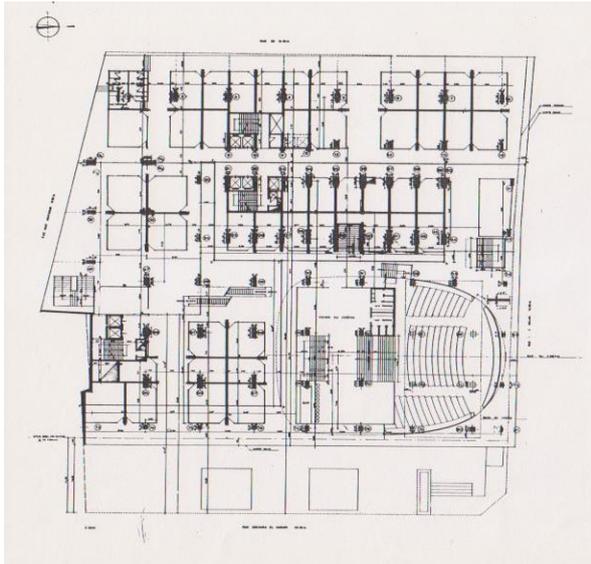
Block C

- 8 stories of commercial offices.
- Shops.

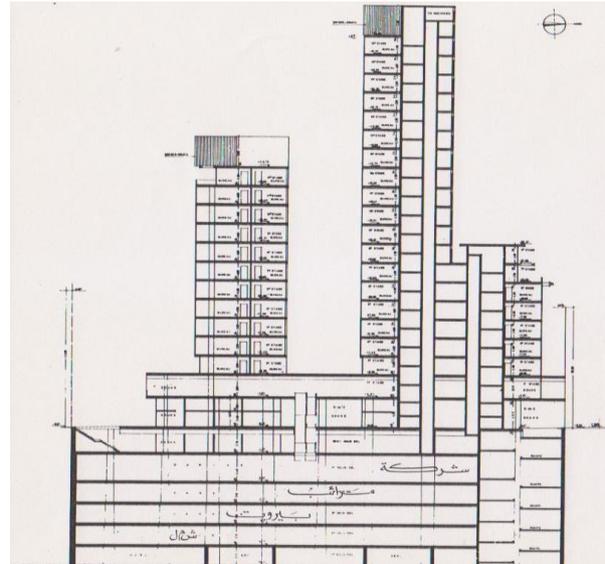
Cinema "the Egg"

Amphitheater of 900 seats.

The Cinema hall is located inside the dome of 24 meters' width and 11 meters' height made with basic construction materials and without any floor tiles. It has also a big area on ground floor used for events and spectacles with 6 basements of parking.



Second floor plan of the Complex



Section of the Complex

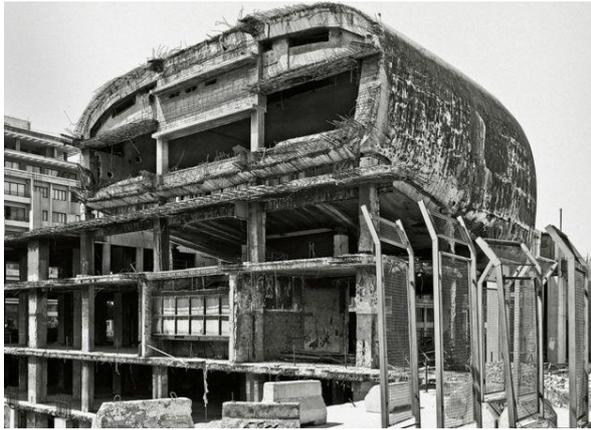
The architect wanted to use the space under the theater at that time, and convinced the authorities that there was no law forbidding him from doing so. After elevating the theatre and creating a retail space underneath, he had to design the cinema in a distinguished shape since it became visible to the public eye. That is why so many architects and critics today find that the shape of the cinema has no great value. However, it is important to acknowledge that in Beirut there aren't so many free shape buildings and that is one of the reasons which make it more appealing.

5.1.2.5. *Construction of the Egg*



Column inside the Egg

It was hard to construct the Egg at that time because of the lack of experience of dealing with strange shapes in the construction field. A massive amount of concrete was used to hold the structure of both the Egg and the two towers. The Egg is not supported by a direct platform; the columns attached to the bottom of the Egg structure are not stiff thus allowing it to perform a movement of minimum measurement. This is due to the use of rubber structure attaching the column to the Egg. Therefore, it avoided the appearance of cracks all over the building once it settled. The walls of the Egg are separated by a gap where all types of technical systems are installed. This void between the walls is also a useful method that helps in supporting the function of the shell and insures its acoustic control.



A view of Beirut City Center from the outside



Picture showing in between the walls of the egg

5.1.2.6. The Importance of the Beirut City Center

The Egg as a Monument

During the fifteen-year period of the civil war the Complex was used as a bunker, and later on, since the post-war reconstruction period, the building became a monument in the city. The architectural importance of the Egg lies in its avant-garde Lebanese modernism, the unusual design with its curved roof still inspires artists today. It holds a great meaning in the fact that it reminds the people of Beirut of their past and holds a deep emotional value. This building reflects the time of the Golden Age of Beirut.

The Golden Age of Cinema

The Egg was also considered monumental because it belonged to and reminded people of the Golden age of the Lebanese film industry. Before the war, starting from the French mandate (1920-1943), the concept of movie and cinema flourished because it represented the image of unity and diversity. Therefore, cinemas became the gathering place for the city and a preferred activity for people of all classes. In the mid-1950s, many theatres were built such as ***Empire, Majestic*** and ***Roxy*** that used to be bursting with people of all ages. The cinemas were also the meeting places for different political parties. Here lies the irony; although nothing was predictable at that time, with 18 religions preparing for the big war, the place that once joined the nation was used as a tool for its destruction and several basements of the greatest theatres across Beirut were used to store weapons and ammunition.



Old Cinema in Beirut



The Egg Beirut

5.2. War Damage and Subsequent Projects

5.2.1. The Situation after the Civil War

5.2.1.1. *The 1990 Egg*

After the fifteen years long civil war, most of Beirut was destroyed and left in ruins. The City Center which was the separating building between West Beirut and East Beirut was then abandoned. The unfinished complex of one tower was in use only for a few years after its opening, but the fact that it withstood all the bombings made it valuable and enabled it to become one of Beirut's many monuments.



The attack on the Egg during the time of the war



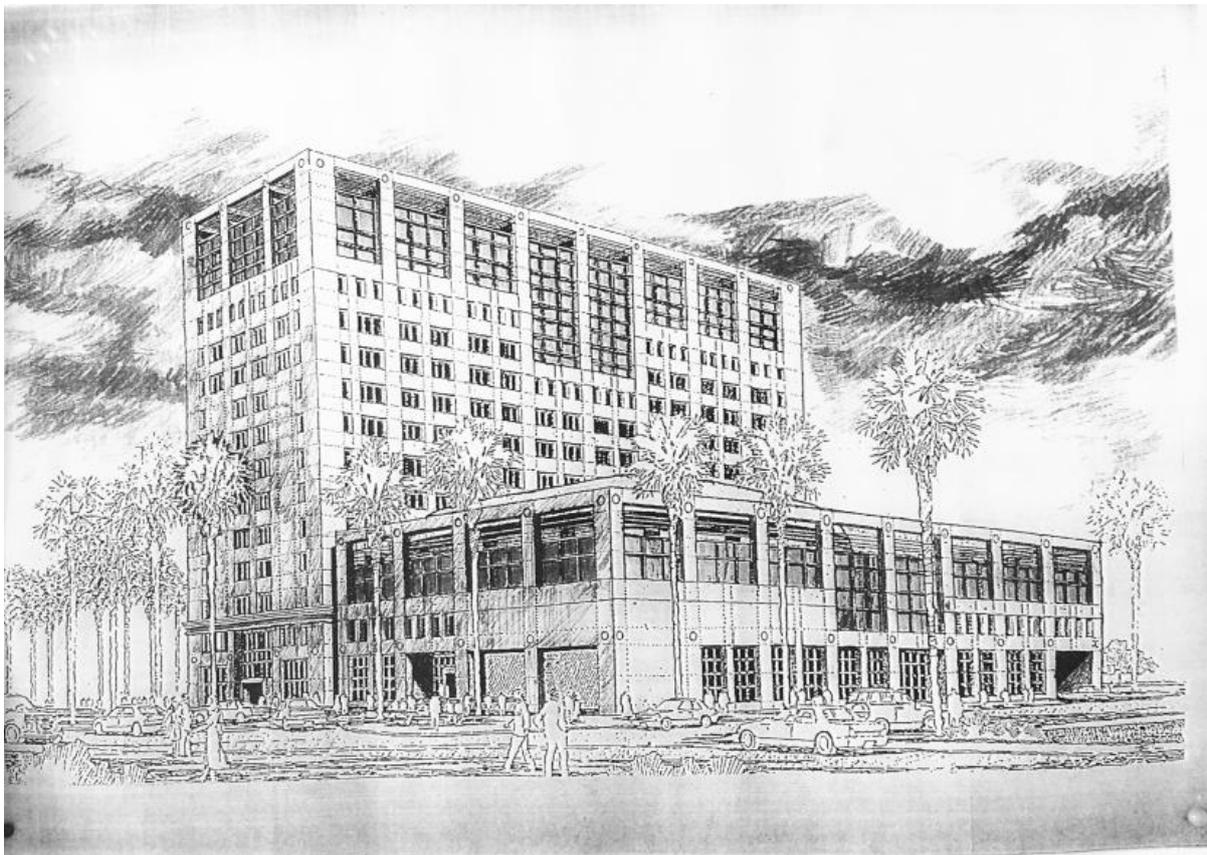
Pictures taken of the complex after the war

5.2.1.2. *The Egg Controversy*

The Beirut City Center after the war was in horrific condition; the last three underground floors of the complex were filled with water. The nearby water reservoir was previously used for fire emergencies by the local fire station. The water pumps of the reservoir were out of order during the civil war; this led to the overflow of water to these floors. When the war broke out, no one anticipated that it would last for 15 years, people made use of the underground parking floors to protect their cars from destruction. After the end of the war, the cars were perfectly preserved under the water, yet with their immediate exposure to air they converted to rust. The reconstruction of Beirut had a powerful political impact but a weak architectural one. Various attempts were made and different projects were proposed for the Egg, yet none have managed to see the light.

5.2.1.2.1. *First Attempt*

In 1994, Solidere was assigned to build the Ministry of Finance on the lot. Several proposals were anticipated until one design was finally chosen. The proposal was done by the local architectural firm MMAP, their plan was to cut the Egg from one side in order to integrate it within the new project, and to destroy the existing tower to make room for a larger one. Therefore, six underground levels had to be excavated in order to build new foundations and protect the old ones. Since the Ministry of Culture forbids the destruction of the Egg, MMAP planned to restore the structure and integrate it within the building. The proposal did not highlight the presence of the Egg; on the contrary, it hid it behind the new architectural skin of the building.

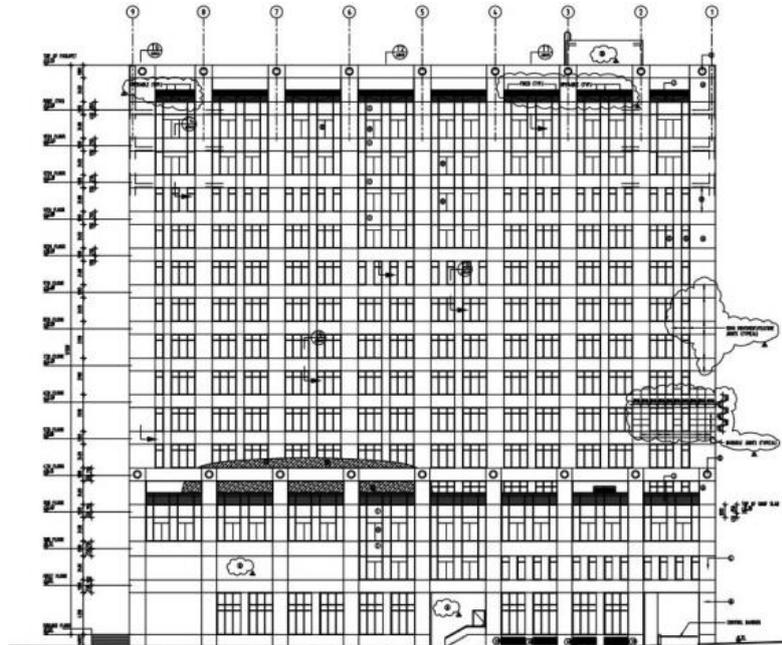


Works on the Ministry of Finance was originally intended to be initiated in 1998, the early stages of the construction included removing water from the basement levels, excavation and cutting of the Egg from one side.

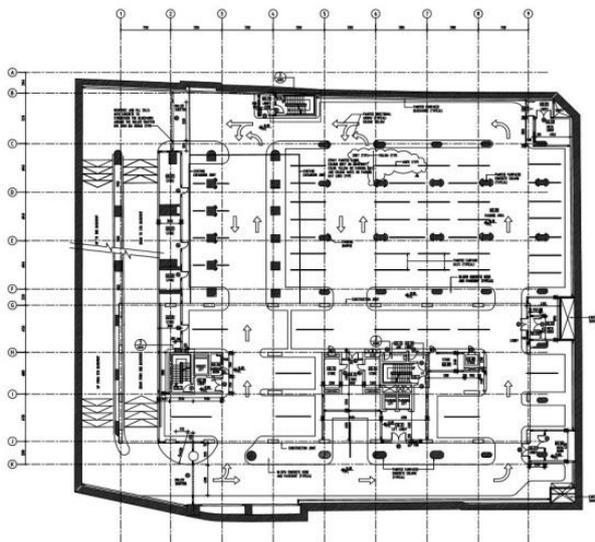
Even though the basements were filled with water, the original foundations of the underground floors were still in appropriate condition because the structure of the 1970 was greatly reinforced in order to withstand the load of two large towers. However, the columns present in the ground floor and in the two upper floors are severely damaged due to the bombing and destructive acts.

The new center was said to consist of :

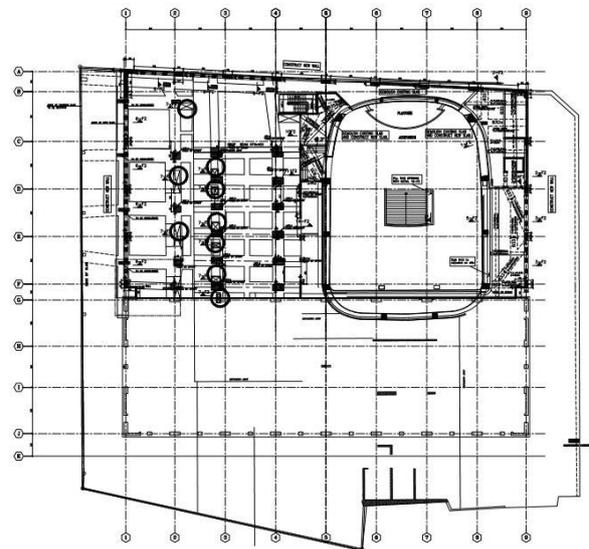
- A tower of 15 stories.
- An amphitheatre (The Egg).
- Customer Service Hall on the ground floor.
- An Underground Parking Area.



North Elevation of the complex



Basement Plan of the complex



First Floor Plan of the complex

Later, work was stopped on the project, and the land was sold to a foreign investor. At the time, excavation works for the tower were already in progress and when the project was sold; all works were forced to be halted. The building was thus under the danger of collapse due to this gap.

Permission was granted to MMAP to strengthen the structure and to reinforce the retaining walls. As for the structural elements holding the Egg, the once free-standing form was rigidified to avoid any catastrophe in the future.



Demolition of the Tower



Excavation on Site

5.2.1.2.2. Second attempt

In 2004, the new owners of the site contacted Bernard Khoury, a famous architect in Lebanon, and asked him to propose a design for the Egg. For Khoury, the Egg is not significant for its shape but for the meaning it holds.

"The Egg represented a kind of deformity in the landscape, a shameful trace of war, a parasite in the visual postcard that Solidere had attempted to reconstruct."

The architect proposed 2 projects:

- Covering the Egg with a metallic structure that symbolizes war and violence.
- 2-Enhancing the Egg with a huge number of mosaic mirrors on its surface, in order to reflect the landscape surrounding it, to reflect and to allow the engagement of the building with the surrounding urban fabric.

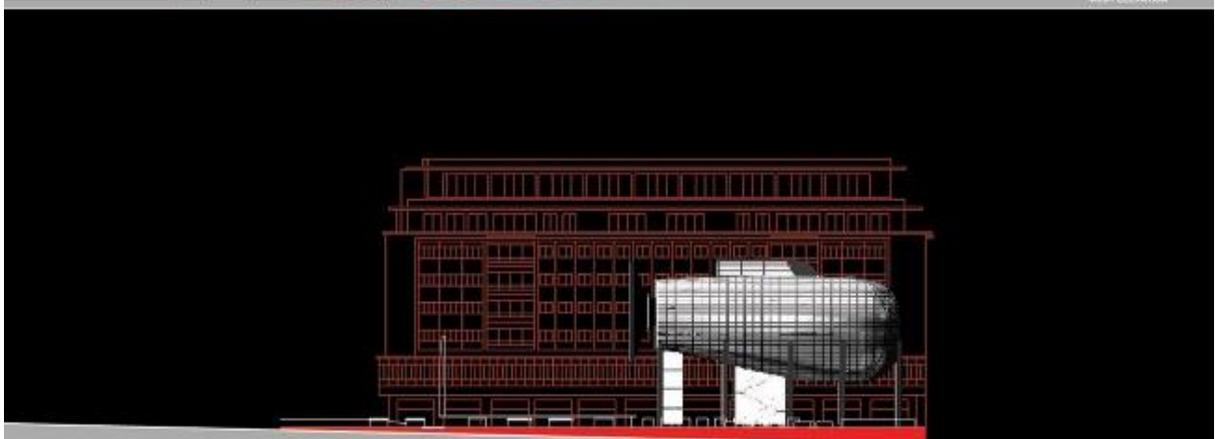
Design Strategies:

- Demolition will be carried out for the first and the second floor to clear the platform on which the theatre stands.
- Excavation will be made to allow the penetration of light to the underground floors.
- Mirror covers will be introduced for the façade of the outer shell.
- A Screen will be placed on the Southern façade of the theatre shell that will project cyber interface of the new city center.
- The shell will feature new types of exhibitions, performances, concerts and interactive events.

In the following a photo collage of the city *with the proposed project B.C.D. by Bernard Khoury in 2004 in addition to some views of the project.*







The construction of this project was scheduled for initiation at the beginning of 2005, but it was interrupted by the assassination of the prime minister Rafic Hariri on February 14 of the same year. This event led to the political unrest and Martyr's Square was constantly filled with protestors, demanding the withdrawal of Syrian forces from Lebanon. This was the primary reason for the suspension of the project.

Beirut for Khoury

Just like most Lebanese who witnessed the civil war, Marie-Louise Ramy, a Lebanese who lived through the civil war, explained what she remembers: “-When we came down from the mountains to Beirut, the whole of Beirut used to look like the Egg now, so the structure acts as a reminder”.

According to Khoury, Solidere succeeded in holding the archeological excavations, especially those of the Ottoman Empire and French Mandate, but failed in preserving the modern, avant-garde architecture, that paints the story of the invaders that once came to this country. This approach towards modern architecture preservation is due to people's preference to avoid problematic, recent history that we seek to sterilize. Khoury added that the Lebanese people are still living in amnesia; for him the best way to forget the past is to forget what represents the true Lebanese identity.

5.2.1.2.3. Third attempt

After freezing the work on the plot originally worth 40 million dollars, Solidere sold the City Center complex along with seven other plots to the Abu Dhabi Investment House (ADIH). In 2009, the Olayan family of Saudi Arabian origins and its partner Mandarin Oriental Group gained ownership of the land. The French architect, Christian de Portzamparc, was assigned to design this complex. He decided to transform the complex into a hotel of 275 rooms and transform the Egg to either a restaurant or a performance space. The whole complex would have the material influence of the neighboring mosque.





5.2.2. Current Situation



George Daou- Apocalyptic Scenes: The Egg as a catastrophic organism invading the city



Hatty Pedder- Luxury and Glam: He portrays the Egg as the city's hotspot.

Until this day, the Egg is still untouched, and the last attempt of intervention dates back to 1998. No one really knows the fate of this complex and evidently, due to external influence, it is unclear what the fate of the Egg will be. After collecting some information from local authorities, no clear answers were given to as whom the current owners are, but what is sure is that it is privately owned by a foreign entity.

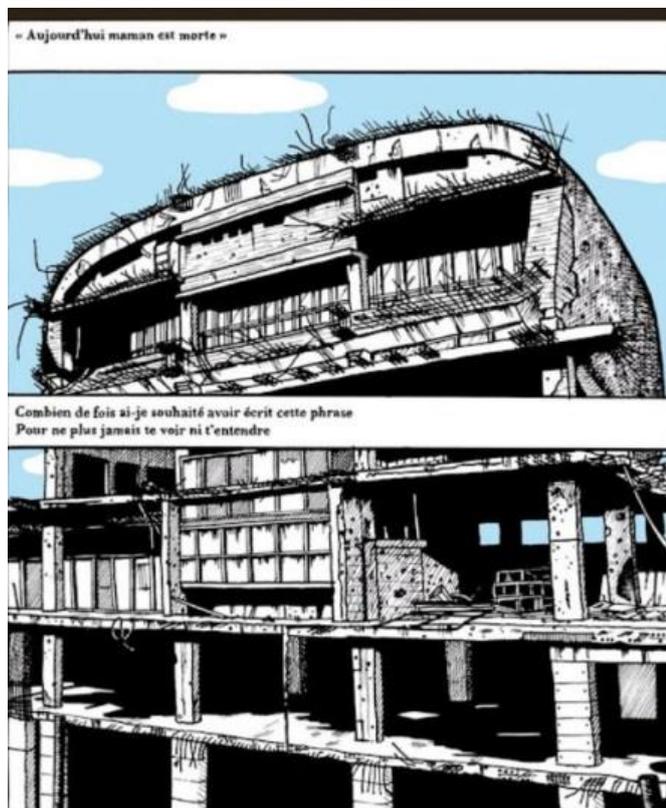
This vagueness of the matter didn't stop Lebanese artists from freely expressing their thoughts about the Egg; it has become the central subject of many artworks such as collages, caricatures, videos, architectural proposals, etc. In the following are some of the major artworks.



Ayman Baalbaki- The Beirut City Center Egg: the artist focuses on the theme of destruction.



Matt Crump- Series Minimal Beirut: the neon Egg stands out.



Mazen Kerbaj: Iconic Comic Style where he points to the phrase: "Mother died today", referring to his frustration with the constant interest in the Egg.



Anthony Saroufim-Massive Camera Obscura: Camera Obscura is a centuries old optical device, through a light from outside the actual scenes happening are reproduced inside.



Caroline Tabet- Beirut's Lost Spaces: Places that are disappearing shown in her series of pictures.

5.3. The Egg, place and identity

5.3.1. Places and Non-Places

When visiting Beirut, the one thing that everybody is shocked about is the amount of cars and chaos that exists in a country this small. The city is growing so fast that the eldest generation finds it hard to have any feeling of belonging to that place.

According to the French Anthropologist Marc Augé these and other similar visible manifestations of globalization can be called “non-places” a concept he first adapted in 1992 in his *“Non-Lieux, Introduction à une anthropologie de la surmodernité”*. Augé writes in his book about super modernity as the opposite side of the coin of which post-modernity shows us only the backside: this is the affirmation of negation. He speaks about major changes in our society, which are the excess of events in time and acceleration of history, overabundance of space and the individualization of references. The direction expressed in these changes, that Augé calls super modernity, has peaked in remarkable physical alterations, including the reproduction of such places which he calls “non-places”. He opposes this to the concept of a sociological “place”, which traditionally has been associated with space and time limited in a specific culture. If a place can be defined as relational, historical and concerned with identity, then it is a “place” and the rest would be “non-places”, such as for example highways, airports and supermarkets.

The World-City and the City-World are in the oppositional relationship just as history and system. Here Augé referred to the Fukuyama’s concept of the end of history: this happens when the system, which is mainly about the combination of the free market economy and representative democracy, predominates on the historical. Even if architecture takes into account historical and geographical conditions, they are rapidly taken over by the patterns of global consumption.



Examples of Non-Places

In his view, a number of great examples of the world architecture seem to be addressed to global society, which, however, does not yet exist. “Architecture relies on the illusion of the ideology of a prison. It has a share of the esthetics of transparency and the reflection of high and distant,” said Augé. The relationship to time expressed in contemporary urban

architecture is in contrast with the one expressed in ruins, which have accumulated large amounts of histories. Thus ruins express 'pure time', which according to Augé is the perception of here and now, but also of something missing, which is the lack of the past.

Progress in technology, materials and techniques has rewarded a faster use and consumption of things, buildings, houses, objects and clothes. It is more expensive to repair a building than to construct a new one.

- Giorgio Agamben talks about tourists and their experience with old places, through their camera. Therefore, the experience of space is destroyed and tourists conceive the place as a museum, they can show ambiguities of Time. One of the experiences is collected through images, one is taken during the travel and others produced after the departure.



- Marc Augé writes in his book about le "Temps en Ruines" (TerraUsurata, 2010), the most significant example is Las Vegas, a place that copies different monuments from all over the world and let them coexist in one place. Mentioning as well Disneyland where false cities and shops become real= non lieux of images that substitutes the images of copies.



Before, tourism was totally different, maybe romantic, certainly aiming to the discovery of oneself. Joachim du Bellay was the first, with his collection of poems titled "Antiquités de Rome" in 1558, to introduce to European culture the so-called "cult of ruins", admiring the greatness of the Roman Empire and moved by a feeling of melancholy for its fall. However, in the eighteenth century a new way of looking at ruins arose and the new sensibility of some élites took shape in the Grand Tour. Authors such as William Hogarth, Edmund Burke, Thomas Whaltely and William Gilpin are representatives of this trend. But one of the major interpreters and promoters of this attitude is Denis Diderot who first presented the landscape of ruins according to not only a moral point of view but also to an aesthetic one: ruins do not exclusively talk about a past time but are offered to people as the projection of their destiny.



Diderot identifies, through the physical and visual perception of a landscape of ruins, a sort of “disorientation”, where time overlaps its different forms, making the author feel like an orphan of his own time, of the present. According to this perspective, ruins are not considered as something that has survived the original work but are perceived in their autonomy, as the result of the passing of time: they are not an architectural fragment but a survival from oblivion.

The perception of a missing “something” between what remains of the past and the current is therefore the real perception of time, of its fragile reality. In this regard, Marc Augé writes about the experience of pure time when contemplating ruins, he considers them as “lost times that art sometimes manages to find” (TerraUsurata, 2010). Ruins function for a collective imagination as memories do for a single individual, buried in the past under further constructions, liable to be recalled to the present through the experience of pure time. Fragments of something that existed before, unconsciously collected but left to the action of nature, come back to the present nullifying and exalting a temporal difference, the pure time which is, was and will be the now.

Art and ruins refer both to a variety of diverse pasts that are recalled as fragments and enigma opened on the verticality of time, intensifying their beauty. If something is missing today it is this beauty, this lost time. As Marc Augé concludes “the conscience of the missing has shifted: it does not concern a lost sense anymore but a sense of finding again.”

If we wish to produce ruins again, to be enchanted and troubled by their experience, we may need to find a new sense, a new future to imagine. If we keep destroying everything, no signs and traces will remain of the lost time, only a short-term memory will exist with the risk of making us forget and lose our past, our collective memory and identity, abandoning our connection to history. The less we are connected to time, the less we experience time, the more we are absorbed by the present, without any “content” and temporal presence.

“Like ruins too, the neighborhoods bear the imprints of a multitude of foretimes, indefinite foretimes that run far off the course of the memories of vigilance. But, unlike the ruins that get caught up by tourism, they escape the present of restoration and dramatization. Maybe they won't be able to escape for a long time. Yet they do involve imagination, as long as they exist, as long as they rouse a sense of anticipation.



Today only catastrophe can produce effects comparable to the slowly marching of time; comparable, but never similar. In fact, the ruin is nothing else but time escaping from history, a conglomeration of nature and culture, losing itself within the past to emerge right within the present, as a sign without a signifier, or, in other words, as a sign without any other signifier than time itself, passing and enduring concurrently (TerraUsurata, 2010).

These non-places that Augé talked about are spaces that have been created for people without any significance. They are places that people tend to stay at while outside their houses. The architect, artist, landscaper should be aware of the space he is creating and to know the importance of respecting the layers that the past has left for us.

Michel de Certeau talked about the negative quality of a place, and the absence of the place from itself. He gave the example of how a person today when describing a place is capable of remembering better the name of the route than knowing necessarily much about the place. Auge adds: 'These names created non-place in the places, they turn them into passages'. This act of giving a name to the place causes the accumulation of places, negation of place. On the other hand, Baudelaire talked about the death of civilizations, the disappearance of landscapes and of the monuments in many cultures and he stated the importance of the coexistence between ancient religion and new industry.

The word non-place refers to two distinct facts: transport-leisure-commerce spaces and to the relation that individuals have with them. Even though these terms are contradictory, they can somehow offer to a certain extent a relation between each other. For example, people travelling make purchases. This link is actually made through words or texts, which mean that a person who has never been to a place is capable of going there with his imagination at the moment he hears its name. A lot of places exist simply through words and therefore they are non-places. In super modernity non-places are experienced in public places such as airports where, through words, instructions can be given to us (turn left, no smoking...) that is the case in which an individual is invited only to interact with a text while moving.



In France, the routes have the capability to remind us of the landscape from an aerial view. The traveler is forced to stop and look over the routes because of the texts planted along the sides; therefore, the viewer is capable of coming back to that place and can become strangely familiar to it over time, just as like rich people get use to the lounges in the airport or the duty free. Before the big intervention done on France thirty years ago the routes and transportation used to enter the suburbs and intimacy of everyday life, the driver uses to pass by someone else's façade while the train used to be more indiscreet, it used to catch on someone sitting in their kitchen, reading a book or watching a movie. Today that is impossible due to the fast speed it goes by. Another example of the invasion by the text is the supermarket, where the customer wonders in silence reading brochures and discounts, even the credit card is capable of handing out information without saying anything which at the same time reminds us of the rules of the game.

Therefore, the person becomes nothing more than a passenger, a customer or driver who surrenders himself with an identity loss and an active pleasure of role playing. He receives the same message as everyone, obeys to the same rules and codes. 'The space of non-places creates neither singular identity nor relation, only solitude and similitude' .

There is no place for **history** unless it is transformed into **words**. They do not work without indications, list of departures and arrival times. Everything works as if there is no history that dates back than the last forty-eight hours of news.

Places and non-places are two different notions, thus the reality of a passenger in transit is very different than a person resident in his own house where no one crosses their space. In the world of super modernity people are always and never at home.

"One day, the need for space makes itself felt... It comes to us without warning. And never goes away. The irresistible wish for space of our own. A mobile space which can take us everywhere. A space where everything is to hand and nothing is lacking... Already, space is inside you... You've never been so firmly on the ground as you are in (the E)space"...

5.3.2. Heritage Conservation Problems

Many countries have gone through the struggle of figuring out what to do with a historical heritage. Some of them have demolished it and others have tried deeply to preserve it. When dealing with the preservation of an architectural heritage, the protection of the physical evidence and the collective memory are considered to be the most important aspects in the process. Nevertheless, considering the safety, reuse and enhancement in preservation is highly required.

Many countries all over the world started to pay attention to their heritage, knowing that preserving their heritage means to preserve their identity. That is mainly important in the countries that have been under the invasion. The first phase of preservation is accomplished by doing a historical archival research, and that is done by understanding the different periods that the city has been through, what kind of movements and events have passed by that makes the city what it is today. The act of conserving historical buildings dates back to the mid-17th century, where Englishmen constantly collected historic artifacts, leading to their preservation. Later in 1913 historic preservation became part of the English law. It seeks to preserve, conserve and protect buildings, objects, landscapes or other artifacts of historical significance. The preservation of historic places then hit the national scene in 1949 when the US national trust for Historic Preservation developed a specific set of goals for preservation.

The Pennsylvania Station was considered to be one of the most important stations working before the World War I until after the World War II. It reached the point where it hosted more than 100 million passengers connecting different city in the United States. In 1950, a decision called for the demolition of the station and building a new sport complex with offices, stating that the maintenance of the old structure costs a lot. Protestors and especially modern architects rushed to save the ornate building although it was contrary to their own style. Despite all of the controversy, the head house was demolished and people were outraged of the decision that was made, leading to the disappearance of one of the most important monuments of the United States. After that happened, new laws were set in the nation in favor of the preservation of important monuments, leading therefore to the protection of the Grand Central Terminal Station. Today the Penn Station sits under the Madison Square Garden, it lacks charm and has lost its value to people.



former Penn Station in New York
City concourse



Penn Station today with all the new Commercials

5.3.3. The Case of the Egg

5.3.3.1. War and Memory

War is the main cause of cultural heritage loss in the world, it is agreed upon that when losing culture, identity is lost, and thus future generations have no sense of belonging to their country. On the brighter side, when a building survives all the atrocities of war, it is transformed from rubble to ruin and can be therefore aestheticized. This was the case of the Beirut City Center.

After all, the question is whether to forget the past or to remember and embrace it. The answer varies from a person to another depending on their personal experience, their memories of the past and whether they have lived through the war or not. **Historical memory** is the term associated with the people who have experience firsthand the Egg, before the war and during it, allowing their own imagination to be mirrored and represented. **Collective memory** is the agreed upon stories of the past which help a person identify himself in his society and how he/she could act in the future. Here it is possible to mention **cultural memory**

that offers the public a narrative of what happened in the past through documents, texts and images. This narrative wants to fill the needs for a shared history, identity and community.

Reminiscence and Memory of War

Two types of memory are identified : *imagined memory* and *lived memory*. *Lived memory* is the one that relies on experience, past events that have affected us in some way. On the other hand, *imagined memory* is a modern concept that is based on culture and symbols in society. The image of Beirut before the war has become idealized, and that has helped in forgetting the war and the damage it has caused. Therefore, it is inevitable for the citizens of Lebanon to face their past in order to move on and push for a political change in the country.

The still-standing buildings from the civil war defy both the past and the future by refusing to regenerate the past, keeping only the memory of the dead. All wars are fought twice, the first time in the battlefield and the second time in the memory. How we think about civil war shows how we think about race and religion and its history in the Lebanese life. War can sometimes act as a tool for the unification of a community, by portraying the catastrophic situation the country once went through. Therefore, reconstructing bombed building that played a major role during the war could be seen as a worthy effort to establish the principle of Sectarianism.

Selecting what to preserve could influence future generations and become a living proof for the old ones in reminding them the atrocity of their actions.

“Upon seeing an image, memory is made”.



The Egg Beirut, 2017



The start of the Lebanese Civil War in 1975

Between Memory and History

In the case of Lebanon, memory of the people is directly related to the history, because memory is what explains the circumstances of history that could be both objective and subjective. By narrating the history, we choose in the present how the future generations will remember the past. However, not all the memories can be remembered, that is why we organize collective memory purposefully or not. If we want the future to hold all of the memories that should not be forgotten, then we need to clarify the truth. The truth is identified through physical objects, in which people can actually see what the past holds and be able to remember the tragic events that have happened. Here we identify the following words: **war, memory, and memory of war.**

Sites of commemoration in Lebanon hold a memory of the Golden era, those which have been attacked by the war's opposing sides. Understanding the history of the building and its meaning to the people is what makes it suitable for preservation. How have the older generations used this site? Who went there? People of that time often say that crossing that green line during the war was very dangerous, they had to risk their lives every day to either go to the university, to their work or to see their family. The Egg is one of those few places that cannot be identified as part of East Beirut or West Beirut. It used to be a place for all. That is why the building was not destroyed during the war and it was only exposed to snipers unintentionally.



Martyr Square before the civil war, 1970



Martyr Square after the civil war, 1990

Until this day, the Lebanese people do not have an agreed upon written history or documentation of their civil war. Firstly, the different political parties involved in the war provided diverse stories and no details were agreed upon. Secondly, the objective of war being to turn the country's culture into rubble, allowed great powers to narrate history the way they wanted. Politicians and authorities had the power to manipulate events thus influencing the people's views. One of the contributors in reserving the memory is filmmakers and writers who can situate the self and the circumstance as a leftover, a remnant of the civil war. They could manage to place the present as an exposure of self to the past, which could lead to the fact that the past is haunted by the present and not the other way around.

5.3.3.2. Documentaries and their Influence

To begin with, let's start by talking about the role of the cinema throughout the years; movies are a tool that could allow the viewer to passively engage with the story, they have to accept the messages that are projected through the screen. One of the main types of movies that could be presented to the public are the documentaries, and these could easily influence people in a bad way for the accuracy it shows. However, this type could be majorly subjective in what it chooses to display, and that could be only one memory of the event.



Bachir: The Series, a documentary, 2012

5.3.3.3. The Egg as a Remembrance of War

The Egg which used to be a cinema before the war is considered as one of Beirut's lost spaces; unfortunately, it is one of the many abandoned buildings in the city after the war. Until now, it did not share the fate of its predecessors of either being restored or destroyed. Between 1975 and 1990, this complex was used as a battle barricade by militants; this led to the loss of identity and function of the Egg. The Egg, being the cultural monument that it is, can also evoke the memories of violence and tragedy.

Recalling the American Civil War

Another example of places that lost **commemorative value** is that of the Gettysburg Battlefield, this was a turning point in the bloodiest civil war in North America in 1863. After the war, the memorial was seen as a place reflecting the heroic movement and glory of the war, not as a tragedy that left thousands dead. They later described this place as a victorious one, for its contribution in creating a unified nation. The battlefield was seen as a positive place that could teach the future generation about the events that took place and the patriots that fought for national identity. In other cases, places could never be seen for their positivity, this is the case in disasters like mass murder.

Some places could evoke a strong value after witnessing a major event such as the death of important figure in the nation, such as a president or a famous person. One example is that of the commemoration of the 1886 Haymarket riot where police officers died after a bomb exploded within the crowd. The police department decided to build a monument on that site to commemorate the tragedy. This place was sabotaged constantly between 1969 and 1970 which resulted in moving the monument to the police station to avoid further complications.

The 1886 Haymarket riot shows how difficult it is to give value to a place that doesn't have a unified approval of the community. In many cases, this becomes the cause of confrontations and violence, which is not the original purpose of a historical monument.



Original monument seen in the Haymarket square



Drawing of the bomb in Haymarket Riots

5.3.3.4. Beirut's Selective Memory

Beirut doesn't suffer from amnesia, but from selective memory. People remember only what they wanted to and forget only what they wished to forget. In the master plan made by Solidere, Beirut was described as "*Beirut-ancient city for the future*", mainly after finding ruins of Phoenicians and Romans buried underground. Solidere tried to select the memories it wanted the Lebanese to choose. It helped shift the attention of the public from the **French mandate** to **prehistory**, thus making the deletion of the image of the Golden era of Beirut easier. After the war, a number of mansions and villas dating back to the mid-century were erased and the train station which used to link Europe with Istanbul across Syria, Lebanon and Palestine, all the way to Egypt.

5.3.3.5. Beirut Today

During the war, many places of entertainment like the Beirut City Center became places for conflict and struggle, and movies and popcorn were replaced by guns and bullets. Other buildings remain till today merely remnants of war, occupied by trespassers. For example, Al Murr Tower, a 40 story building that was meant to be a house for World Trade Center in 1974 serves as an army post today. Another example is the Holiday Inn which had a short life before being associated with war. To date it has not been decided what to do with the Hotel. A close proximity to the Holiday Inn is another building that is still standing after the war, the Saint Georges Hotel whose owner refused to sell it to Solidere in exchange for stocks. The owner was one of the few in Beirut that did not succumb to Solidere.



The Holiday Inn Hotel, 2017



Al Murr Tower, 2017

The Green Line Today

The green line that used to separate the two halves of Beirut still discreetly lingers to this day. People are somehow still divided and problems of sectarianism occur in all the governmental divisions, “militia power not only practiced ethnic, sectarian and political ‘cleansing’ of territories but also committed ‘memoricide’, the eradication of all memories of coexistence and common interests between Lebanese”.



Saint George Hotel, Beirut, 2017



Holiday Inn Hotel behind the Phoenicia Hotel, 2017

5.3.3.6. Conclusion

If people wish to remember the war, they will agree to the fact that they despise it. The protagonists of the war till this day deny its atrocities, meaning that the war has ended but the battle is still underway. Building a commemorative place for the city means that it should be unprejudiced, showing no sense of belonging to any religious or political side. The only way for the nation to move forward is to realize what the war has done and to learn from the mistakes of our predecessors. For architecture to be a commemorative one, it must encompass the past with a prospective approach. It should be the link between society and its history, without drowning it in the past.

5.4. Social Media Impact

5.4.1. Social Media in the 21st Century

In our modern day world, social media has a great impact on people's lives. Nowadays, there are several social networks and applications available to everyone. It has come a time where a single click of a button can bring together different worlds. Applications such as twitter, Facebook, snapchat and more had become the database for information and an easy tool for sending and receiving messages worldwide.

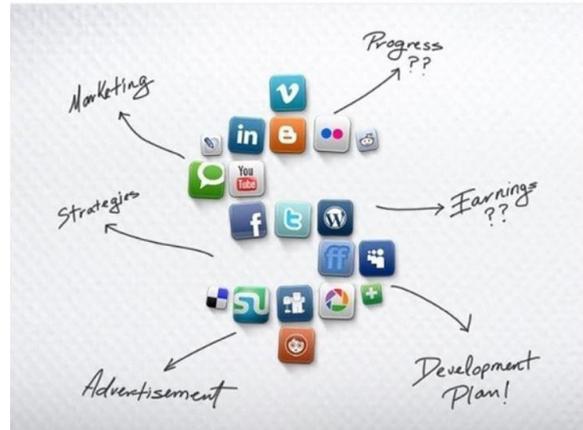
5.4.2. The Role of Social Media

Social Media was not only a way of social interaction; it has helped play part in the world's most recent revolutions. During the Arab spring, for example, social media became the way to deliver accurate information and to show what other means wished to hide. In Lebanon, these online sites became regularly used and highly influential that political and social figures exploited this instrument to get their ideas out to the public. Instead of reading the local newspapers or watching the daily news reports, people have become reliant on social media to get access to national and international updates. Social media is being used in ways that it is able to affect politics, business, education and other fields. For example, most of the Lebanese politicians use twitter as their preferable social communication tool. They believe that it is an effective method to engage with the community, changing the formal way in which politicians and people usually communicate. But with the nation being freely exposed to information and its freedom of expression on social media, will our political leaders be up to the challenge?

For example, almost a quarter of the population today uses Facebook and since this application feeds on interaction between people, it has become widely held and its popularity is growing more every day.



Social media helps people find others who share their similarities, preferences and opinions. However, it is of great concern that people are only sharing their opinions through social media rather than through real contact, or by pressing the "like" button. This is called "slacktivism" in the cyber world and it is the opposite of activism. Studies have shown that people are more likely to show support online and not publicly, since it is costless and doesn't require being exposed. Also, it accepted the participation of all of people, even for those who come from oppressed countries.



In Lebanon, there is one television channel that is owned by the government, all the others are politically affiliated, and political party leaders are an important source of their funding. Therefore, it is hard for people to find a reliable source that broadcasts news in an objective way. Social media has given this community the opportunity to express their views towards political issues, social matters and many others. Another positive face of online networks in the case of Lebanon is that these sites have given the world a look at a country that doesn't revolve solely around war and political unrest, but offered people a view into an open minded society, with a modern lifestyle and great ambition and prosperity. This allowed Lebanon to gain major popularity in the Arab World despite its small population and geographical size.

5.4.3. "Save the Egg" Campaign 2011

5.4.3.1. Campaign Initiatives and Goals

One famous case is that of the "Save the Egg" campaign that showed how the public attention in Beirut was shifted. Back in 2006, Raafat Majzoub, a Lebanese architect, published an article on Yaloubnan.com stating that the egg was going to be demolished and that the land was going to be sold to a foreign company. Majzoub's work revolves around a borderless Arab World and it has taken various forms such as films, videos, interactive performances, public installations and publications. Dania Bdeir was one of the few people who felt the need to raise her voice against this act, so she launched a Facebook group called "Save the Egg", it grew rapidly in just 3 days to reach 2000 members. Later on an organization called indyAct, a league of independent activists who search for groups with certain causes to support them, contacted Bdeir and they decided to work together. She became one of the independent activists of that association. They launched a protest against the demolition; the protest was accompanied by a concert and art exhibition. The artists that were involved exhibited their work related to the Egg inside the building itself.

The “Save the Egg” campaign and its activists felt the need of getting their voice and an opinion out on what Lebanon should look like. This was one of the few standing buildings in Beirut after the war. Most of the civil war generation has a certain attachment to this building; it creates a certain feeling of belonging for them, as well as it acts as a reminder of their youth and the old days of pot-war Beirut. Lebanese strongly believe that the Egg building must continue to withstand the power of time; therefore, it should not be destroyed and preserved for the future generations. People are afraid that Lebanon is reaching a time where it is losing its identity and cultural heritage. This fear, as Dania Bdeir put it, is like having a photo album, where each year you decide to glue a picture over the previous one. You eventually reach a point where you will have only one photo to look at and nothing left from the past. Below is the process that was followed during the campaign:

- Provide an alternative: Bernard Khoury.
- Get political support or visit key individual to support.
- Learn about the process on how to declare a site a cultural heritage (historical protection).
- Meet with Beirut Gate and propose the Bernard Khoury design.
- Try to secure developers for Bernard Khoury plan.
- Continue to raise support for the campaign.
- Strengthen media exposure.
- Events, protests, and actions.

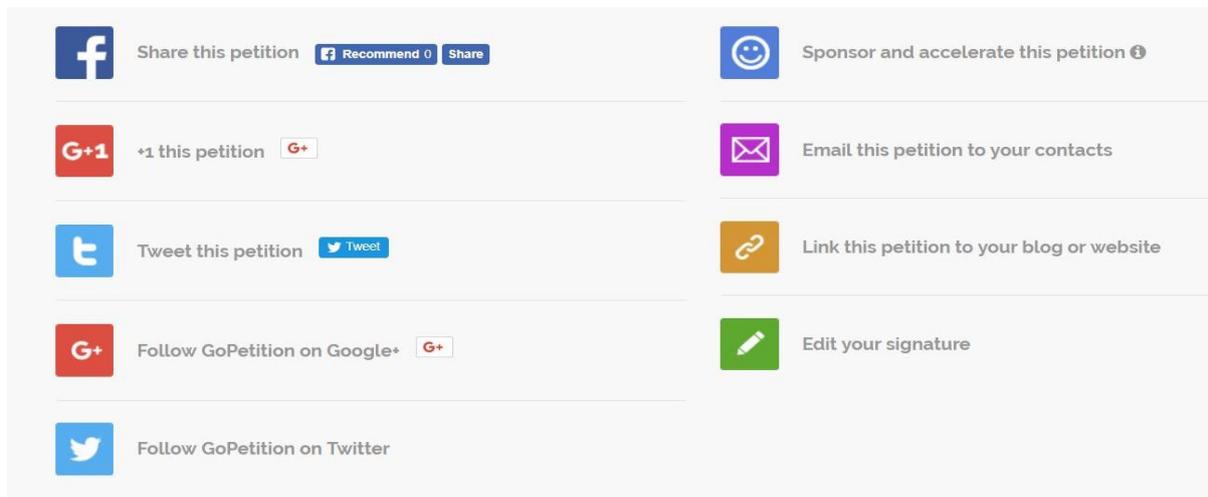
5.4.3.2. Campaign Inscription Procedures

The campaign procedure is as follows: People joining Facebook follow and support “Save the Egg”. The greater the number of followers the more the attention is drawn towards the campaign. Later an online petition on www.gopetition.com/save-the-egg is signed to show immediate support to the cause.

<p>Target: Beirut Gate Project and co. Region: Lebanon Website: www.yalibnan.com</p> <p>The Beirut City Center, by Joseph Phillippe Karam, a prominent modernist Lebanese architect of the 60s, is an egg shaped theater/ cinema in downtown Beirut Its design is a symbol of modern design foresight and a testament to Lebanese talent and architecture. Now, with the Beirut downtown area renovation and reconstruction, this milestone of Lebanese design is on death-row, making space for the new 600 million dollar Beirut Gate project.</p>	<div style="display: flex; justify-content: space-between;"> Sign the petition Sponsor </div> <hr/> <p>Miss</p> <p>Elissa Ibrahim</p> <p>elissa7ibrahim@gmail.com</p> <p>Lebanon</p> <p>Byblos-Jbeil</p> <p>Byblos-Jbeil</p> <p>Edde jbeil main road, industrial zone</p> <p>Zip code or post code</p>
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We, the undersigned, call on ADIH, Solidere, and any architect or investor responsible for the Beirut Gate Project to reconsider the demolition of the Beirut City Center in Downtown Beirut, and rather think about the appropriation of the existing structure (renovation) within an equally satisfying Beirut Gate in terms of culture, economy, and profit.

Above is the petition that the people signed against the demolition of the Egg, it is still active today. As part of our research work and our interest in preserving the Egg, we have also taken part in this campaign by signing its petition.



Once the petition is signed a page is directly open giving the option to share the protest through other social media engines to widen its public and allow others to participate.

Dania Bdeir was personally surprised at the great interest the Lebanese youth had towards this building and the “Save the Egg” campaign.

Contacting Dania Bdeir led to a realization that social media can be a pressuring tool for authorities. At the beginning of her campaign, Bdeir simply wanted to make a change in Lebanon. But in a short time her campaign went viral and people started to express their opinions on the Facebook page to show their frustration with the system that was destroying their visions of the country. They didn’t want Lebanon to turn into another Dubai, a country with no architectural identity, simply composed of numerous empty and lifeless high rise buildings. Just like many Lebanese, the activist, Jack Samaha feared that the country will no longer stay the same, he wrote: “our identity and culture as Lebanese is not for sale to Gulf millionaires”.

"STOP THE DUBAIFICATION OF LEBANON"

In an email with Bdeir, she was able to explain her point of view on the campaign and the reason behind its launch and its outcomes.

"I was passionate about it. I still am and would be devastated to see it go away but I wouldn't say I'm a social media activist. My answers in the doc you linked would be the best answers to your question. I explain there how it started and grew.

It was very organic: one thing lead to another.

This is what's great about social media: people start messaging you about wanting to help. This is how I partnered with Indyact at the time and they had more experience about policy changing and activism.

At some point we met with Bernard Khoury who agreed to propose an alternative design that would keep the egg all the while incorporate a contemporary high rise.

At some point we were also looking into doing an eggzhibition of people's art pieces about the egg. But I was a kid really so I don't know if I would've been able to pull it off without more help.

Anyway, eventually we got news through the pipeline that the Beirut Gate project was cancelled and we were sooo happy. I still until now don't know for sure if my work had anything to stop it. I'm sure eventually money speaks louder than our small Facebook group. But then again maybe we did enough bad publicity for them not to want to be associated with it anymore?

Who knows."

(Dania Bdeir, October



Pictures taken inside the Egg during the exhibition

5.4.3.3. *The Protests*

A representative from the ADIH realized the upcoming riots and decided to personally contact Dania Bdeir with an intention to reassure her that: "Solidere wishes us to keep the soul of this dome by either reshaping it or doing something similar. We took it into consideration and we are considering it, because it also has to financially make sense for us to do it. For this plot, we bought and paid 39000 meters squared of built up area, and the dome is only taking up 6000 or 7000 meters squared. The developer who is going to buy it is looking at it."

Yet again, Lebanese heritage has been turned into a business deal between foreign investors. The once flourishing country with proud cultural heritage has become merely a transaction.

Below are some of the complaints made by people on social media:

- *"I think they should turn it into a theatre/opera house" - SAMER CHAMI (Lebanon)*
- *"It should be turned into an experimental performing arts center for all of the amazing, innovative Lebanese artists working in theater, music, performances art, and dance to work and create." -MICHAEL ZERANG (Chicago, IL)*
- *"they are destroying the Beirut we know" NAJI ESTHER (Lebanon)*
- *"I'll bring my tent and sleeping bags" AMER HNEINI*
- *"WE ARE NOT A MC DONALD NATION" MADELENE KHREICHE*
- *"I'd love to see the Egg being used as a modern museum, with displayed art and a section for entertainment (theater/music/film/etc.)! Involve Lebanese and non-Lebanese architects worldwide on this cause! You will get somewhere, not to forget the media..." JENNIFER MATTA (WASHINGTON, DC)*

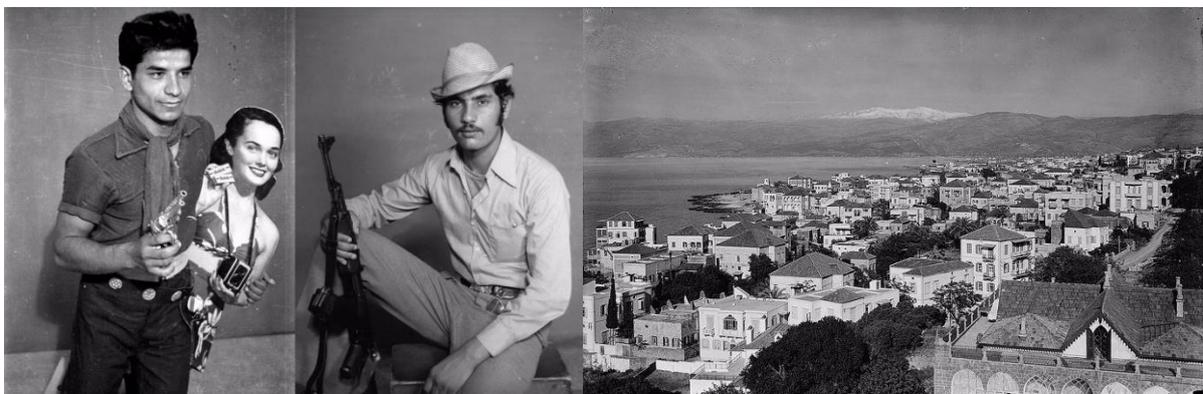
Most of the petitions collected were against the demolition of the Egg, from both people living in Lebanon and abroad. Removing the Egg was like removing people's identity from it. Some considered that this riot is a result of accumulated anger of not only the Egg itself, but also of other projects that have been lost for profit gain. On the other hand, others disagreed with the campaign and wanted Lebanon to become an advanced and modern country. For this section of the community, demolishing the Egg was a step forward towards a new beginning.

- *"Well if we would want to preserve everything that has to do with our memories, we would keep every single building and Lebanon will stay as it is. How do you expect people to invest in our country if you want to keep its old buildings? We have enough memories, cedars, monuments; I think a cinema is not that much of a big issue when it comes to advancing ourselves at the level of other countries. Take a picture next to it if you want a nice memory. We want to move forward, not backward." FOUAD BARDAWIL (AMERICAN UNIVERSITY OF KUWAIT)*
- *"enno sorry although I appreciate its architecture design... its ugly standing there in the middle of a booming city, either reconstruct it or remove it and build something efficient in its place. this building does not represent our culture, it reminds me of war every time I pass by it" - KARIM MKLD (Lebanon)*

5.4.4. Beirut's Broken Egg

Yet again, the Egg had been the central subject of various projects and researches. The building that reflects the image of freedom for the Lebanese people is one of the few remaining assets that have not yet been altered by any foreign country.

Below is one of the projects, *"Beirut's Broken Egg"* that was made by the architecture student Khaled Sedki. His work highlighted the life of Lebanese people during the years prior to the civil war and after its occurrence, whilst including in his project the Egg that is one of the most controversial war remnants in Lebanon.



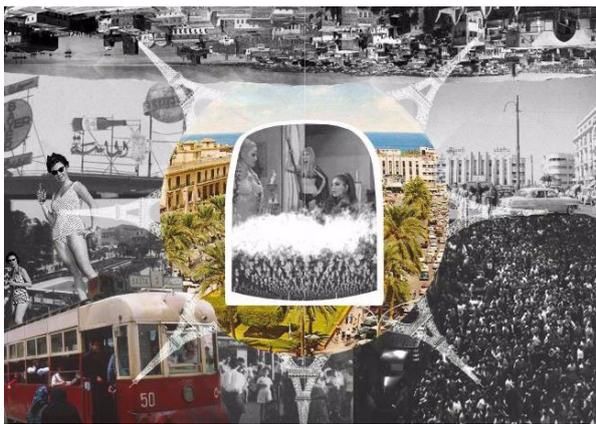
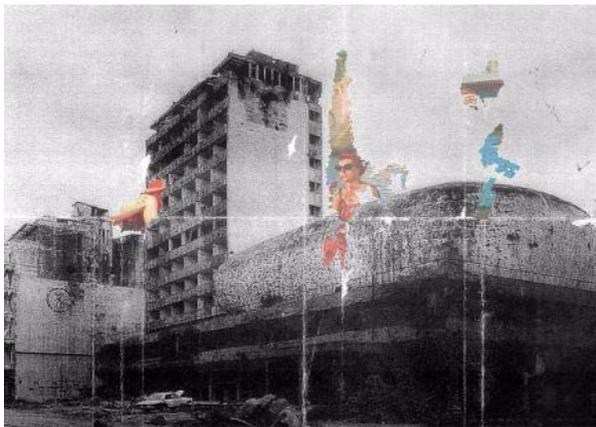
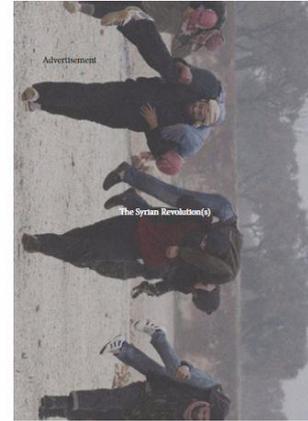
Beirut's Broken Egg

Master Thesis
Khakki Sechi



For Hana, Sara, Sam, Mary, Mary Chabé,
Antony, Saad, Minda and Rada.
For mother and sister.

9



To conclude, we can say that the role of social media no matter how small was effective in the case of the egg. It led to the execution of a decision of permanently safeguarding the egg by the Ministry of culture.



الجمهورية اللبنانية

المديرية العامة للآثار

المدير العام

عدد : ٢٨٦
تاريخ : ٢١ تموز ٢٠١٥

جانب السيدة كوليت قبلان راضي
بالوكالة عن شركة ٩٨٧ الباشورة ش.م.ل

الموضوع : إفادة عن وضعية البناء القائم على العقار رقم ٩٨٧ من منطقة الباشورة العقارية
المرجع : - كتابكم المسجل لدى المديرية العامة للآثار برقم ٢٥٦٣ تاريخ ٢٠١٥/٧/٨
- تقرير المديرية العامة للآثار رقم ٢٥٦٣ تاريخ ٢٠١٥/٧/٢٧

بالإشارة إلى الموضوع والمرجع المبينين أعلاه،
وبنتيجة الكشف الذي قامت به المديرية العامة للآثار على العقار رقم ٩٨٧ من منطقة الباشورة
العقارية،
وحيث انه تبين أن الأجزاء المطلوب هدمها هي الانشاءات الاسمنتية المجاورة للمبنى البيضاوي
الذي تم لحظ الحفاظ عليه ودمجه ضمن البناء الحديث المراد اشادته على العقار المذكور،
لذلك
تبدي المديرية العامة للآثار الموافقة على هدم هذه الانشاءات شرط استيفاء كافة الشروط الفنية
والقانونية اللازمة، لا سيما تلك المتعلقة بسلامة المبنى البيضاوي والحفاظ على اصلته وطابعه
وابرازه ضمن المشروع الحديث ، على ان يتم عرض مشروع البناء والترميم المقترحين على هذا
العقار مسبقا على هذه المديرية العامة لابداء الرأي بهذا الخصوص .

المدير العام للآثار
سركيس الخوري

= I. hay. s.



المديرية العامة للآثار - طريق المتحف - بيروت ، لبنان

فاكس : ٥٩ ٢٢ ٦١ ١ ٩٦١ +

هاتف : ٠٣ ٦٧ ٤٢ ٩٦١ +

A Scan of the original document by the ministry of culture stating that after an inspection done by the "General Directorate of Antiquities" of lot 987, it gave approval to demolish the concrete structure of the complex surrounding the auditorium "the egg" under condition of leaving the "egg" intact while executing the new proposal of this complex. In addition, the new proposal should meet the technical, cultural and legal requirements especially those concerned with the safety of the egg shaped part of the complex.

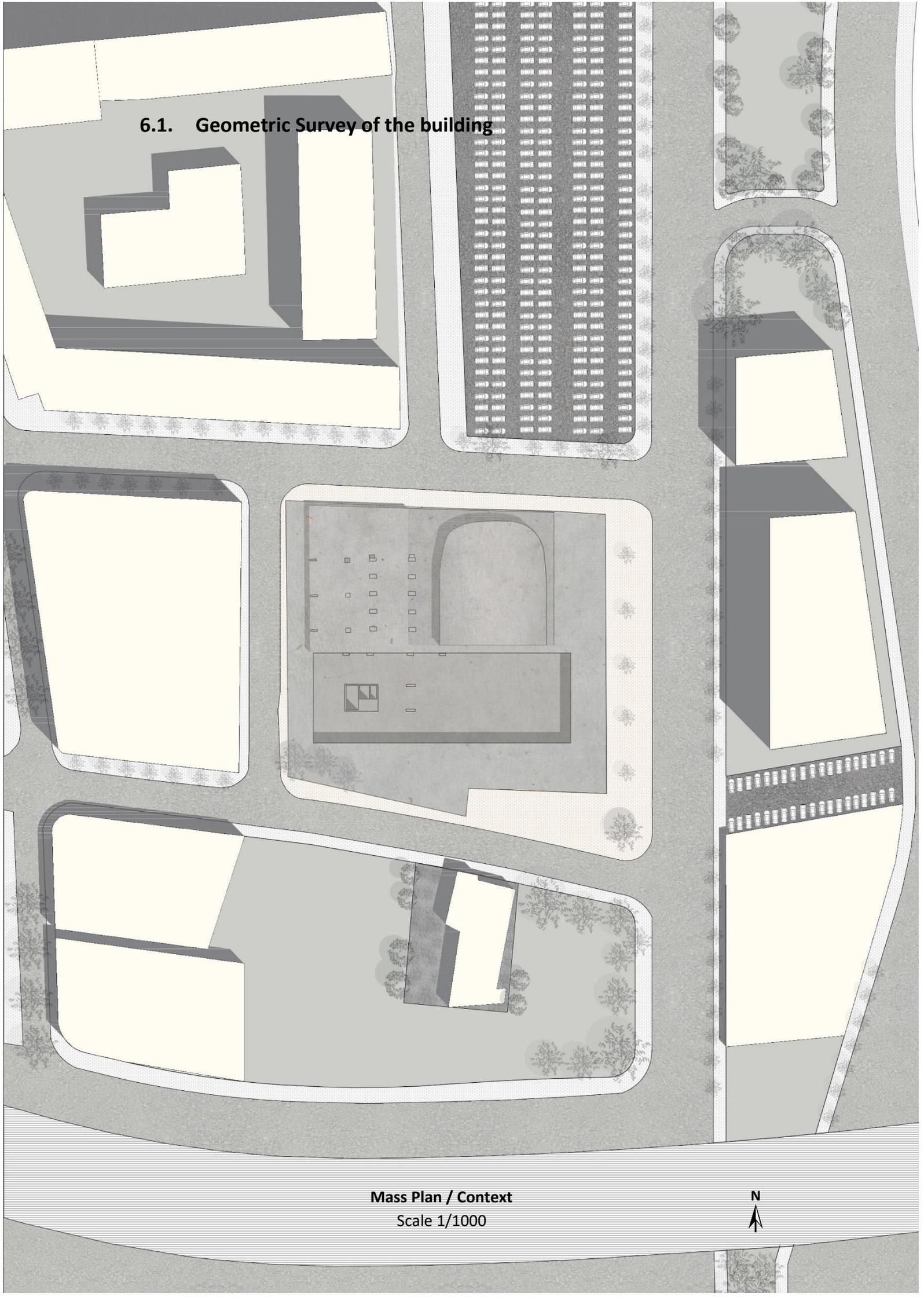
6. PRESERVATION PROJECT

This chapter will illustrate a geometric survey of the building through plans, sections and elevations showing the current geometry of the whole complex. The drawings have been provided beforehand by: The Municipality of Beirut, Malek Mahmassani Architectural Practice and Bernard Khoury / DW5.

In addition, a photographic and a video survey shows the complex' surrounding and includes views from the inside and outside of Beirut City Center as well as recalling Beirut and the "Egg" history. Moreover, elevations, sections and forms will show in details the present decay, cracks and material. All the information above was gathered from various site visits.

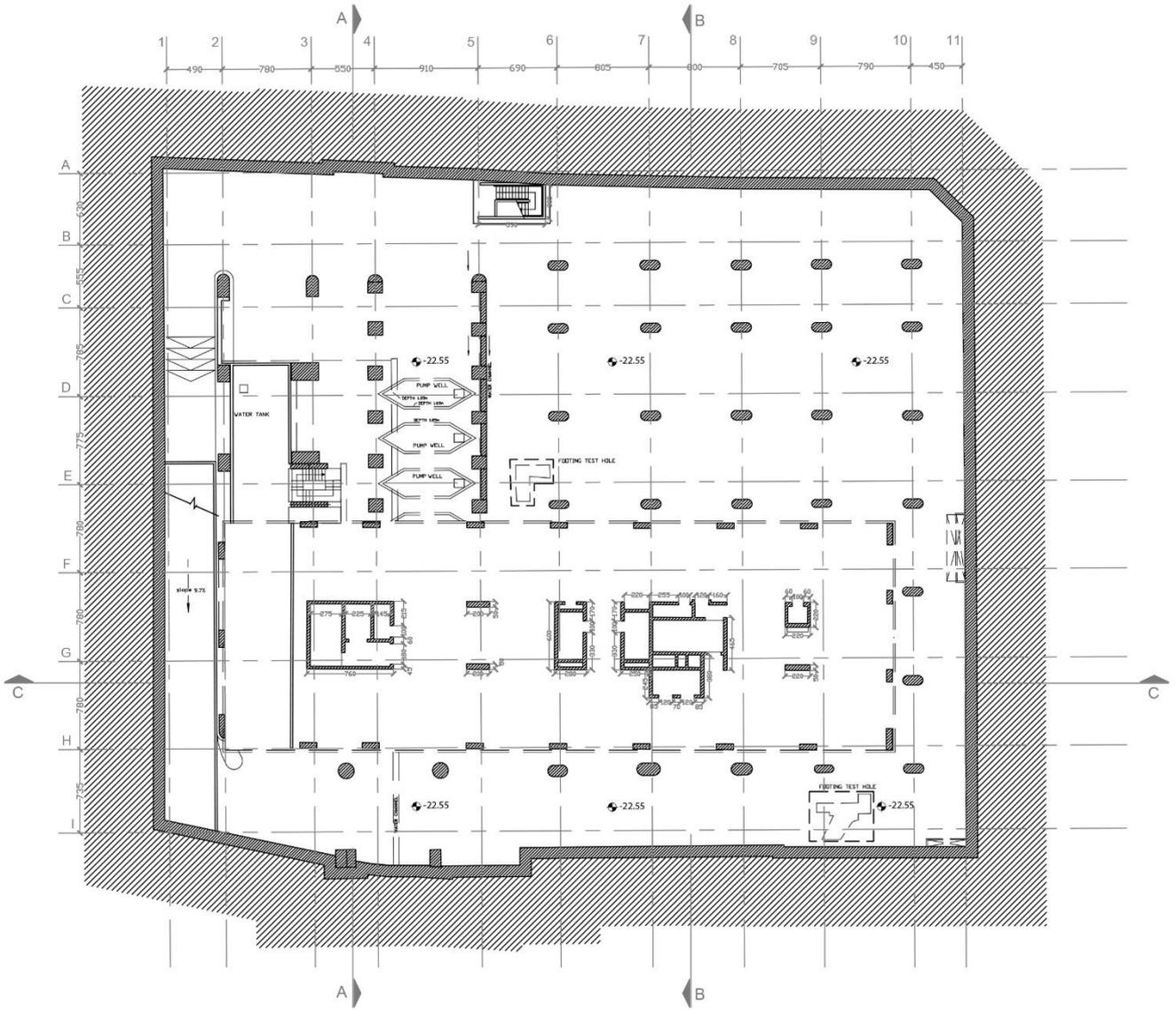
Finally, a conservation proposal will be developed and a new function will be assigned to the complex.

6.1. Geometric Survey of the building



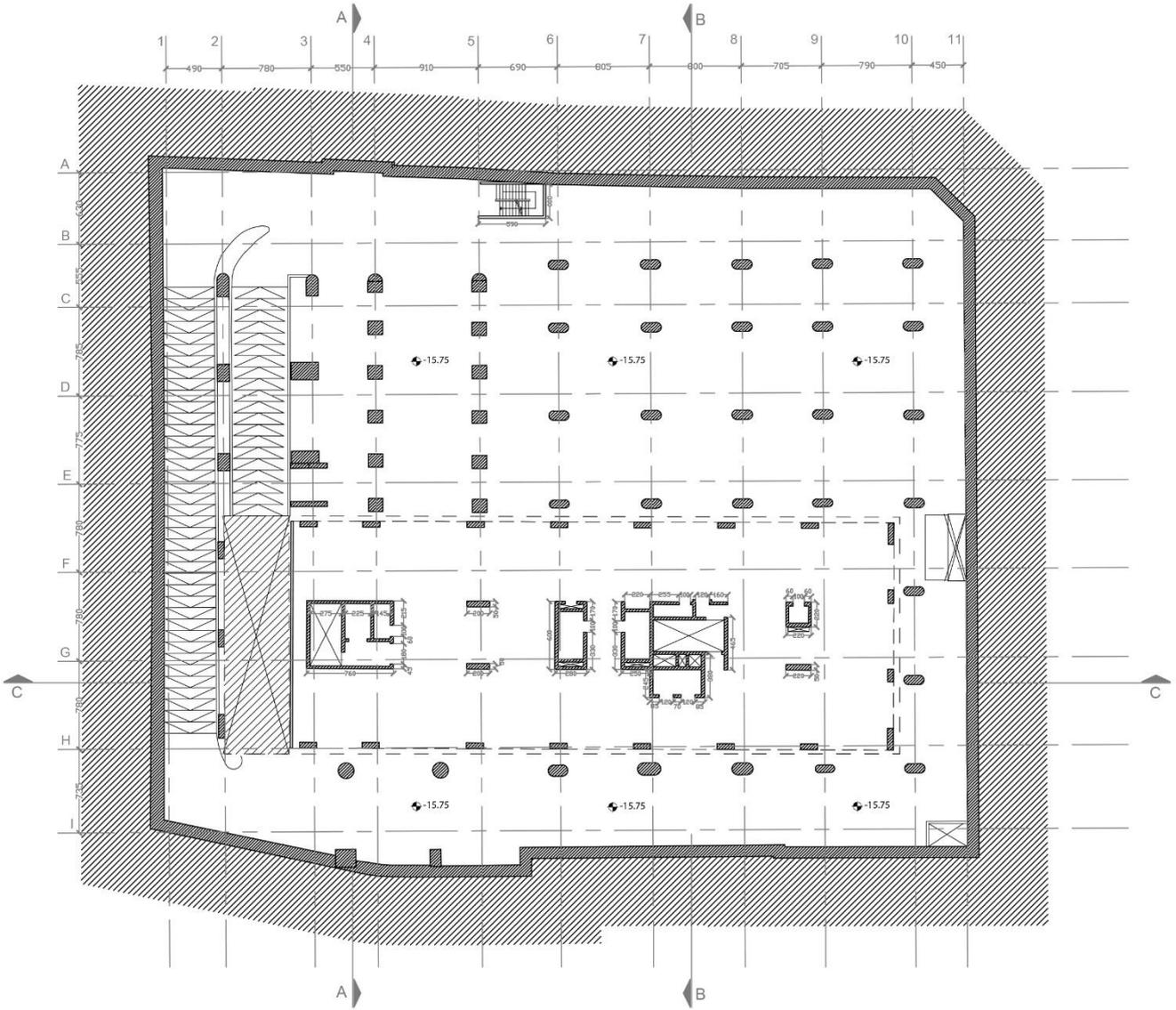
Mass Plan / Context
Scale 1/1000





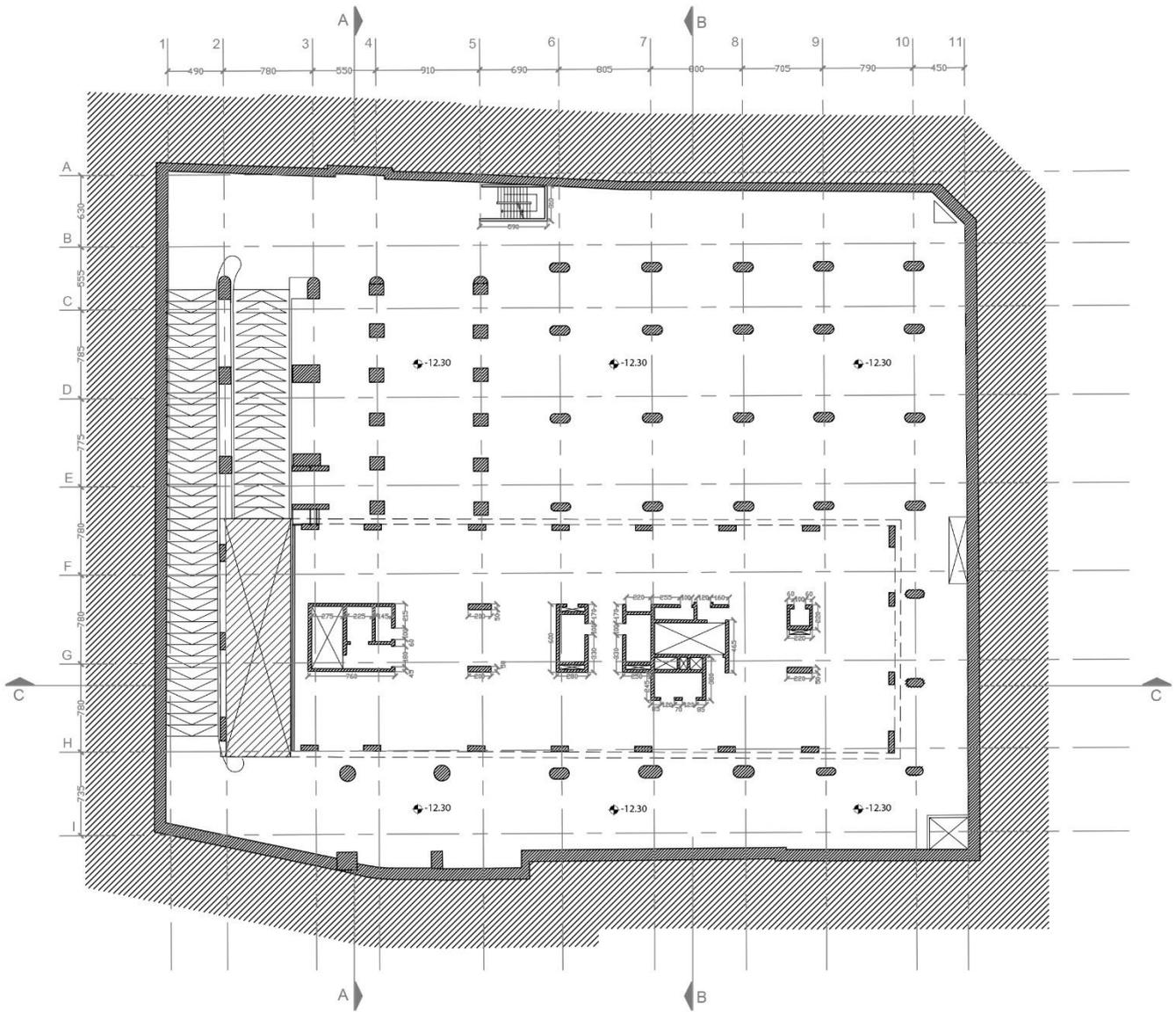
6th and 5th Basement
 Scale 1/500





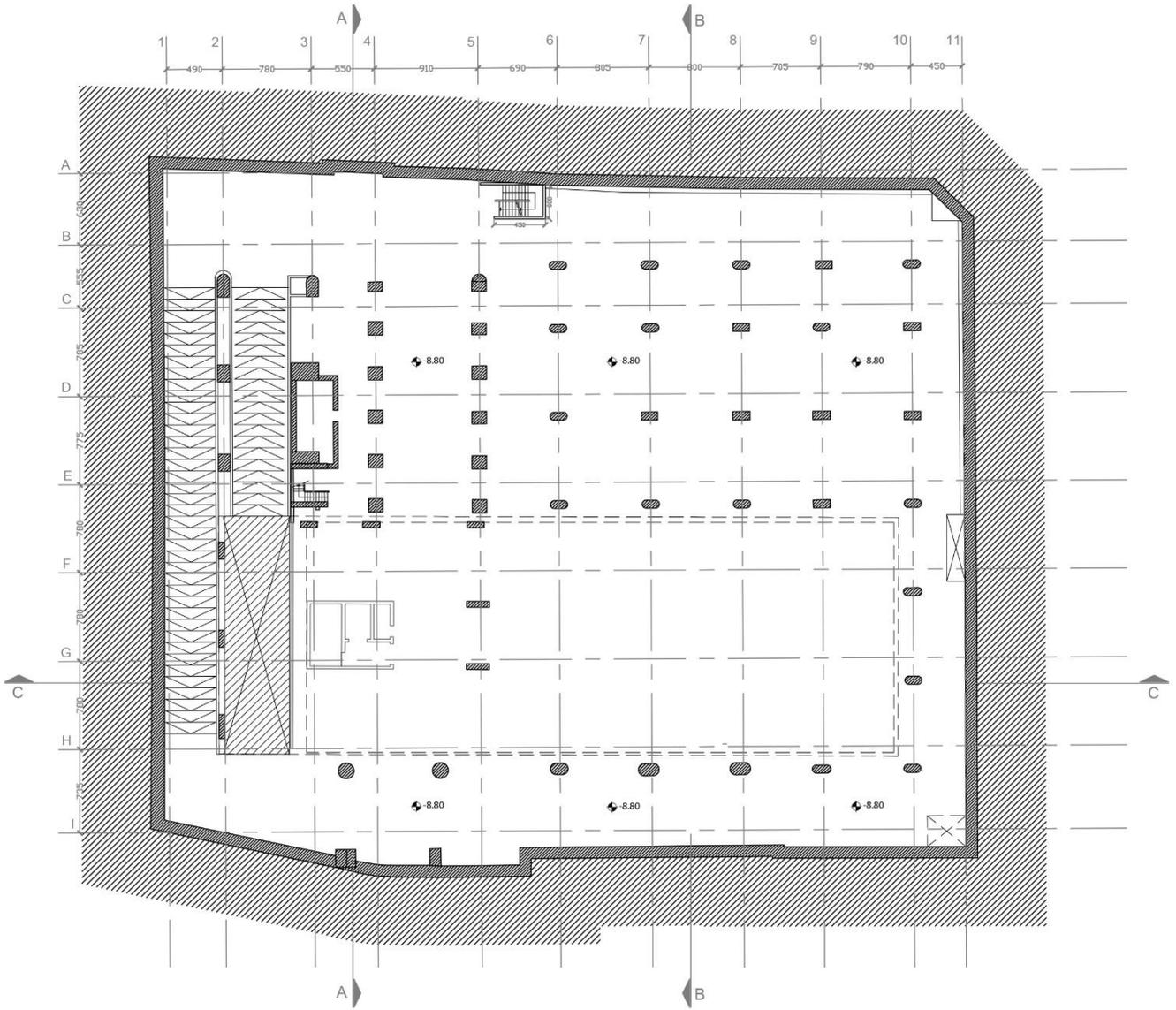
4th Basement
Scale 1/500





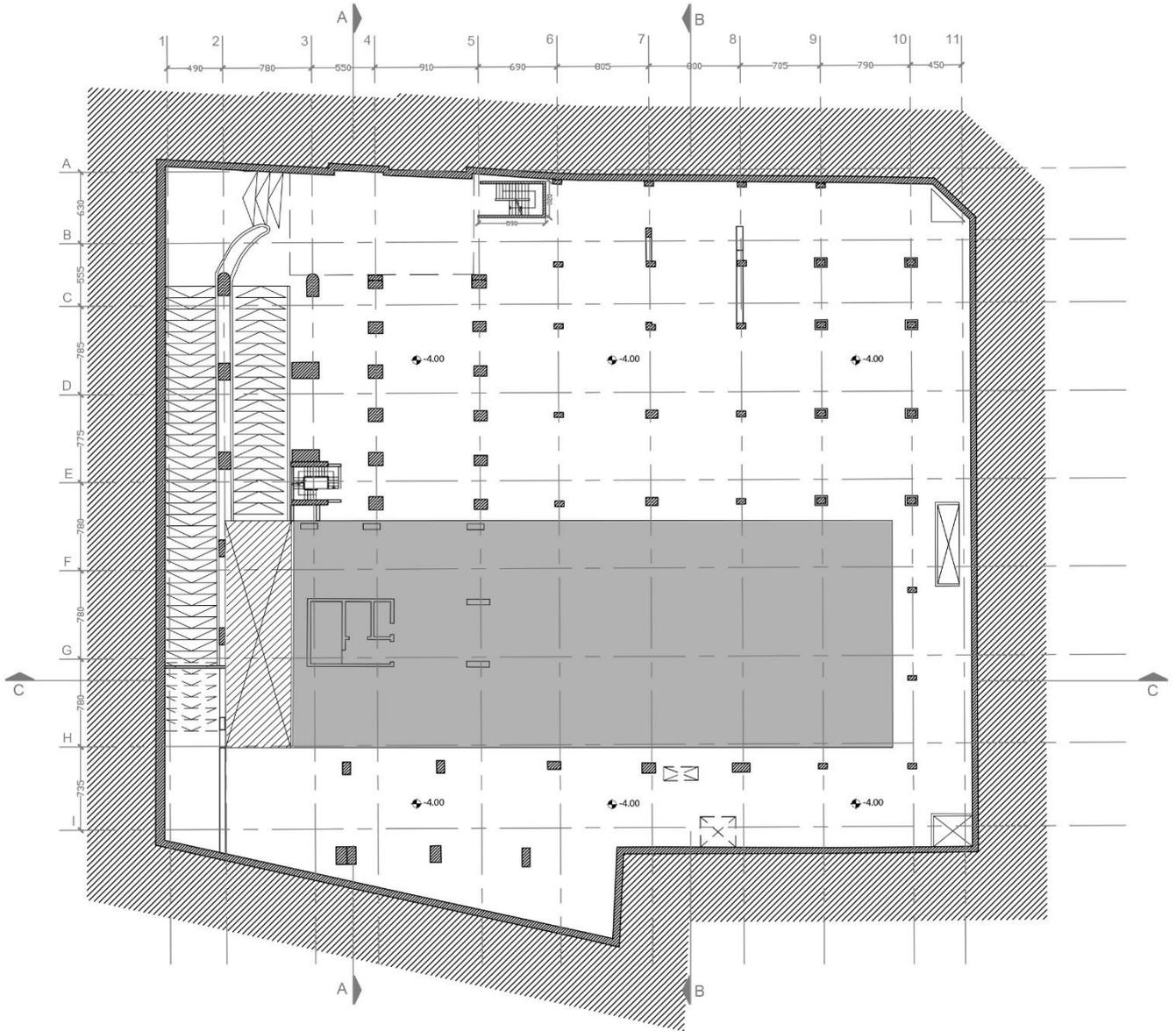
3rd Basement
Scale 1/500





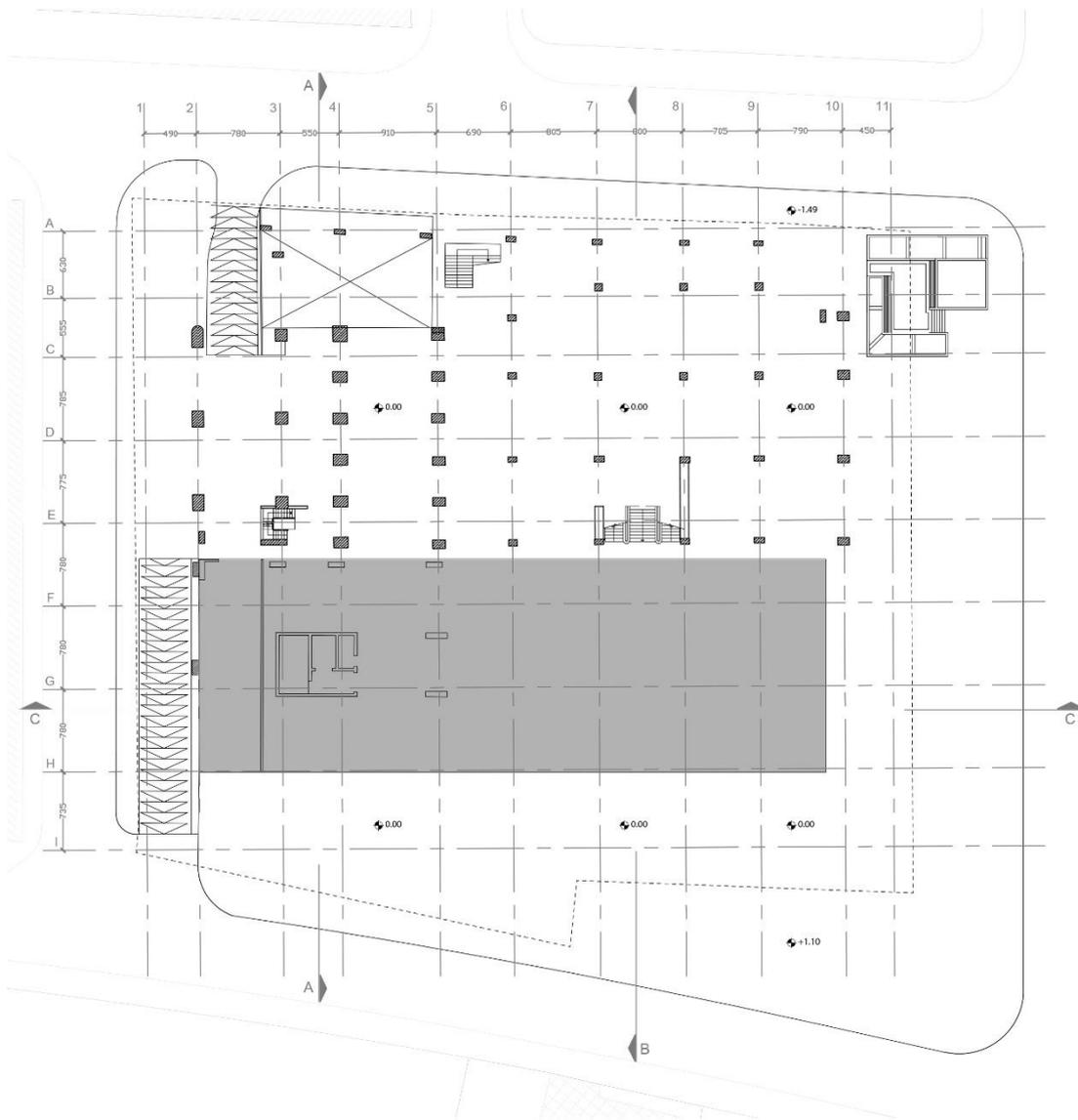
2nd Basement
Scale 1/500





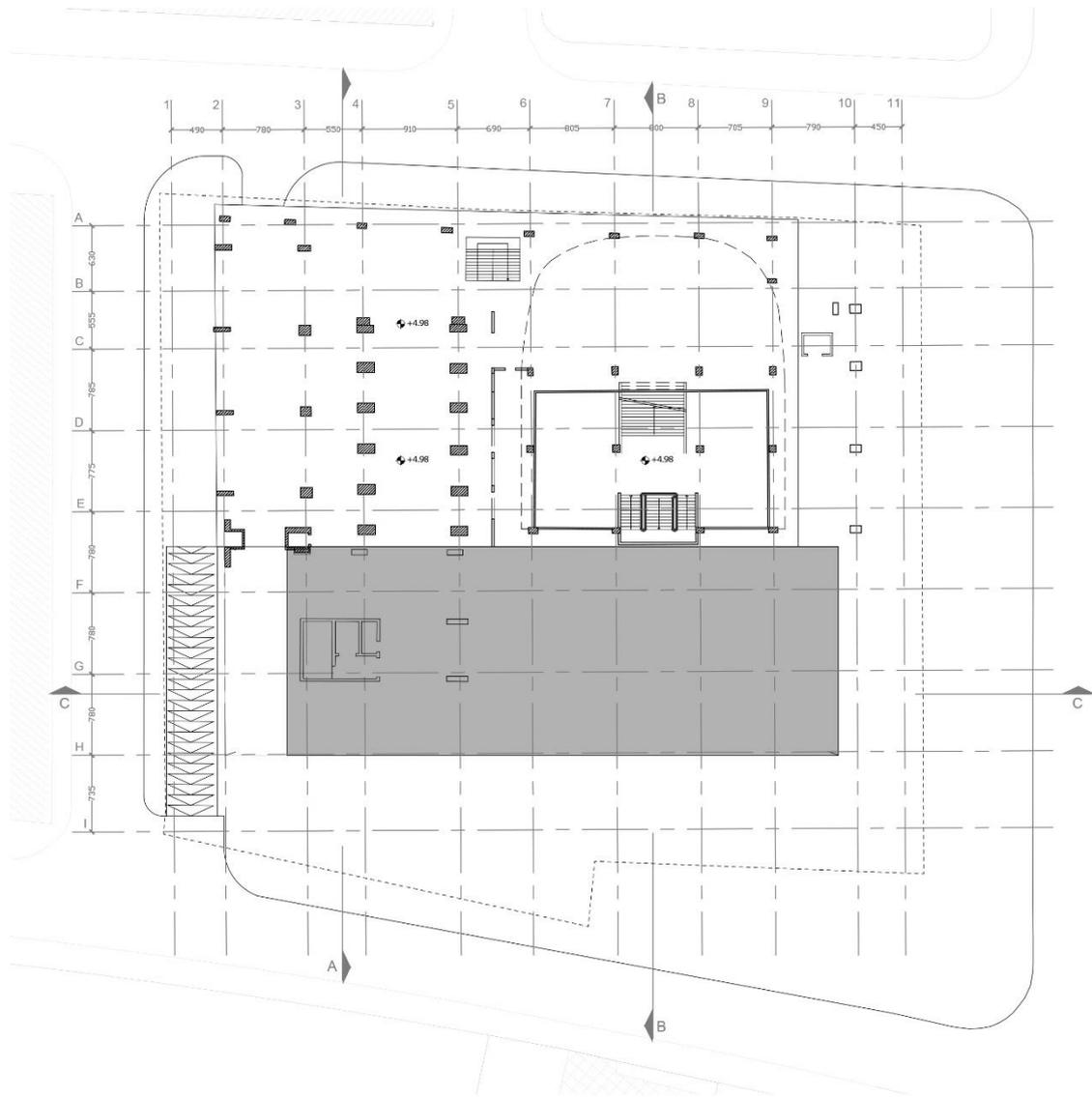
1st Basement
Scale 1/500





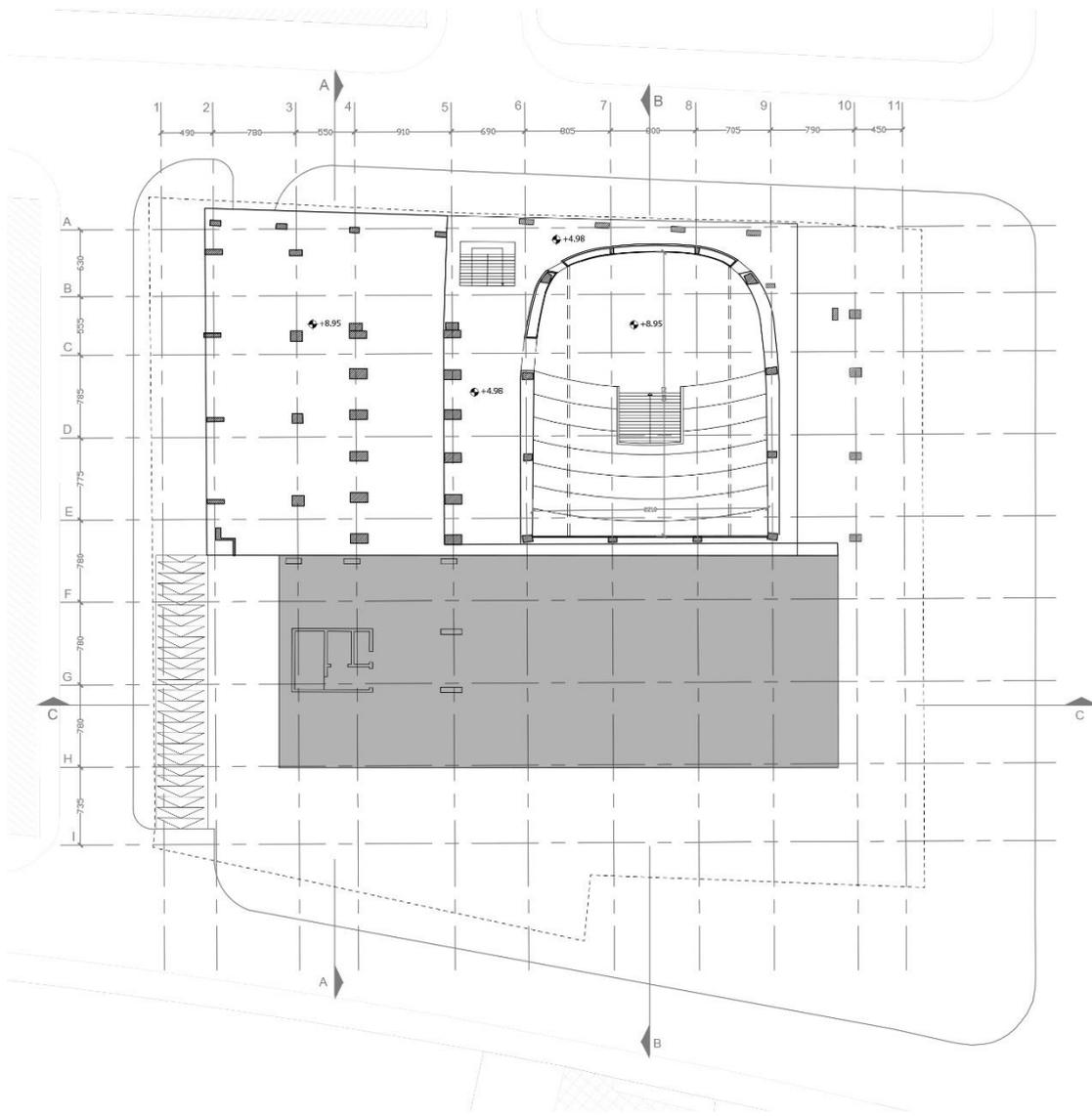
Ground Floor
Scale 1/500





First Floor
Scale 1/500

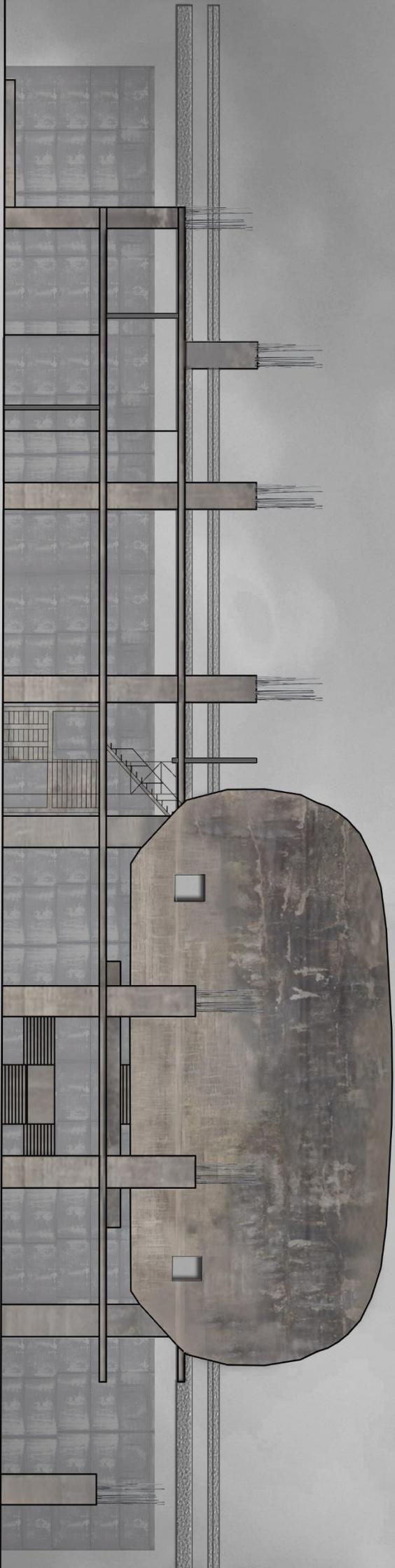




Second Floor
Scale 1/500



NORTH ELEVATION



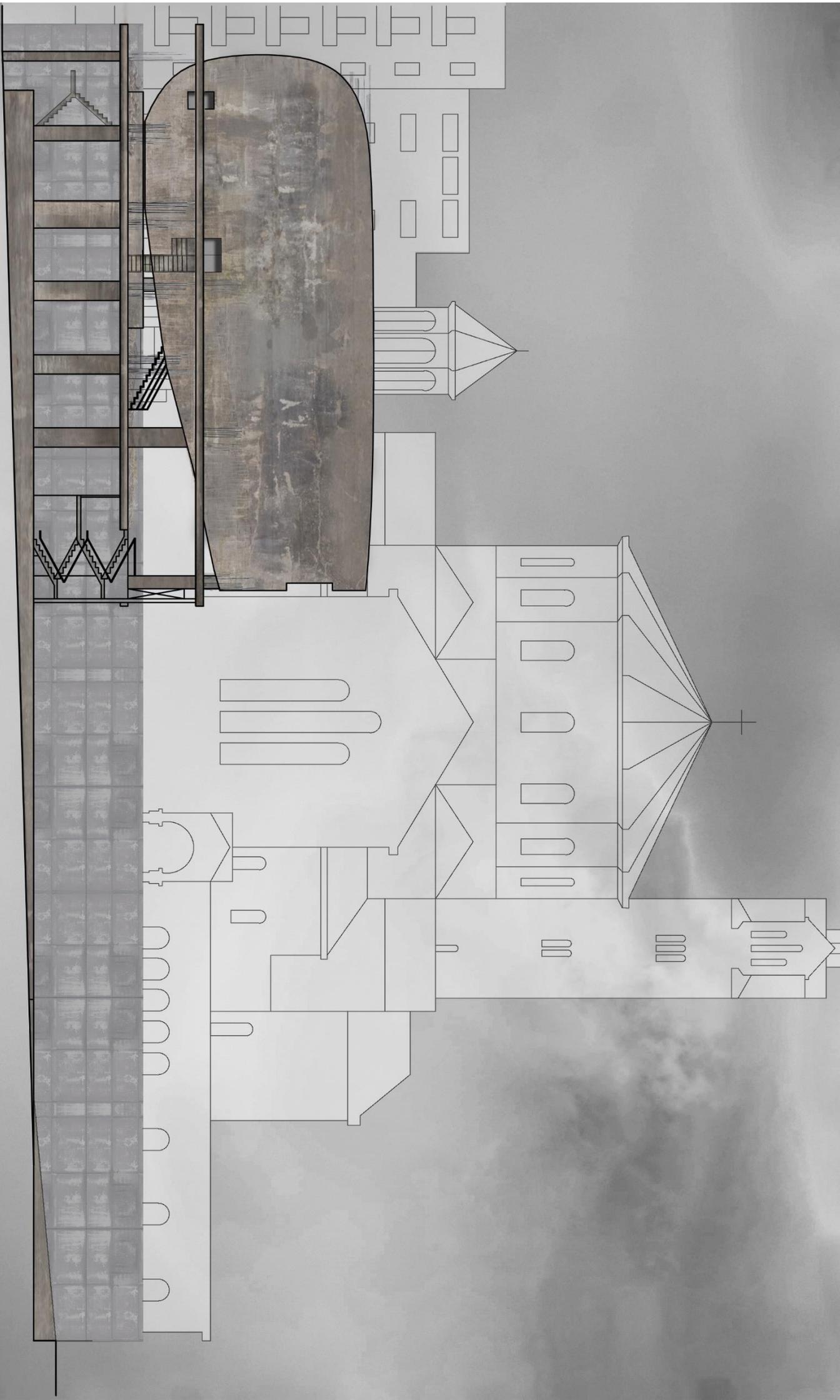
EAST ELEVATION

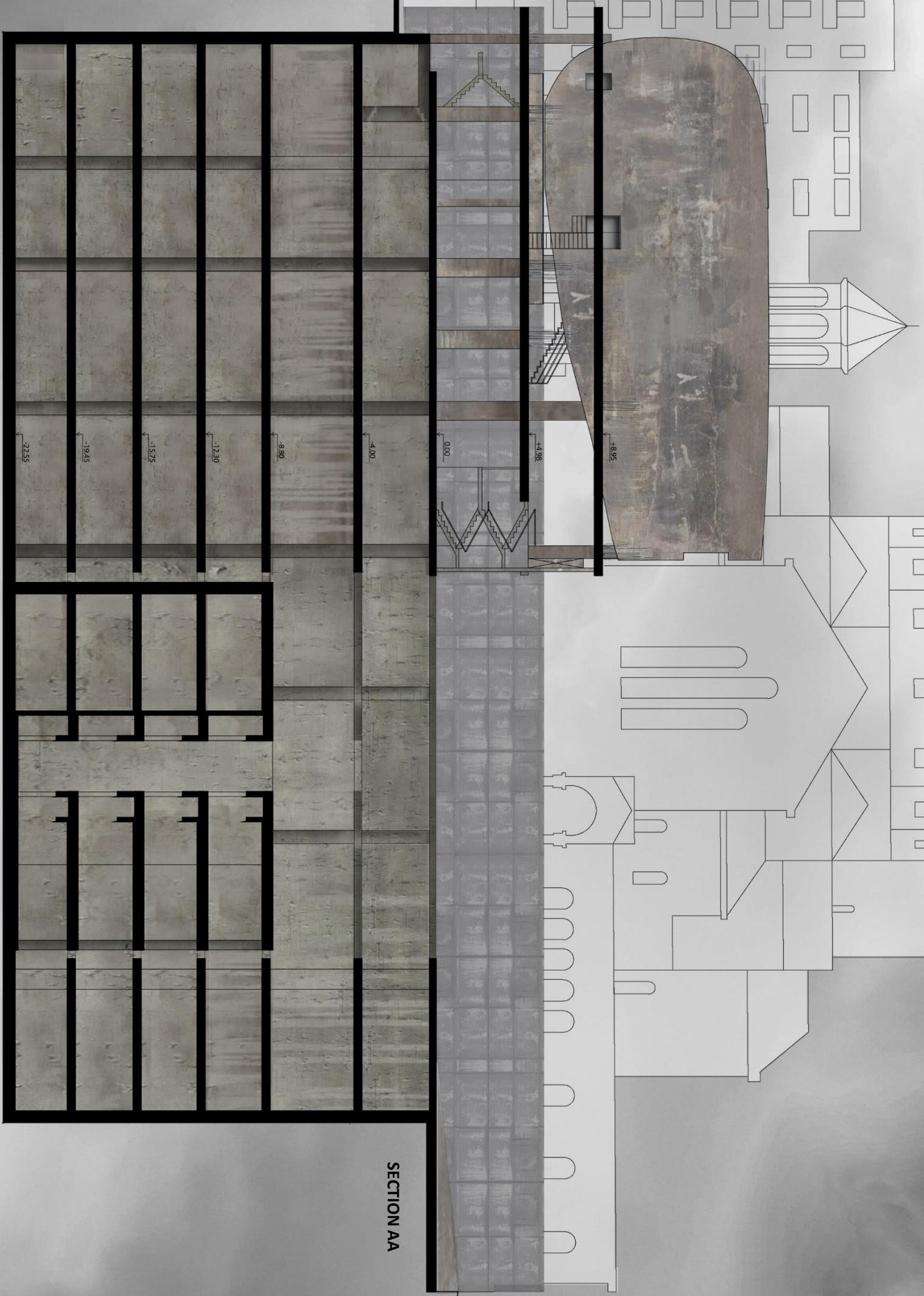


SOUTH ELEVATION



WEST ELEVATION





SECTION AA

SECTION BB



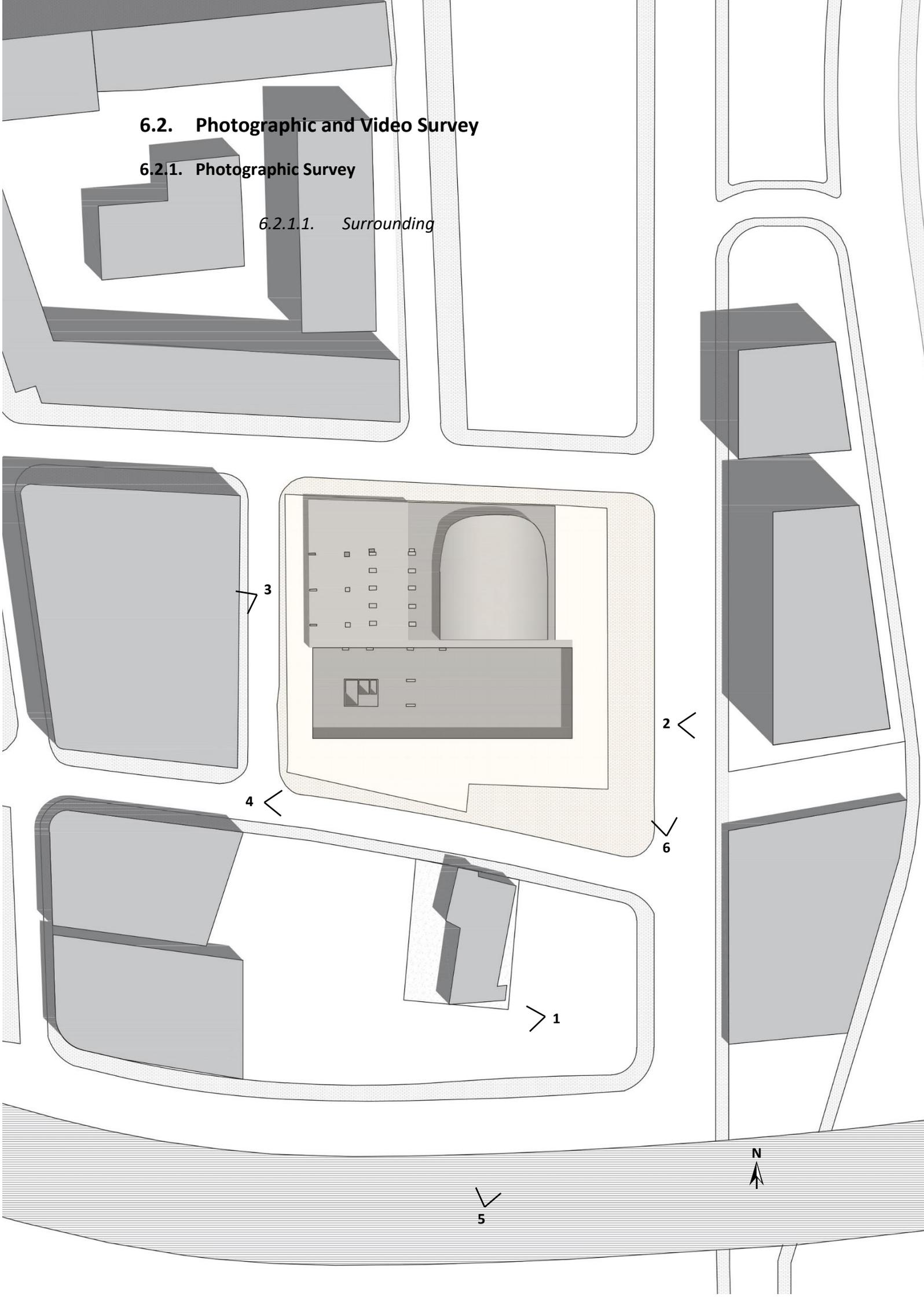
SECTION CC



6.2. Photographic and Video Survey

6.2.1. Photographic Survey

6.2.1.1. Surrounding





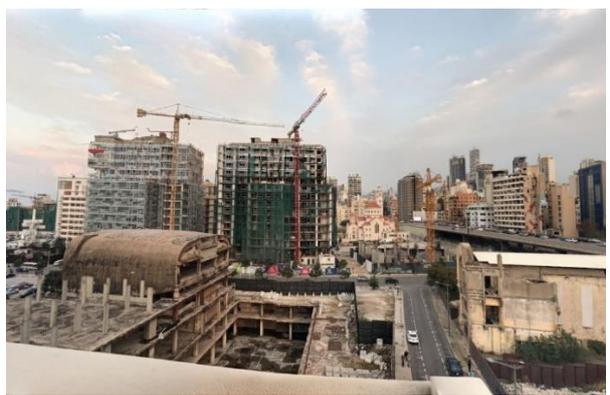
1.St Vincent Church bombed during the war



2.GC Tower



3.Beirut Markazia Monroe Suite



4.View from the top of the balcony on the West Side

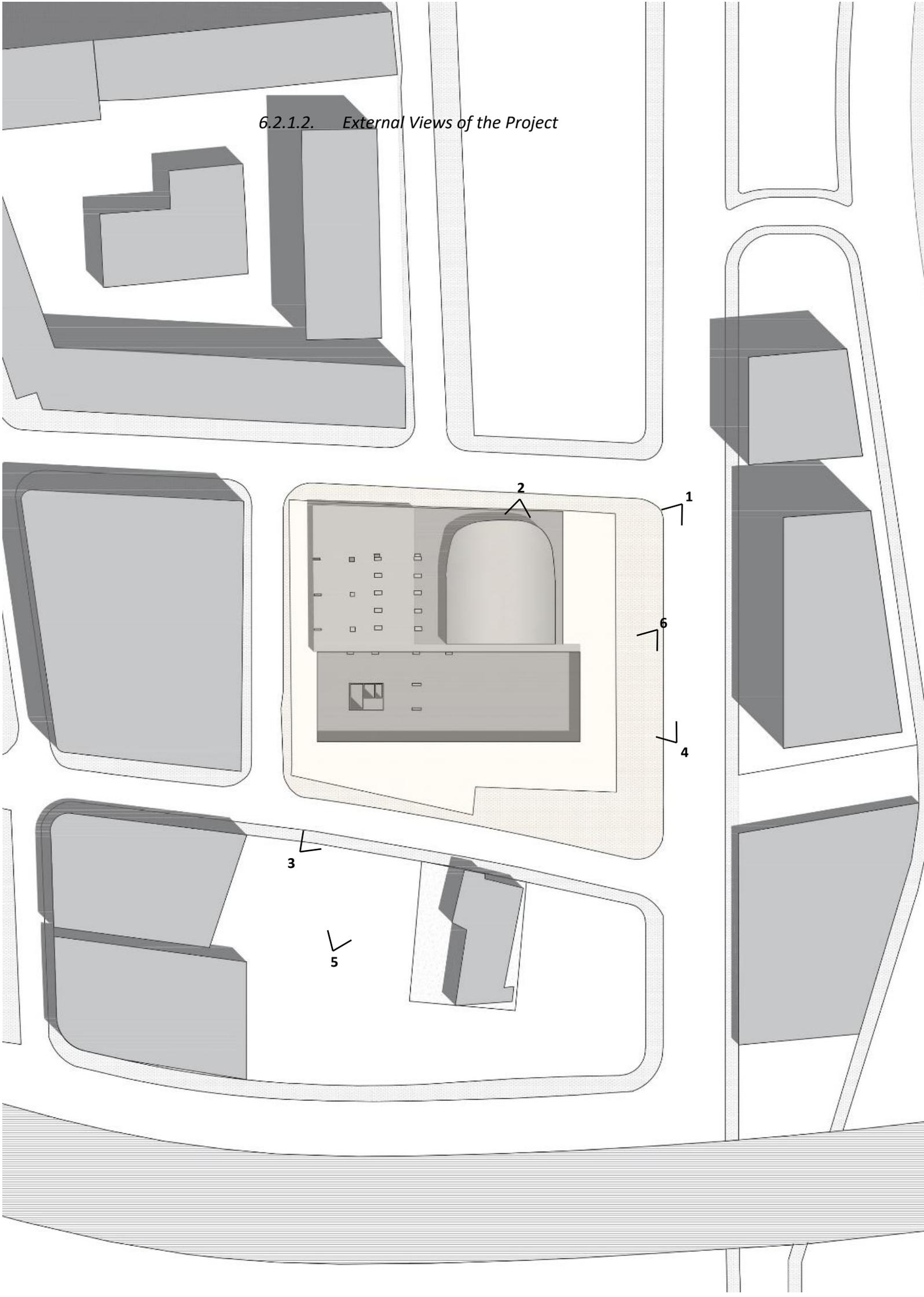


5.View from the top of the balcony on the South Side



6.The Egg with its surrounding

6.2.1.2. External Views of the Project





1. Picture taken from the East Side, on the other side of the street



2. Picture taken from the Northern Side, in front of the entrance



3. Picture taken inside the project on the western side



4. Picture taken from the street on the eastern side

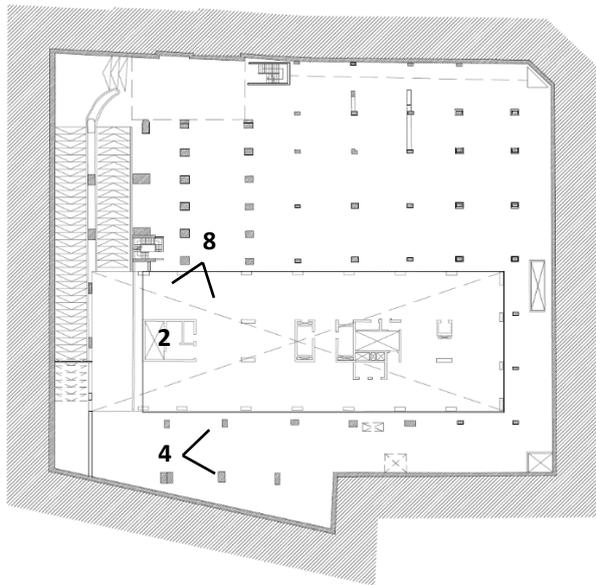


5. Picture Taken from the plot facing the project

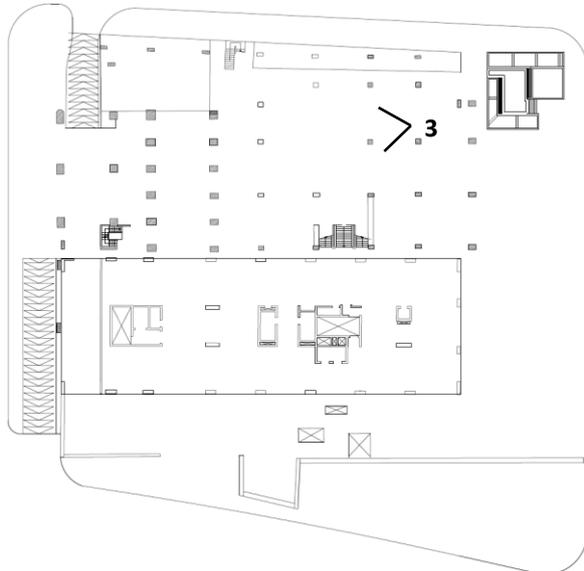


6. Picture taken next to the Egg facing the Church

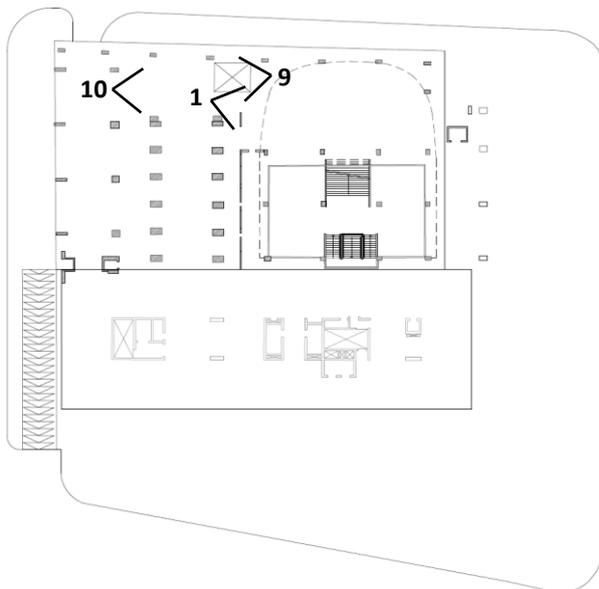
6.2.1.3. Internal Views of the Project



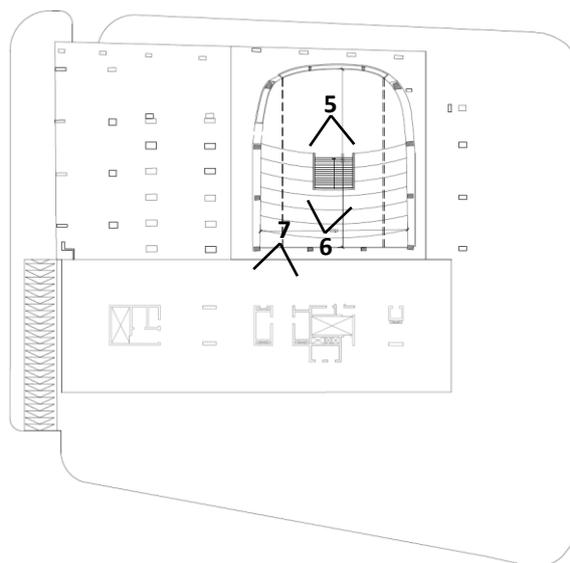
First and Second Basement



Ground Floor



First Floor



Second Floor



1. First Floor (View of Egg's Side Entrance)



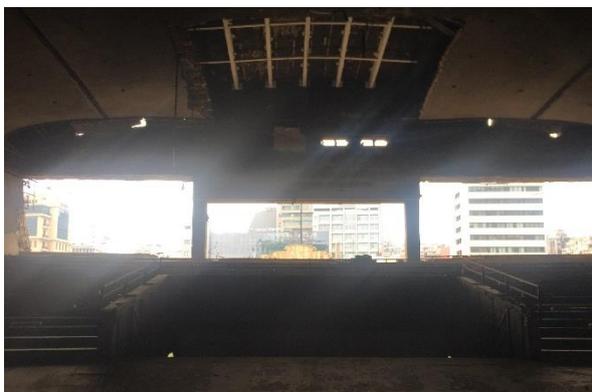
2. Second Basement (View of the elevator Shaft)



3. Ground Floor



4. Second Basement



5. Second Floor (View of the inside of the Auditorium)



6. Second Floor (View of the inside of the Auditorium)



7. View of the plaza from inside of the Auditorium



8. Second Basement (View of the elevator Shaft)



9. First Floor (View of the Staircase and second floor' Slab)



10. First Floor (View of the Staircase)

6.2.2. Video Survey

The Presentation will be accompanied by a video survey documenting the situation in Beirut before, during and after the Lebanese Civil War. Moving deeper into the subject of our case study “The Egg”, the video will highlight the “Save the Egg” campaign which was one of the main movements that saved the complex from having the same fate of many other heritage and cultural monuments of the city; demolition.

The survey includes interviews with:

- Kamal Richmani, the owner of a publishing house. Kamal points out the contrast between Beirut before and after the civil war as well as its situation today.
- Georges Jureidini, an architect. Georges explains about the egg project and its importance as a monument for the city.
- Dania Bdeir, the founder of “Save the Egg” campaign. Dania tells the story of the campaign: how it started and its outcome, giving her opinion about the recovery phase of Beirut after the war.

The following images show the protagonists of our documentary and give a glimpse of the Plot through its title pages.



Beirut

60s - early 70s

(1975 - 1990)



The Egg

1990 - Today

"Save The Egg"

2009

Beirut

Today

The End

6.3. Decay, Cracks and Material survey

The Egg was the first big cinema in Lebanon in the late 1950's, with its weird shape it was able to gain the attention of the Lebanese and to become the main destination for movie fans.

The whole complex, Beirut City Center, is one of the main buildings in Lebanon following the **Brutalist architecture style** that flourished from the 1950s till the mid-1970s, stemming from the modernist architectural movement of the early 20th century. The name of the style originates from the French word "brut" as Le Corbusier chose this material in his buildings; "*béton brut*" for "raw concrete". The British architect Reyner Banham improved the term into "brutalism" originally called "New Brutalism" as an identification for the emerging style.

Thus, the Complex' main material is Reinforced Concrete. The reinforced concrete buildings were the most numerous ones of the twentieth century and they prove to be both vulnerable and fragile. It is True that they have lots of fortunes such as speed in construction and being economical but they also have many failures; they deteriorate more quickly than brick or stone buildings. They present signs of wear and tears all over. The typical buildings of that century have deteriorated as they got old; concrete is exposed to the effects of time. This is exactly what happened with our case study "The Beirut City Center".

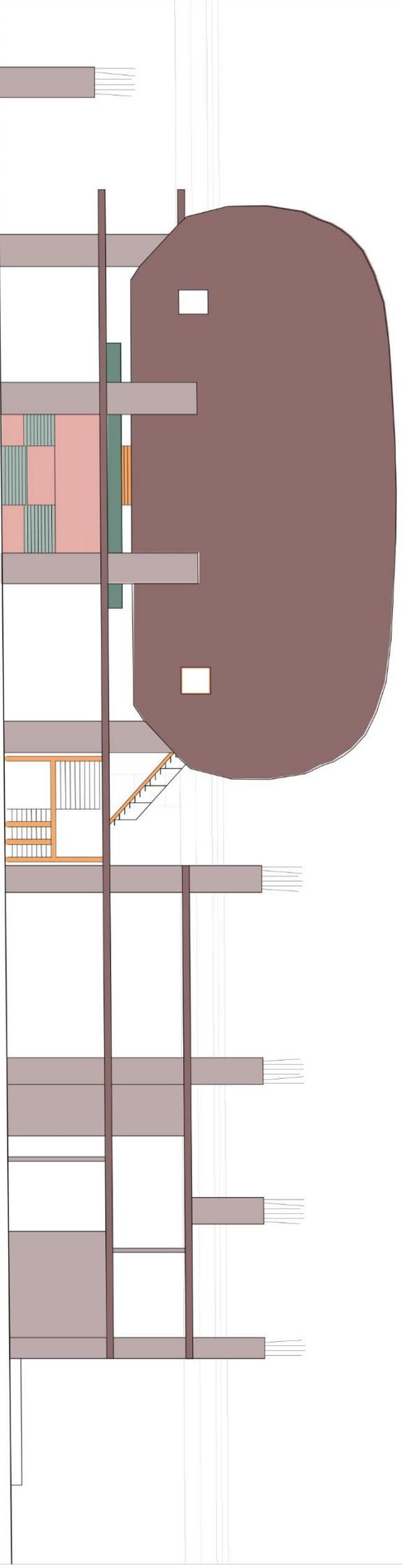
Since we are developing a conservation proposal for the Complex, a study of the materials concerned was necessary in order to understand how it behaves over time. Then, an on-site investigation which started with the description of the variation manifestations of deterioration. Many materials and decays have been detected and will be showed in the following forms.

6.3.1. Material Survey

It is true that the main material of the Beirut City Center is Reinforced concrete but some other materials are also visible in this complex such as: **stone, terracotta, ceramic, various types of plaster, painted steel, aluminum, nylon fibers, PVC and wood.**

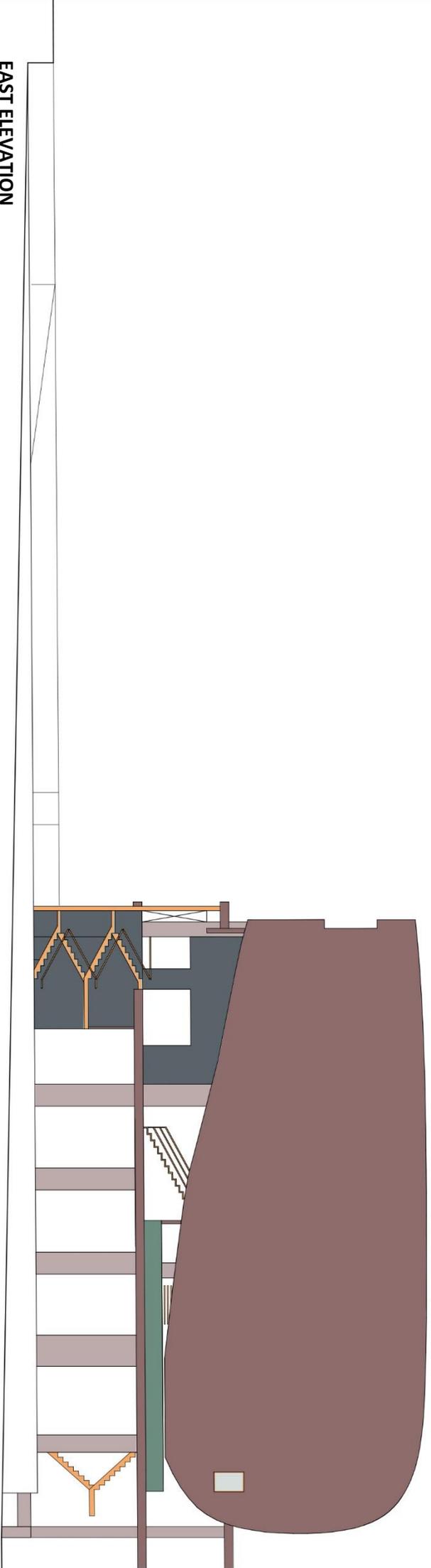
The following forms will present the visible material, each with its photo, location in the complex as well as a detailed description of its definition, function, origin, position and composition.

	External Plaster		Painted Steel		Reinforced Concrete		Nylon Fibers		Ceramic
	Internal Plaster		Aluminum		Precast Concrete		Wooden Boards		
	Rough Plaster		Steel		Concrete		Stone		



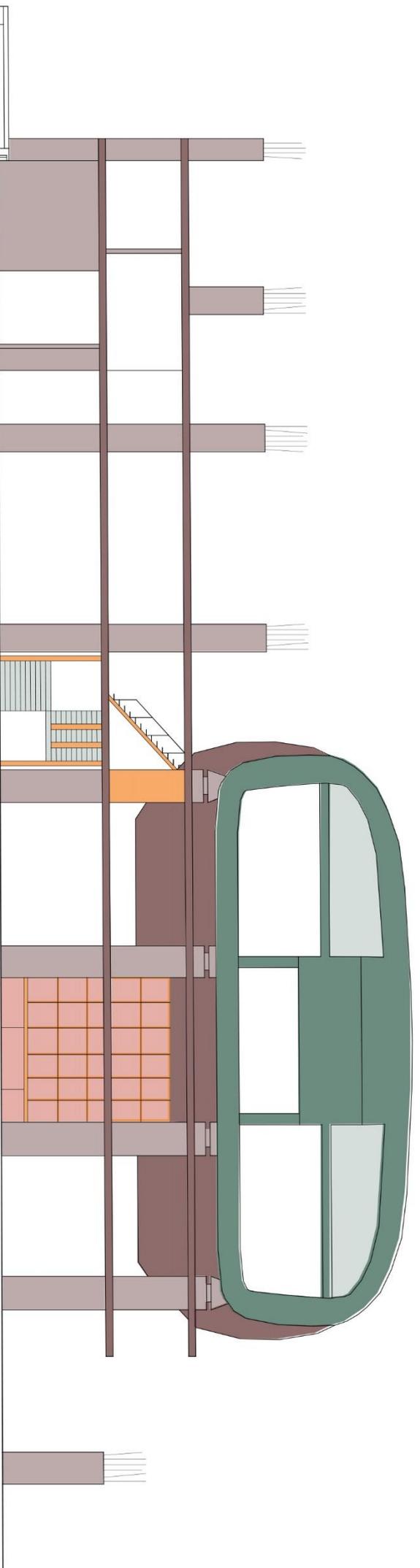
NORTH ELEVATION

	External Plaster		Painted Steel		Reinforced Concrete		Nylon Fibers		Ceramic
	Internal Plaster		Aluminum		Precast Concrete		Wooden Boards		
	Rough Plaster		Steel		Concrete		Stone		



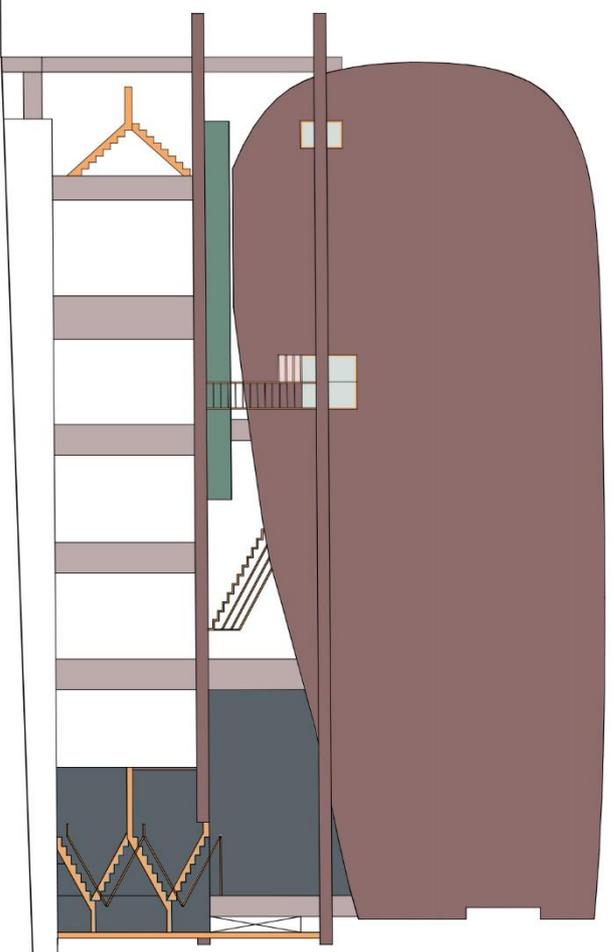
EAST ELEVATION

	External Plaster		Painted Steel		Reinforced Concrete		Nylon Fibers		Ceramic
	Internal Plaster		Aluminum		Precast Concrete		Wooden Boards		
	Rough Plaster		Steel		Concrete		Stone		



SOUTH ELEVATION

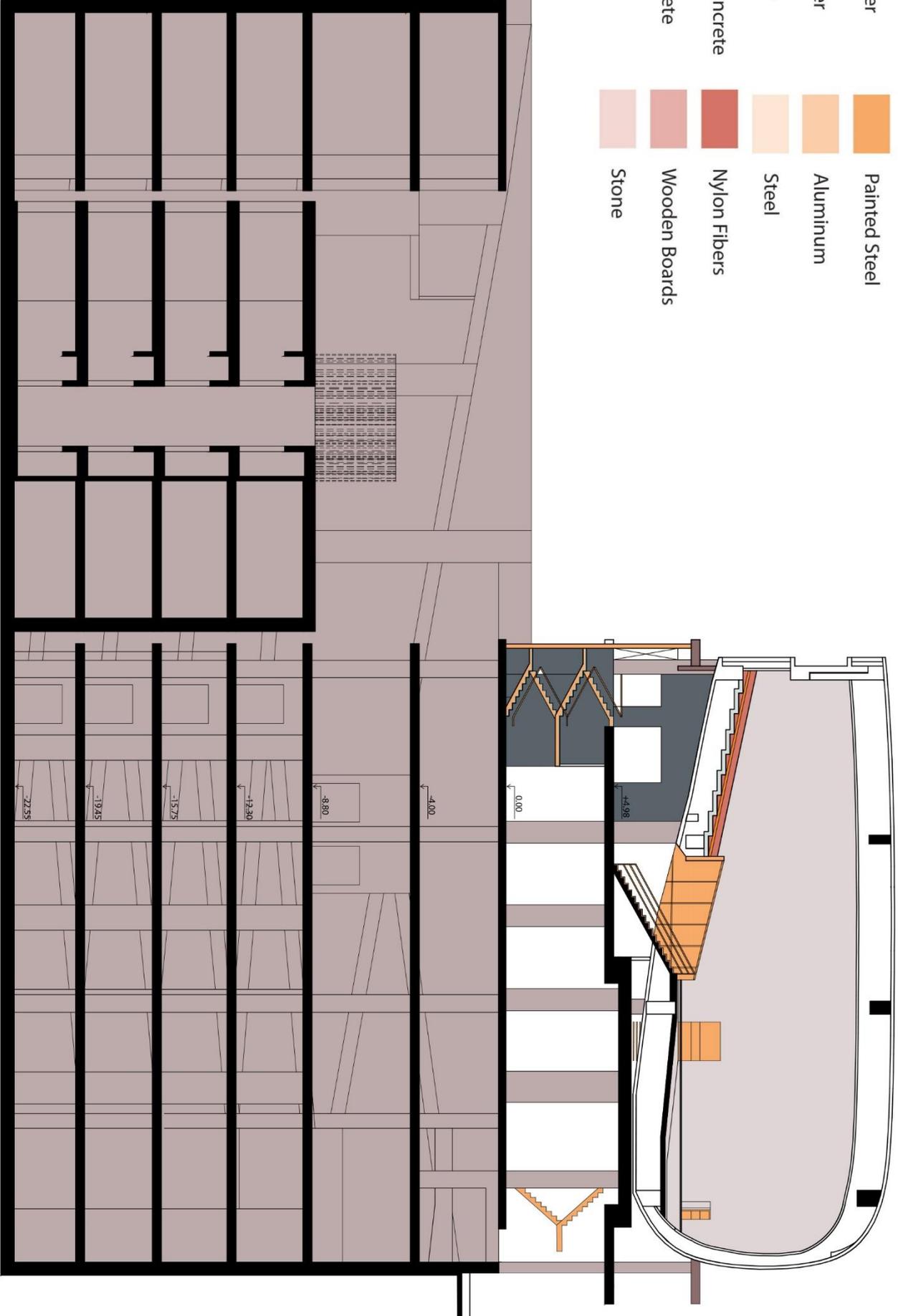
- External Plaster
- Internal Plaster
- Rough Plaster
- Painted Steel
- Aluminum
- Steel
- Reinforced Concrete
- Precast Concrete
- Concrete
- Nylon Fibers
- Wooden Boards
- Stone
- Ceramic

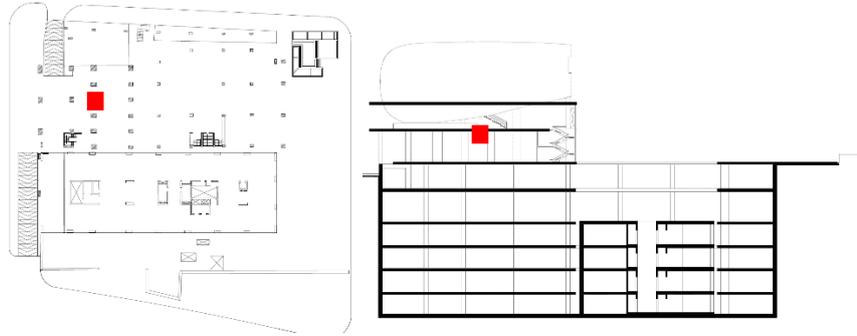


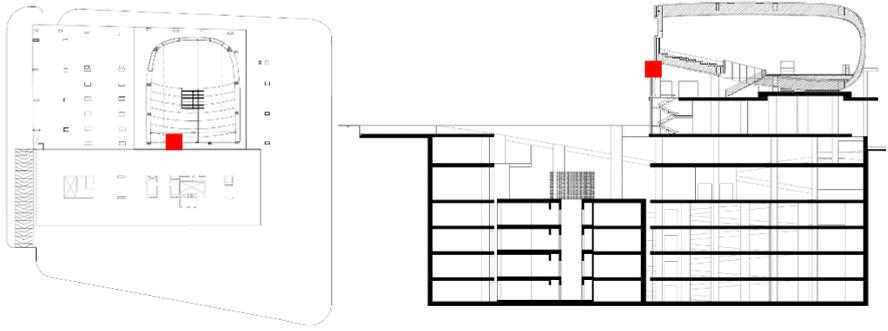
WEST ELEVATION

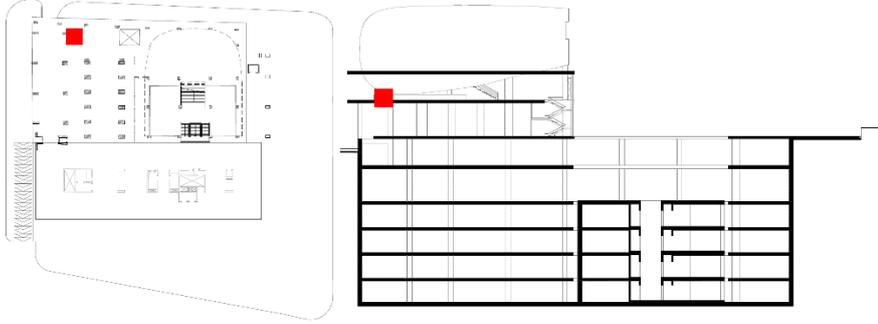
	External Plaster		Painted Steel
	Internal Plaster		Aluminum
	Rough Plaster		Steel
	Reinforced Concrete		Nylon Fibers
	Precast Concrete		Wooden Boards
	Concrete		Stone
	Ceramic		

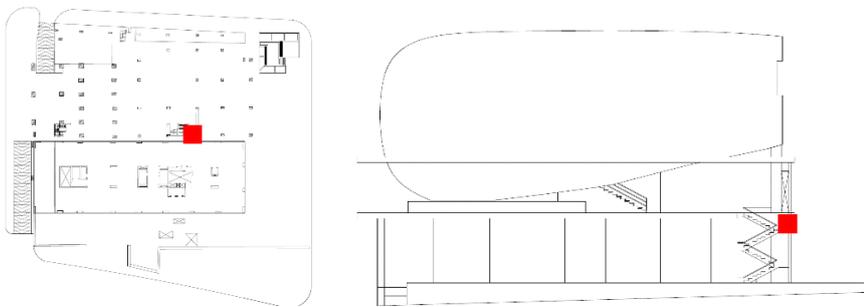
SECTION BB

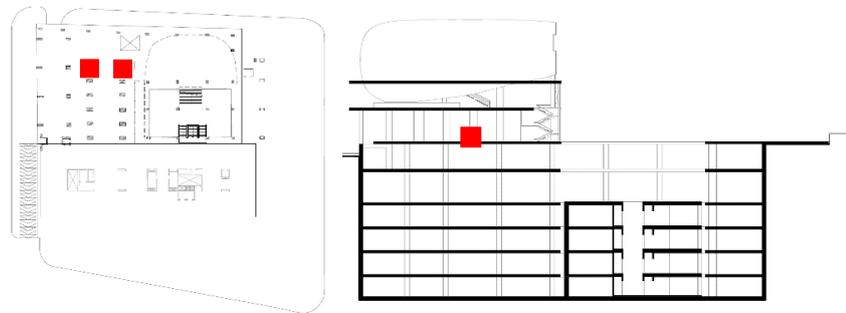


REINFORCED CONCRETE	
ASSIGNED CODE	M01
HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Ground Floor
KEY PLAN/ ELEVATION	
PHOTO	
MATERIAL DEFINITION AND DESCRIPTION	<p>Conglomerate obtained by the mix of cement with fine aggregates as sand, pebbles, gravel or shale. It appears with colours that range from white to light grey. Concrete is reinforced by the displacement of an iron grid. The surface is sometimes finished with a thin layer of painting.</p>
FUNCTION <input checked="" type="checkbox"/> structural <input type="checkbox"/> covering <input type="checkbox"/> functional element	ORIGIN <input type="checkbox"/> natural <input checked="" type="checkbox"/> artificial
POSITION	<input type="checkbox"/> wall <input type="checkbox"/> floor <input checked="" type="checkbox"/> ceiling <input type="checkbox"/> stair <input type="checkbox"/> ramp <input type="checkbox"/> pipe <input type="checkbox"/> window
COMPOSITION	<p>The material was cast in place and covered by a layer of cement plaster, then by a thin layer of painting.</p>
REMARKS	<p>This material is present in other positions of this building such as walls, floors, stairs and ramps as well. Basically it is the main material of this complex.</p>

STONE	
ASSIGNED CODE	M02
HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Second Floor
KEY PLAN/ ELEVATION	
PHOTO	
MATERIAL DEFINITION AND DESCRIPTION	Stone is a piece of natural rock; it is a mass of hard, compacted mineral. Natural Stone is one of the first building materials.
FUNCTION <input checked="" type="checkbox"/> structural <input type="checkbox"/> covering <input type="checkbox"/> functional element	ORIGIN <input checked="" type="checkbox"/> natural <input type="checkbox"/> artificial
POSITION	<input type="checkbox"/> wall <input type="checkbox"/> floor <input type="checkbox"/> ceiling <input checked="" type="checkbox"/> stair <input type="checkbox"/> ramp <input type="checkbox"/> pipe <input type="checkbox"/> window
COMPOSITION	The whole stair element is made of stone. Each step is 200cm length, 25cm height and 35cm depth.
REMARKS	

TERRACOTTA	
ASSIGNED CODE	M03
HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	First Floor
KEY PLAN/ ELEVATION	
PHOTO	
MATERIAL DEFINITION AND DESCRIPTION	The Tiles are 30*30cm and 1cm thick. Bricks appear with an orange coloration and rough surface linked with the mortar joints. An intervention was done to the material where the tiles were colored by white painting.
FUNCTION <input type="checkbox"/> structural <input checked="" type="checkbox"/> covering <input type="checkbox"/> functional element	ORIGIN <input checked="" type="checkbox"/> natural <input type="checkbox"/> artificial
POSITION	<input type="checkbox"/> wall <input checked="" type="checkbox"/> floor <input type="checkbox"/> ceiling <input type="checkbox"/> stair <input type="checkbox"/> ramp <input type="checkbox"/> pipe <input type="checkbox"/> window
COMPOSITION	Mortar is the adhesive material used under the tiles to fix them in place as well as within the joints to fix them to each other.
REMARKS	

CERAMIC	
ASSIGNED CODE	M04
HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Ground Floor
KEY PLAN/ ELEVATION	
PHOTO	
MATERIAL DEFINITION AND DESCRIPTION	The Tiles are 20*20cm and 3cm thick. The ceramic tiles are usually of neutral colors and slightly glazed finish. They tiles have neutral grey glaze but deteriorated with time.
FUNCTION <input type="checkbox"/> structural <input checked="" type="checkbox"/> covering <input type="checkbox"/> functional element	ORIGIN <input type="checkbox"/> natural <input checked="" type="checkbox"/> artificial
POSITION	<input checked="" type="checkbox"/> wall <input type="checkbox"/> floor <input type="checkbox"/> ceiling <input type="checkbox"/> stair <input type="checkbox"/> ramp <input type="checkbox"/> pipe <input type="checkbox"/> window
COMPOSITION	Mortar is the adhesive material used under the tiles to fix them in place as well as within the joints to fix them to each other.
REMARKS	

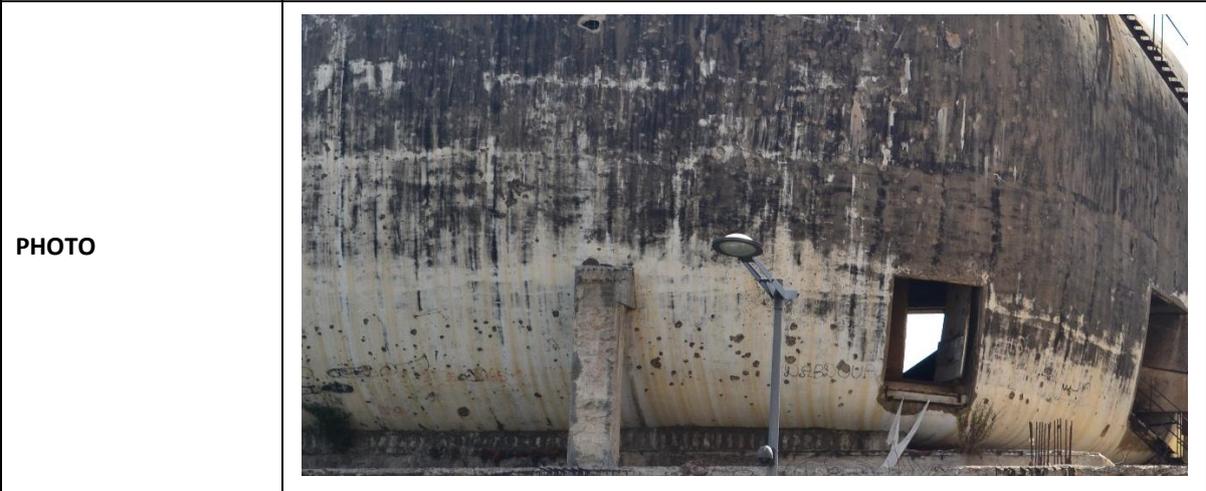
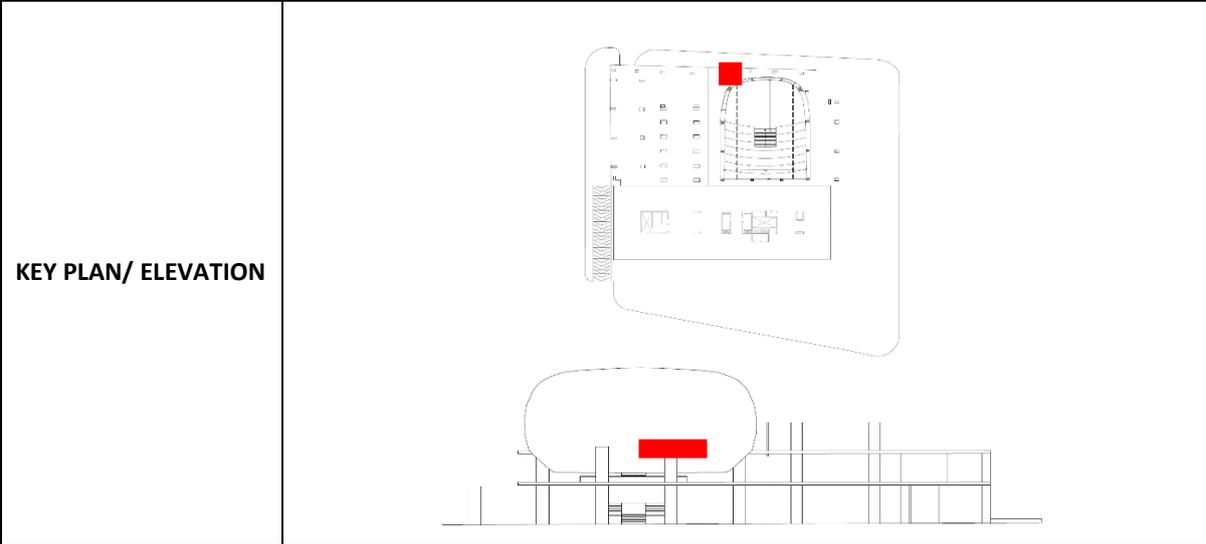
INTERNAL PLASTER	
ASSIGNED CODE	M05
HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Ground Floor
KEY PLAN/ ELEVATION	
PHOTO	
MATERIAL DEFINITION AND DESCRIPTION	Final layer of plaster, which protects the wall against the chemical and physical atmospheric agents. it's finished with a thin layer of white painting.
FUNCTION <input type="checkbox"/> structural <input checked="" type="checkbox"/> covering <input type="checkbox"/> functional element	ORIGIN <input type="checkbox"/> natural <input checked="" type="checkbox"/> artificial
POSITION	<input type="checkbox"/> wall <input type="checkbox"/> floor <input type="checkbox"/> ceiling <input type="checkbox"/> stair <input type="checkbox"/> ramp <input type="checkbox"/> pipe <input checked="" type="checkbox"/> Column
COMPOSITION	It is a pasty composition of cement, water, and sand hardened on drying and used for coating the columns. It is linked to the reinforced concrete.
REMARKS	This material is present in other positions of this building such as walls and ceilings.

EXTERNAL PLASTER

ASSIGNED CODE M06

HATCH 

LOCALIZATION OF THE DETAIL IN THE BUILDING Second Floor, North Elevation



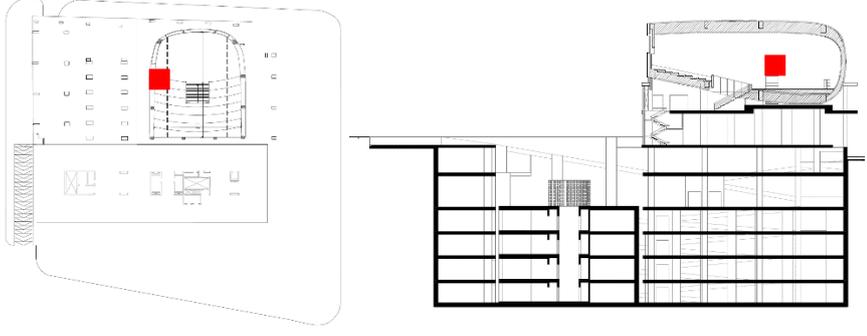
MATERIAL DEFINITION AND DESCRIPTION Final layer of plaster, which protects the wall against the chemical and physical atmospheric agents. it's finished with a thin layer of white painting.

<p>FUNCTION</p> <p><input type="checkbox"/> structural</p> <p><input checked="" type="checkbox"/> covering</p> <p><input type="checkbox"/> functional element</p>	<p>ORIGIN</p> <p><input type="checkbox"/> natural</p> <p><input checked="" type="checkbox"/> artificial</p>
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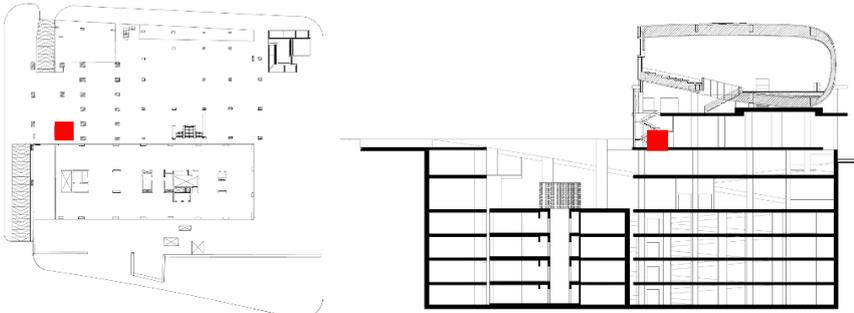
POSITION wall floor ceiling stair ramp pipe window

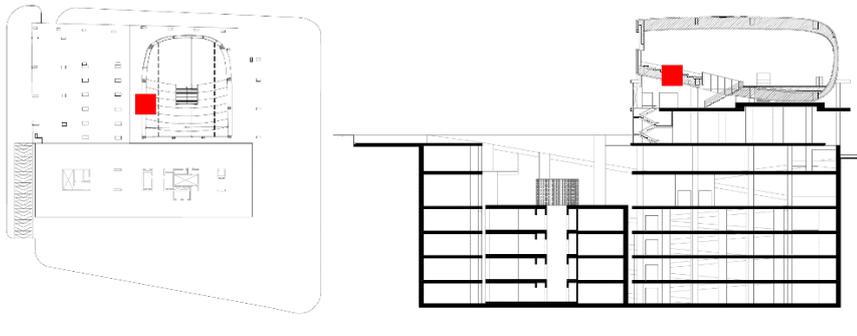
COMPOSITION It is a pasty composition of cement, water, and sand hardened on drying and used for coating the columns. It is linked to the reinforced concrete.

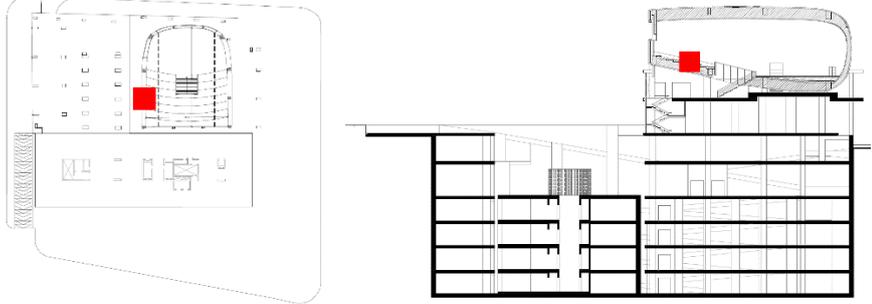
REMARKS

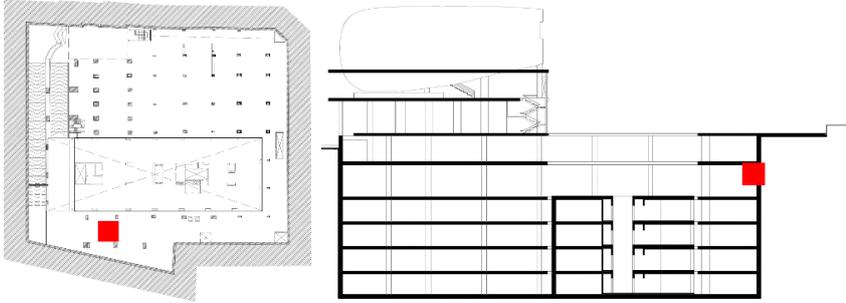
ROUGH PLASTER	
ASSIGNED CODE	M07
HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Second Floor
KEY PLAN/ ELEVATION	
PHOTO	
MATERIAL DEFINITION AND DESCRIPTION	A raw grey plaster of 4 cm thickness, rough to touch.
FUNCTION <input type="checkbox"/> structural <input checked="" type="checkbox"/> covering <input type="checkbox"/> functional element	ORIGIN <input type="checkbox"/> natural <input checked="" type="checkbox"/> artificial
POSITION	<input checked="" type="checkbox"/> wall <input type="checkbox"/> floor <input type="checkbox"/> ceiling <input type="checkbox"/> stair <input type="checkbox"/> ramp <input type="checkbox"/> pipe <input type="checkbox"/> window
COMPOSITION	The plaster is characterized by 2 layers; the first layer is linked to the reinforced concrete and made by cement mortar with middle dimension aggregates. The external layer is composed by a grey-pigmented covering.
REMARKS	

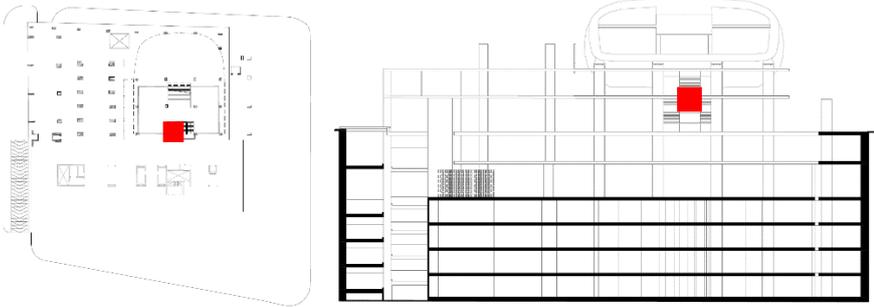
PAINTED STEEL

ASSIGNED CODE	M08
HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	First Floor
KEY PLAN/ ELEVATION	
PHOTO	
MATERIAL DEFINITION AND DESCRIPTION	A composition of iron and carbon. It's painted. It's quite smooth at the touch. Oxidized portions of brownish colour are present.
FUNCTION <input type="checkbox"/> structural <input type="checkbox"/> covering <input checked="" type="checkbox"/> functional element	ORIGIN <input type="checkbox"/> natural <input checked="" type="checkbox"/> artificial
POSITION	<input type="checkbox"/> wall <input type="checkbox"/> floor <input type="checkbox"/> ceiling <input checked="" type="checkbox"/> stair <input type="checkbox"/> ramp <input type="checkbox"/> pipe <input type="checkbox"/> window
COMPOSITION	The material is used as handrail for the stairs. It is composed by vertical and horizontal elements directly connected to the concrete slab and stairs' steps.
REMARKS	

ALUMINIUM	
ASSIGNED CODE	M09
HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Second Floor
KEY PLAN/ ELEVATION	
PHOTO	
MATERIAL DEFINITION AND DESCRIPTION	Light, soft, ductile, silvery metallic material. It is slightly shiny, smooth to the touch.
FUNCTION <input type="checkbox"/> structural <input type="checkbox"/> covering <input checked="" type="checkbox"/> functional element	ORIGIN <input type="checkbox"/> natural <input checked="" type="checkbox"/> artificial
POSITION	<input checked="" type="checkbox"/> wall <input type="checkbox"/> floor <input type="checkbox"/> ceiling <input type="checkbox"/> stair <input type="checkbox"/> ramp <input type="checkbox"/> pipe <input type="checkbox"/> window
COMPOSITION	The material is used as rails. It is linked to the walls and stairs of the auditorium
REMARKS	

NYLON FIBERS	
ASSIGNED CODE	M10
HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Second Floor
KEY PLAN/ ELEVATION	
PHOTO	
MATERIAL DEFINITION AND DESCRIPTION	The Pile is made by fibers of nylon in twisted tufts that are typically heat-treated to maintain their structure. It has a rough texture and a greyish color.
FUNCTION <input type="checkbox"/> structural <input checked="" type="checkbox"/> covering <input type="checkbox"/> functional element	ORIGIN <input type="checkbox"/> natural <input checked="" type="checkbox"/> artificial
POSITION	<input checked="" type="checkbox"/> wall <input type="checkbox"/> floor <input type="checkbox"/> ceiling <input type="checkbox"/> stair <input type="checkbox"/> ramp <input type="checkbox"/> pipe <input type="checkbox"/> window
COMPOSITION	It is a Nylon Carpet layered on the finished surface of the lower part of the theater's wall.
REMARKS	

PVC	
ASSIGNED CODE	M11
HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Basement 2
KEY PLAN/ ELEVATION	
PHOTO	
MATERIAL DEFINITION AND DESCRIPTION	PVC (polyvinyl chloride), often called vinyl, is a thermoplastic obtained from salt and oil. It has good mechanical properties, abrasion resistance and defence from the attack of chemical agents and organic bacteria. It is grey, smooth and opaque.
FUNCTION <input type="checkbox"/> structural <input type="checkbox"/> covering <input checked="" type="checkbox"/> functional element	ORIGIN <input type="checkbox"/> natural <input checked="" type="checkbox"/> artificial
POSITION	<input checked="" type="checkbox"/> wall <input type="checkbox"/> floor <input type="checkbox"/> ceiling <input type="checkbox"/> stair <input type="checkbox"/> ramp <input type="checkbox"/> pipe <input type="checkbox"/> window
COMPOSITION	The material has been placed as a unique cylindrical element as a water pipe.
REMARKS	

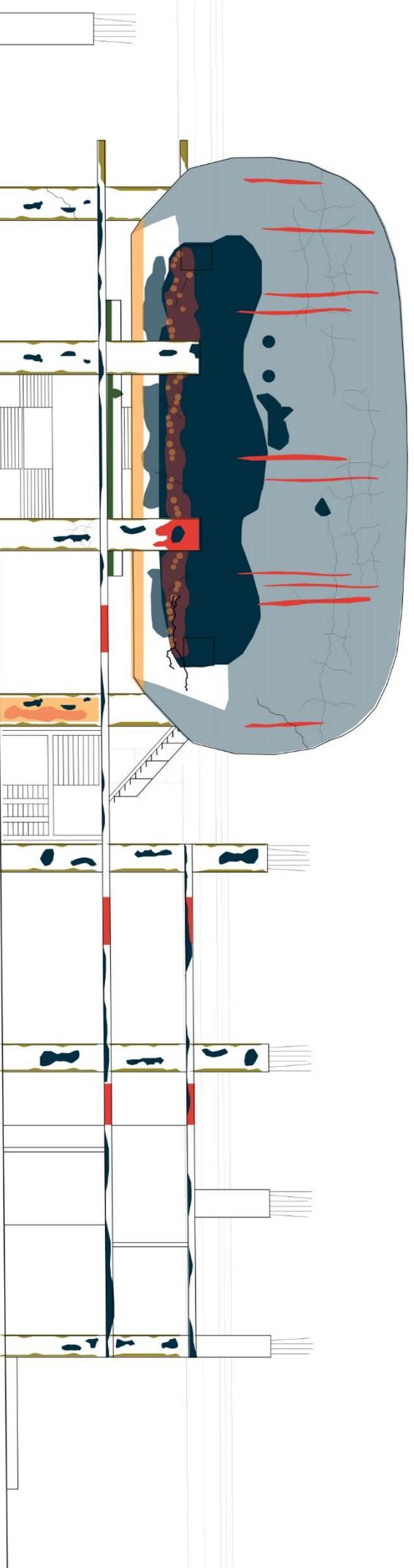
WOOD	
ASSIGNED CODE	M12
HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Ground and First Floor
KEY PLAN/ ELEVATION	
PHOTO	
MATERIAL DEFINITION AND DESCRIPTION	Wood is composed of a solid part and fibrous rich juices. It is essentially a collection of vases and originally composed of cellulose. Wood is covered by a thin layer of paint.
FUNCTION <input type="checkbox"/> structural <input checked="" type="checkbox"/> covering <input type="checkbox"/> functional element	ORIGIN <input type="checkbox"/> natural <input checked="" type="checkbox"/> artificial
POSITION	<input type="checkbox"/> wall <input type="checkbox"/> floor <input type="checkbox"/> ceiling <input type="checkbox"/> stair <input type="checkbox"/> ramp <input type="checkbox"/> pipe <input checked="" type="checkbox"/> window
COMPOSITION	Wooden boards of 2 cm thickness are present inside an aluminum frame of several parts connected to each other. The whole composition is used as a panel to hide the stairs behind.
REMARKS	

6.3.2. Decay and Cracks Survey

Various decays formations are visible in this complex. Some of them are here considered just aesthetic since they are not immediately threatening the structural safety such as: ***Trickling, Mineral Deposit, Minor Delamination, Erosion, Staining, Discoloration, Spall, Pop out, Honeycombs, Impact damage, Graffiti, Diagonal cracks, hairline cracks, Shrinkage cracking, Irregular pattern cracks*** and ***rust spots*** while others are severe and dangerous such as: ***Biological Growth, Efflorescence, Chipping, Severe Cracking, Delamination, Stalactite*** and ***Exfoliation***.

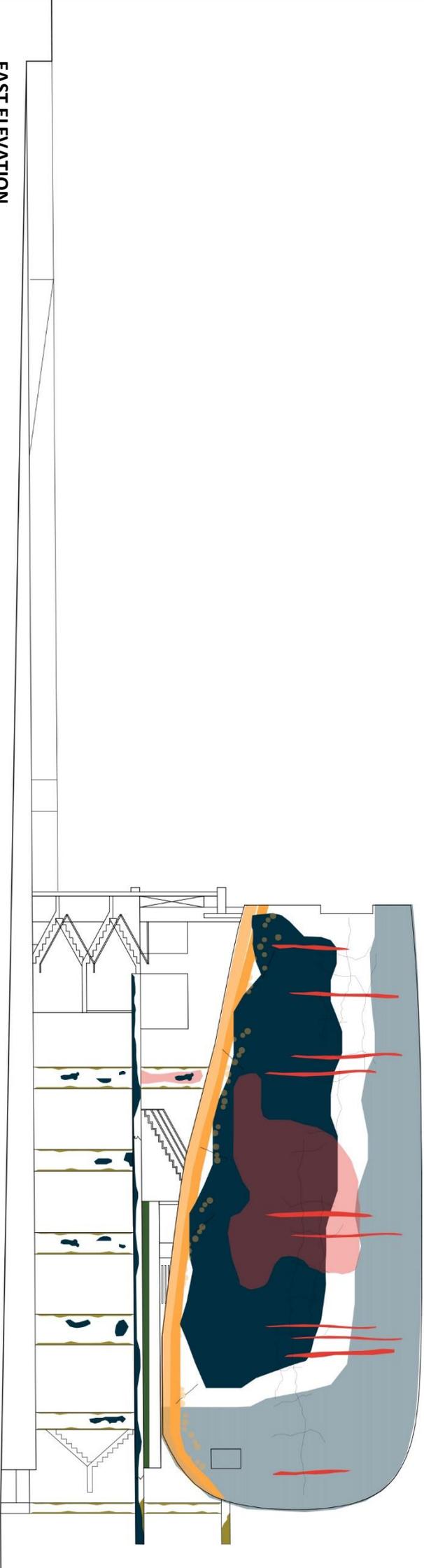
The following forms will present the visible decay, each with its photo, location in the complex as well as a detailed description of its definition, visible effects, possible causes, decay mechanism and type investigation. On the other hand, as far as severe decay is concerned, interventions will be suggested in order to fix the problem and possibly eliminate it thus preventing any further deterioration as well as the weakening of the building. The intervention in the severe decay is mandatory, whereas for the aesthetic decay the choice was made to leave it as it is. No intervention methods are mentioned in the forms since it doesn't put our building in danger. Regarding the decisions of whether to repair or not, it will be considered and depicted later in the research as part of the project proposal.

	Trickling		Impact Damage		Chipping		Diagonal Crack
	Mineral Deposit		Graffiti		Exfoliation		Hairline Crack
	Minor Delamination		Peeling		Biological Growth		Shrinkage Cracking
							Irregular Pattern Crack
							Severe Cracking



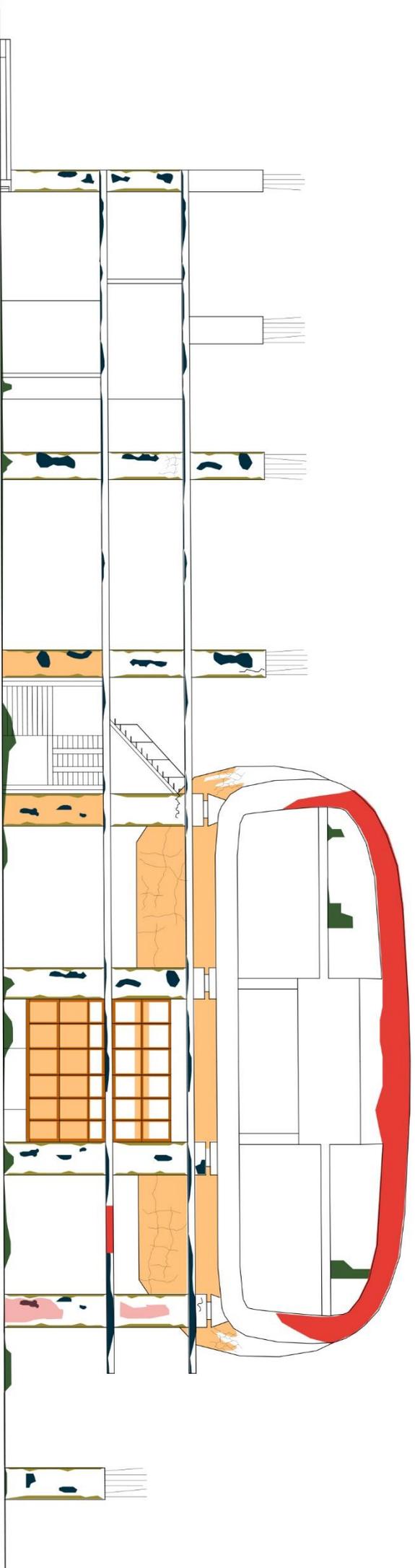
NORTH ELEVATION

	Trickling		Corrosion		Impact Damage		Chipping		Diagonal Crack
	Mineral Deposit		Erosion		Graffiti		Exfoliation		Hairline Crack
	Minor Delamination		Discoloration		Peeling		Biological Growth		Shrinkage Cracking
			Spall						Irregular Pattern Crack
									Severe Cracking



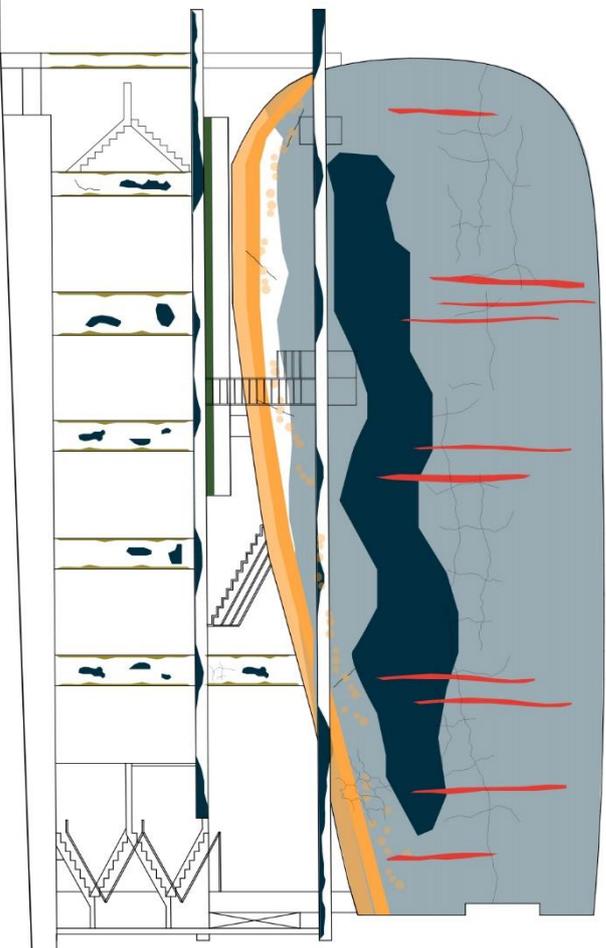
EAST ELEVATION

	Trickling		Impact Damage		Chipping		Diagonal Crack
	Mineral Deposit		Graffiti		Exfoliation		Hairline Crack
	Minor Delamination		Peeling		Biological Growth		Shrinkage Cracking
							Irregular Pattern Crack
							Severe Cracking

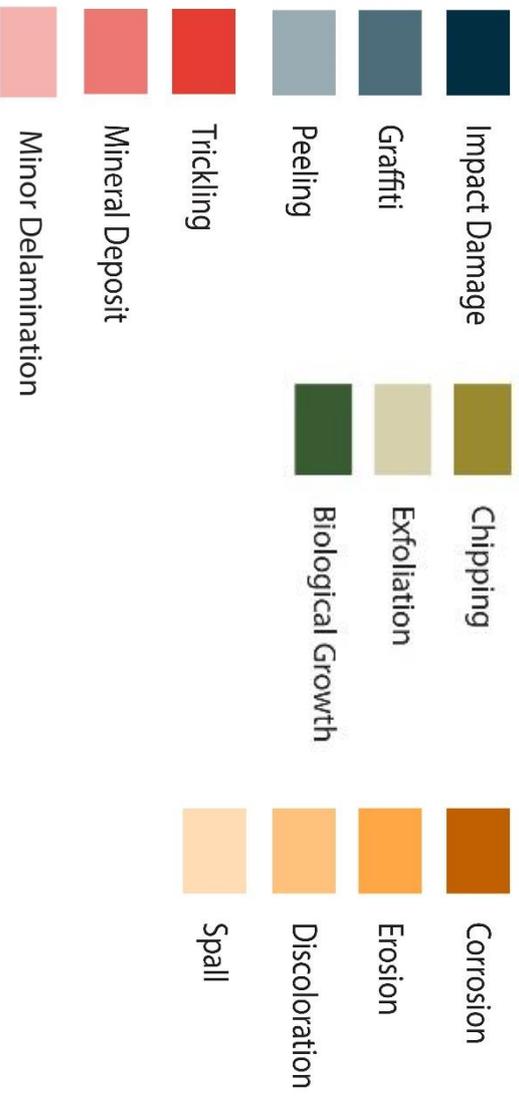


SOUTH ELEVATION

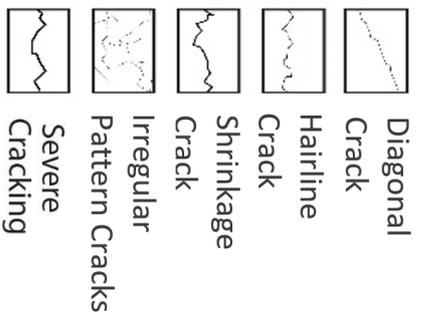
	Trickling		Impact Damage		Chipping		Diagonal Crack
	Mineral Deposit		Graffiti		Exfoliation		Hairline Crack
	Minor Delamination		Peeling		Biological Growth		Shrinkage Cracking
			Corrosion				
			Erosion				
			Discoloration				
			Spall				
							Irregular Pattern Crack
							Severe Cracking



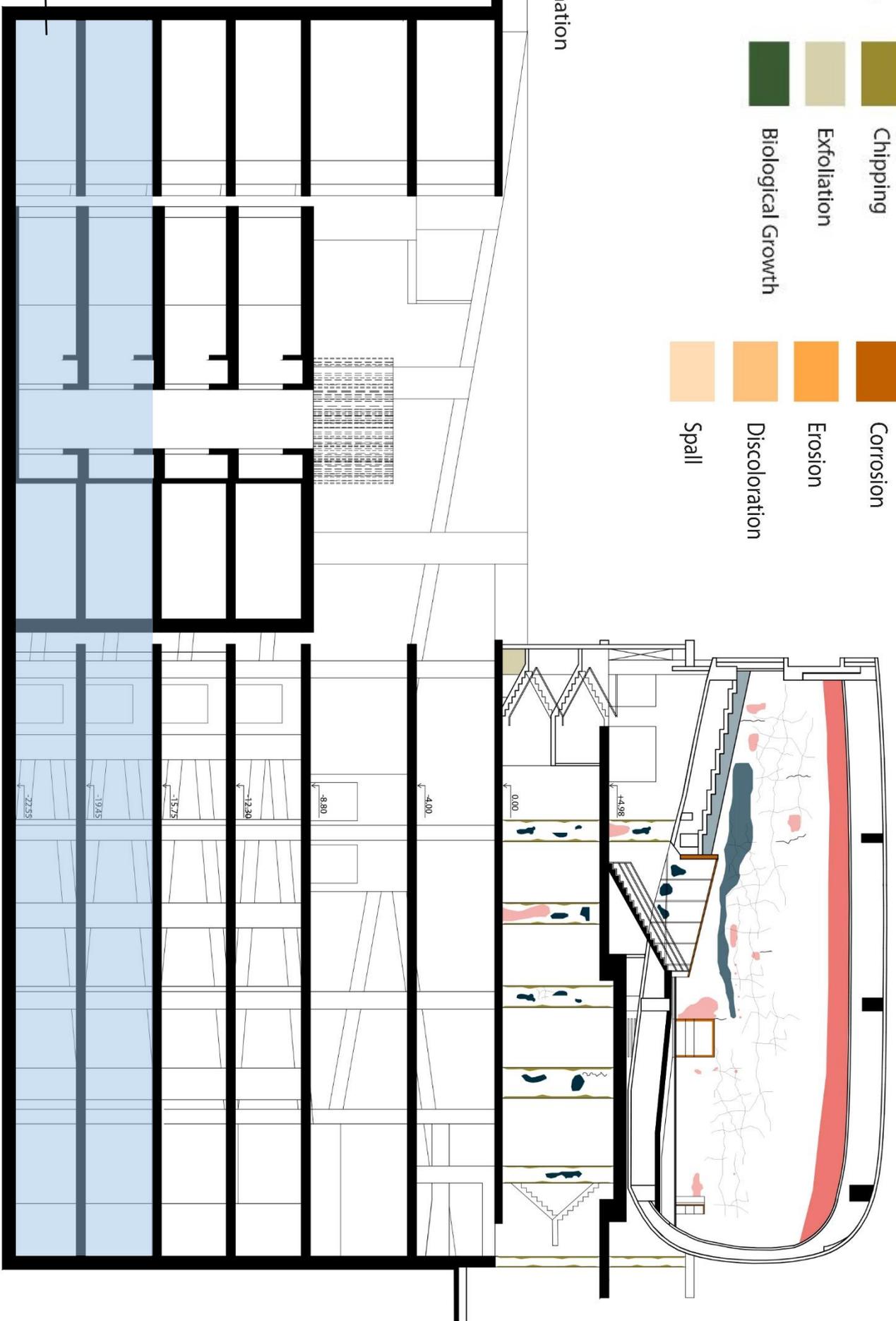
WEST ELEVATION



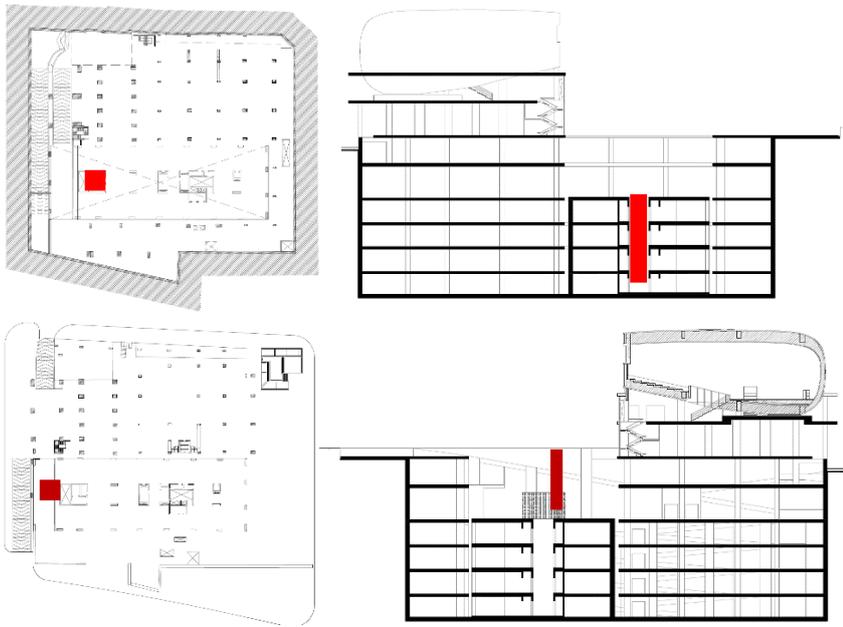
SECTION BB

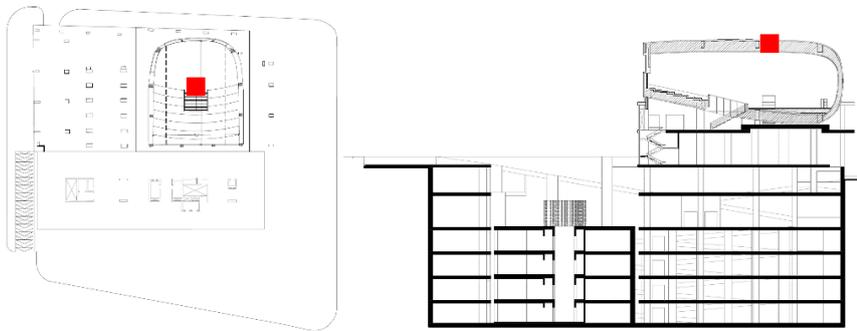


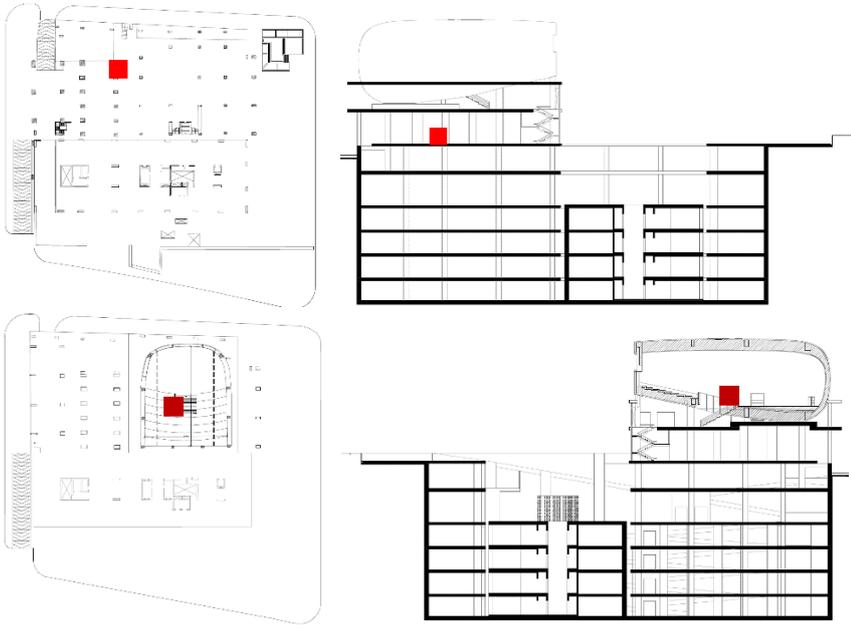
Water
In Basement →

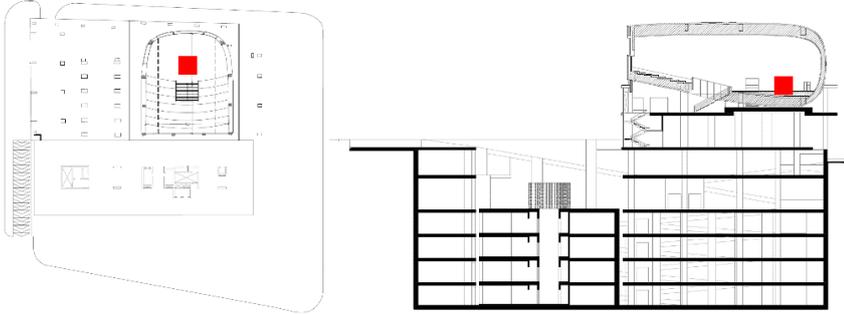


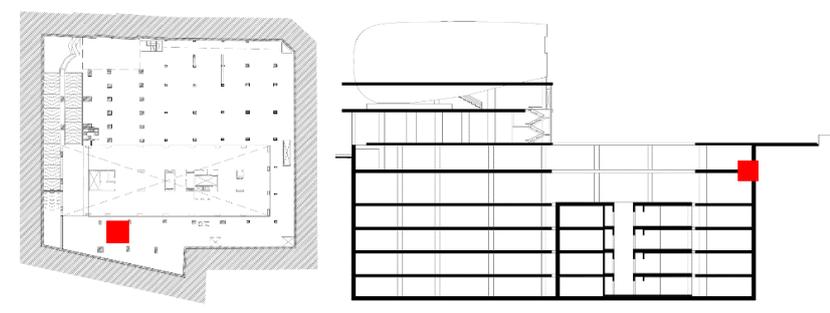
6.3.2.1. Aesthetic Decays

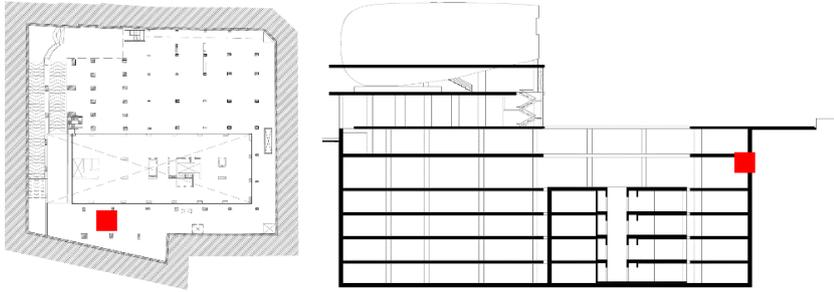
TRICKLING			
ASSIGNED CODE	D01	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Basement 2 Ground floor		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	Unexpected variations in the visual appearance of the structure due to weathering problem. It is largely a cosmetic problem.		
VISIBLE EFFECTS	Streaks of dark color, parallel and vertical (due to the flow direction of rainwater).		
POSSIBLE CAUSES	Action of weather. Structure morphology .		
DECAY MECHANISM	It starts with dust in the atmosphere deposited on the façade. Then, the flow of rainwater tends to wash some areas preferentially, resulting in significant differences in color between clean and dirty areas.		
SUGGESTED INVESTIGATION	Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done: <ul style="list-style-type: none"> • On site: Macroscopic observation. • In lab: Ion Thermographic Petrographic survey. 		
REMARKS			

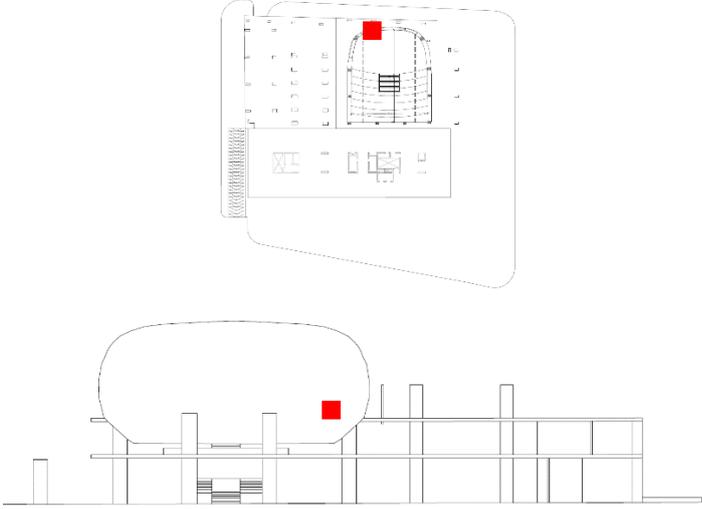
MINERAL DEPOSIT (DUST)			
ASSIGNED CODE	D02	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Second Floor		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	A deposit of dust in the atmosphere on the façade due to weathering problems that makes variations in the visual appearance. A variation in the color to dark grey.		
VISIBLE EFFECTS	Areas of dark color due to the accumulation of material of variable thickness. Non uniform layers in different parts of the ceiling.		
POSSIBLE CAUSES	Atmospheric particles (suspended powders in the atmosphere).		
DECAY MECHANISM	The happens when dust in the atmosphere deposits on the elements of the building.		
SUGGESTED INVESTIGATION	<p>Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done:</p> <ul style="list-style-type: none"> • On site: Macroscopic observation. • In lab: Ion Chromatography /Petrographic survey... 		
REMARKS			

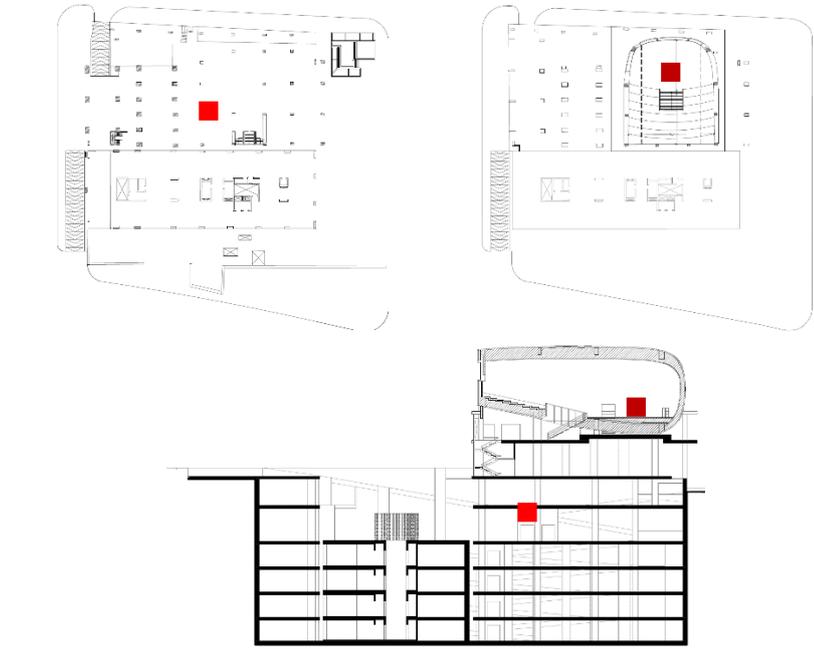
MINOR DELAMINATION			
ASSIGNED CODE	D03	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Ground Floor Second Floor		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	A separation along the plane of the coating from the substrate.		
VISIBLE EFFECTS	Discontinuity of the finishing surface: plaster Loose of big parts of the plaster material. The finishing layer is rough and lifted from the concrete by 2 cm.		
POSSIBLE CAUSES	Action of Weather Thermal cycles.		
DECAY MECHANISM	The poor adhesion between the concrete and the plaster lead to the separation of the coating from the substrate.		
SUGGESTED INVESTIGATION	Verify the grade of detachment to determine if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done: <ul style="list-style-type: none"> On site: Macroscopic observation. 		
REMARKS			

EROSION			
ASSIGNED CODE	D04	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Second Floor		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	Irregularity of the surface because of the loss of pieces of the material (concrete). The phenomenon doesn't appear on the whole surface of the concrete. Some areas appear to be darker than the usual color of the surface.		
VISIBLE EFFECTS	Small round cavities of different sizes on the surface of the concrete. Irregularity of the concrete surface. Some zones are darker in color than the others.		
POSSIBLE CAUSES	Action of weather.		
DECAY MECHANISM	Progressive disintegration of a solid by the abrasive or cavitation action of gases fluids, or solids in motion.		
SUGGESTED INVESTIGATION	Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be: <ul style="list-style-type: none"> On site: Macroscopic observation. 		
REMARKS			

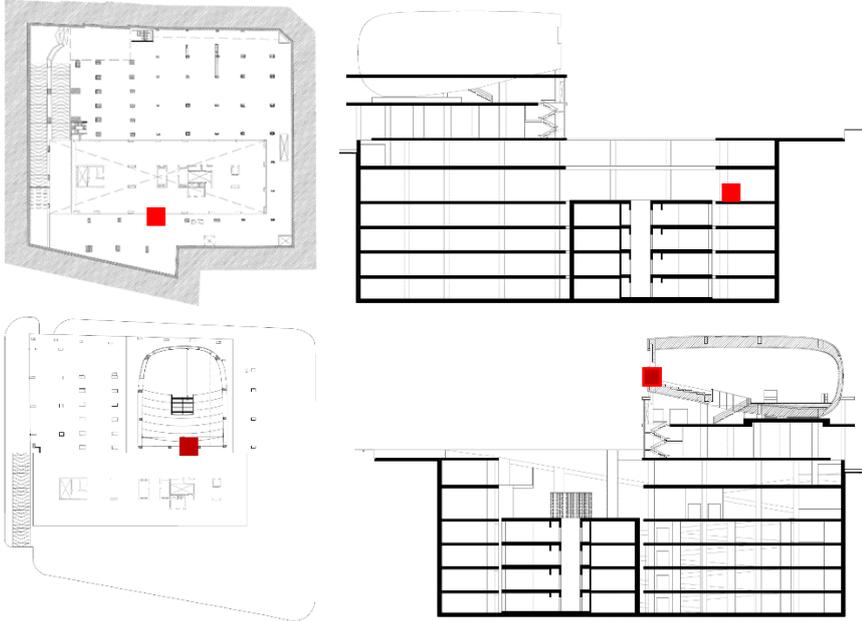
STAINING			
ASSIGNED CODE	D05	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Basement 2		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	Zones of red brownish color on the ceiling and the wall. Staining is a cosmetic problem that affects the appearance of the structure.		
VISIBLE EFFECTS	Shallow dark, brownish strips on the ceiling and spots on the wall. The strips and spots have no thickness.		
POSSIBLE CAUSES	Corrosion of the metal element. Bad waterproofing application during execution phase.		
DECAY MECHANISM	Oxides and salts of copper may be washed from copper and bronze items, such as cladding and flashing, staining the concrete under it.		
SUGGESTED INVESTIGATION	Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done: <ul style="list-style-type: none"> On site: Macroscopic observation. 		
REMARKS			

DISCOLORATION			
ASSIGNED CODE	D06	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Basement 2		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	Departure of color from that which is normal or desired. The walls and ceiling were originally of white color.		
VISIBLE EFFECTS	Shallow zones of yellow brownish color. The zones have no thickness.		
POSSIBLE CAUSES	Presence of moisture.		
DECAY MECHANISM	The state of the plaster is bad; the Surface is characterized by a change in color to brown yellowish and this is due to the neglect of the building for more than 30 years after it was damaged partially by war.		
SUGGESTED INVESTIGATION	Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done: <ul style="list-style-type: none"> On site: Macroscopic observation. 		
REMARKS			

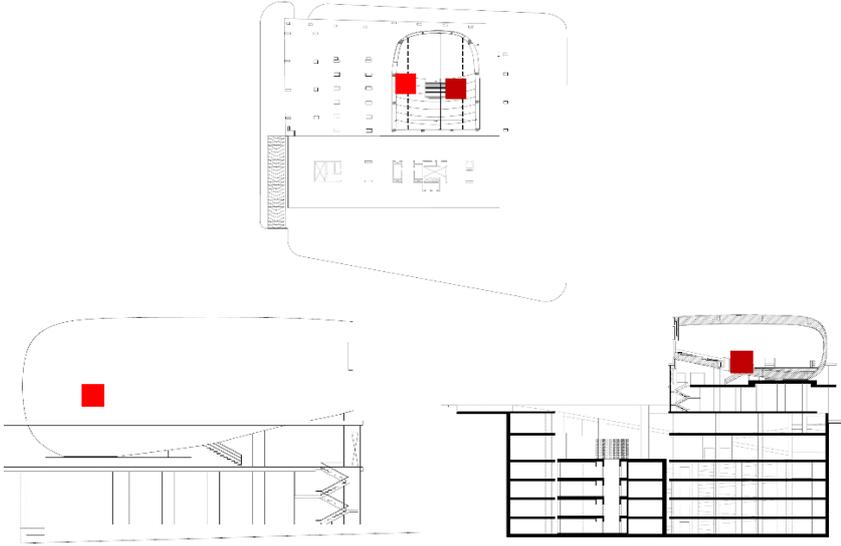
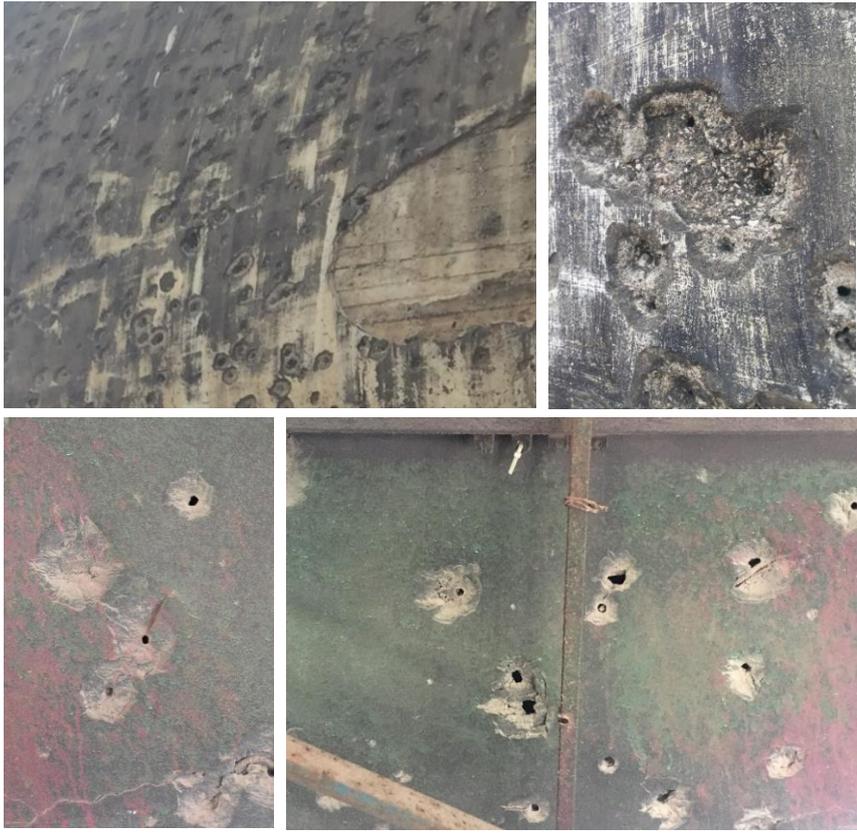
SPALL			
ASSIGNED CODE	D07	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Second Floor, North Elevation		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	A fragment in the shape of ovals detached from the walls of the outer part of the auditorium (egg).		
VISIBLE EFFECTS	The loose of round shape fragments of irregular size from the plaster of the wall. The absence of the plaster fragments (2-3cm thickness) can make us see the concrete under.		
POSSIBLE CAUSES	Action of weather. By a blow.		
DECAY MECHANISM	Fragment detached from a larger mass by a blow, by the action of weather, by pressure or by expansion within the large mass.		
SUGGESTED INVESTIGATION	<p>Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done:</p> <ul style="list-style-type: none"> • On site: Macroscopic observation. • In lab: Ion Chromatography/ X-ray diffraction/ Optic microscopy in polarized light on thin section. 		
REMARKS			

POPOUT			
ASSIGNED CODE	D08	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Ground Floor Second Floor		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	<p>Discontinuity of the surface.</p> <p>Cavities of variable dimensions on the ground of the auditorium and ceiling of the ground floor.</p>		

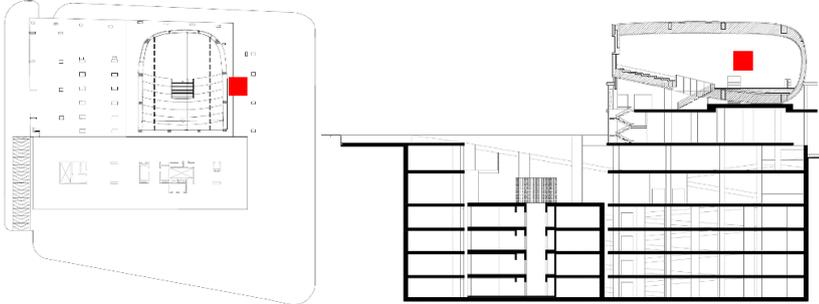
VISIBLE EFFECTS	The cavities are round and small ranging from 5 to 15 mm. We can also notice irregular small cracks.
POSSIBLE CAUSES	Characteristic of the aggregate.
DECAY MECHANISM	Breaking away of small portions of a concrete surface due to localized internal pressure which leaves a shallow, typically conical depression.
SUGGESTED INVESTIGATION	Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done: <ul style="list-style-type: none"> • On site: Macroscopic observation.
REMARKS	

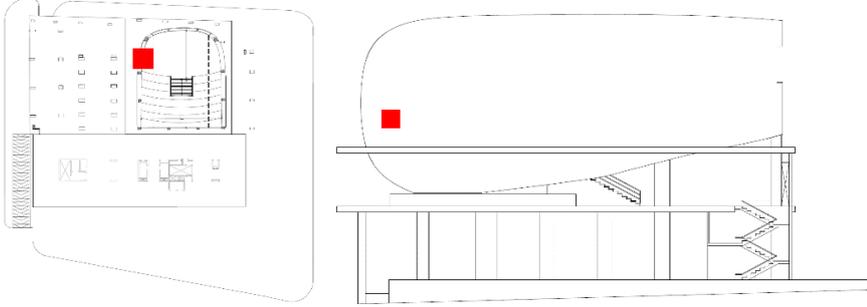
HONEYCOMBS			
ASSIGNED CODE	D09	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Basement 2 Second floor		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	Irregular cavities on the surface of variable depth and presence of aggregates usually dates back to the pouring phase.		
VISIBLE EFFECTS	Irregularities of the surface. Presence of fine aggregates.		
POSSIBLE CAUSES	Executive mode: Inadequate finishing layer (mortar) either due to wrong dosage while mixing or to bad application.		

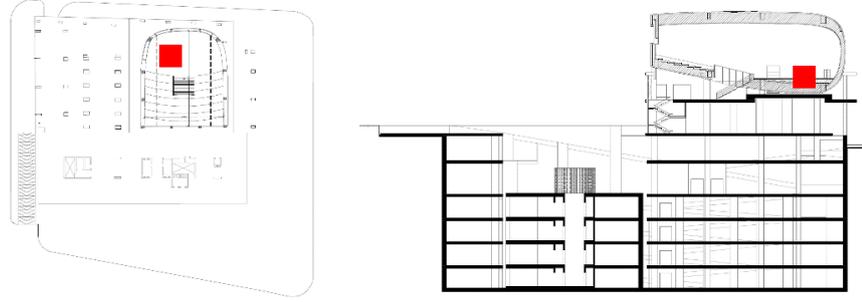
DECAY MECHANISM	The mortar fell to fill the spaces among aggregate particles which caused voids in the concrete.
SUGGESTED INVESTIGATION	Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done: <ul style="list-style-type: none"> • On site: Macroscopic observation. • In lab: X-ray diffraction /Petrographic survey/ Quantitative chemical analysis...
REMARKS	

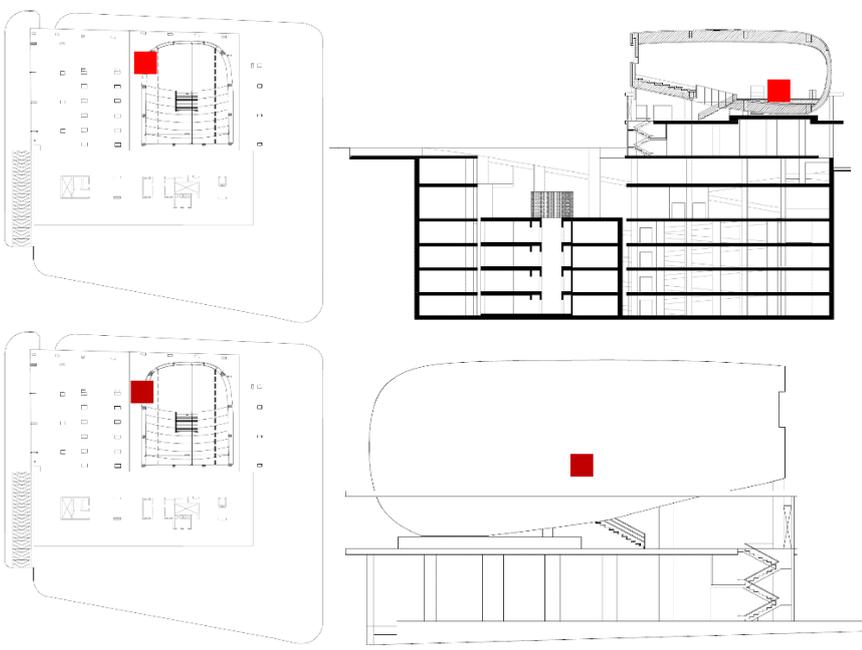
IMPACT DAMAGE			
ASSIGNED CODE	D10	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Second Floor, West Elevation Second Floor		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	Mechanical damage due to the impact of a projectile; bullets		
VISIBLE EFFECTS	Punctual loss of material		
POSSIBLE CAUSES	The impact of bullets that the building was exposed to during war		

DECAY MECHANISM	Isolated impact of war bullets, which caused the loss of portions of plaster and part of the concrete underneath as well. The decay is with high density in the building.
SUGGESTED INVESTIGATION	Verify the situation of detachment to make sure if the decay is dangerous or no. The investigation can be done: <ul style="list-style-type: none"> • On site: Macroscopic observation/ Measuring the depth of the excavation.
REMARKS	This Decay is present excessively on the four façades of our building as well as inside it.

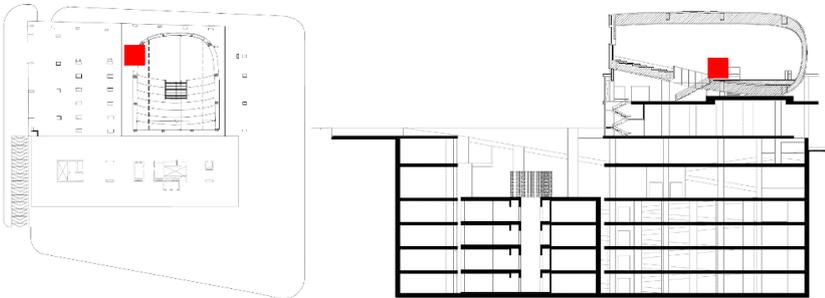
GRAFFITI			
ASSIGNED CODE	D11	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Second Floor		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	Exogenic deposit of paint, ink or similar on building materials surface.		
VISIBLE EFFECTS	Deposit of paint on the plaster's surface. Most of the writings are cursing.		
POSSIBLE CAUSES	Human action by the use of spray cans.		
DECAY MECHANISM	Human action through the use of more than one colour spray cans. The decay is localized on internal and external walls of the building.		
SUGGESTED INVESTIGATION	<p>Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done:</p> <ul style="list-style-type: none"> On site: Macroscopic observation. 		
REMARKS			

DIAGONAL CRACKS			
ASSIGNED CODE	D12	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Second Floor, West Elevation		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	<p>Crack: A complete or incomplete separation, of concrete, into two or more parts produced by breaking or fracturing.</p> <p>Diagonal Crack: An inclined crack usually 45 degrees to the axis of dimension <0.1mm.</p>		
VISIBLE EFFECTS	<p>Discontinuity of the Surface (Long Diagonal crack).</p> <p>Small cracks around the big fissure.</p>		
POSSIBLE CAUSES	<p>Result of the Spall that is probably caused by a blow.</p> <p>Characteristic of the material (Dosage).</p> <p>Executive mode.</p> <p>Mechanical actions.</p>		
DECAY MECHANISM	<p>In a flexural member, an inclined crack caused by shear stress, usually about 45 degrees to the axis; or a crack in slab, not parallel to either the lateral or longitudinal directions.</p>		
SUGGESTED INVESTIGATION	<p>Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done:</p> <ul style="list-style-type: none"> • On site: Macroscopic observation/ Sonic and thermographic tests. • In lab: Petrographic analysis of the concrete (Optic microscopy in polarized light) in order to Perform qualitative information about internal detachments and possible increasing of the fracture. 		
REMARKS			

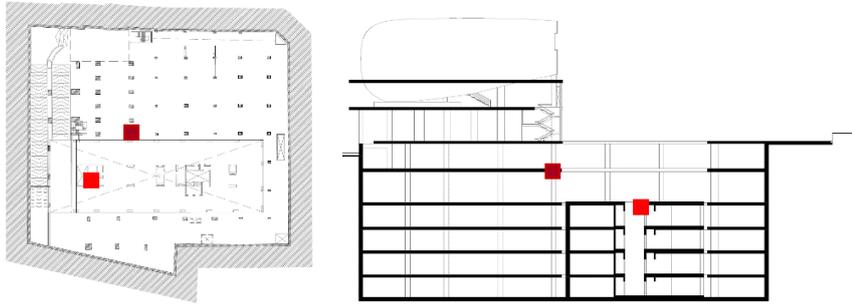
HAIRLINE CRACKS			
ASSIGNED CODE	D13	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Second Floor		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	<p>Crack: A complete or incomplete separation, of concrete, into two or more parts produced by breaking or fracturing.</p> <p>Hairline Crack: Cracks in an exposed concrete surface having widths so small as to be barely perceptible <math><0.1\text{mm}</math>.</p>		
VISIBLE EFFECTS	Thin crack breaking the continuity of the surface (slab), without damaging the underlying layers.		
POSSIBLE CAUSES	<p>Slop moulding.</p> <p>Drying shrinkage of mortar.</p> <p>Moisture.</p> <p>Frost/defrost.</p>		
DECAY MECHANISM	The hair cracks appear along the surface due to different causes, especially atmospheric agents, differential shrinkage or moisture. They do not penetrate completely the layer of plaster.		
SUGGESTED INVESTIGATION	<p>Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done:</p> <ul style="list-style-type: none"> On site: Macroscopic observation to verify the presence of moisture or water and analysis of the adjacent structure and details in order to understand if the hair cracks are related to some lack of stability of the wall. 		
REMARKS			

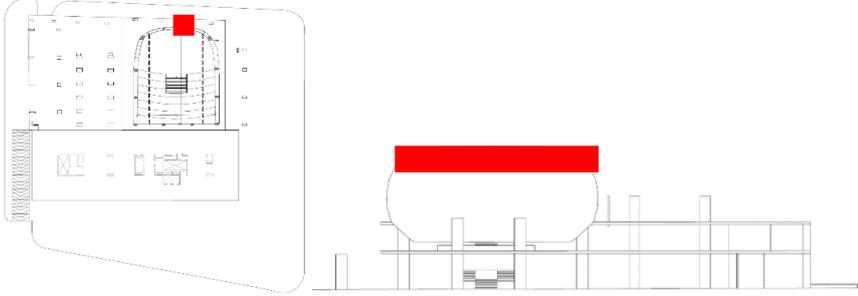
SHRINKAGE CRACKING			
ASSIGNED CODE	D14	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Second Floor Second Floor, West Elevation		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	<p>Crack: A complete or incomplete separation, of concrete, into two or more parts produced by breaking or fracturing.</p> <p>Shrinkage Cracks: Cracking of a structure or member due to failure in tension.</p> <p>Dimension 1mm</p>		

VISIBLE EFFECTS	Discontinuity of the Surface (Big main crack). Small cracks around the big fissure.
POSSIBLE CAUSES	Morphology of the structure Characteristic of the material (Dosage) Executive mode
DECAY MECHANISM	It happens due to failure in tension caused by external or internal restraints as reduction in moisture content develops, or as carbonation occurs, or both.
SUGGESTED INVESTIGATION	Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done: <ul style="list-style-type: none"> • On site: Macroscopic observation/ Sonic and thermographic tests. • In lab: Petrographic analysis of the concrete (Optic microscopy in polarized light) in order to Perform qualitative information about internal detachments and possible increasing of the fracture.
REMARKS	

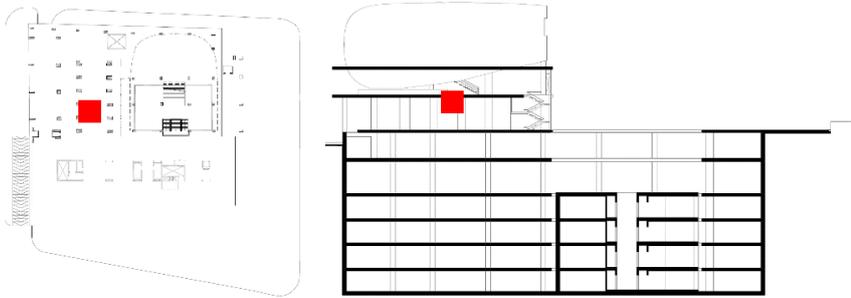
IRREGULAR PATTERN CRACKS			
ASSIGNED CODE	D15	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Second Floor		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	<p>Crack: A complete or incomplete separation, of concrete, into two or more parts produced by breaking or fracturing.</p> <p>Pattern Cracks: fine openings on concrete surfaces in the form of a pattern of dimension $>0.5\text{mm} <1\text{mm}$</p>		
VISIBLE EFFECTS	<p>Numerous cracks on the surface of polygonal shape but irregular sizes.</p> <p>The decay is covering all over the surface.</p> <p>Some zones of darker colors of the others.</p>		

POSSIBLE CAUSES	<p>Thermal differentiation between the different layers. Variation in concrete volume. Mechanical actions. Characteristic of the material (Dosage). Executive mode. Action of weather.</p>
DECAY MECHANISM	<p>It happens because of the decrease in volume of the material near the surface, or increase in volume of the material below the surface, or both.</p>
SUGGESTED INVESTIGATION	<p>Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done:</p> <ul style="list-style-type: none"> • On site: Macroscopic observation. • In lab: Chemical Analysis: alkali-aggregates reaction in order to perform qualitative information about internal detachments and possible increasing of the fracture.
REMARKS	

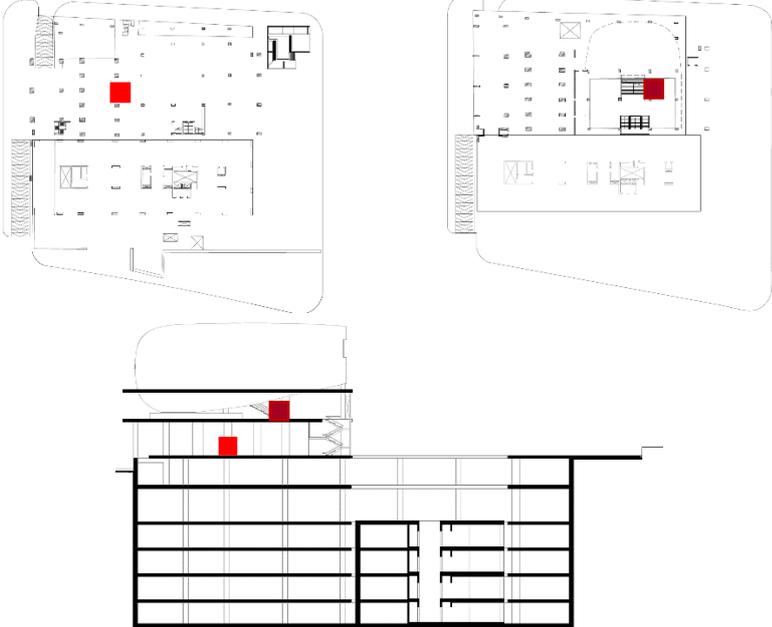
RUST SPOTS		
ASSIGNED CODE	D16	HATCH
LOCALIZATION OF THE DETAIL IN THE BUILDING	Basement 2	
KEY PLAN/ ELEVATION		
PHOTO		
DECAY DEFINITION AND DESCRIPTION	A problem affecting the appearance of the structure produced by reinforcement corrosion.	
VISIBLE EFFECTS	<p>Presence of zones of irregular margins having different color than the one of the surface.</p> <p>Areas of red brownish pigmentation of vertical direction on the walls and horizontal direction on the slab.</p> <p>The rust is heavy because it is spread in excess on the surface.</p>	
POSSIBLE CAUSES	<p>Carbonation of concrete.</p> <p>Corrosion of the structure's reinforcement.</p> <p>Weather factors.</p>	
DECAY MECHANISM	The corrosion of reinforcement bars causes the rust spots to appear on the surface of the structure and thus affect its appearance.	
SUGGESTED INVESTIGATION	<p>Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done:</p> <ul style="list-style-type: none"> • On site: Macroscopic observation. 	
REMARKS		

DECAY TERM			
ASSIGNED CODE	D17	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Second Floor, North Elevation		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	Detachment of coating, glaze, englobe or skin. Due to a loss of adherence between surface and paint film or plaster finish.		
VISIBLE EFFECTS	Detachment of layers and loss of continuity. The surface doesn't appear homogeneous, showing the underlying layers. The white painting is absent in almost the whole upper part of the egg.		
POSSIBLE CAUSES	Chemical composition of materials, presence of moisture, frost-defrost, crypto efflorescence, growth of algae between coating and underground, percolating water.		
DECAY MECHANISM	<p>The external film of paint gradually detaches from the underlying layer, due to differential shrinkages of the two materials, external atmospheric agents (for example the action of sunlight), frost-defrost actions, presence of moisture, bad quality of the applied film of paint etc.</p> <p>The decay is excessively diffused on the Top of all the four sides of "the egg".</p>		
SUGGESTED INVESTIGATION	<p>Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done:</p> <ul style="list-style-type: none"> On site: Macroscopic observation to verify the grade of detachment and the presence of moisture or water and how water outflows on the surface. 		
REMARKS			

6.3.2.2. Severe Decays

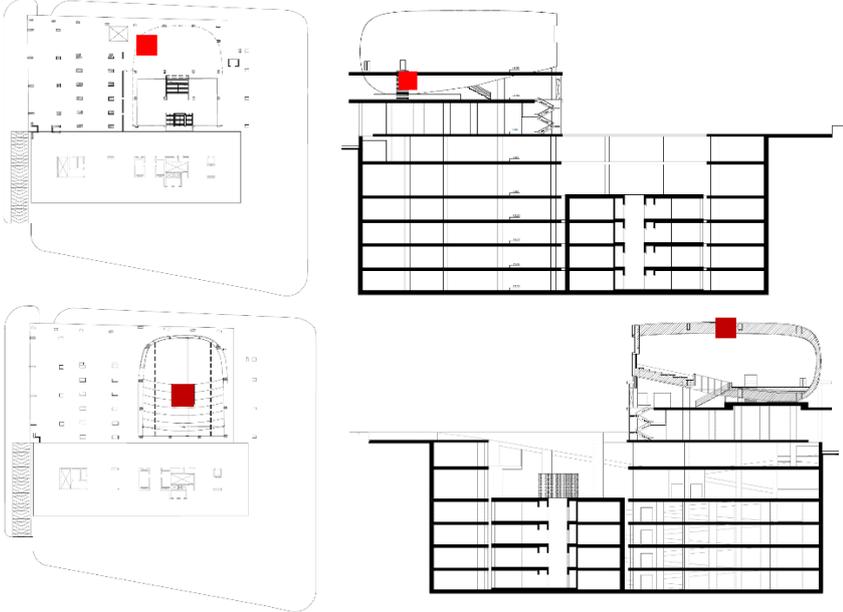
EFFLORESCENCE		
ASSIGNED CODE	D18	HATCH
LOCALIZATION OF THE DETAIL IN THE BUILDING	First Floor	
KEY PLAN/ ELEVATION		
PHOTO		
DECAY DEFINITION AND DESCRIPTION	White material in the form of blankets and crystals with irregular distribution along the ceiling. In addition to some swollen patches of dark color.	
VISIBLE EFFECTS	White color zones of irregular forms and swallowed areas of grey color.	
POSSIBLE CAUSES	Water infiltration. Deterioration of waterproofing treatments. Concrete Hydrolysis.	
DECAY MECHANISM	It starts with the deposit of salt (white color) on the surface; then the substance emerges within concrete and subsequently precipitates by evaporation.	

SUGGESTED INVESTIGATION	<p>Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done:</p> <ul style="list-style-type: none"> • On site: measuring of carbonation depth / measuring of concrete cover thickness/ measuring of corrosion potential/ Ultrasonic measurements. • In lab: chlorine content analysis.
SUGGESTED INTERVENTIONS	<p>Rinse the concrete surface with water then scrub the infected areas with a wire brush or scrub brush. Apply a cleanser by spraying it onto any deposits and allow it to set in for several minutes. Use wire brush or scrub brush after to vigorously clean the troubled areas. Rinse off again any remaining traces of your cleaning solution with water.</p> <p>We may need to repeat the cleaning process several days to several weeks because the decay is not fresh.</p>
MAINTENANCE / PERIODIC CONTROLS	<p>Six months / one year, in order to verify if the intervention has a good durability and if any new decay has occurred.</p>
REMARKS	

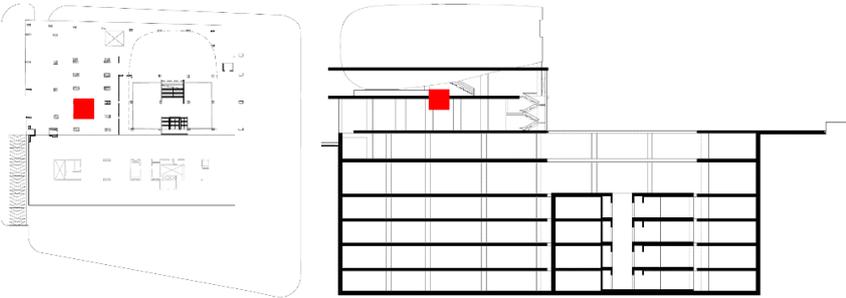
DETACHEMENT specifically CHIPPING			
ASSIGNED CODE	D19	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Ground Floor First Floor		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	<p>Detachment: The complete or partial breaking up of a stone, into portions of variable dimensions that are irregular in form, thickness and volume.</p> <p>Chipping: breaking off of pieces, called chips, from the edges of a block.</p>		
VISIBLE EFFECTS	Missing parts at the edges of a column and a wall.		
POSSIBLE CAUSES	Mechanical impact due to the use of the building.		

DECAY MECHANISM	The collision with some harder tool/object caused the rupture of the angular piece of both the wall and column, which was later taken away since it has not been found next to the affected area.
SUGGESTED INVESTIGATION	Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done: <ul style="list-style-type: none"> • On site: Touch test to verify the level of adhesion of the adjacent pieces/ make sure the concrete missing parts of the column are not structural and does not affect the safety of the building.
SUGGESTED INTERVENTIONS	Cautious removal of the instable and detached elements, which cannot be recovered. Remove some concrete and CMU pieces and until reaching the reinforcing steel bars and analyze them chemically to discover their state of corrosion and the potential of further ones. Clean of the area in order to remove powdery deposits. Reintegration of the missing part using compatible materials in terms of chemic elements and grain as well as using mechanism.
MAINTENANCE / PERIODIC CONTROLS	One / two years in order to verify if the intervention has a good durability.
REMARKS	

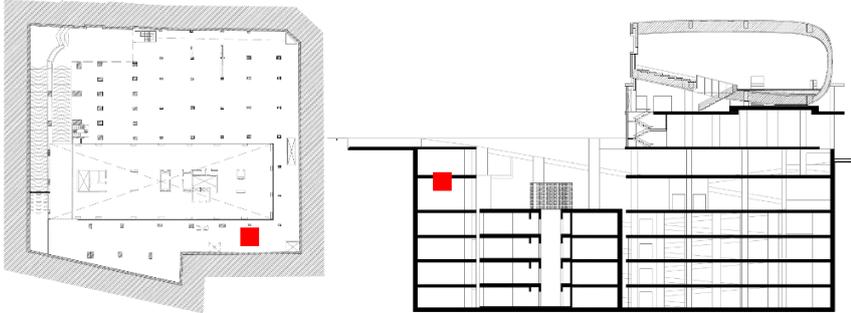
SEVERE CRACKING

ASSIGNED CODE	D20	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	First Floor Second Floor		
KEY PLAN/ ELEVATION			
PHOTO			

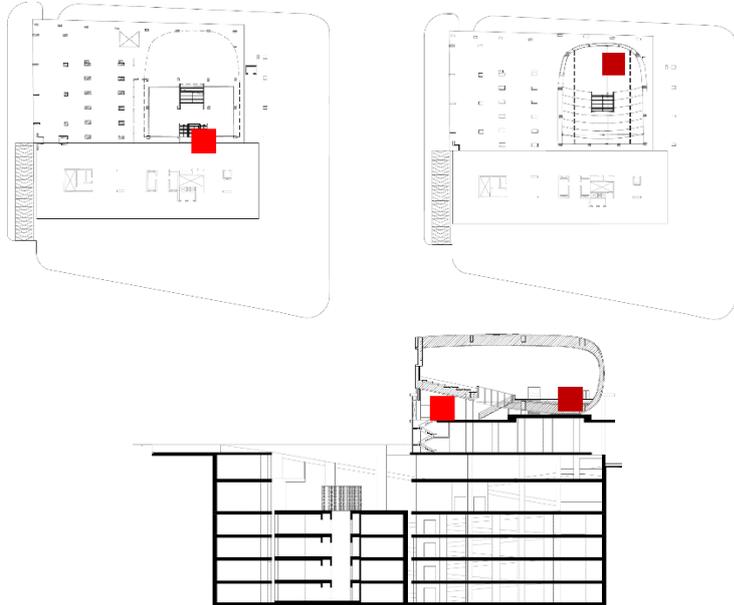
DECAY DEFINITION AND DESCRIPTION	A complete or incomplete separation along line of bars produced by reinforcement corrosion.
VISIBLE EFFECTS	Discontinuity of the surface all along the ceiling and the stair step. Loss of materials since the fracture is severe >5mm.
POSSIBLE CAUSES	Carbonation of concrete. Corrosion of the structure's reinforcement. Executive mode. Water percolation.
DECAY MECHANISM	The reinforcement corrosion usually produce the separation along line of bars causing the crack.
SUGGESTED INVESTIGATION	Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done: <ul style="list-style-type: none"> • On site: Macroscopic Observation/ Sclerometric tests/ Sonic test. • In lab: Petrographic analysis of the concrete (Optic microscopy in polarized light) in order to Perform qualitative information about internal detachments and possible increasing of the fracture.
SUGGESTED INTERVENTIONS	Reach the reinforcing steel bars and analyze them chemically to discover their state of corrosion and the potential of further ones. Consolidate the fracture in order to avoid future movements between the two pieces; place compatible material with the previous ones in terms of chemic elements, grain and color. Design of new technological solutions to avoid the expansion of fractures.
MAINTENANCE / PERIODIC CONTROLS	Six months / one year, in order to verify if the hair cracks have expanded or increased in number.
REMARKS	

DELAMINATION			
ASSIGNED CODE	D21	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	First Floor		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	A separation along a plane parallel to a surface caused by the corrosion of reinforcement steel.		
VISIBLE EFFECTS	<p>Loss of concrete material and appearance of the reinforcement bars with corrosion and red color.</p> <p>Conglomerate of gray color with fine aggregates.</p>		
POSSIBLE CAUSES	<p>Carbonation of concrete.</p> <p>Corrosion of the structure's reinforcement.</p> <p>Executive mode.</p> <p>Geometry of the structure (the low thickness of the concrete cover).</p> <p>Humidity.</p> <p>Frost/Defrost.</p> <p>Presence of Chloride.</p>		
DECAY MECHANISM	the corrosion of steel reinforcements caused a separation along the surface		

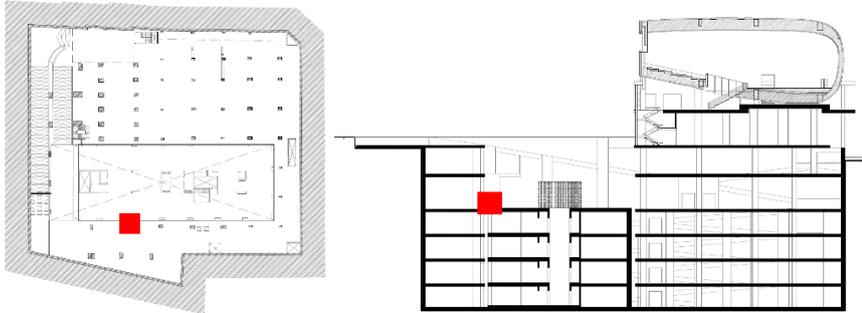
SUGGESTED INVESTIGATION	<p>Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done:</p> <ul style="list-style-type: none"> • On site: Macroscopic Observation/ Sclerometric tests/ Sonic test/ measure the concrete cover thickness • In lab: Petrographic analysis of the concrete/ Quantitative chemical analysis (chlorides presence) in order to discover any new potential of corrosion.
SUGGESTED INTERVENTIONS	<p>Remove the left pieces of concrete cover until reaching the reinforcing steel bars and analyze them chemically to discover their state of corrosion and the potential of further ones. Reintegration of concrete cover with compatible material with the previous ones in terms of chemic elements and grain.</p>
MAINTENANCE / PERIODIC CONTROLS	<p>Six months / one year, in order to verify if the intervention has a good durability and if any new decay has occurred.</p>
REMARKS	<p>This decay is one of the most common ones in the building.</p>

STALACTITE			
ASSIGNED CODE	D22	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Basement 2		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	<p>Irregularities of the surface.</p> <p>Presence of vertical downward-pointing material of white color and 5-15cm length.</p>		
VISIBLE EFFECTS	<p>Stalactites formed by cement mortar of gray color, with fine aggregate.</p> <p>Prevalent areas of white / pink coloring; most rare, stalled by light brown color.</p>		
POSSIBLE CAUSES	<p>Water presence under different forms: infiltration and humidity.</p> <p>Drip of cement paste.</p> <p>Infiltration of rainwater.</p>		
DECAY MECHANISM	<p>A downward-pointing deposit form as an accretion of mineral matter produced by evaporation dripping water from the surface of concrete, commonly shaped like an icicle.</p>		
SUGGESTED INVESTIGATION	<p>Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done:</p> <ul style="list-style-type: none"> On site: Macroscopic Observation. 		

<p>SUGGESTED INTERVENTIONS</p>	<p>Solve the problem of waterproofing that caused this decay to happen; like that we prevent the repetition of this decay.</p> <p>Removal of the decay paying attention to avoid damaging the layers of the substrate (Plaster). Mechanical dry cleaning with the aid of jets of compressed air at high pressure in addition to hard tool like scrubs, razor blades and stripe eliminator wheels.</p> <p>Possible restoration of the substrate; Partial or total re-plastering using techniques, colours and tonalities as similar as possible to the surface of the neighbouring colour.</p>
<p>MAINTENANCE / PERIODIC CONTROLS</p>	<p>Six months / one year, in order to verify if the intervention has a good durability and if any new decay has occurred.</p>
<p>REMARKS</p>	

EXFOLIATION			
ASSIGNED CODE	D23	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	First Floor Second Floor		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	Disintegration occurring by peeling off in successive layers; swelling up and opening into leaves or plates like a partly open book.		
VISIBLE EFFECTS	Broken concrete of rough surface with different layers overlapped.		

POSSIBLE CAUSES	Executive mode. Quality of the material used in construction
DECAY MECHANISM	It starts with cracks or other decays that happen to the material which causes later its falling down from the surface. Gradually there will be a discontinuity in the surface due to the successive falls of the building material (plaster, concrete)
SUGGESTED INVESTIGATION	Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done: <ul style="list-style-type: none"> • On Site: Macroscopic observation to verify the grade of detachment.
SUGGESTED INTERVENTIONS	Cautious removal of the instable and detached elements, which cannot be recovered. Analyze the steel reinforcing bars chemically to discover their state of corrosion and the potential of further ones. Solve the erosion problem in order to prevent further decays. Clean of the area in order to remove powdery deposits. Reintegration of the missing part using compatible materials in terms of chemic elements and grain as well as using mechanism.
MAINTENANCE / PERIODIC CONTROLS	New checks each one / two years, in order to verify if the intervention has a good durability and if new decay has occurred.
REMARKS	

BIOLOGICAL GROWTH			
ASSIGNED CODE	D24	HATCH	
LOCALIZATION OF THE DETAIL IN THE BUILDING	Basement 2		
KEY PLAN/ ELEVATION			
PHOTO			
DECAY DEFINITION AND DESCRIPTION	<p>Organic surface growth (moos and grass)</p> <p>Moos are vegetal organism forming small, soft and green cushions of centimetres' size. They look generally like dense micro-leaves (sub to millimetres' size) tightly packed together. Mosses often grow on stone surface open cavities, cracks, and in any place permanently or frequently wet (masonry joints), and usually shady.</p>		

VISIBLE EFFECTS	<p>Moos: Thin and soft layer composed by dense, green and brown leaves, low adhesion to the substrate.</p> <p>Grass: vegetation consisting of typically short plants with long, narrow leaves.</p>
POSSIBLE CAUSES	<p>Action of Weather.</p> <p>Long-lasting presence of moisture.</p>
DECAY MECHANISM	<p>The presence of moisture gradually led to the growth of micro-vegetation.</p> <p>The moss is concentrated in specific parts of the building especially the outdoor part and therefore is clearly due to rainwater.</p>
SUGGESTED INVESTIGATION	<p>Verify if the decay is just esthetic or Severe in order to prevent further dangerous decays. The investigation can be done:</p> <ul style="list-style-type: none"> • On site: Macroscopic observation/ Touch test to understand the consistency of the moss and the grade of adhesion to the concrete surface. • In lab: Taxonomic analysis of the moss, in order to evaluate the level of danger (using indexes of dangerousness) and to opt for the best intervention.
SUGGESTED INTERVENTIONS	<p>Softening of the moss through the application of a solution containing ammonia.</p> <p>Mechanical or hydro washing removal of the moss. Application of specific biocides.</p> <p>Low-pressure hydro washing of the surface with clean water, in order to remove all the remaining traces of biocide and biological pests.</p> <p>Final preventive treatment by vaporization at low concentration of biocide against the growth of vegetation and autotrophic microorganisms attacks.</p>
MAINTENANCE / PERIODIC CONTROLS	<p>Six months / one year, in order to verify if the intervention has been adequate to avoid future colonization of plants.</p>
REMARKS	

6.4. Conservation Proposal

The Egg, being the important war remnant that it is, continues to be a main monumental site worth preserving its structure as well as its memory. As a result, the re-use project will take into consideration the following aspects: *materiality* and *functionality*.

6.4.1. Materiality

As previously discussed, concrete is the most used material in the world during the 21st century. The revolution of this material appeared specifically after the world wars during the reconstruction phase in the 20th century.

In the case of “the Egg”, its *material* is considered as monumental as its structure. It is part of the Lebanese Modernist era and it is influenced by the *Brutalism movement* where concrete was extensively used. For this reason, the material will be kept visible. The skin of the building, with its patina and historic layers, will be preserved.

As far as *interventions* are concerned, only severe decay and structural damage will be fixed, leaving the rest of the structure untouched. The skin of the building, with all its previous bullet holes and war scars, will be left intact.

6.4.2. Functionality

When dealing with remains, it is important to link its new function with its memory. The interventions must remain *light, flexible* and *noticeable*. It is important to also make use of the existing architecture.

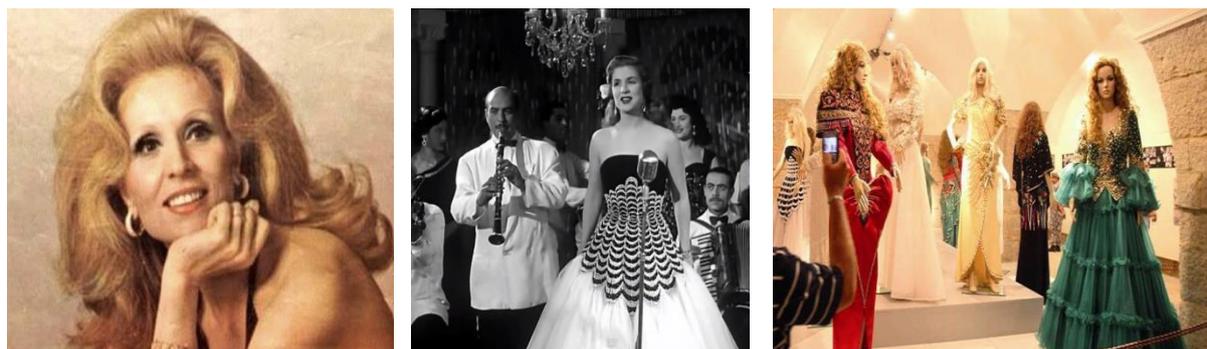
In the case of the Egg, the building has undergone drastic change over time; it lost its role as a space and it was affected greatly by the changes in its context. Therefore, the project requirement is to revive the building and extend its life.

As far as the functionality is concerned, the project will be transformed into a Cinema Museum accompanied by a Movie Production Center. The flourishing Lebanese film industry has greatly influenced this choice of function.

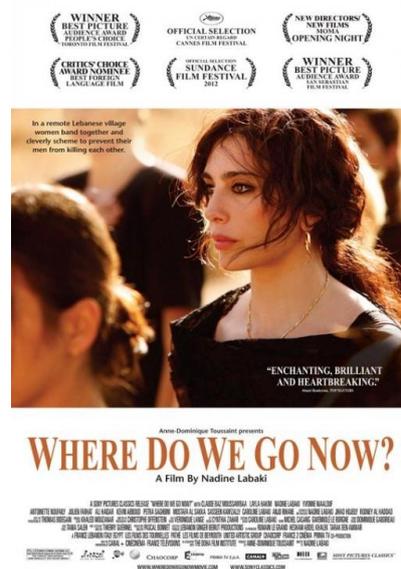
6.4.2.1. The Lebanese Film Industry

Lebanese films are believed to be part of the country's heritage; they are worth encapsulating and celebrating. Today, there are many talented directors, actors and film makers, as well as movies worth noting. These artists are gaining success abroad and are receiving awards in international festivals.

The aim of this project is to return the Film industry to its glorious Golden age. It will promote these talented people and their work in Beirut, and consequently the world. The project will become a hub for these artists to share their creations and creativity in one place.



Sabah, Lebanese Diva, actress and singer, exhibition of her dresses



Two of Nadine Labaki's movies: "Caramel" and "Where do we go now?"



Nadine Labaki, Lebanese director and actress

Labaki's works are translated into more than 6 languages and are gaining recognition in International festivals. Her movie Caramel was considered as a revival of Lebanese cinema that has been neglected since the civil war.



Two of George Khabbaz,' movies "ghadi" and "Under the bombs"



George Khabbaz, Lebanese actor, writer and director

Khabbaz is another hope for the Lebanese cinema and theater. His movies and plays are also translated into many languages and are gaining recognition in International festivals.

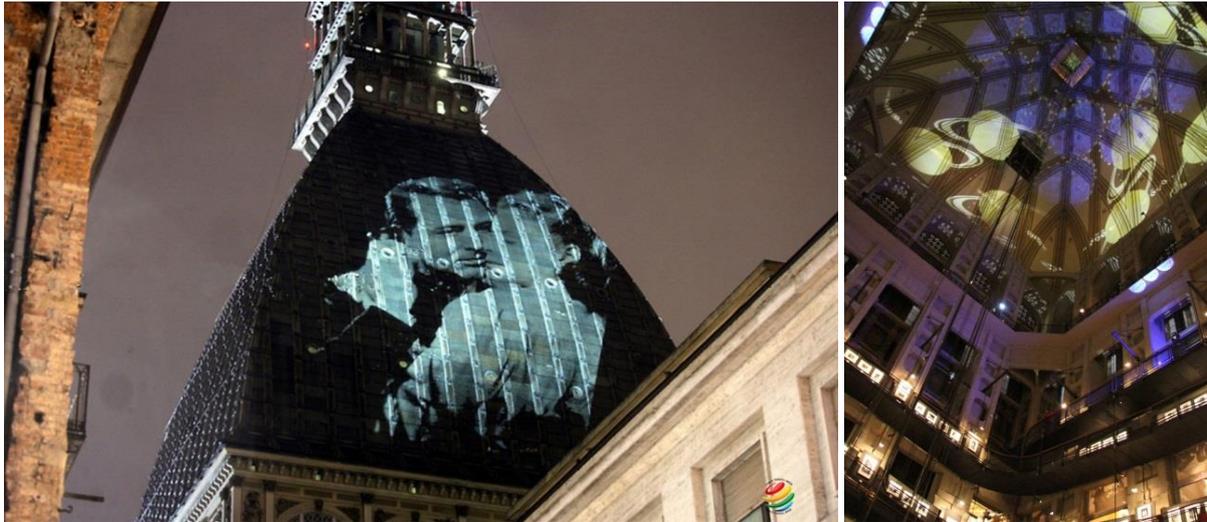
6.4.3. Inspirations

6.4.3.1. *The National Museum of Cinema, Torino*

The project is inspired by the example of the National Museum of Cinema in Torino. This monumental building is an architectural symbol of Turin and home of the great collection of film artifacts.



Exhibitions spaces inside the museum



Projections on dome and ceiling of the National Museums of Cinema, Torino

6.4.3.2. The Artworks of Edoardo Tresoldi

Interventions, both temporary and permanent, are inspired by the work of the artist Edoardo Tresoldi. His wire mesh works transcend time and space.



Selection of works of Edoardo Tresoldi.

6.4.4. The Project

6.4.4.1. *The Egg and the City*

The new project will allow the Egg to become the mirror of the city; it will be open to all the public especially those interested in movies and cinema.

The project will be composed of **public spaces** such as the open ground floor which is completely accessible by the public, **semi-public** spaces such as the exhibitions, the rooftop and the auditorium, and **private spaces** such as the Movie Production floor.

On the public level, the ground floor with its minimal closed spaces will create **a free flow** for the people and will link the building complex to the city. The egg-like structure will not merely be considered as an auditorium; it will become in itself the **exhibition for the city**. Various projections will be held on the outer skin of the structure, creating a greater interaction between the city and the Egg.

6.4.4.2. Interventions

The concept of the National Museum of Cinema in Torino, its space definition and artifacts exhibition have greatly motivated the new project. The creative way of exhibiting and creating of spaces was also taken into consideration; separations and walls were installed, structures were hanged and projections were casted on screens, ceilings and roofs.

In addition, the mesh technique used by Edoardo Tresoldi was considered as a way to link all the different layers and building languages in the city. It created interventions standing out from the context. This technique was used to wrap around permanent interventions such as staircases, elevators and balustrades. It was also used to create temporary spaces such as exhibitions, instillations and flexible interiors.

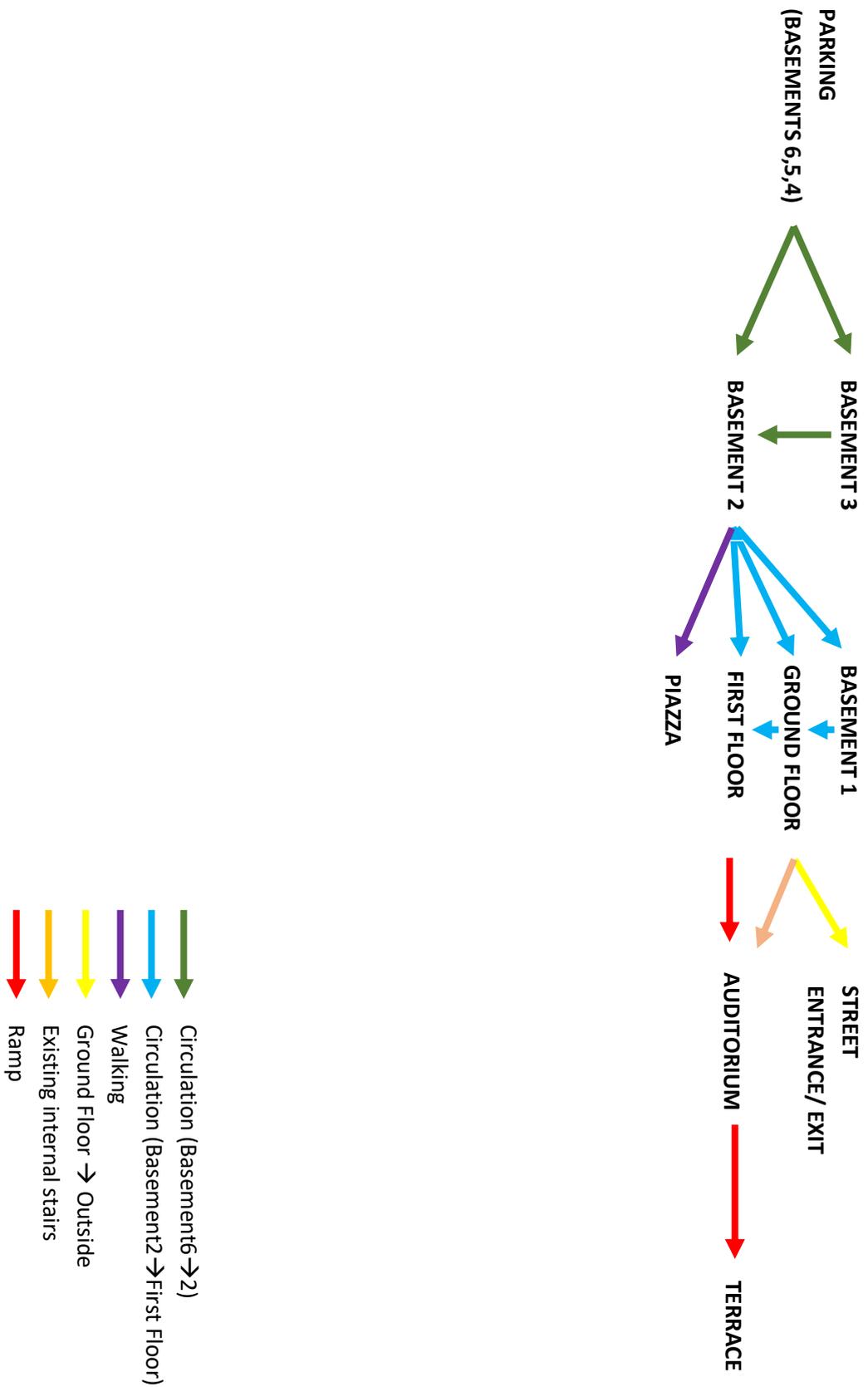
Another main circulation intervention within the project was the ramp linking the first floor to the egg structure reaching the rooftop terrace. This ramp helped in creating an access for the handicapped visitors to the auditorium as well as the terrace.

6.4.4.3.

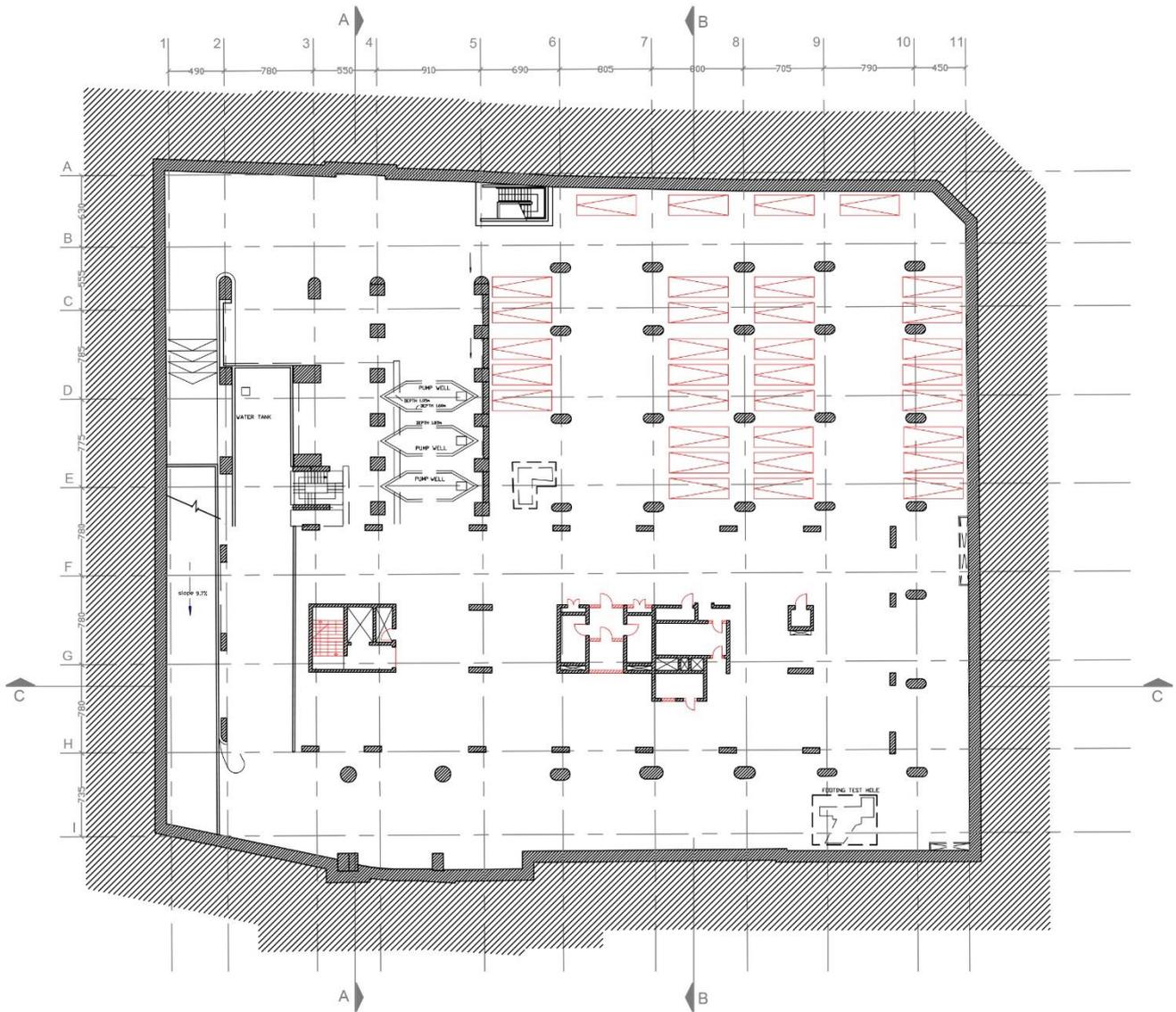
The Total area of our land lot is around 6300m² and our project area is around 18500m². The full capacity of the complex is 4000 people occupying the space at the same time. This capacity is split on different spaces such as exhibition halls, auditorium, roof top restaurant, movie production area and a piazza. In addition to the latter spaces, the complex consists of three basement levels of parking able to hold 150 cars.

The place is not necessarily used all at the same time, its functions are independent of each other. This is to say that spaces are created flexibly according to the event taking place; many

promenade scenarios can be anticipated within the complex. Further clarification can be found through the following diagram.



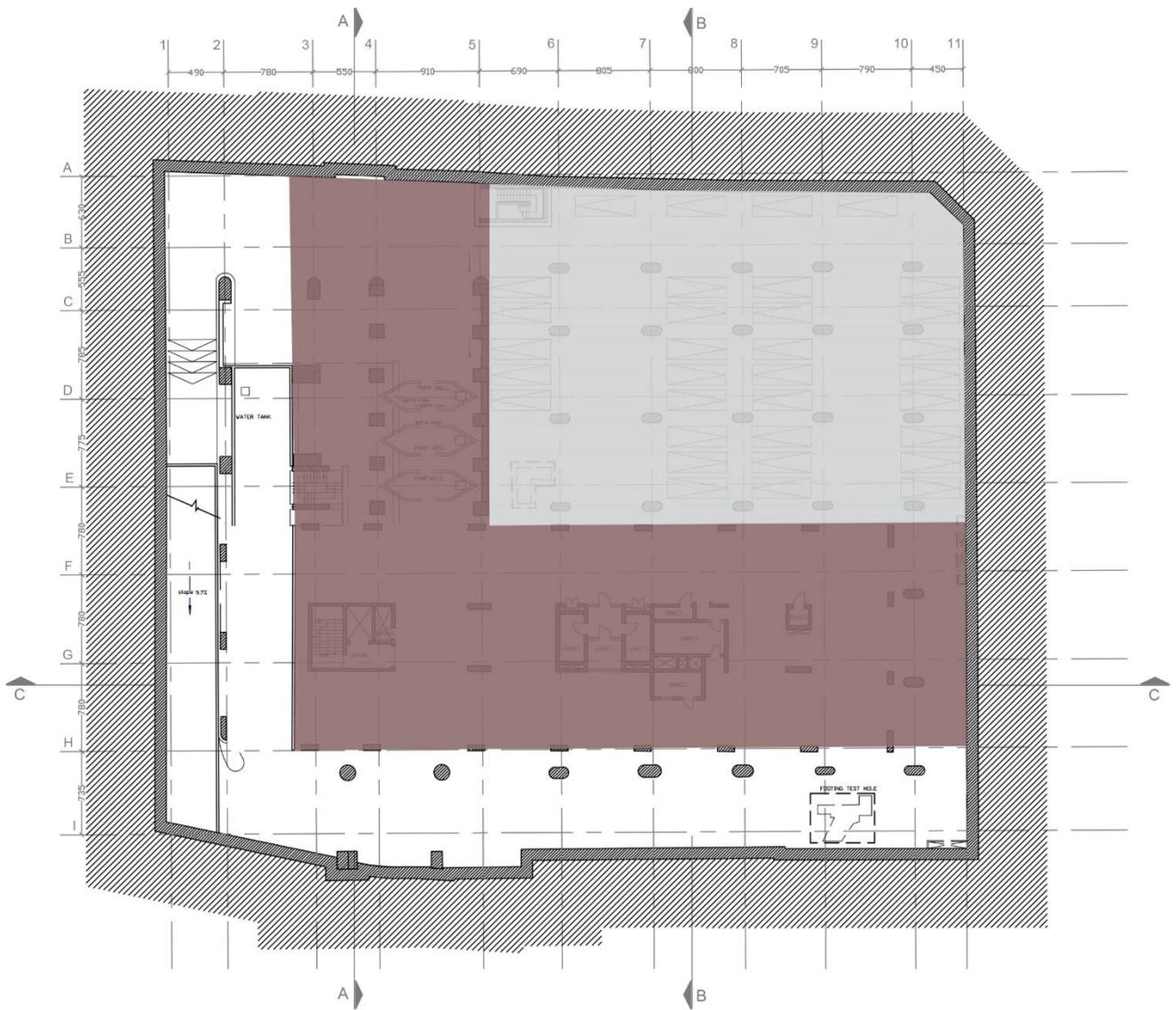
6.5. New Function Proposal



Modifications
6th & 5th Basement
Scale 1/500



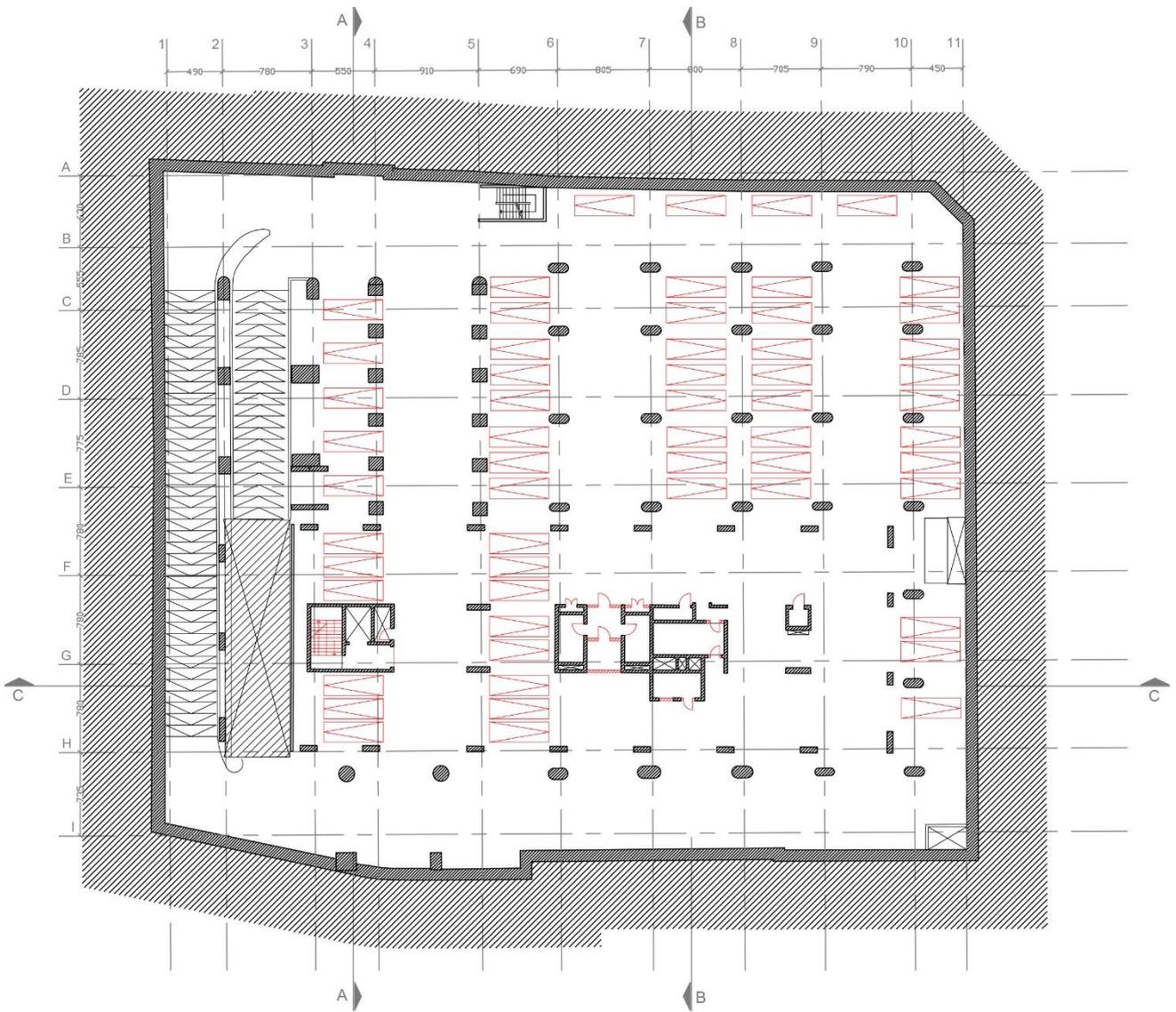
RED ADDITIONS
YELLOW REMOVAL



Functions
6th & 5th Basement
 Scale 1/500



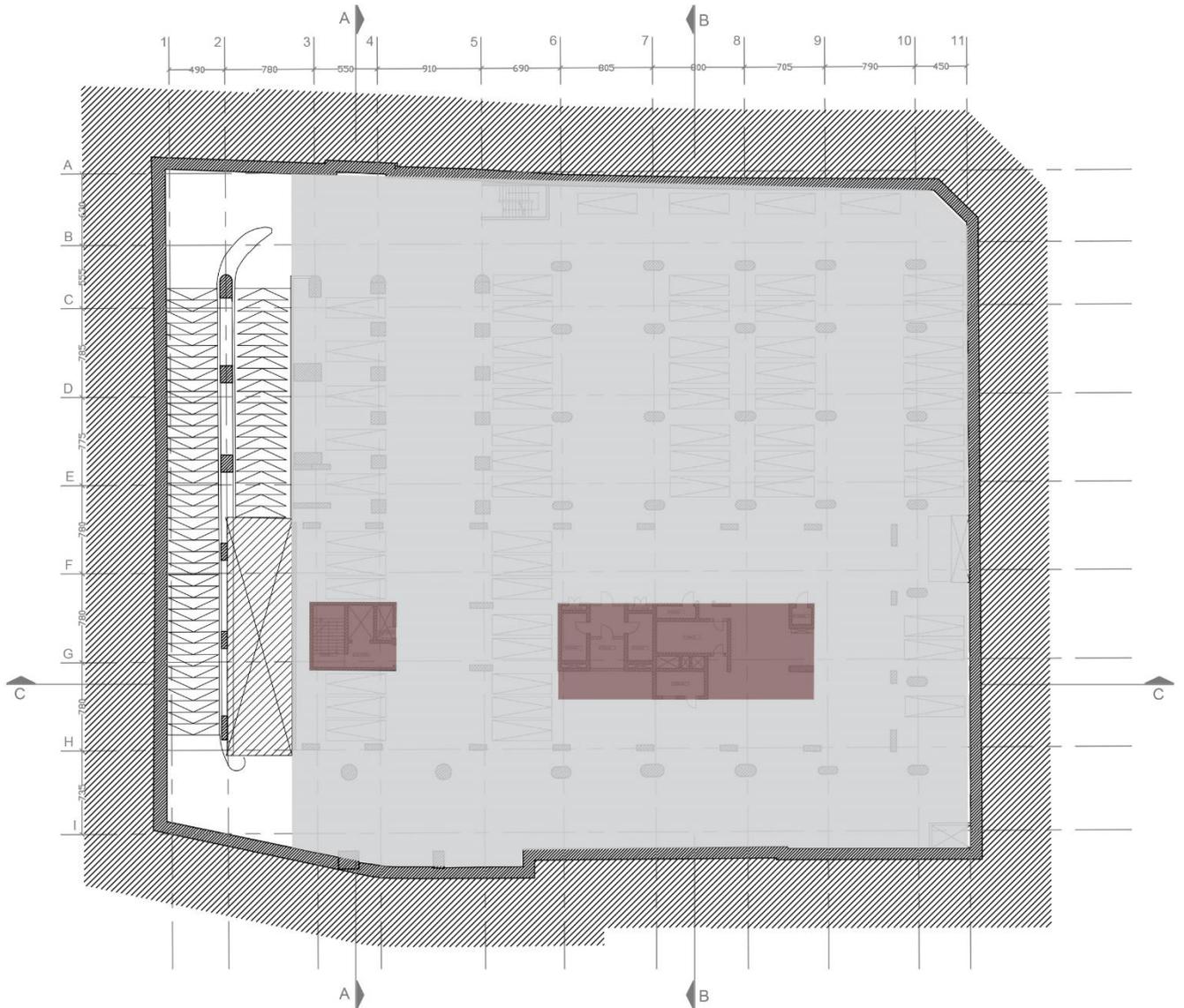
■ SERVICES
 ■ PARKING



Modifications
4th Basement
 Scale 1/500



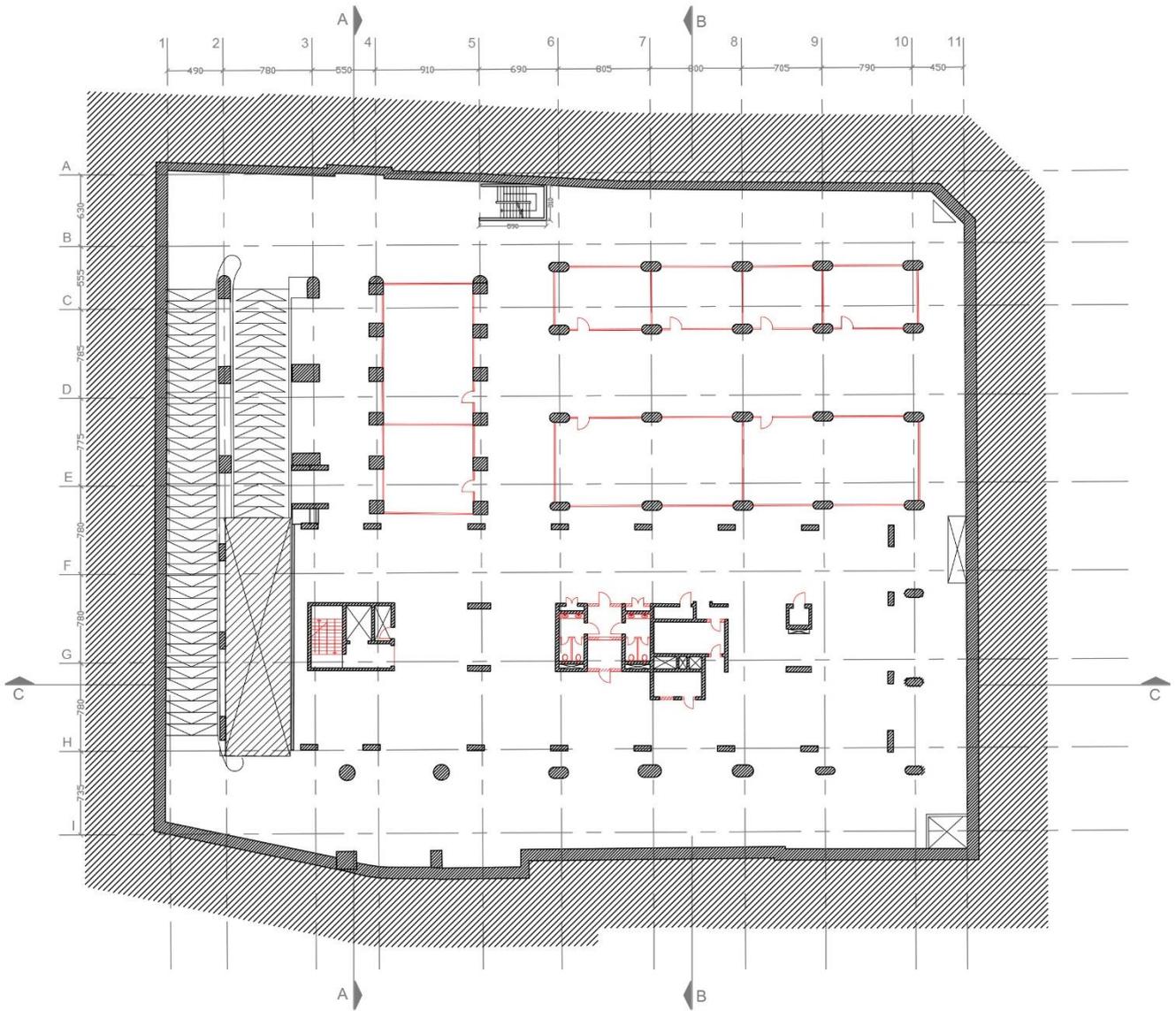
■ ADDITIONS
■ RIMOVAL



Functions
4th Basement
 Scale 1/500



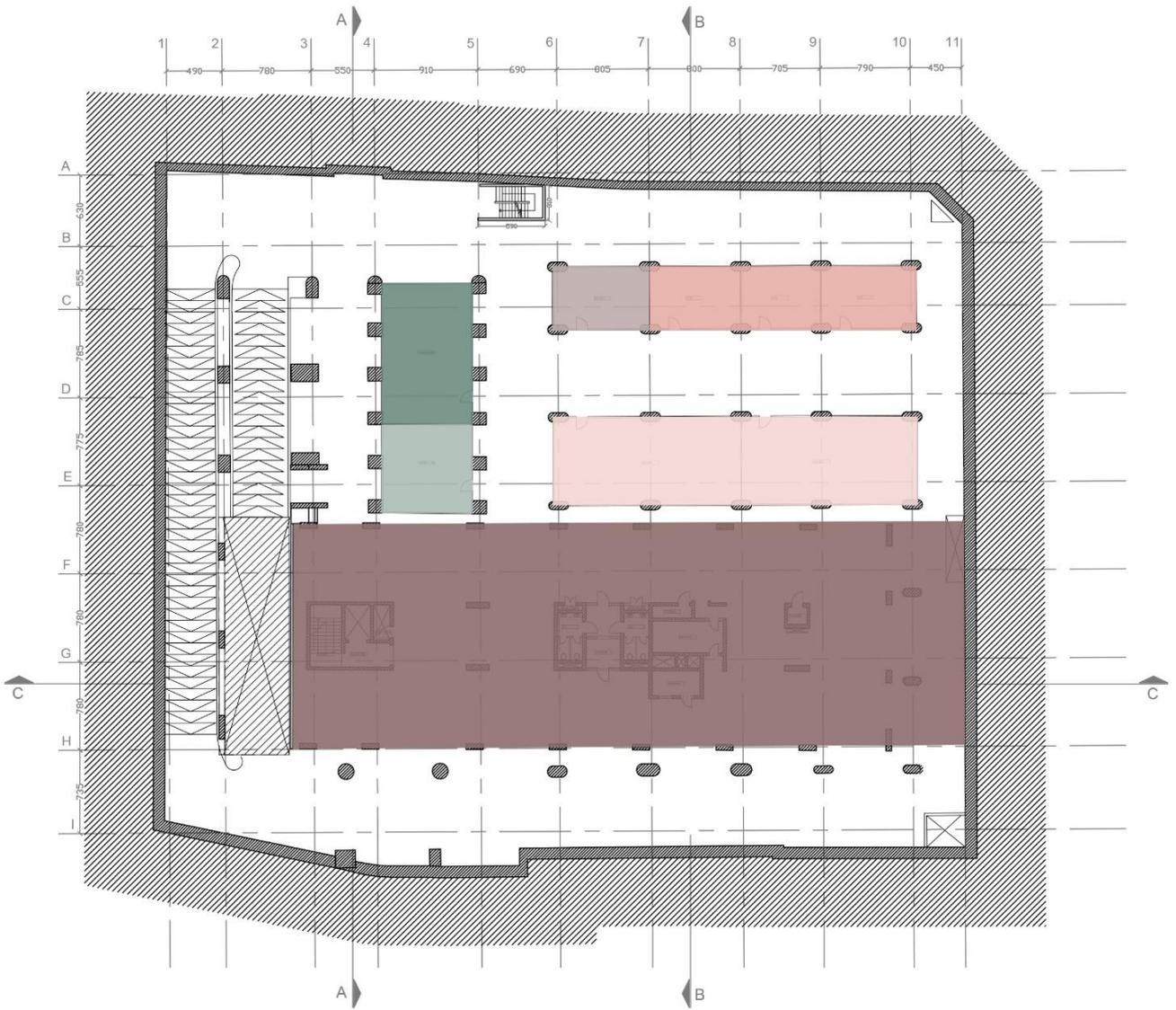
- SERVICES
- PARKING



Modifications
3rd Basement
 Scale 1/500



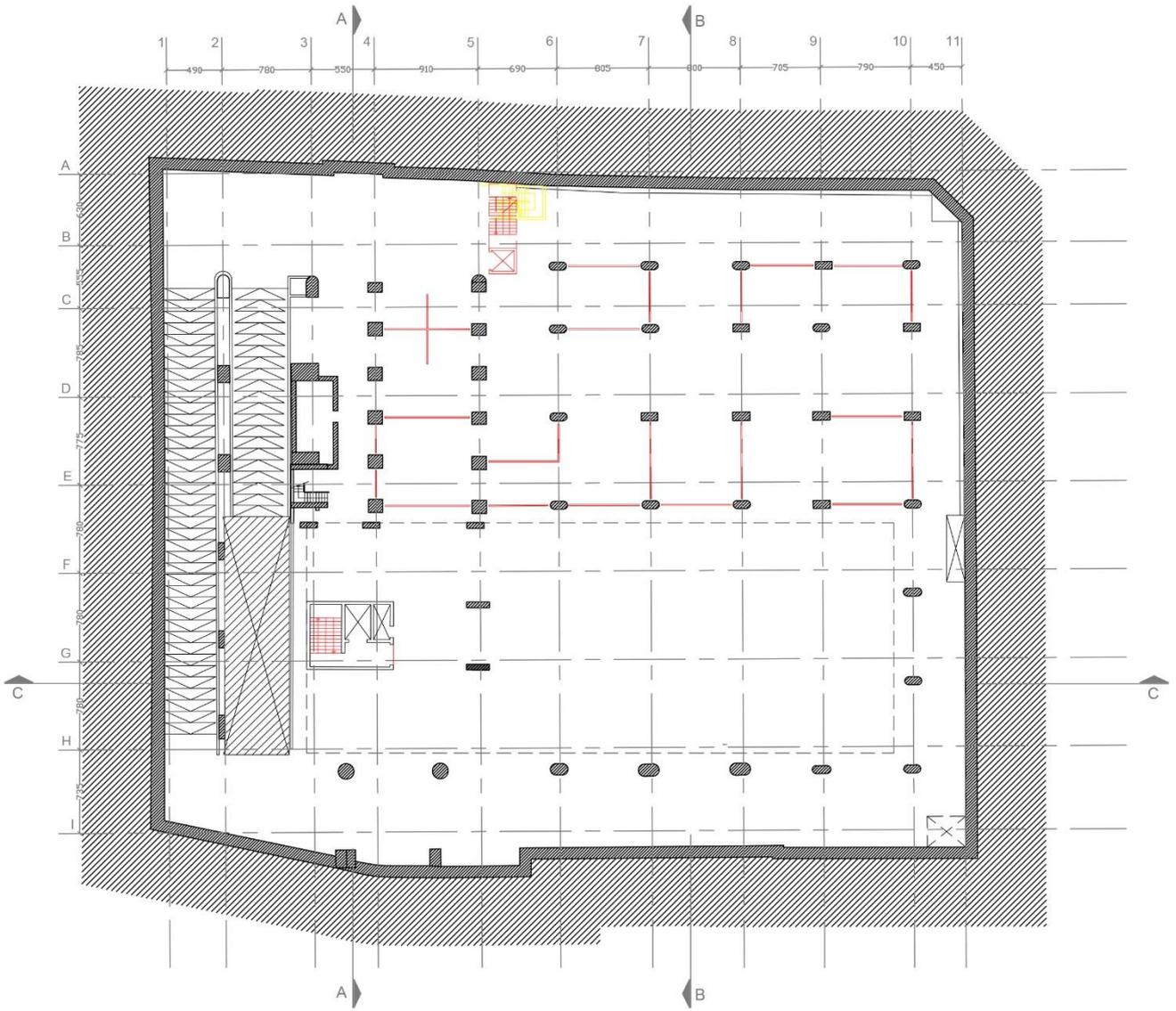
■ ADDITIONS
■ RIMOVAL



Functions
3rd Basement
 Scale 1/500



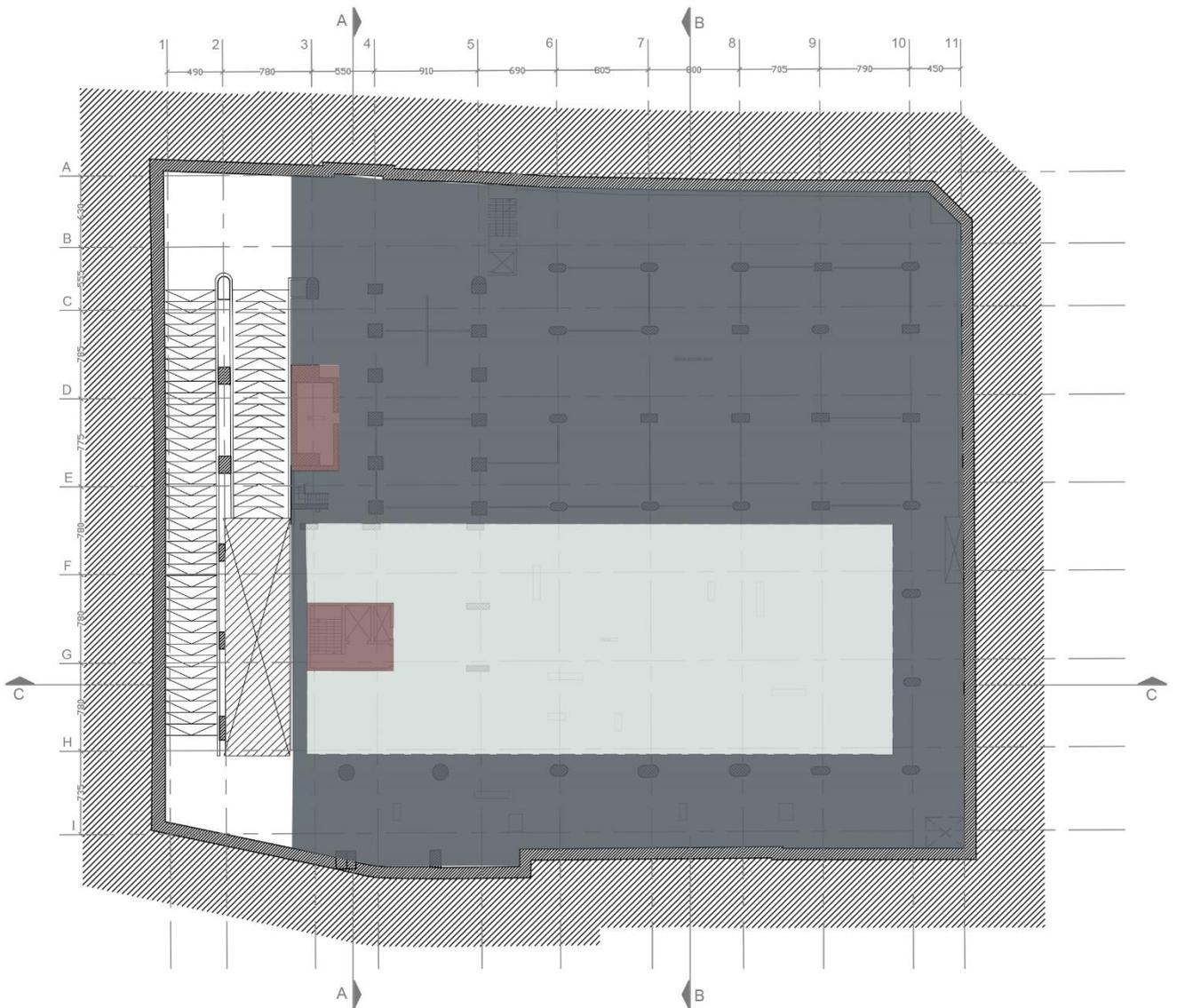
- SERVICES
- OFFICE
- PROJECTION
- PRODUCTION
- LAB
- STUDIO



Modifications
2nd Basement
 Scale 1/500



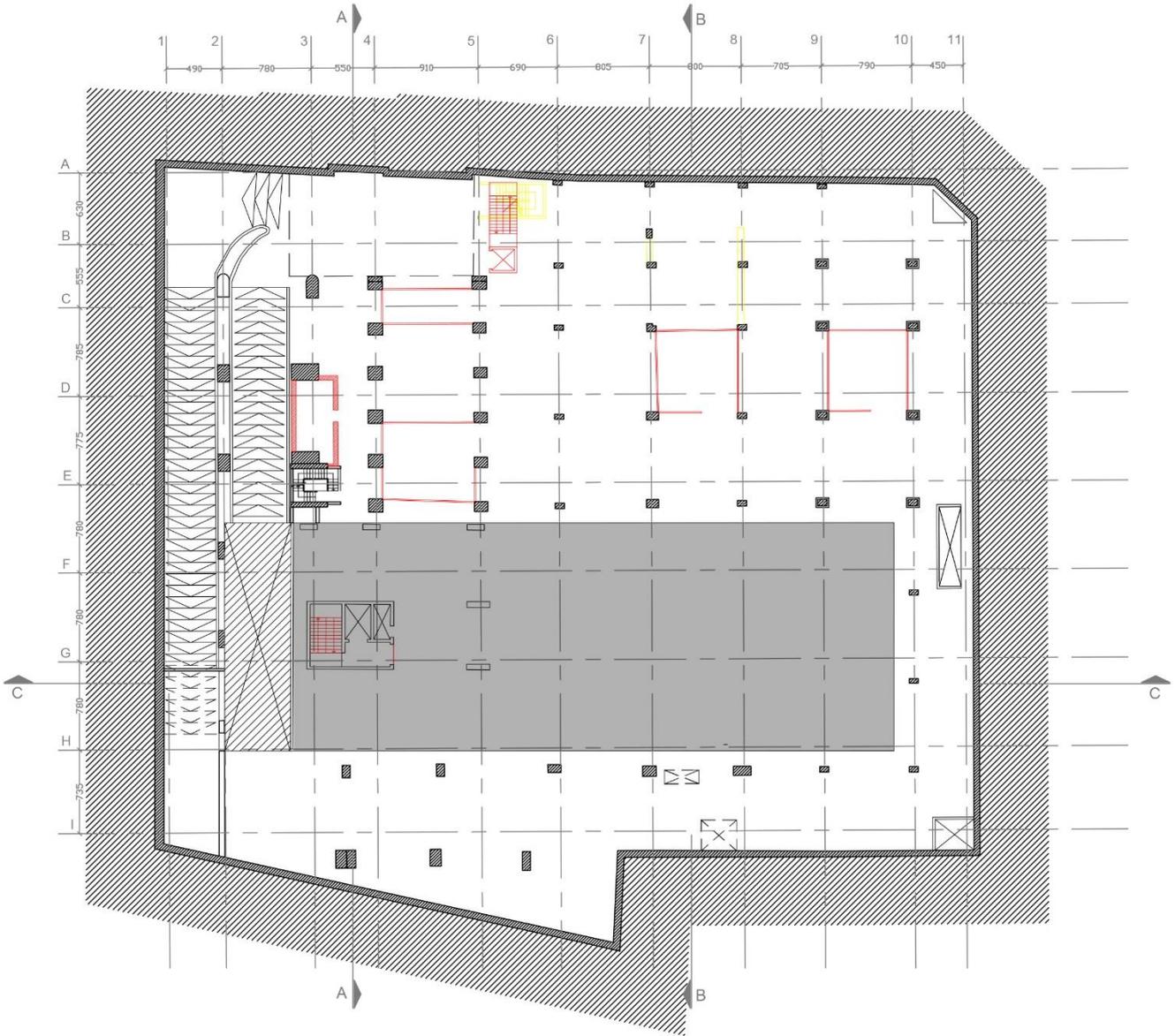
■ ADDITIONS
■ RIMOVAL



Functions
2nd Basement
 Scale 1/500



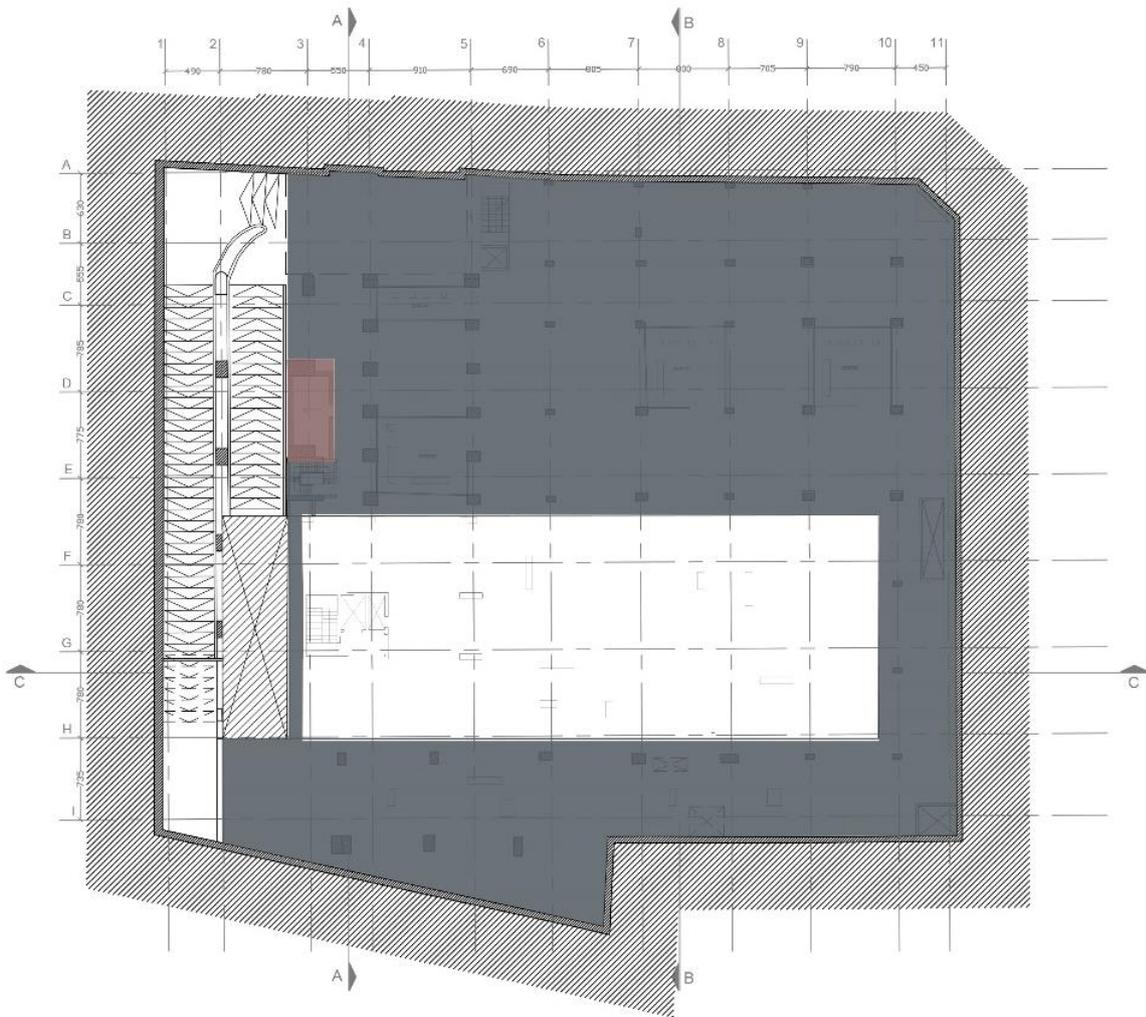
- SERVICES
- PIAZZA
- EXHIBITION



Modifications
1st Basement
 Scale 1/500



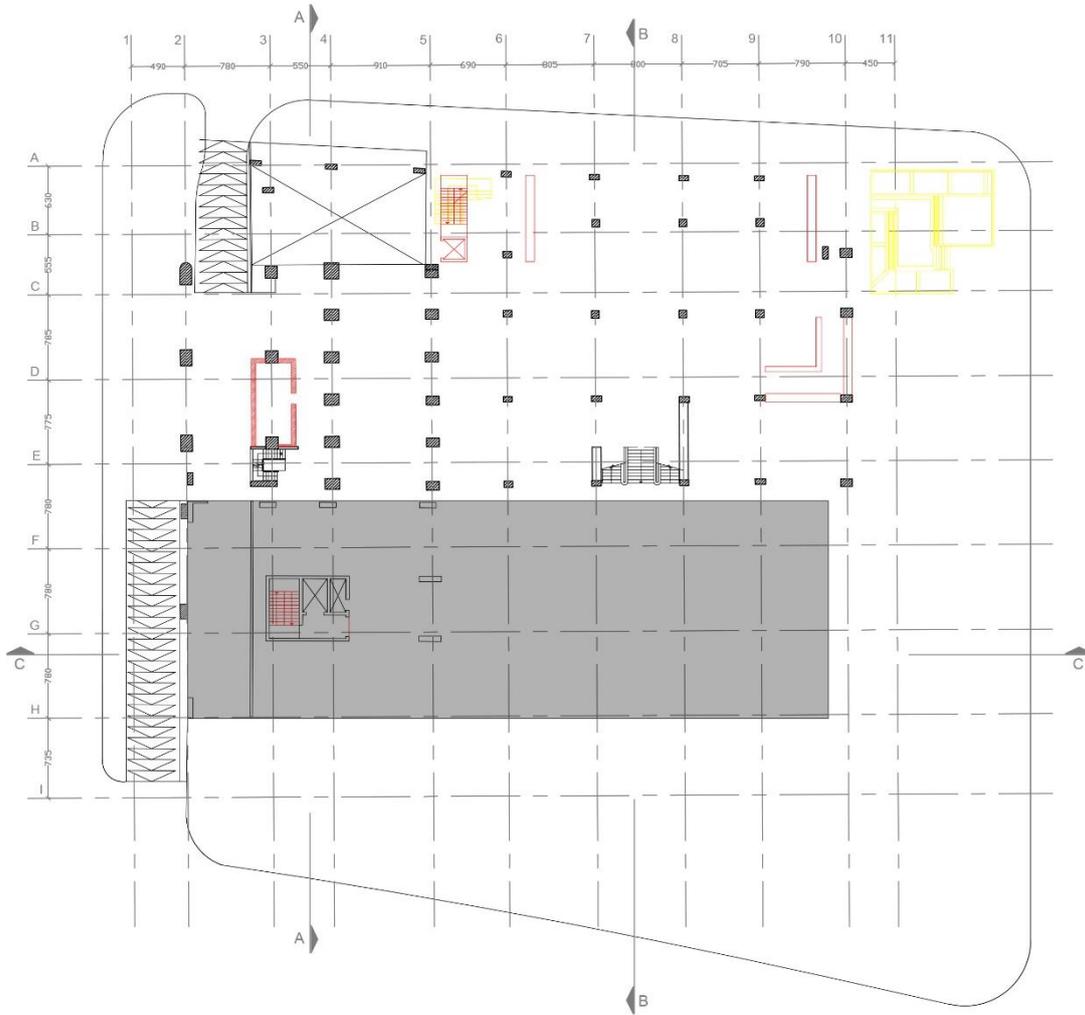
■ ADDITIONS
■ RIMOVAL



Functions
1st Basement
 Scale 1/500



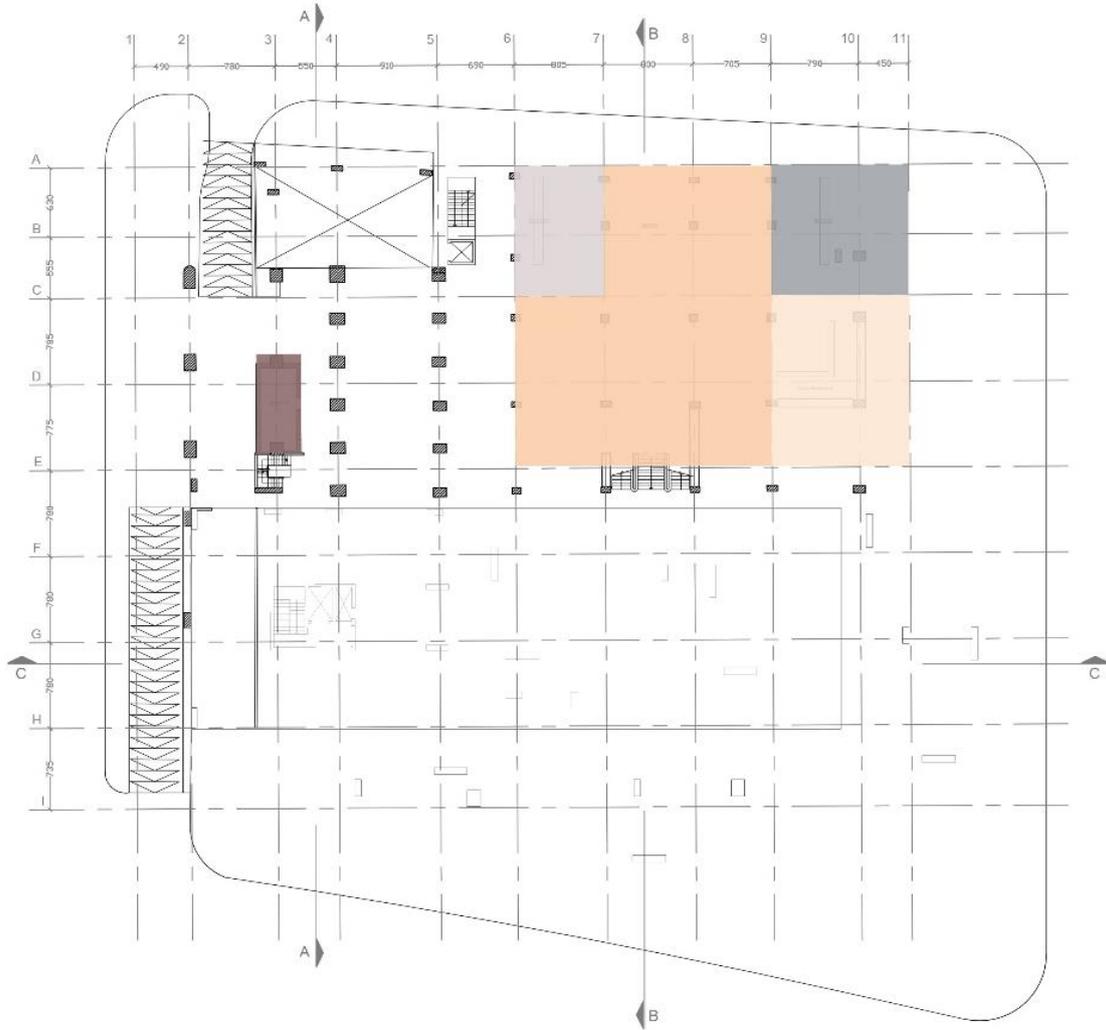
■ SERVICES
 ■ EXHIBITION



Modifications
Ground Floor
 Scale 1/500



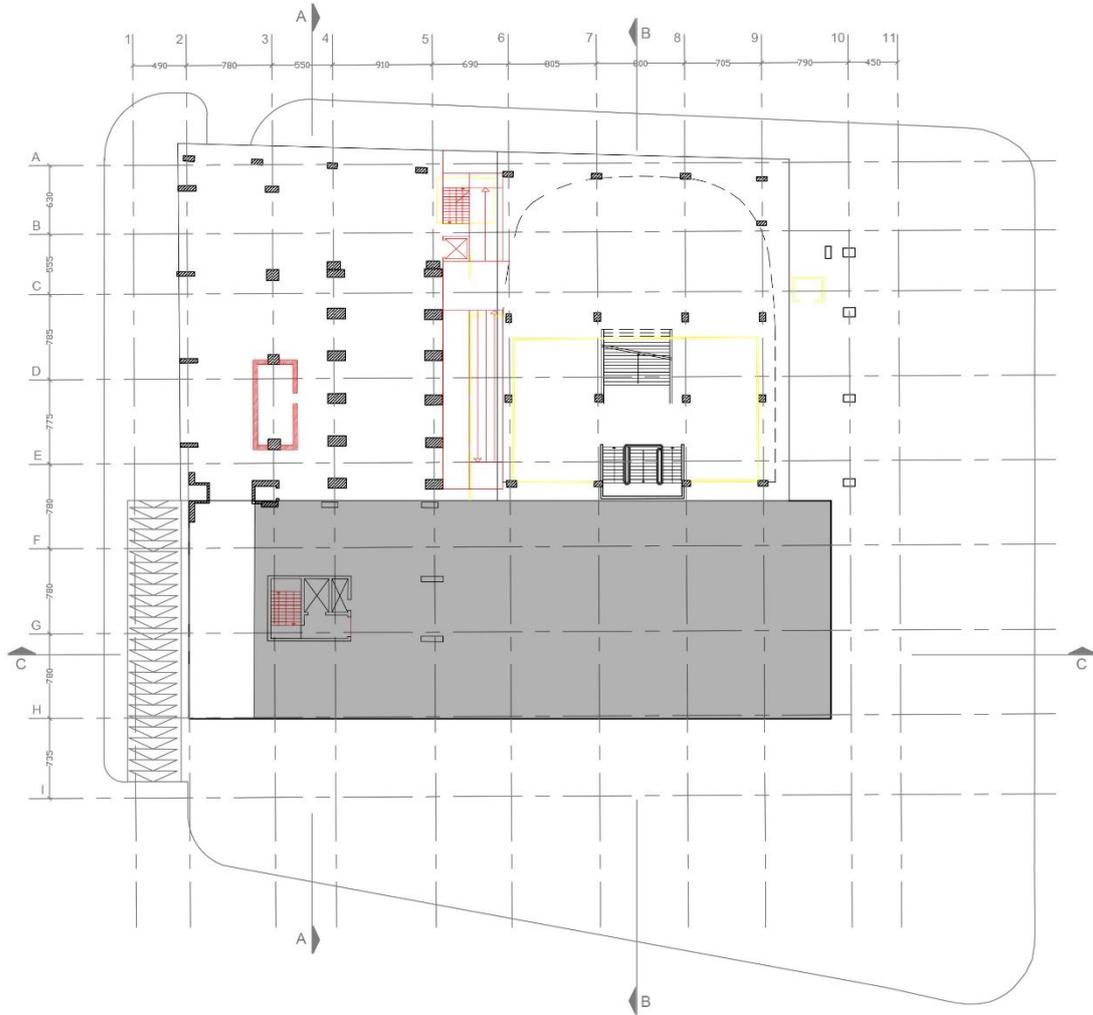
■ ADDITIONS
■ RIMOVAL



Functions
Ground Floor
 Scale 1/500



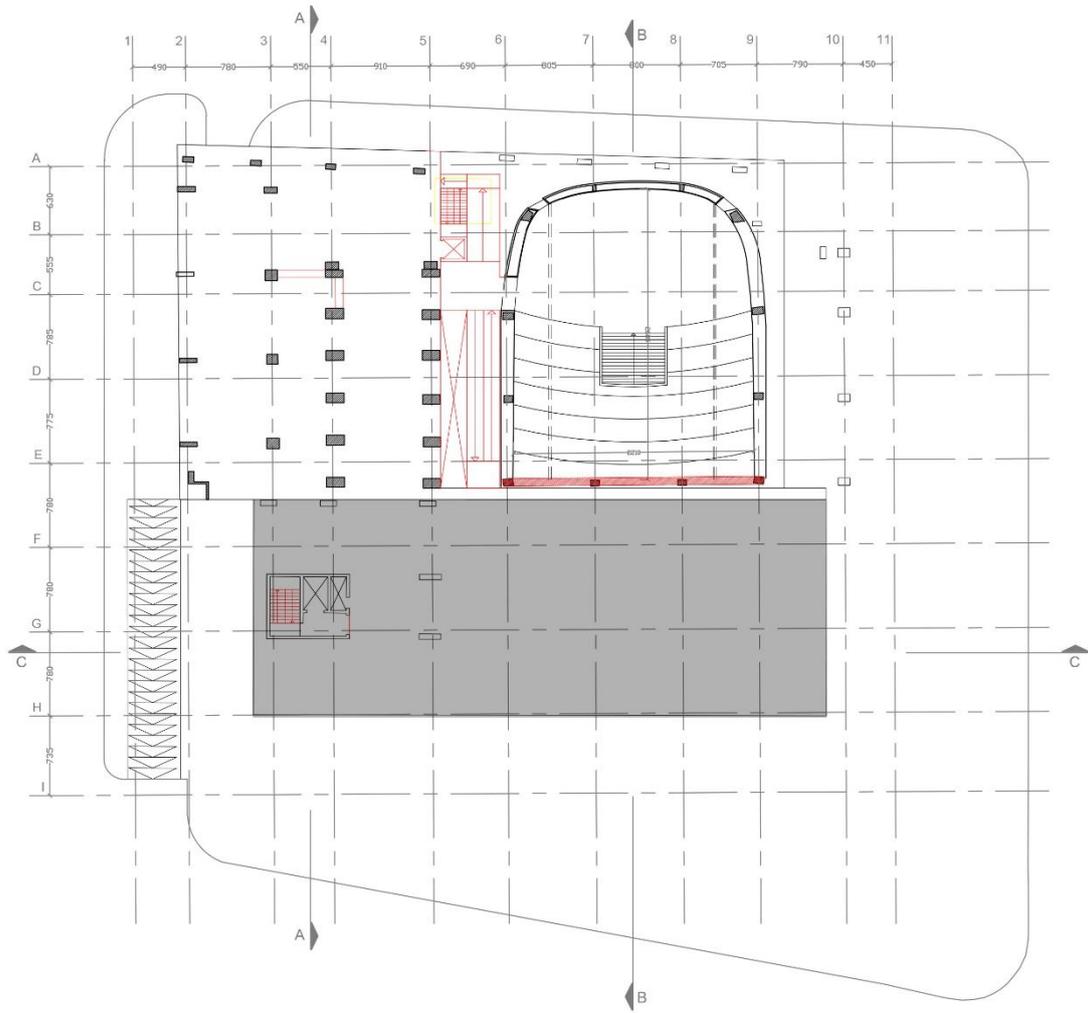
- SERVICES
- TICKET OFFICE
- INFO DESK
- RECEPTION
- SNACK/ BEVERAGE



Modifications
First Floor
 Scale 1/500



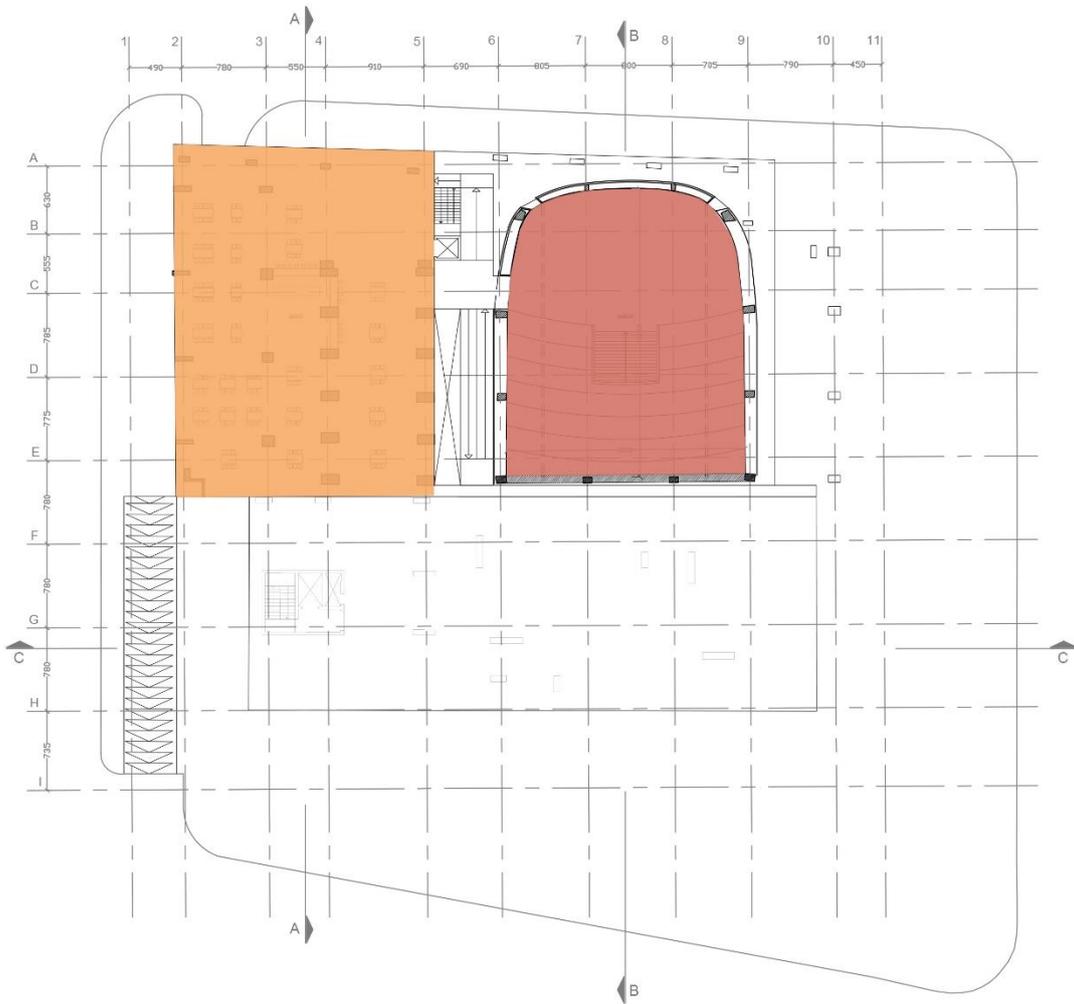
■ ADDITIONS
■ REMOVAL



Modifications
2nd Floor
 Scale 1/500



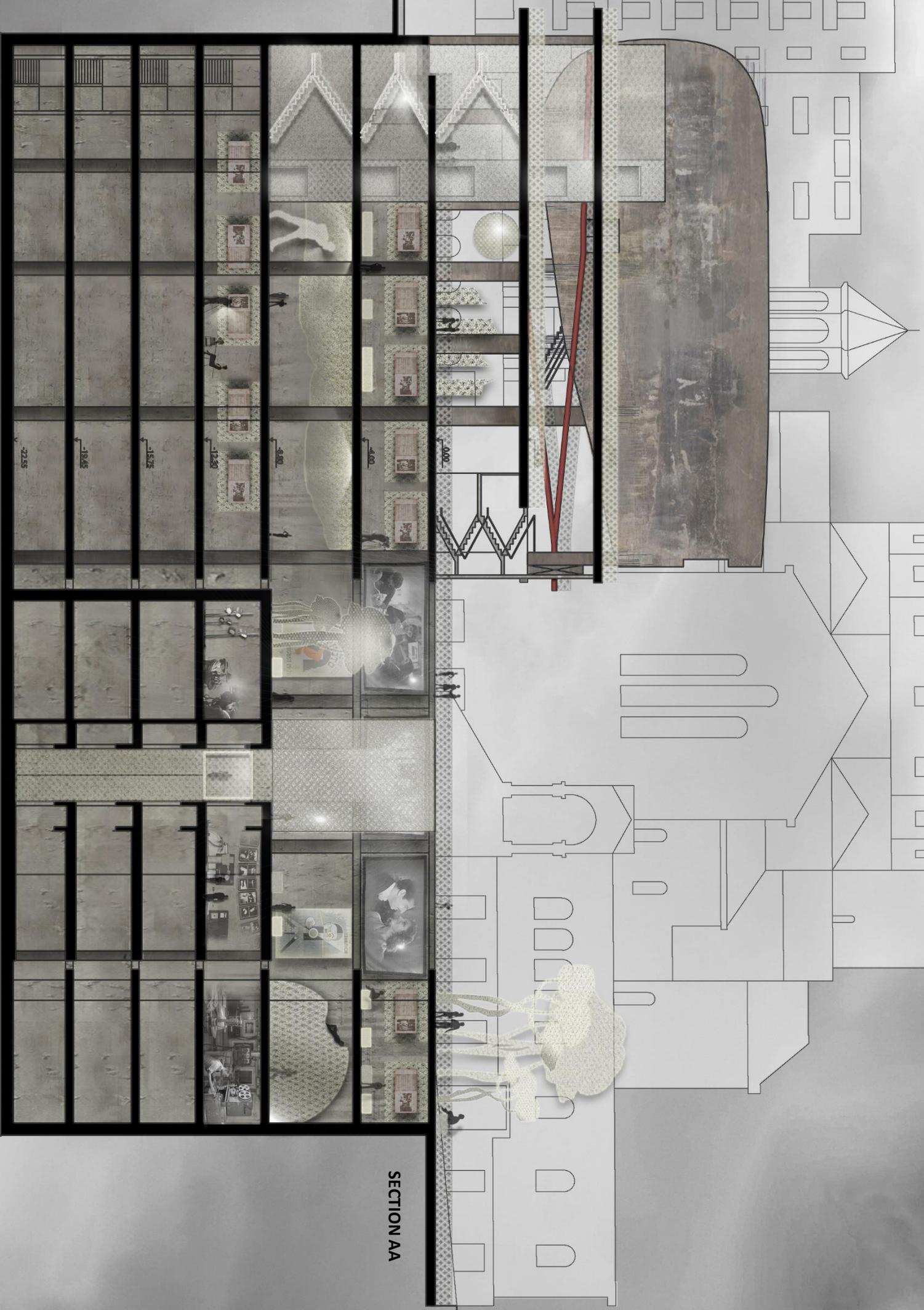
ADDITIONS
REMOVAL



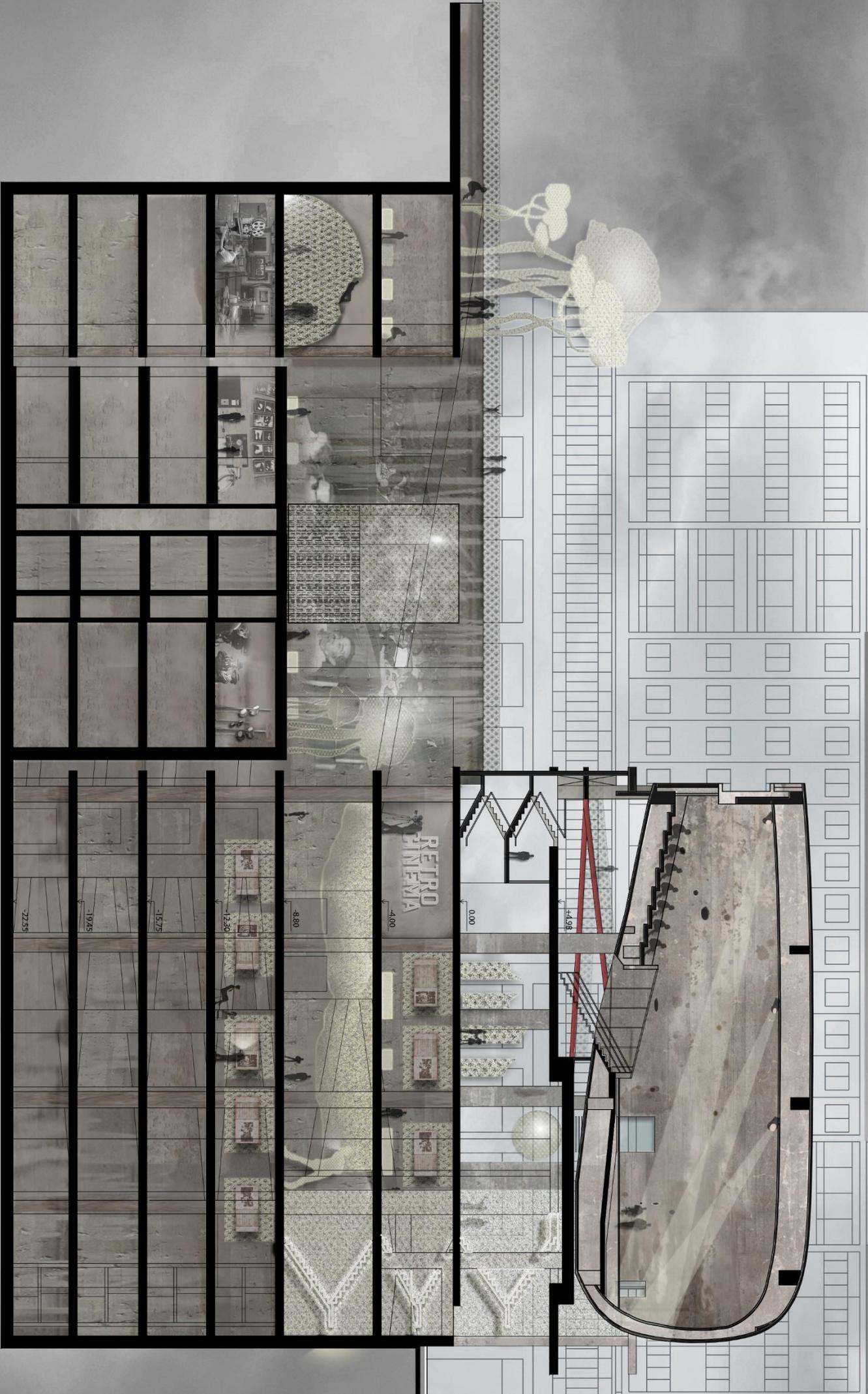
Functions
2nd Floor
 Scale 1/500



- AUDITORIUM
- ROOFTOP



SECTION AA





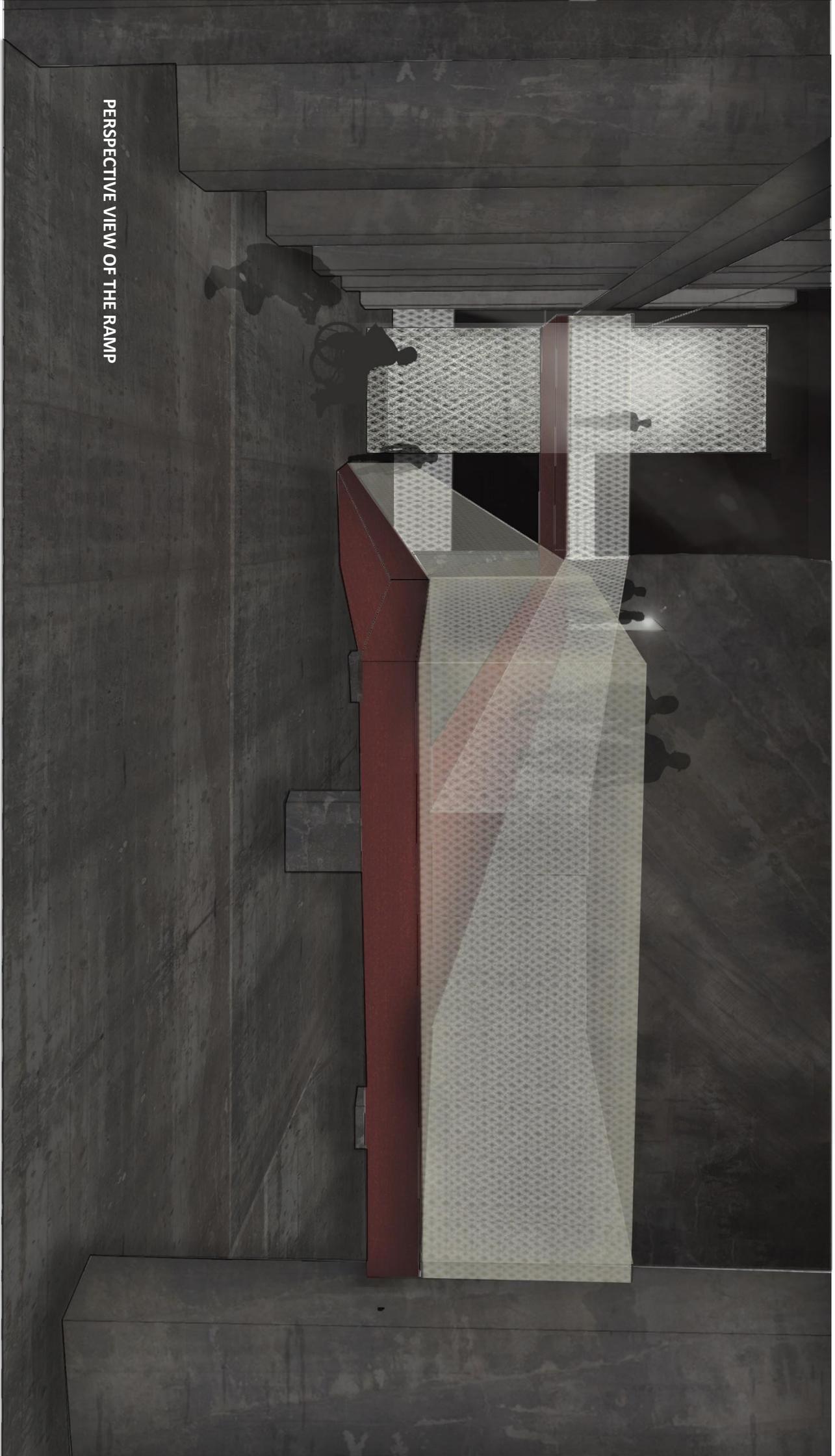
SECTION CC

PERSPECTIVE VIEW FROM THE PIAZZA

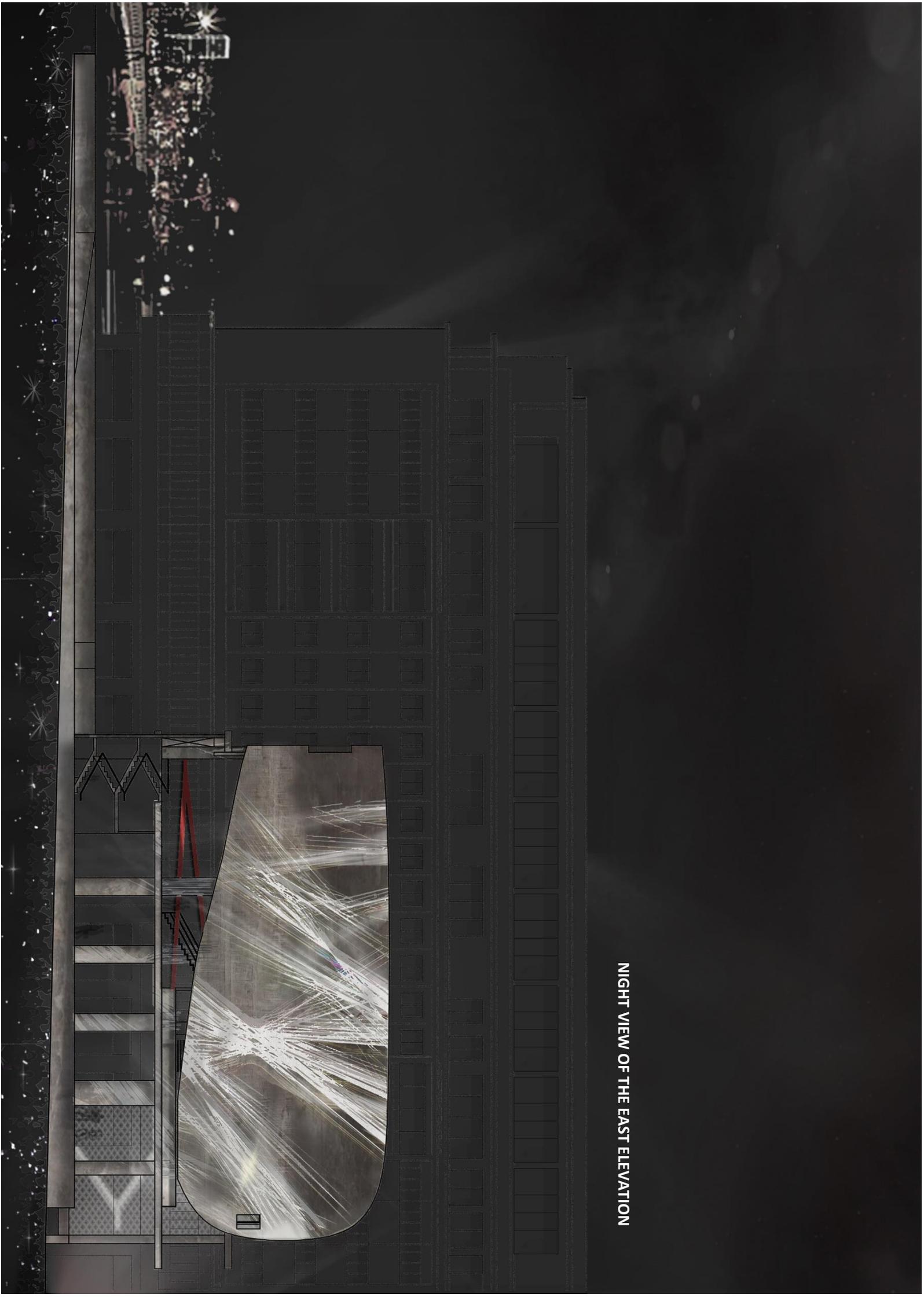




PERSPECTIVE VIEW OF THE ROOF TOP TERRACE



PERSPECTIVE VIEW OF THE RAMP



NIGHT VIEW OF THE EAST ELEVATION



CONCLUSION

After a full insight on the issue of conservation in the 20th century, it is noted that **heritage** is the primary **object of conservation**, specifically historical and cultural heritage. These heritage objects contain important **value** recognizable by man. For this reason, their safeguarding for future generations is an important task. **Heritage loss** is recognized as an important issue governing the modern day and various causes have surfaced, one of which is succumbing to the process of demolition.

Today a portion of the world's most valuable heritage has vanished due to the sinful hand of war. After the end of World War II, the **rebuilding** procedure was difficult. This gave rise to the Marshall Plan, an initiative towards rehabilitation. In various cases city's urban fabrics were reshaped and new neighborhoods were developed. In the case of contemporary bombing, the intentionally targeted monuments were all great symbols of their countries' **cultural significance**. With the destruction of these **symbols**, nations felt enormous grief. Acts of violence against the monuments were intended to tear nations apart, but instead they seemed to strengthen cultural values and significance to these countries and to provoke unity. As far as natural disasters are concerned, nations have become aware that **precautions** are necessary; heritage objects are vulnerable and thus **safeguarding** them is a vital task.

In the 21st century, **social media** plays an important role transferring information. Social media can have a **positive face** such as its ease of accessibility, its effortless documentation of real life situations, its usefulness as a resource for collecting information and its benefit in wide-spreading of awareness among people. On the other hand, this phenomenon has many **shortcomings** such as subjectivity, non-professionalism and risk of fragmentation. Therefore, it is important to note that when dealing with social media, one must be **selective** and a great deal of **professionalism** must be implemented. This is done to ensure the purposefulness of social media in **servicing society**.

Lebanon is a country based on multiple layers of **historical heritage** due to all the civilizations that have passed through it over time. It is important however to realize that all of these layers are equally important and in totality they should be **well kept** for future generations. As previously noted, war is the primary cause of **deep loss of heritage**. The civil war of 1975 caused the destruction of many monumental buildings during its 15 years' life span. The reconstruction process after the war led to the rooted change in the image of Beirut. The city had been transformed towards modernization and little by little, traces of its heritage were erased. Lebanese should become aware of the **danger** of them losing their **national identity** and actions must be taken to stop the move towards the "Dubaiification" of Beirut.

In the case study, the Egg, a consensus was reached that this oddly shaped structure has become one of the pillars of Beirut and its wartime **monument**. Although it has been subject to destruction many times, it has been saved from the wrecking ball. Furthermore, many projects have been proposed by Lebanese architects aiming at changing its current situation, but none of these proposals grasped the attention of the government and the Egg continues to be under changing foreign ownership. From a **psychological aspect**, saving the Egg is of great priority, it has become a part of the memory of all the Lebanese. People have become greatly connected to this building, making it testament of its time. For this reason, it is a pronounced duty to **protect** it for prospective generations.

As part of the **Re-use design** project, the aim was to **revive** the building and extend its lifetime with the introduction of the **new function**, a Museum of Cinema and Movie Production Center. The project respects the **memory** engraved within each wall and bullet hole of the complex by leaving it untouched. Thus, all interventions are **flexible, reversible** and **separated** from the original structure. The Egg is returned to its original owners, the citizens of Beirut, and a great link between the building and the context is developed.

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