



A **Vibrant Pulse**: Restoring the Old Souk of Jounieh into a Cultural Hub



#### **A Vibrant Pulse**

Restoring the Old Souk of Jounieh into a Cultural Hub

Preserving History, Reviving Life



Politecnico Di Torino Masters in Architecture and Construction City

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#### **ABSTRACT**

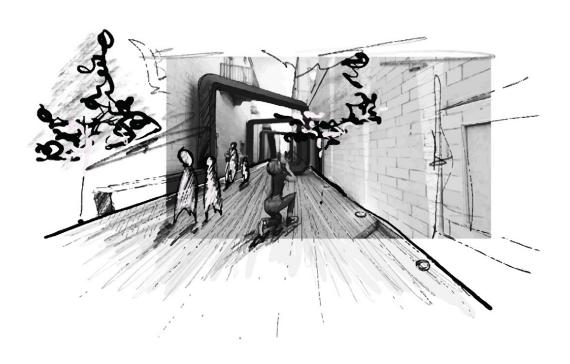
Rooted in the rich heritage of Lebanon, Jounieh and its iconic old souk stands not only as a symbol of cultural heritage but marks as one of the intriguing architectural masterpieces. The city has a heritage that is almost as old as the earliest evidence of mankind making it a crucial core to be preserved for future generations. However, decades of instability and war conflicts have pressed many challenges to the historic city, leaving it abandoned and underutilized. It's strategic location and historical significance which have endowed it with a unique architectural and cultural landscape has, unfortunately, deteriorated over time due to lack of urban planning and architectural neglect. This neglect has led to create a significant disconnection on an urban scale, resulting in a profound divide that separates the inhabitants from their shoreline.

Therefore, this thesis explores the restoration and repurposing of a historic city while demanding a transformative approach, intersecting urban revival and architectural restoration. It aims to breathe new life into Jounieh's and its historic old souk, transforming it into a vibrant, functional and cultural hub bridging heritage with modern demands. Through this approach, several questions arise: How can we reconnect this long-lost urban fabric to its shoreline while respecting its historical identity? How can we rethink neglected spaces on an urban scale? Moreover, how can we retain the perception of this area as an ancient city while adapting its buildings to modern use, highlighting their historical significance? Lastly, amidst Lebanon's ongoing challenges, how can we adaptively reuse and restore these historic buildings to highlight their significance and cultural value? The groundwork aims to propose strategies for adaptive reuse and urban reintegration, with the goal of revitalizing the connection between the historic strip and the shoreline. This involves introducing dynamic activities to neglected areas, preserving and restoring the historical buildings, and reconnecting them to the city's vibrant past. At the same time, the approach seeks to forge a dynamic future that honors the city's historical significance while embracing modern aspirations, ensuring a harmonious blend of heritage and vibrant activities.

The primary objective of this study is to develop a comprehensive restoration and repurposing plan aimed at preserving the historical essence of Jounieh, with a particular focus on its historic center, the "Old Souk." The research adopts a multidisciplinary approach, combining historical analysis, architectural conservation techniques, and urban planning strategies. Key aspects of the study focus on identifying critical areas and structures within Jounieh that are essential for preservation, solving pressing urban problems, and revitalizing neglected spaces to reconnect the city with its shoreline. Ultimately, this thesis aims to offer a viable roadmap for transforming Jounieh into a vibrant, culturally rich city that honors its past while embracing the future. It advocates for policies and practices that can ensure the long-term preservation and appreciation of Jounieh's "Old Souk" historical assets, fostering a renewed sense of identity and pride among its residents.

**Key Words** Restoration, Urban Heritage, Urban Revival, Historical Urban Areas, Historical Cities, Preservation, Conservation, Cultural Heritage, Adaptive Reuse, Cultural Value

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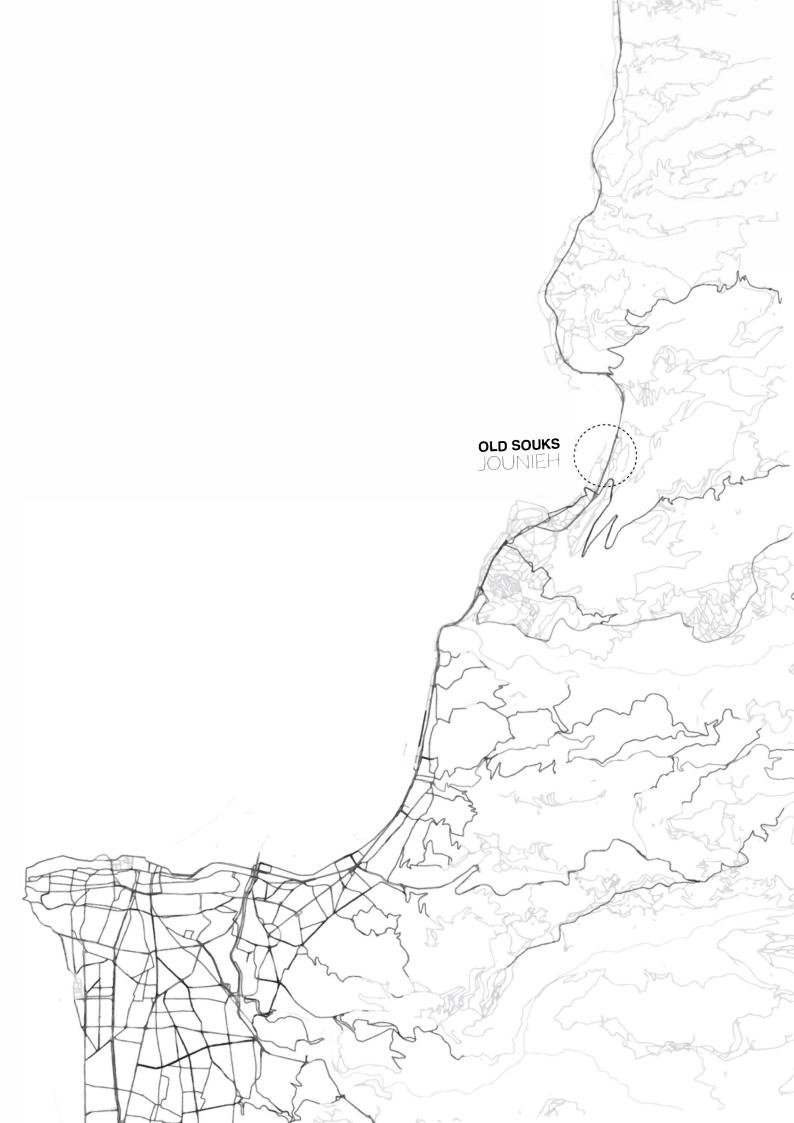
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# Introduction

# 01.1. Defining Historical Cities: Their Role as Symbols of Memory and Urban Dynamics

Historical centers are dynamic entities that evolve over time. They can be understood as living systems, undergoing a lifecycle shaped by how they are preserved, restored, and reimagined. Historical cities adapt over time and change according to the urban and societal needs. This dynamism allows them to evolve into new forms of centrality or risk becoming peripheral.

Historical cities serve as focal points for interaction among diverse populations, fostering social connection and integration. Their central location and ability to accommodate multiple societal layers enable these historical centers to function as public spaces. The historic center is described as the public space "par excellence", where the city's collective memory, identity, and civic life converge. These centers play a variety of roles, starting with their symbiotic role as meeting places. This unique quality allows them to bridge generations and connect people from different locations, making them spaces of interaction and social cohesion. In addition to their symbiotic role, historical centers hold a significant symbolic value. They preserve collective memories, generate a sense of belonging, and serve as repositories of cultural and historical heritage. This symbolic power is deeply tied to their historical significance, granting them an identity and influence over their surrounding areas. Moreover, historical centers act as civic representations by hosting landmarks, collective actions, and events that embody societal values. By fulfilling these roles, historical centers serve as public spaces where society's collective memory and identity are preserved and celebrated.

Furthermore, historical centers are more than a collective memory; they play a pivotal role in fostering urban growth and prosperity. These spaces serve as platforms for innovation, capable of revitalizing cities and enhancing their appeal. The historic center, therefore, becomes a space where the city's identity and historical legacy intersect with contemporary urban needs and opportunities. Their historical and cultural value positions them uniquely to inspire and drive urban innovation projects, creating a blend that connects the past with the present. This approach transforms these spaces into a vibrant hub that strengthens the social and economic fabric of the city. [07]

#### 01.2. Historic Cities: Urban Heritage as the Foundation of Urban Identity

"Historic City centers of European cities are one of the most important elements of the European cultural heritage" [18]. In every Historical city lies an array of history and culture, which have been composed throughout centuries of human endeavor and natural evolution. They also help shape an urban identity that not only defines the city itself but also influences the surrounding districts [07]. Heritage serves as the enduring legacy of those countless lives and stories engraved into the fabric of its streets and buildings. It is more than just a remnant of the past; but is the vibrant pulse and breathing essence of a community's identity, a bridge connecting generations, and a guiding light directing us towards a culturally enriched and sustainable future. Moreover "heritage ties one to the past, making it more valuable today than ever before"[30]. As society rapidly changes and evolves, the value of heritage increases because it offers stability, context, and a deeper understanding of who we are. It reminds us of the lessons, achievements, and experiences of previous generations, making our cultural and historical knowledge more precious and relevant in contemporary times. However, the majority of Architectural Historical areas are unprotected. This heritage is rapidly disappearing due to intensive modernization and urbanization, as it does not demand the same sensitivity as "legally protected monuments" which makes them worthy of attention in terms of initiating local character. However, these heritage sites are crucial for fostering local identity. Therefore, it is essential to create areas that incorporate traditional and social values, transforming them into magnets for economic and creative activities [36].

Throughout the 20th century and up till now, urban development in historic cities has determine today's world regarding the environmental, socio-economic and political changes. Several architects and authors examined the role of cultural heritage as a main catalyst for economic and cultural development. Hence, cultural heritage plays a pivotal role in improving lives of people, fulfilling their needs for identity and belonging [42]. In addition, regeneration interventions in historic urban areas have been shown to yield positive outcomes, prompting many governments to adopt culture-led urban strategies that prioritize the revitalization of heritage sites and community engagement. [13]. These strategies often focus on leveraging cultural assets to stimulate economic growth, enhance social cohesion, and promote sustainable urban development. Therefore, Revitalization and Preservation of a historic city is considered a process with a goal of reviving a historical urban area suffering from different physical, social, and economic challenges to be ready for the contemporary needs and requirements.

#### 01.3. Understanding Historical vs Historiographical Cities

Historical definitions and records provide frameworks for understanding the past, often providing a linear narrative of urban development.; however, perceptions of historical significance can vary widely among individuals and societies in understanding what is historical. [04] For instance, cities like Rome or Cairo are universally recognized as historical centers due to their ancient monuments and rich archaeological heritage. However, interpretations of what constitutes a historical city can differ greatly.

While some define historical cities by its ancient monuments and centuries-old architecture, others focus on more recent developments that have significantly impacted the city's identity into making it historical. Take Dubai as an example, while it may not possess the same ancient ruins or medieval streets as other historical cities, its rapid transformation into a global metropolis over the past few decades has created a unique urban landscape with its own historical narrative. Therefore, whether Dubai is considered a historical city depends largely on one's subjective perspective and interpretation of history, illustrating the subjective nature of historical perception.

# 01.4. Impact of Historical and Historiographical Definitions on Preserving Historic Urban Areas.

Historical areas serve as a living archive of cultural, social and architectural heritage. The way they are perceived, interpreted and preserved are influenced by both historical and historiographical perspectives. Historically speaking, the architectural and cultural artifacts reflect the dominant social system and cultural value in their respective time. Hence, the preservation of these areas reflects a society's acknowledgment of these values and its commitment to maintain a tangible connection to the past. The tangible records such as buildings, monuments, urban layout all serve as historical narratives allowing the interpretation of how communities evolved and interacted with their environment. They act as primary figures that guide preservation efforts. [03]

However, the tangible ruins are rarely complete, requiring architects to analyze and interpret their value. Therefore, this process impacts decisions about whether to preserve and why. The values and meaning of the historic areas shift overtime. Structures that once held symbolic elements may later be defined as cultural or architectural heritage. This helps us understand that historical areas are not only based on their physical characteristics but also reflects changing in perception of importance based on the reflection of societal, political and cultural priorities.

On the other hand, historiographical definitions of cities impact not only the way we interpret the past but also how we engage with and preserve these areas in the present. The way histories are written and analyzed affects how historical areas are valued. They involve what narrative structures to use, what to include and exclude. All these choices are shaped by the intellectual and cultural context of the authors themselves. Thus, historiographical narratives prioritize certain aspects of history, such as stylistic movements, architectural achievements, or social significance, which all influence preservation efforts [03][04].

While historical evidence provides a foundation, it is through historiographical frameworks that these areas are analyzed and understood. Both impacts are inseparable, their dual lens affects how historical areas are preserved and valued. An example, is the post-war listing process in Britain, which aimed to identify and protect buildings of historic importance, was shaped by both the immediate historical context and the historiographical emphasis on national heritage. Therefore, together, they shape not only our perception of historical areas but also our strategies for preserving and valuing integrating them into contemporary life [03].

# 01.5. Impact of Historical and Historiographical Definitions on Preserving Historic Urban Areas.

Heritage conservation and urban modernization are often seen in tension. Some people often see historical sites as cultural and historical value for preservation and memory, while others perceive it as sites for economic growth and urban progress. Hence, policymakers often prioritize demolitions by framing preservation as incompatible with modern needs, favoring economic and political interest over preserving heritage. A prominent example is the demolition of the historic building Geelong's Bow String Truss Wool Stores in Australia. Despite its historical importance and a candidate for World Heritage listing, the building was destroyed due to the state of governmental decision to prioritize redevelopment.

Furthermore, facadism and adaptive reuse, though explored as approaches to historic preservation, are often criticized for stripping buildings of their historical context and meaning Facadism is described as only preserving the exterior facades of the building while altering its interior. This approach is often critiqued as superficial, stating that it weakens the historical and cultural essence of the structure, as it disconnects the building form from its original purpose. On the other hand, adaptive reuse involves repurposing historic buildings for new uses while retaining their ordinal character. This ensures that the historic building is integrated into a "living mainstream" finding modern day functions for old structures. However, critics claim that this approach reduces preservation efforts to facadism draining the building's historical meaning and social context. As a result, this new function disregards the historical narrative, placing economic value above cultural significance. [26]

Preserving historic cities is a complex challenge, as these cities face significant pressures from urbanization, which manifest in social exclusion, loss of centrality, and physical deterioration. The rapid urbanization of the 20th and 21st centuries has led to urban fragmentation, isolating historic centers from their urban contexts. To address this issue, it is essential to improve accessibility, fostering connectivity, and integrating them into the wider urban framework. This involves creating spaces that encourage community interaction and social cohesion.

However, these public spaces are increasingly threatened by privatization, highlighting the urgent need to restore them as public assets. Reimagining these areas as vibrant centers of civic and social identity not only revitalizes the historic site but also strengthens its collective identity, ensuring its lasting relevance in the contemporary urban landscape.[07]

Historical cities often face economic distress and urban decay, leading to demolition being viewed as a practical solution over preservation. However, this approach raises significant concerns about the loss of the historic and cultural identity of these cities. Such actions erase the unique cultural and architectural significance, undermining their potential to play a pivotal role in urban revitalization.

In contrast, historic preservation serves as a catalyst for sustainable growth by leveraging architectural, cultural, and economic values. It not only ensures the continuity of a city's identity and character but also enhances urban revitalization through adaptive reuse. This approach creates coherent and improved urban spaces that honor the past while accommodating the needs of the present and future. [38]

#### 01.6. Role of Historic Preservation in Urban Revitalization.

The revitalization of historic cities requires a balance between preservation and modernization. By integrating adaptive reuse and conservation efforts, these cities can become dynamic, multifunctional spaces that serve as hubs for social interaction, economic development, and cultural identity. Historic preservation and urban revitalization are deeply interconnected, with preservation serving as both a catalyst and a framework for reviving urban spaces.

Architectural conservation are zones filled with heritage that often incorporate public squares, religious landmarks, and market areas that serve as centers for the community. Therefore, there is a need to turn these areas into interactive functions through conservation and adaptation. Through this we can breathe new life into these areas, introducing new activities for these existing spaces, to enhance their appeal to both residents and tourists. Any interventions should be minimal and respectful, ensuring that the historical surface is not compromised. By blending preservation with innovative urban planning, the revitalization of historic cities can create vibrant, multifunctional spaces that honor the past while supporting present and future needs. [19]

Historic preservation supports economic development by facilitating the adaptive reuse of old buildings, while reinforcing the cultural significance of historic structures. Preservation promotes the reuse of existing structures, making it an environmentally responsible strategy for urban revitalization. As described by Ada Louise Huxtable, Preservation is "finding ways to keep those original buildings that provide the city's character and continuity and incorporating them into its living mainstream" [26]. Adaptive reuse is a critical strategy for historic preservation, but it must be carefully managed to balance maintaining heritage with modern functionality. Without being repurposed, buildings risk neglect and eventual decay. Through targeted initiatives, historic centers can honor their rich past while embracing the future, establishing themselves as critical drivers of innovation and progress in urban development. These efforts prioritize the revalorization of historic cities by improving and rethinking existing urban infrastructure. Such an approach preserves the original character and unique architectural features of historic centers while addressing modern urban demands. This dual focus on preservation and adaptability highlights the necessity of revitalizing historic centers as vibrant, functional spaces that balance tradition with modernity. [07]

At last, adaptive strategies should be developed in a manner that sets a dynamic history that narrates the site's significance. Overall, adaptive reuse ensures that historic sites remain meaningful, functional, and relevant, bridging the gap between past and present. This balance is essential for creating urban spaces that are both dynamic and historically meaningful.

#### 01.7. Thesis Aim and Objective

The thesis sets the broader concept of the role of historic preservation in revitalizing historic cities through architectural restoration and urban revitalization, as outlined in the introduction, with specific strategies that balances heritage preservation with modern urban revival.

This thesis explores the revitalization of Jounieh, a historic city along Lebanon's coastline, with a specific focus on preserving its architectural and cultural essence, particularly its historic center, the "Old Souk." The study seeks to address issues of urban neglect, disconnection, and architectural decay through strategies of adaptive reuse and urban revitalization, aiming to transform the Old Souk into a vibrant, multifunctional cultural hub that bridges its rich heritage with the demands of modern urban life.

The primary objective of this research is to safeguard the historical identity of Jounieh's Old Souk, which embodies a unique blend of cultural and architectural influences from Phoenician, Roman, Ottoman, and French Mandate periods. By emphasizing the importance of conserving the city's historical narrative, the study aims to restore its historic identity and pride among its residents while preserving the architectural and cultural legacy of the area.

A significant component of this thesis is the adaptive reuse of historic structures. The research proposes transforming abandoned or neglected buildings within the Old Souk into functional cultural spaces, such as local workshops, museums, educational activities... These transformations aim to integrate traditional Lebanese architecture with modern functionality, ensuring that these spaces meet contemporary needs while respecting their historical authenticity. Furthermore, the study focuses on revitalizing underutilized areas by introducing multifunctional public spaces that serve as social, cultural, and economic hubs. A key element of this revitalization is the effort to reconnect Jounieh's Old Souk to its shoreline, restoring the physical and visual link between the city and its coastal identity, which has been lost over time due to urban development and neglect.

To achieve these goals, the thesis adopts a multidisciplinary approach that combines historical analysis, urban planning, and architectural conservation. This methodology involves conducting detailed surveys and assessments of existing historical structures to evaluate their current condition and propose strategies for their adaptive reuse. By incorporating architectural conservation techniques and urban revitalization strategies, the study establishes a sustainable framework for the development of Jounieh, ensuring that its rich heritage is preserved while addressing modern urban demands.

Through a combination of archival research, field studies, and interviews, the thesis identifies critical areas and structures within Jounieh that require preservation and revitalization. The proposed solutions aim to transform the Old Souk into a dynamic cultural and community hub, enhance the spatial and functional dynamics of the city center, and create a harmonious blend of traditional and contemporary elements. This research ultimately provides a roadmap for transforming Jounieh into a vibrant, culturally rich city that honors its past while embracing the future. It advocates for policies and practices that ensure the long-term preservation of the Old Souk's historical assets and promote a renewed connection between the city, its shoreline, and its residents.

This thesis will demonstrate how the intersection of urbanism and restoration can serve as a transformative approach to reimagine Jounieh's Old Souk as a cultural hub while preserving historical identity and adapt to the modern needs of the society.





Urban Design Analysis



"Jounieh, jewel of the Lebanese coast, where the waves dance to the rhythm of dreams." - Gebran Khalil Gebran. "جونيه جوهرة الساحل اللبناني حيث الأمواج أرقص على إيقاع الأحلام." - جبران خليل جبران

Identifying Jounieh's Location in Relation to Lebanon
Figure 02. Illustrating a General Overview (N.Maawad, A.Khoury)

#### **CHAPTER 01**

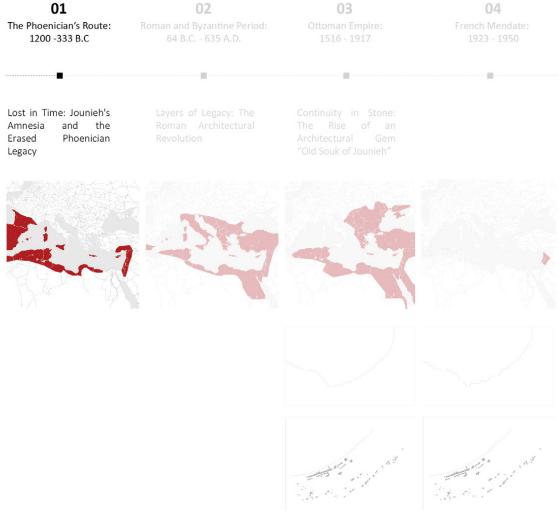
History

"The talk became of "Monte Carlo of the East" and Jounieh stood out as a bride of the Lebanese coast." - Unknown

Located 15 kilometers north of Beirut, Jounieh also known as "Monte Carlo of the East" sits at the heart of Keserwan Casa and is often seen as an extension of the Lebanese Capital. Spanning approximately 7.7 square kilometers, it is comprised of four towns: Sarba, Ghadir, Sahel Alma, and Haret Sakhr making it the largest urban area in Keserwan and the biggest coastal city in Mount Lebanon. The city's uniqueness lies in its topographical and morphological expansion, extending from the coastal line of the port towards the mountains creating a captivating landscape that blends nature, traditional Lebanese houses and urban development. Moreover, the coexistence between the Lebanese craftsmanship and traditional houses has infused a diversity of rich cultural and heritage essence in the city. The coastal area of Jounieh holds the city's rich historical roots, serving as its initial focal point. Through its historical time, the city flourished, the inner areas became predominantly inhabited by locals, while the coastal evolved into a vibrant hub tailored to the needs and interests of tourists such as handcrafts shops, Lebanese Gourmet restaurants and known hotels. In the following guide, we will explore the historical evolution of the city, tracing how Jounieh adapted through different historical timelines and transformed into what it is today. [32] [01]

### **Chronology of Events**

#### Evolution of the Lebanese Bride Coastal Planning تحت الاحتلال Under Influences

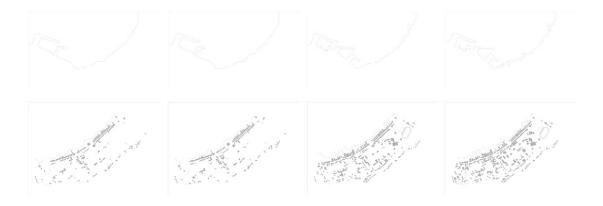


Jounieh Under Heavy Historic Influences

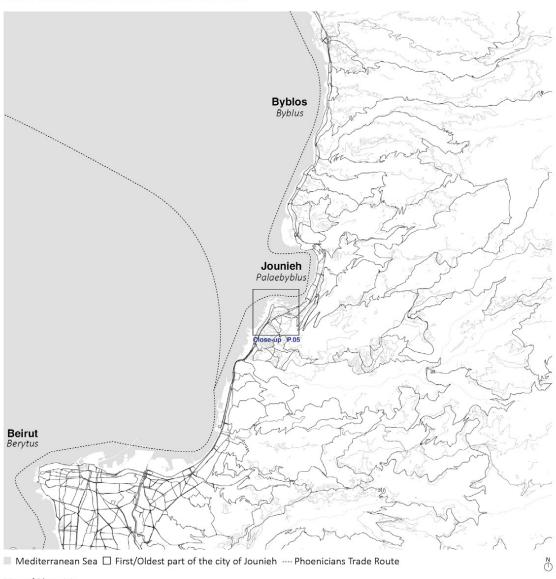
Figure 03. Showcasing Historic Influences on Jounieh, The Phoenician Period (N.Maawad, A.Khoury)

## After Occupations بعد الاحتلال





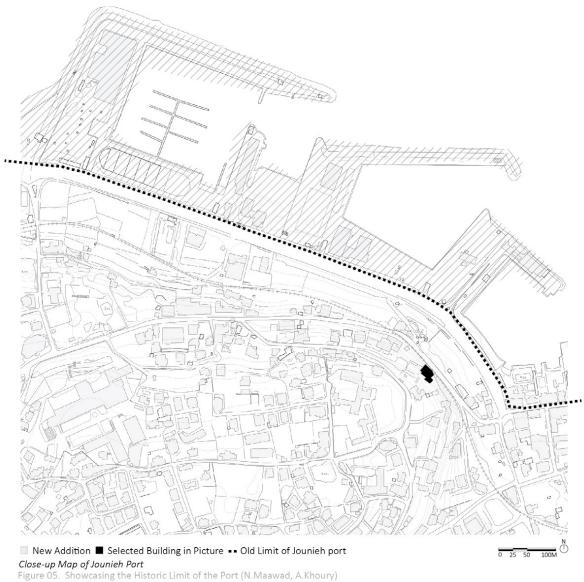
. Lost in Time: Jounieh's Amnesia and the Erased Phoenician Legacy The Phoenician's Route: 1200-333 B.C



Map of Phoenicia
Figure 04. Illustrating a General Historic Overview (N.Maawad, A.Khoury)

During the Phoenician period, Jounieh held a strategic position between the two main ports of Byblos (Byblus) and Beirut (Berytus), earning itself the name "Palaebyblus", meaning "Before Byblos" (Figure 04). This geographical advantage made it a crucial resting stop for Phoenician sailors navigating the Mediterranean waters. Therefore, serving as a winter refuge, Jounieh provided winter shelters for ships sailing from south to north, facilitating the exchange of goods such as cedars, jewelry, wine, perfume, and fruits with nearby neighboring Mediterranean countries.

As part of their strategic planning, the Phoenicians preserved it as a natural bay, providing natural hiding spots, with boats hidden among the rocks forming a cliff. This ensures a safe harbor of valuable cargoes, contributing to the flourishing trade networks of the Phoenician civilization (Figure 06).[32]



#### View to Selected Building, 1960



View to Selected Building, 2018



 ${\it Historic Startegic Planning, Map\ of\ The\ Same\ Building\ in\ Ancient\ and\ Modern\ Times.}$ Figure 06. Examining the Historical Evolution of Jounieh (N.Maawad, A.Khoury)

However, nowadays this cliff is no longer visible (Figure 06). This previous boundary was not properly safeguarded over the centuries due to the extension and privatization of the shoreline, in particularly in the 1960s (Figure 05). This resulted in the construction of several infrastructure and private buildings that now separates the cliff from the sea. Unfortunately, the majority of locals are unaware of the Phoenician existence since they are no preserved or maintained settlements. The sole remaining ruin, instead of being celebrated is currently used as a storage area, abandoned and hidden from public view. This neglect highlights the degradation of a rich cultural heritage that Lebanon, particularly Jounieh, holds but has buried within its root.[32][01]

### **Chronology of Events**

01

#### Evolution of the Lebanese Bride s Coastal Planning تحت الاحتلال Under Influences

04

03



Jounieh Under Heavy Historic Influences

Figure 07. Showcasing Historic Influences on Jounieh, The Roman and Byzantine Period(N.Maawad, A.Khoury)

02





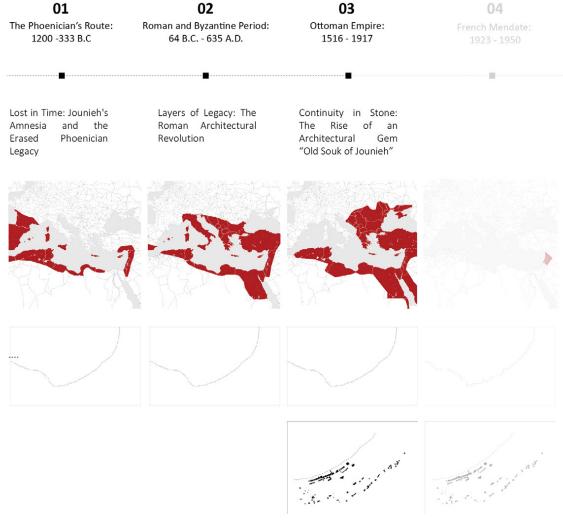
## **Q2.** Layers of Legacy: The Roman Architectural Revolution. Roman and Byzantine Period: 64 B.C.- 635 A.D.



Photo of the Ghazir-Maameltein Roman Bridge.
Figure 08. Illustrating a General Historic Overview (The Lebanese Heritage/ Facebook)

The Romans and Byzantines left their mark in Jounieh, as they constructed bridges (Figure 08), fancy temples, and grand palaces that still stand today. They brought in new building tricks and techniques that shaped how things are constructed in the region. Furthermore, they layered their structures over the foundational footprint of the Phoenicians, as the Romans created their own advancements with the rich heritage of the land, creating a landscape that speaks to both their ambitions and their respect for the past.

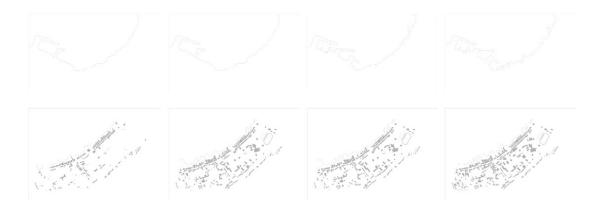
Today, we can only preserve and respect the beauty of these ruins, as they remind us of the enduring legacy of Roman civilization that changed and shaped Lebanon and Jounieh for generations.[32]



Jounieh Under Heavy Historic Influences

Figure 09. Showcasing Historic Influences on Jounieh, The Ottaman Empire (N.Maawad, A.Khoury)



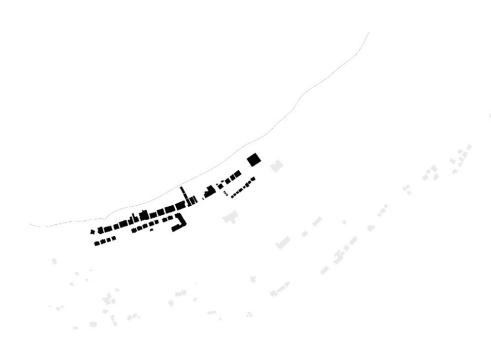


## . Continuity in Stone: The Rise of an Architectural Gem "Old Souk of Jounieh" Ottoman Empire: 1516- 1917 A.D.

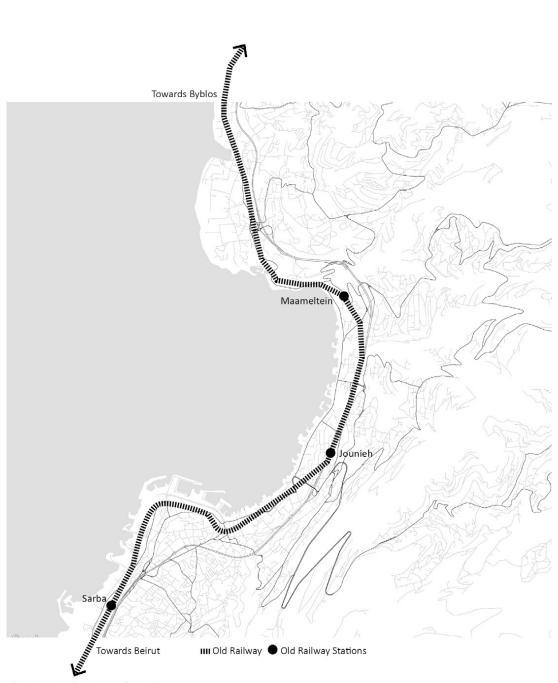


The Rise of A Gem
Figure 10. Demonstrating The Historical Strip ( Jounieh Municipality.)

Throughout the ottoman era, the heart of Jounieh observed a remarkable transformation, through an urban development of the prominent strip known as "The Old Souk" (Figure 11). This vibrant marketplace was characterized by its uniform, symmetrical and elegant architecture which evolved into an architectural gem in the Lebanese heritage. The buildings have similar façade as they rose two to three stories high. Crafted by locally sourced materials, the buildings are constructed from natural stone and structurally covered by red roof bricks that adds charm and uniqueness to the strip. Their attention to detail made the souk elegant, drawing in tourists and visitors to the present day. (Figure 10)[22]



The Creation of The Old Souk
Figure 11. Illustrating the Rise of The Architectural Gem, The Old Souk of Jounieh. (N.Maawad, A.Khoury)

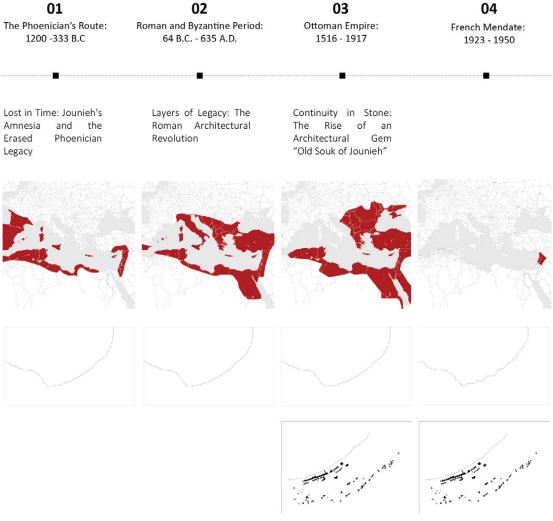


The Ancient Railway Map of Jounieh
Figure 12. Demonstrating Railway Trajectory of Jounieh, Lebanon (N. Maawad, A. Khoury)

#### **Linking Coastal Cities**

In 1892, a significant railroad was built connecting Jounieh to Beirut featuring six stations along its route. Three of which situated in Jounieh, Sarba and Maameltein. This railroad played a pivotal role as the main mode of transportation for people traveling along Lebanon's coastal region, facilitating journeys from one end of the country to the other. (Figure 12)

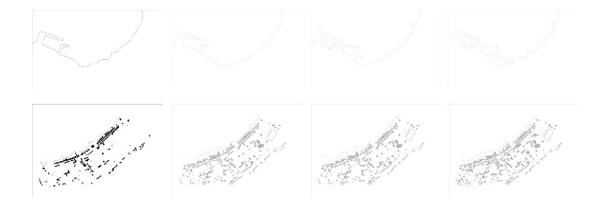
Currently, despite traces of the railroad system still being present, the government is not benefiting from it as a means of public or international transportation due to corruption policies. Some sections of these traces have been preserved, while others have long been forgotten.[32][22]



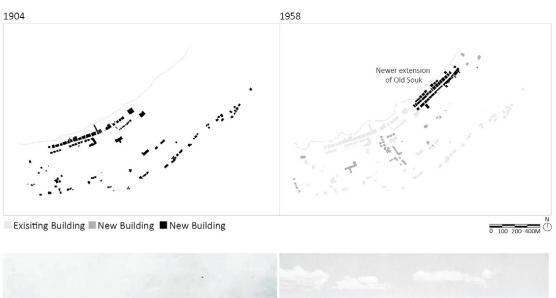
Jounieh Under Heavy Historic Influences

Figure 13. Showcasing Historic Influences on Jounieh, The Golden Era (N.Maawad, A.Khoury)





**05.** The Golden Era
Jounieh's Favorite Son: The Fouad Chehab Presidency, 1958-1964



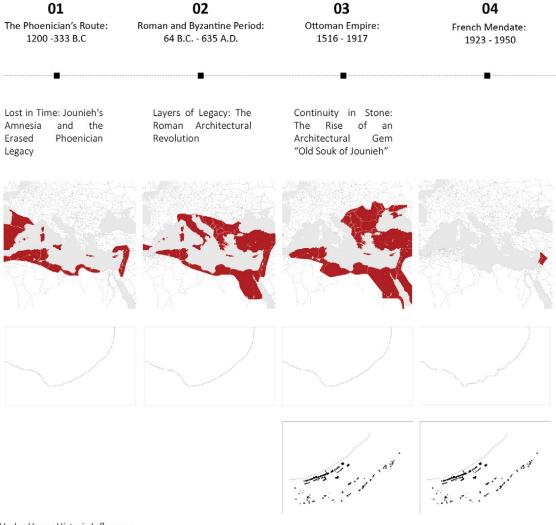


The Rise of Jounieh's Golden Era
Figure 14. The Development and Extension of Jounieh and Its Old Souk (N.Maawad, A.Khoury)

Following the French Mandate, Fouad Chehab, native of the city Jounieh, was elected President of the Republic in 1958. His tenure marked a transformative period for the nation and his city, as he initiated an architectural program organized to develop and modernize Lebanon through series of large-scale public constructions that led the country to reach its Golden Age in 1960. To avoid local political influences, he relied on foreign expertise professionals to shape his architectural vision. With a strategic eye on maintaining international relationships, he particularly relied on a French urban planner Michel Ecochard, to develop urban plans for Lebanon and the city Jounieh. Chehab strategically balanced international relations, opting for French assistance to maintain ties with both France and the United States

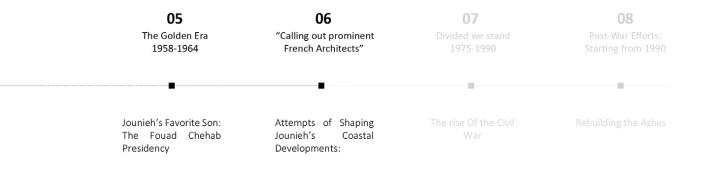
By 1964, Chehab's administration transformed Jounieh into a vibrant hub, leveraging in foreign experts and specialists to implement series of strategic directive designs aimed at transforming the city into a touristic destination. This approach led to the development of cable cars, casino, municipal football stadium, parks, educational, religious and commercial buildings. [22]

#### Evolution of the Lebanese Bride s Coastal Planning تحت الاحتلال Under Influences



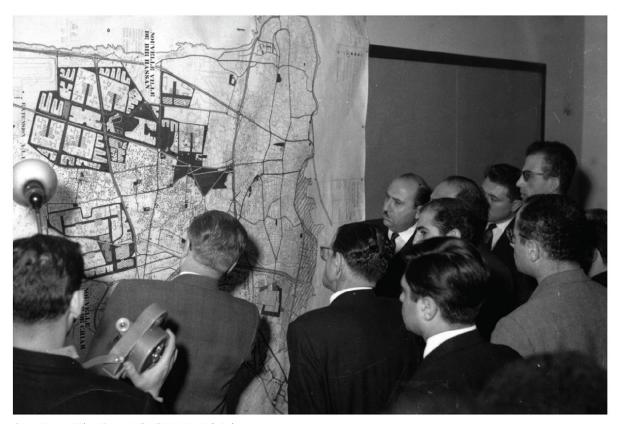
Jounieh Under Heavy Historic Influences

Figure 15. Showcasing Historic Influences on Jounieh, "Calling out Prominent French Architects" (N.Maawad, A.Khoury)



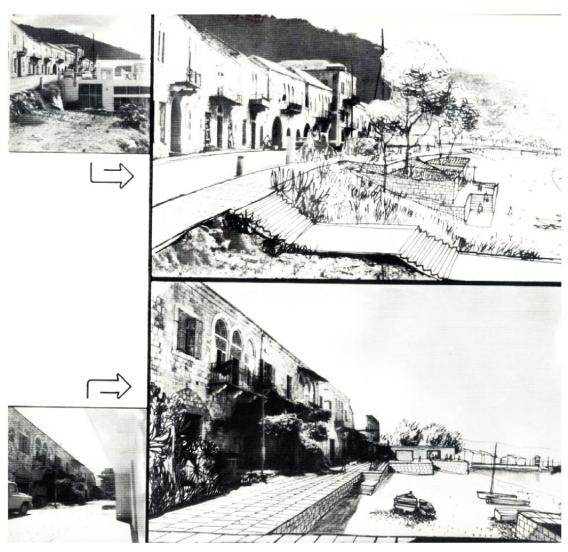


## **06.** «Calling out Prominent French Architects» Attempts of Shaping Jounieh's Coastal Dvelopements



Proposing an Urban Strategy For Beirut-Jounieh, Lebanon
Figure 16. Unveiling Proposed New Adminstrative and Residential Towns in The Suburbs of Beirut (l'Orient-Le Jour)

First Attempt: Architect and Planner Michel Ecochard – "President I have a plan"
In 1958, Michel Echochard set a masterplan to the city. Ecochard presented a modernist and functionalist approach, transforming the historical port and strip into a commercial hub with high exploitation ratio. This led to new zoning laws and demolition of multiple traditional buildings. However, the new outcome of his masterplan stating mainly the creation of Beirut-Tripoli highway, cable car and the football stadium have transformed the whole city into a vivid and dynamic touristic hub.(Figure 16)[22][32]

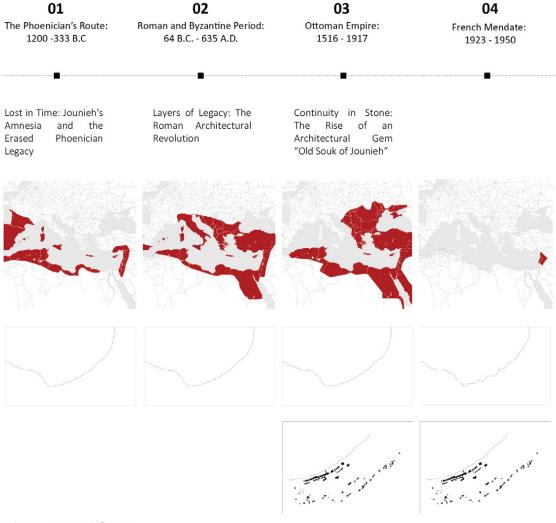


Attempts to Initiate a Cultural Activity in The Old Souk
Figure 17. Sketches by Jacques Liger-Belair (Atelier Des Architectes Associes sarl)

**Second Attempt:** Architect Jacques Liger-Belair — "In Lebanon, my eyes were opened to the "architectures without architects" of this magnificent country."

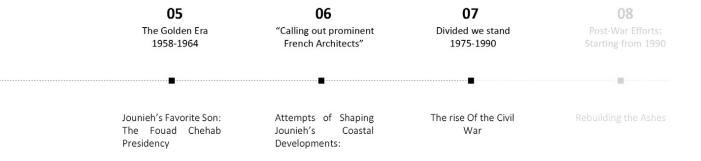
This attempt was called upon the municipality. In 1963, architect Jacques Liger-Belair set a planning effort that aimed at protecting traditional heritage buildings. The effort started by creating pedestrian routes in the coastal zone aimed at highlighting the historic strip of the city. The architect's main achievement was to initiate a cultural and maritime touristic activity that connects both land and sea domains. The illustrations showcased how the architect Jacques Liger-Belair translated his ideas into tangible reality. Regrettably, despite its promise, the project was terminated due to political circumstances. (Figure 17)[22]

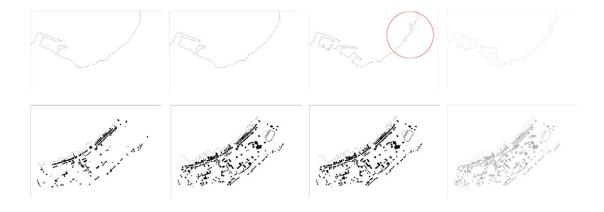
#### Evolution of the Lebanese Bride s Coastal Planning تحت الاحتلال Under Influences



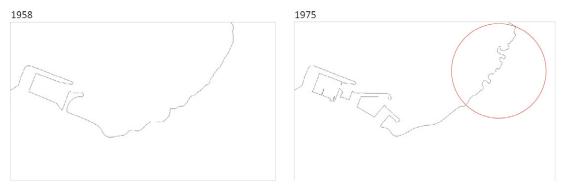
Jounieh Under Heavy Historic Influences

Figure 18. Showcasing Historic Influences on Jounieh, Divided We Stand (N.Maawad, A.Khoury)

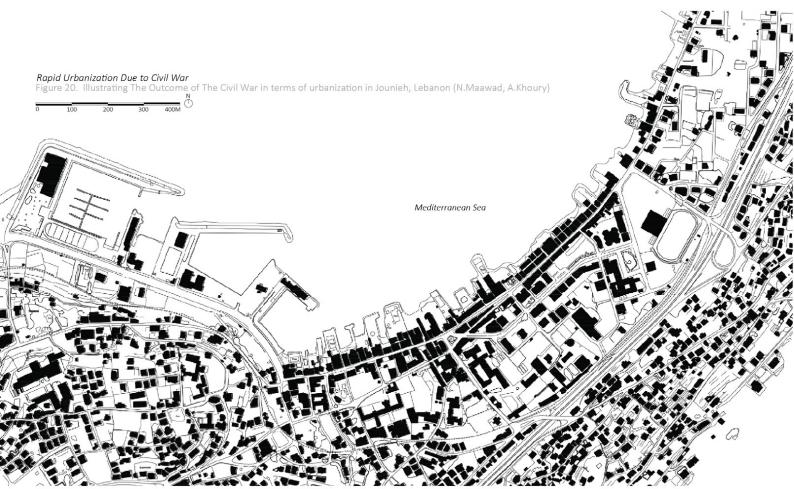




## **07.** Divided we Stand The rise of the civil war 1975-1990

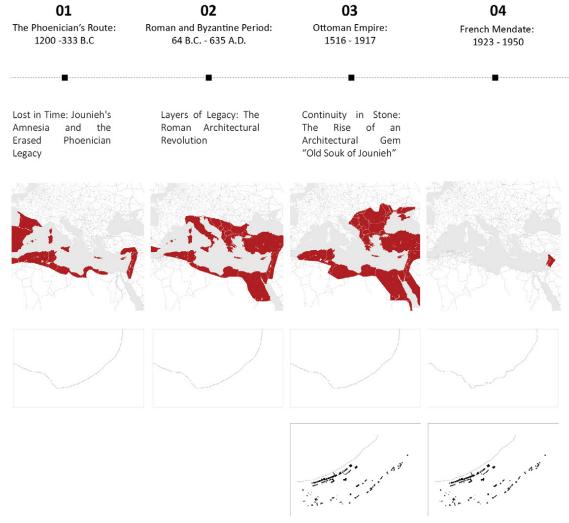


The Impact of the Lebanese Civil War on Coastal Morphology: Changes in the Lebanese Shoreline
Figure 19. Illustrating The Outcome of The Civil War on the Coastal Morphology of Jounieh, Lebanon (N. Maawad, A. Khoury)



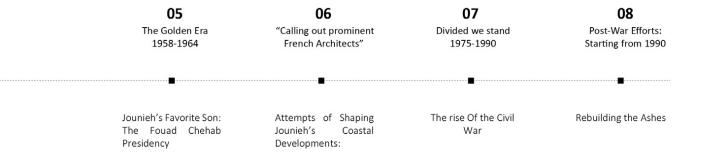
With the outbreak of the civil war in 1975, Beirut became divided by the demarcation line into East and West, and the escalation of the violence, many people fled to safe areas and were organizing their lives in accordance with the new realities.

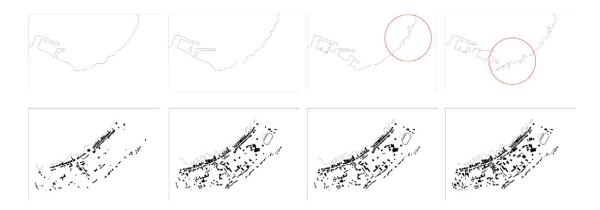
From 1980 to 1990, Jounieh experienced a significant migration with large numbers Beirut traders relocated to its markets. This sectarian homogenization translated into new territorialities as green spaces were replaced by buildings, and tourist complexes occupied the shores. Despite these circumstances, Jounieh's economy reached its peak as it has replaced Beirut's port temporarily. The use of the tourist port boosted commercial activities in the area. However, with the increase of violence and governmental absence, the city faced irregular building activities specifically on its coastline (Figure 19). This unchecked expansion has led to privatization of public beaches resulting to a transformation of movement so called "a chaotic urban and morphological development". This transformation stretches from the coastline all the way into the mountains, continuing a cycle of chaotic development(Figure 20). In 1993, the war ended allowing the traders and refugees to move back to their hometowns leaving Jounieh in a bad economic and touristic state. The city is till now suffering from unplanned chaotic environment, deforested mountains and illegal privatization of beaches resulting in zero public beaches. [32][22]



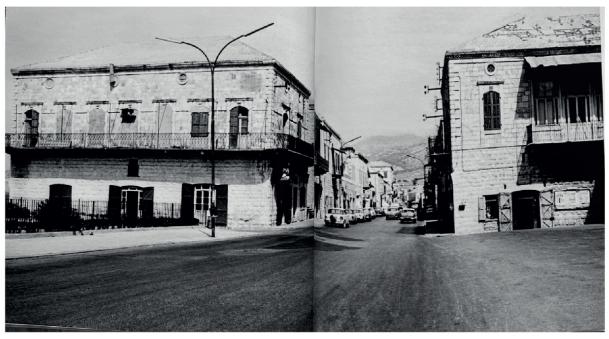
Jounieh Under Heavy Historic Influences

Figure 21. Showcasing Historic Influences on Jounieh, Post-War Efforts (N.Maawad, A.Khoury)





# . Rebuilding the Ashes Post-War Efforts: Starting from 1990



*The Old Souk of Jounieh*Figure 22. View of Post-War Efforts ( جونيه صور من الذاكرة by Wakim Abou Lahdo),

Multiple failed and successful efforts have been studied and done to revive the area. In 1995, the ministry of culture issued a decree noting that 100 houses were classified as cultural buildings that should be protected. In addition, a study by the architectural firm of Atelier des Architectes Associés and UNESCO was also conducted in order to protect the historic zone as well as the beach in Jounieh to create a touristic cultural city.

In 2002, a decree was issued by the municipality of Jounieh, officially labeling the forest of Harissa as a natural reserve within the Protected Zone. This step aimed to safeguard the untouched beauty and ecological integrity of this natural landscape. Furthermore, in 2006, under the decree 18093, a supervised framework for construction activities has been adopted within the region classified as "Heritage Zone" . However, despite the efforts, not all of these zones were successfully restored and renovated as till now they stand as abandoned historical landmarks gazing towards the sea. [22][32]

Overcoming The Disruptions of Centuries,

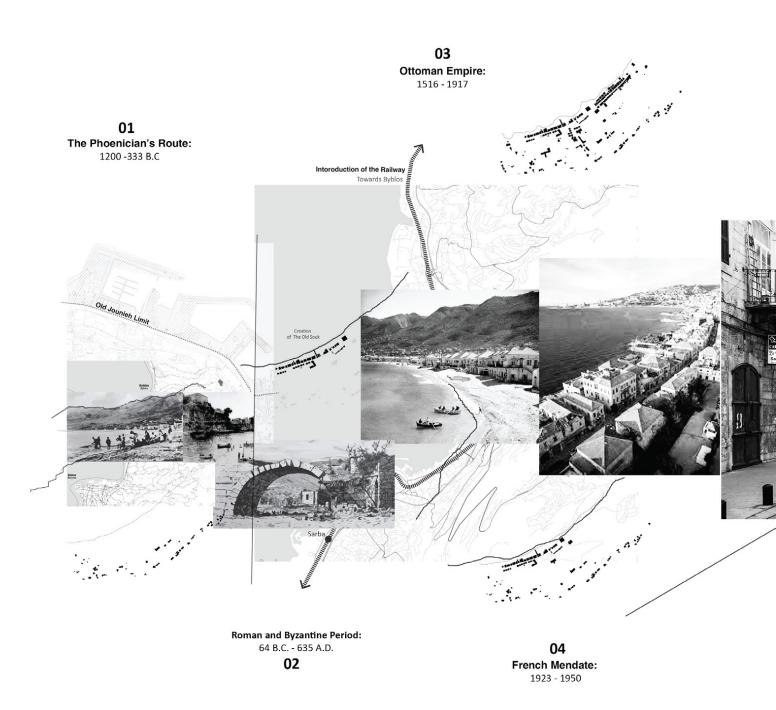


Figure 23. Illustrating the Chronological Historic Influences and Events on Jounieh and its Old Souk (N.Maawad, A.Khoury)



a Glance

Shaping The Identity of Jounieh's Old Souk



### 2.1.2. Scope of The Analysis

In the present day, the "old souks" of Jounieh remains as a historical landmark in Lebanon. The coastal bride stands out for its unique character rooted in a traditional architectural heritage that integrates elements from both land and sea sectors. However, the remaining legacy of chaotic building activities and infrastructural developments, notably the north-south highway, has led to fragmented neighborhoods and a loss of cohesion. This disconnection has resulted in a gradual decline in the city's urban identity.

Therefore, the analysis goal is to explore the city's urban evolution, identifying challenges and difficulties that have emerged during different periods that led to urban fragmentation and degradation of this historical city. By understanding the factors behind the transformation of its layout, the aim is to provide tangible evidence of how these challenges influenced the current landscape. Hence, the main objective is to develop an efficient strategy that aims at preserving the city's unique historical identity and revive it back into an interactive hub. In order to formulate the strategy, it is necessary to examine Jounieh's morphology, physical boundaries, socio-economic factors, infrastructure and connections, cultural and traditional urban qualities. A variety of research techniques, such as site visits, questionnaires, interviews, maps, and visuals, will be used in the study. Therefore, this research will set the framework of the conceptual urban design aiming at developing and safeguarding a historical city in order to regain its unique character positioning it as a standout destination between its regional surroundings.

### **CHAPTER 02**

## **Physical Geography**

In this chapter, we go through the urban analysis of Jounieh, while particularly focusing on its historic old souk. Understanding the urban fabric of Jounieh is not only crucial for appreciating the city's aesthetic and historical significance but also for recognizing its unique cultural identity. By examining the complex layers of the city's urban fabric, we gain insights into the spatial and social dynamics that have shaped its development over time. This analysis is essential for fostering a deeper consciousness of the aesthetic values and the degree of historical significance embedded within the city. Moreover, studying the urban fabric plays a vibrant role in enhancing the quality of life, as it informs sustainable urban planning and preservation strategies that respect the city's heritage while accommodating contemporary needs. Through this exploration, we aim to highlight the importance of integrating historical awareness into urban development practices, ensuring that the rich legacy of Jounieh's old souk continues to add value and vibrancy to the city's future. Moreover, a detailed analysis of the urban form, both past and present helps in discovering what to prevent and what strategies are more efficient in terms of urban management. Therefore, urban fabric provides an appreciation for linking relevant fields of application namely planning, preservation, and urban design.

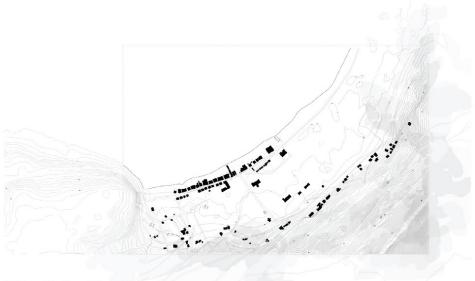
In order to understand the urban fabric, in this section, several maps are developed (Figure 24 - 39) to understand the complete structure of the city of Jounieh and more specifically its old souk. The different layers ranging form the physical geography, to its economic and social aspect will be also explored in terms of how they affect the historical city and its urban context.

### 2.2.1. Urban Expansion

In this specific section, our methodology will involve both an interpreted as well as a referenced analysis regarding the expansion of the old souk and its neighboring city forming the city of Jounieh. This is due to the lack of references and researches around this specific area.

Throughout historical maps and our historical analysis, Jounieh was constituted of a strip of building occupying small part of the peninsula facing the Mediterranean Sea. At the time, Jounieh was a small village with no urbanization. In 1904, during the Ottoman Empire, the rise of an architectural gem known as "the old souk of Jounieh" appeared (Figure 24). During this period, a remarkable transformation in the urban development took place in terms of architectural and infrastructure. In terms of architecture, the old souk was the significance behind Jounieh's identity giving rise to the traditional Lebanese architectural style. Therefore, the urban landscape was characterized by a homogenous traditional façade crafted by natural yellow stones featuring the three renowned arcades alongside there balcony and red roof. In terms of infrastructure, at this time a new railroad was built connecting Jounieh to Beirut. Afterwards, in 1958, the old souk has extended horizontally along the coastal area featuring an expansion of the old souk. This linear growth was caused in order to take advantage of the accessibility and infrastructure which has led into an agglomeration on the coastal area and near the railway route resulting in vast empty spaces in between. It is noteworthy that during that period, transportation primarily relied on a railway system or sea routes. Moreover, in terms of urban layout the coastal line had a denser and more ordered compositional landscape compared to the upper part that is near the railway route, which more characterized by a scattered and an unorganized landscape. Therefore, these two linear patterns defined the boundaries of Jounieh that starts from the coastal area towards the beginning of the forestry slopes, since it was difficult to access and built on these steep slopes.

Due to the enforced displacement during the civil war, the linear strip has expanded further towards the Mediterranean Sea giving place to new settlements residing on the public maritime. Furthermore, the city started taking shape in an uncontrolled manner as illegal settlements dominated the landscape. Public services and important landmarks started to interact and bond within the city forming an integral component of the city's character.[22][32]



1904 The Rise of the Old Souk



1958 A Linear Expansion of the Old Souk



**1975** New Morphology due to Illegal Settlemen
Figure 24. Urban Expansion of the City of Jounieh. (N.Maawad, A.Khoury)

Hence, the city expanded further, starting from 1990, inhabitants constructed and settled beyond the periphery of the steep hills. This marks the beginning of characterizing Jounieh as a fully urbanized city.

Nowadays, according to the article of "Evaluating Urban Expansion Using Remotely-Sensed Data In Lebanon" [15], studies have shown that Jounieh has the highest growth factor among urban agglomeration compared to the major cities in Lebanon. This signifies that Jounieh has expanded significantly, making it one of the fastest-growing urban centers in the country. This being said, it is the second-largest urban agglomeration in Lebanon covering an area of 38 km². This urban area underscores Jounieh's importance as a key economic hub adjacent to Beirut. However, the reason behind its expansion is not only due to the Lebanese civil war but was driven by various factors. Hence, Jounieh's diverse growth development is due to:

Proximity to Beirut: Jounieh's location near the capital has been a major driver of its rapid urban expansion. As Beirut reached near saturation with 98% of its area urbanized, the effects contributed to the growth of neighboring areas like Jounieh.

Economic and Residential Appeal: Jounieh offers an alternative to the dense urban environment of Beirut. Its appeal includes historical old souk, residential development, commercial activities, and tourism, particularly due to its coastal location and scenic beauty.



Nevertheless, studies have shown that Jounieh exhibits a combination of type of urban expansion: low-density sprawl and ribbon development (Figure 26).

#### In terms of low-density sprawl

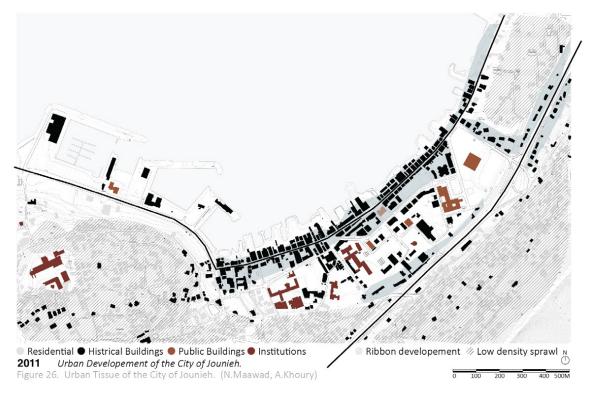
From the date of the research data given until modern times, Jounieh is experiencing "outward expansion", spreading outwards from its core area leading to the creation of new suburban neighborhoods. This expansion involves developing large plots of land for residential and commercial purposes, contributing to the growth of low-density areas where buildings are not closely packed together. This result of suburbanization resulted in single family houses, small parks and low-rise commercial buildings and new infrastructure that solely rely on cars as public services such as taxis are not efficient enough to cover these areas.

#### In terms of Ribbon Development "Linear Growth"

Jounieh is experiencing growth along its main roads and especially on the main highway that connects North to South, leading to a linear pattern of development. By means, new buildings and commercial facilities are being established along these transport routes, taking advantage of the accessibility and infrastructure. This have led to major agglomeration on these roads that brings economic benefits for commercial facilities, but increases traffic congestion, pollution, stress and anxiety of the inhabitants.

#### Mixing Both Patterns

The result of both terms has led to series of concerns and problems along the urban area. The spread of diverse urban forms as the city features new spacious layout of linear corridors and developments along its main transport system. In addition, the spread out has led to decrease greenery along the city and resulted in loss of open spaces and farmlands. Therefore, these patterns have raised concerns on the wellbeing and socio-economic features of the inhabitants in the city.



# 2.2.2. Jounieh's Climate and Strategic Location

The "Old Souks" lays at the heart of the city of Jounieh on the seaside part. It is considered to be one of the oldest heritages which are almost as old as the earliest evidence of mankind [15] It is one the very first beginning and starting part of the city of Jounieh, the point from which the city has expended going back to the Phoenicians as shown previously (chapter 02.1.1). Its unique geographic location as a crossroad linking the Mediterranean basin with the great Asian hinterland fosters a cosmopolitan atmosphere and leaves behind a rich multicultural legacy dating back to the oldest times. [11].

It is one of Lebanon's major coastal area alongside with Beirut, Saida and Tripoli. Their location on the seafront engage in commerce, tourism and banking, therefore they have the highest population density in Lebanon while representing only 27 percent of its total land surface [35]. Hence, Jounieh's is located 15 kilometers north of the capital Beirut (Figure 27). Its strategical location benefits from the capital growth of Beirut due to the fact that it has been classified within the metropolitan region of Beirut and is considered as an extended suburb to the latter. Despite the role of Beirut, Jounieh itself forms a major economic center for Metn and Keserwan regarding leisure, entertainment and consumption (shipping, banking....) [22].

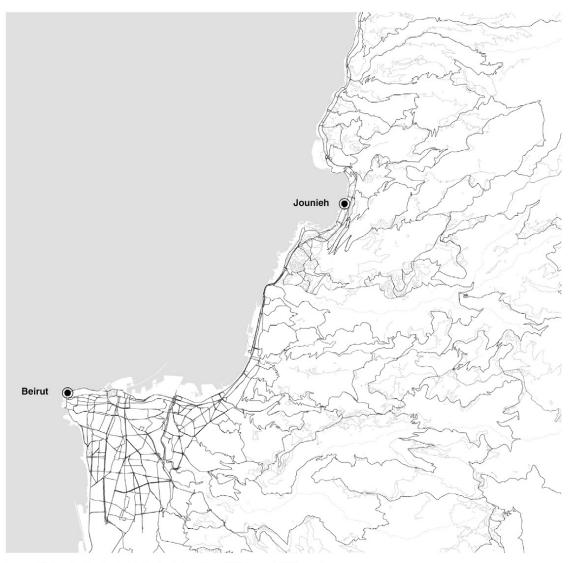


Figure 27. Illustrating Jounieh's Strategic Location (N.Maawad, A.Khoury)

Moreover, Jounieh's historical quarter also known as the "old souk" attracts different groups of people ranging from locals to international visitors which results as a positive cultural asset. This is also mainly due to its location, and to the fact that Jounieh incorporates several attraction points in its city and its surrounding creating a node across its region, which attracts people from all across Lebanon (Figure 28). The nodes vary form a diverse type of functions as leisure, education, touristic, traditional, religious, sport... which enrich the city's cultural identity. These assets are just miles away from the "Old Souk". For instance, they are at around 2km away from the Casino of Lebanon, 10km from Byblos, 20km from Beirut airport, 7km from Harissa and 8km from Jeita Grotto which was a finalist in the New7Wonders, and serves as an important attractive tourist point in Lebanon. Moreover, it is also some meters away from one of the most important stadiums known as the Fouad Chehab stadium, from Jounieh' s cable car, the old municipality, which is an ottoman building, its public garden and from Mar Gerious cave. Therefore, the close proximity of these noteworthy sites positions Jounieh, particularly the "old souk," advantageously for tourism, given its strong potential to attract tourists and thereby boost the economy. This being said, "the old souk" surely "knows how to capture someone's attention and imagination", since "everything has its place in the historical center." [46].







Unfortunately, the coastal city lies close to the Dead Sea fault system, which is a major tectonic boundary between the African Plate and the Arabian Plate which makes the region prone to earthquakes (Figure 29). Therefore, it is crucial to take into consideration the importance of being ready for any seismic recurrence in the area since recently majors disastrous earthquakes occurred in the neighboring countries. On February 5th 2023, a 7.8 magnitude earthquake happened in southern turkey and north Syria which has been felt in parts of the country of Lebanon shaking some residential buildings in some of its regions [46]. By this, it is essential to take into consideration the need to implement and take into consideration some safety regulations particularly when referring to old buildings dating back to before the civil war and the need to enhance their structure and prolong their life in case any future seismic event occurred.

Furthermore, it is as important to assess and understand Jounieh's or more precisely the "Old Souk's" climate as much as its geography. This allows a more comprehensive approach related to the unique opportunities and problems that the city presents as well as it could influence the city's architectural requirements. Considering this, the intense summer heat and humidity, along with harsh winter conditions, lead to significant flooding levels, greatly impacting the buildings' structure and longevity. Hence, it becomes crucial to take this study into account to develop more effective plans that address the challenges the city may encounter in the aftermath of any natural disaster. Moreover, adopting restoration methodologies and strategies incorporating sustainable design principles, while mindful of the city's climate and geography, is essential. This encompasses the enhancement and establishment of more resilient infrastructures to mitigate the impact of earthquakes and flooding [46].



#### **General Climate Overview**

Given the lack of specific meteorological records for Jounieh, particularly those predating the 1950s, and the disruption of many weather stations during the Civil War, assessing the climate change and precipitation trends in Jounieh requires a comprehensive and multi-faceted approach. To address this challenge, a combination of available national data and regional climate models has been used to infer local trends. Historical climate data from Lebanon, where accessible, have been supplemented with satellite observations and reanalysis datasets to fill in gaps. Additionally, statistical downscaling techniques have been employed to translate broader regional climate patterns into more localized estimates for Jounieh. By integrating these methodologies, a better understanding of the climatic trends affecting Jounieh can be constructed, despite the limitations posed by the lack of specific historical records for the city.

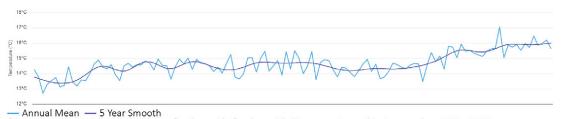
Lebanon experiences a Mediterranean climate characterized by hot, dry summers and cool, rainy winters, with an average annual temperature of 15°C. Along the coast, summers are hot and humid, with temperatures exceeding 35°C in August. The sea's moderating effect narrows the daily temperature range compared to inland areas. January is the coldest month, with temperatures ranging from 5 to 10°C. The mean annual rainfall on the coast varies between 700 and 1,000 mm. Approximately 70% of the country's average rainfall occurs between November and March, often concentrated in a few days of heavy cloudbursts or violent storms.[27]

#### Climate Change Trends

The ND-GAIN Country Index assesses nations based on their susceptibility to climate change impacts and their preparedness to their resilience. Lebanon is ranked 117th on this index, marking it as the 97th most vulnerable and least prepared country. This places Lebanon in the lower-top quadrant of the ND-GAIN Matrix, indicating manageable current vulnerabilities but a critical need to enhance readiness for better adaptation [27].

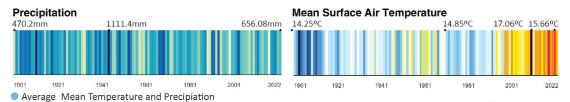
Over the years, Lebanon has experienced a notable increase in its average annual mean temperature, rising from 14.22°C in 1901 to 16.23°C in 2021, an increase of 2.01°C (Figure 30).

Rainfall patterns across Lebanon have shown varied trends over the past five decades. While average rainfall has remained relatively stable nationwide, there has been a significant decline in drier regions. Conversely, rainfall has increased in the North and Southeast of the country, accompanied by an increase in instances of torrential rains. Temperature trends have also shown a distinct rise, contributing to desertification, though the full extent of this impact requires further study [27].

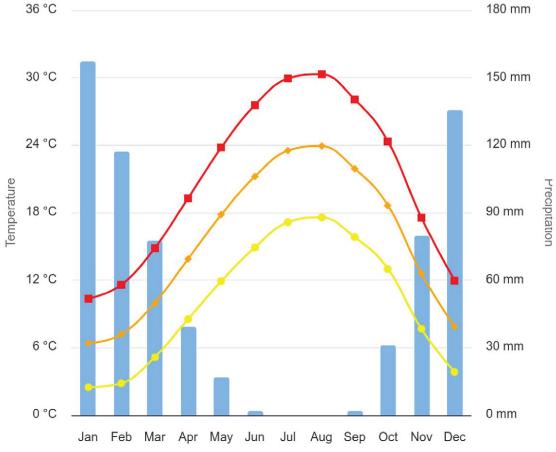


Observed Annual Average Mean Surface Air Surface Air Temperature of Lebanon for 1901-2022

Figure x. Observed Average Annual Mean Temperature (1901-2021) (WB CCKP, 2021)



Observed Annual Average Mean Surface Air Temperature and Precipitation of Lebanon for 1901- 2022



-- Average Min. Surface Air Tempararture -- Average Mean Surface Air Tempararture -- Average Max. Surface Air Tempararture -- Precipitation

Monthly Climatology of Average Minimum Surface Air Temperature and Average Mean Surface Air Temperature, Average Maximum Surface Temperature and Precipitation 1991 - 2022; Lebanon.

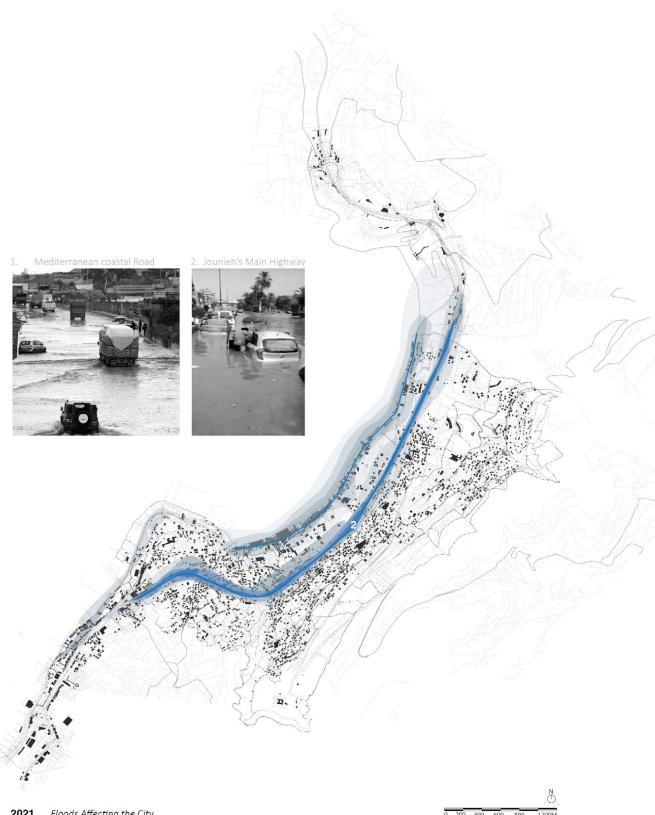
Figure 30. Observed Monthly Climatology (1901-2021) (WB CCKP, 2021)

#### City Under Floods: Floods and their Impact on Jounieh and its Old Souk"

Floods are among the most dangerous and destructive natural disasters, posing significant threats to both human life and property. In cities and their historic areas, the impact of flood affects negatively architectural heritage sites, infrastructure and settlements. In the contemporary period, urban areas are been highly affected by floods due to rapid urbanization and inadequate planning. Hence, urban developments without proper consideration of flood fiscs leads to significant vulnerabilities. Therefore, it is important to understand and study this phenomenon in order to develop flood management strategies to ensure the resilience and sustainability of the city. This being said, we aim to analyze the risk of flood that affects the old souk and its consequences on its inhabitants. This exploration will help us to set solutions that effectively reduce flood risks, protect the environment, preserve historical and cultural assets, and enhance the overall resilience of the historical city against future flooding events [02]

Flooding in Lebanon arises predominantly from irregularities in rainfall patterns, resulting in 1to 2 annual occurrences that are expected to become more frequent due to climate change. They occur during the rainy season, usually between December and March after particularly heavy storms or at the beginning of snowmelt. Storms can bring heavy rains up to 100 mm per hour, causing substantial damage to property and agricultural lands, and triggering landslides that deposit pollutants into the Mediterranean Sea. Consequently, The water overflow causes major damages, which are estimated to amount to 15 million US\$ per year (Atlas of Lebanon) [x]. Due to uncontrolled urban sprawl, Jounieh is one the Lebanese cities that is experiencing flood damages (Figure 31). Jounieh's roads experiences major overflow during heavy rains specifically in its main highway, resulting in damage cars, disrupt infrastructure and residential settlements (Figure 33). According to local interviews, the city has undergone more than five flood incidents for the past two years. Thus, this is all due to unplanned and ineffective construction that has been carried out without considering flood risks. In addition, the city lacks sufficient drainage systems, rainwater harvesting infrastructure, and other essential flood management measures. Along with that, the impact of these floods is particularly severe on settlements, especially commercial areas that resides in the old souk and on the coastline (Figure 32). A local owner suggests that the lack of drainage systems have allowed water to enter their restaurants causing damage that significantly impacted their profits. Hence, it is essential to understand and develop flood strategies that reduces these overflows of events occurring in both in the city and historical area.

Moreover, Coastal regions face rising sea levels, projected to increase by 30 to 60 cm over the next three decades. This threatens densely populated coastal areas and vital ecosystems. [45].



**2021** Floods Affecting the City.
Figure 31. Jounieh's Flood Map (N.Maawad, A.Khoury)

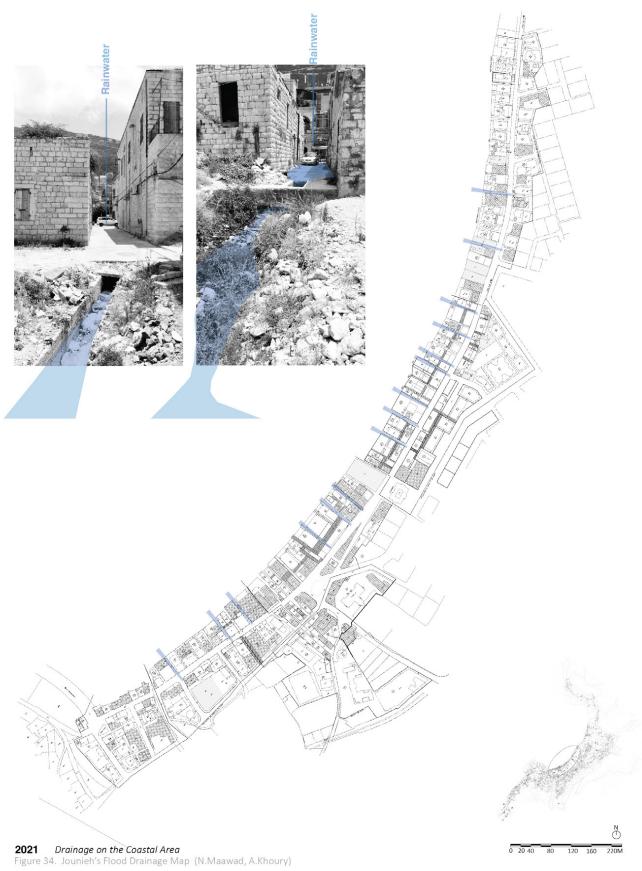
1. Figure 32: Image of the Coastal Road of Jounieh
Prentis, J. (2022, November 30). Lebanon's coastal areas flooded after torrential rain. The National News.
https://www.thenationalnew.com/mena/lebanon/2022/11/30/lebanons-coastal-areas-flooded-after-torrential-rain/

2. Figure 33: Image of the Floods on the Main Highway of Jounieh. IHA News. (2022, November 30). Severe flood hits Lebanon. IHA News. https://iha.news/severe-flood-hits-lebanon/

Expanding on the complexities surrounding flood risks in Lebanon reveals that besides climate factors, practical considerations significantly contribute to the heightened vulnerabilities. One critical aspect is the state of infrastructure, particularly drainage systems. In almost every of the in-between corridors there are tubes along the coastal road (Figure 34), originally designed to channel rainwater to the sea, were adequate in the past but now struggle to cope with increased precipitation attributed to climate change. The intensification of winter rains demands larger capacity drainage systems capable of managing larger volumes of water to prevent urban flooding. In contrast, areas lacking drainage infrastructure, such as the main north-south highway, suffer from more severe and frequent flooding incidents due to inadequate water management strategies.

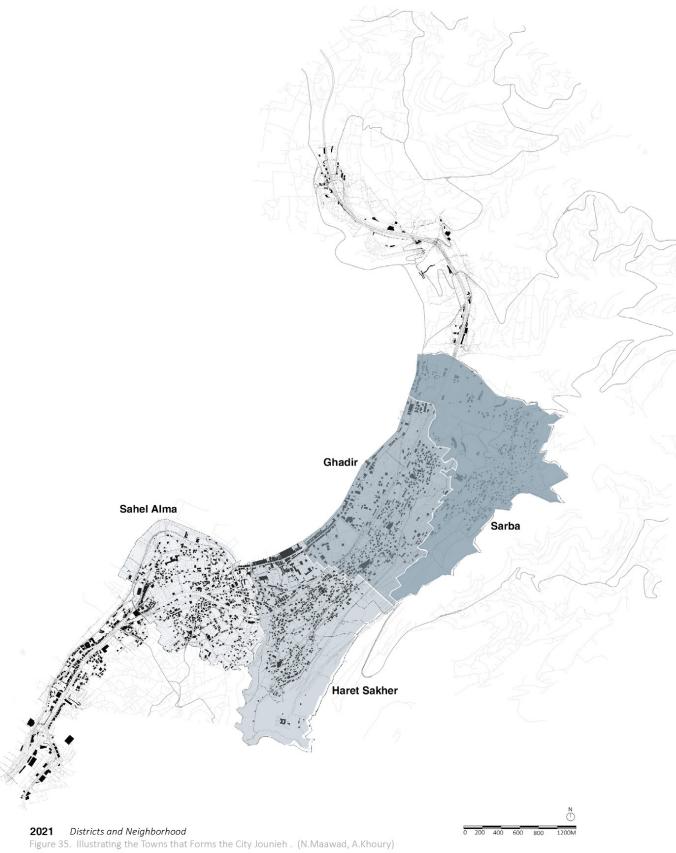
This issue is not unique to Lebanon's coastal regions like Jounieh but resonates with many historical cities worldwide grappling with outdated or insufficient drainage systems. Addressing this global challenge necessitates proactive measures and innovative solutions. Enhanced urban planning practices, coupled with investments in resilient infrastructure, are pivotal. Solutions include retrofitting existing drainage networks with larger pipes, implementing green infrastructure to absorb excess water, and deploying advanced flood monitoring and warning systems to mitigate risks effectively.

A recent example underscores these vulnerabilities: a major flood incident at a coastal hospital in Lebanon necessitated the emergency evacuation of patients as floodwaters inundated the facility and surrounding areas. This event serves as a stark reminder of the urgent need for comprehensive flood risk management strategies tailored to local conditions, emphasizing resilience and adaptability in the face of escalating climate impacts.



## 2.2.3. Districts and Neighborhood: Assessments of The Main Districts.

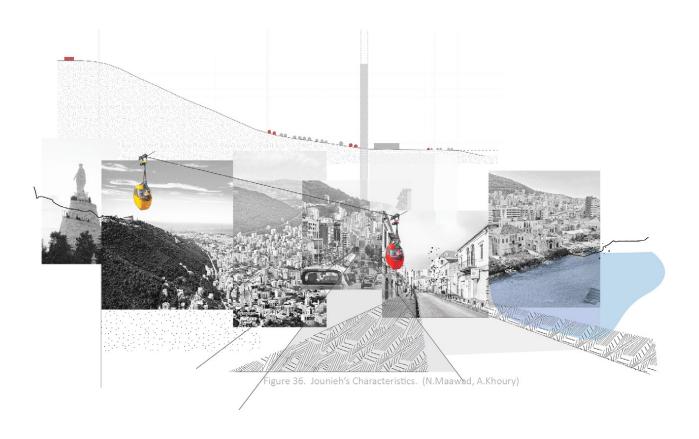
The city of Jounieh has evolved into separate villages that have emerged during the civil war which led into a "construction boom". It started from a small coastal part currently known as "the old souk of Jounieh" which is the oldest part of the city. It was still a small town close to the old port, with little to no urbanization in its surrounding. Afterwards, the historical urban center of the city has then evolved extensively within time and has gained significance in the late 19th century due to urban sprawl, new professions and the extension of the souk making it the city it is today. Consequently, Jounieh is mainly composed of four towns: Sarba, Ghadir, Sahel Alma and Haret Sakher (Figure 35). It is actually the largest urban center in the caza of Keserwan and the largest coastal city in the governate of Mount Lebanon with total area of around 7.7 square kilometers. It is also the administrative and regional center of the Keserwan casa [28][22]. Hence, the city of Jounieh presents a vibrant atmosphere with a distinguish mix of styles going from traditional, modernity, cultural diversity and historical significance. Each of its four towns are characterized with its unique personality.



# 2.2.4. Topographical Analysis.

The city of Jounieh is characterized by its coastal setting, with hills rising to the east reaching more than 600 m in a 2km distance and the land gradually sloping down towards the Mediterranean Sea in the west. Therefore, the city lies on the base of Harissa mountain which also provides the city a unique character (Figure 36) and ends with a historic quarter which is the "Old souk" located on the peninsula facing the Sea. Both locations play a huge role in shaping the city of Jounieh's character, as they serve as the two main central points that highlights the cultural, historical, and geographical significance of the city. Therefore, broadly speaking the terrain of Jounieh is a blend of coastal lowlands, hilly neighborhoods, and a towering mountain, resulting in a varied panorama that is exclusive to this area. Moreover, this topography provides the city with its scenic views and distinctive landscape. The mountains surrounding Jounieh have a significant impact on the region's climate by creating a humid environment that supports a diverse range of plant and animal species.

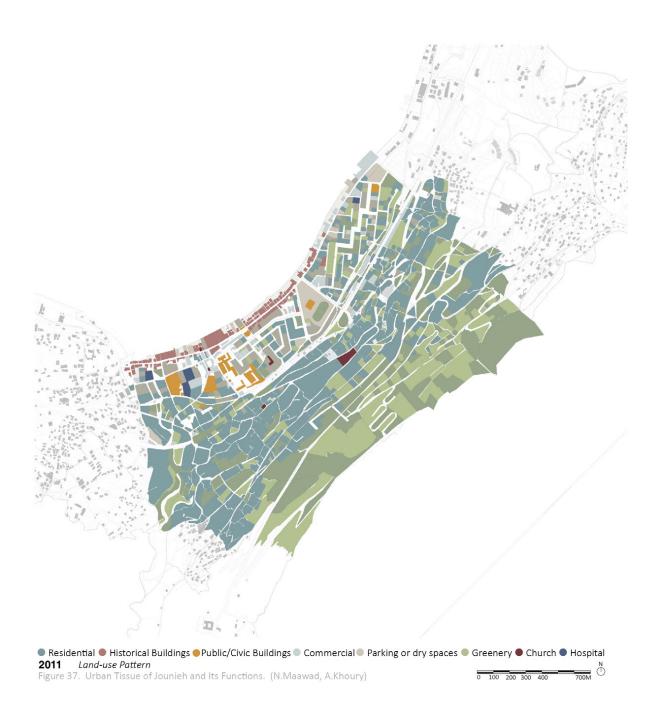
However, this steep slope not only hinders connectivity between different parts of the city, but also, despite the topographical challenges, a main highway runs through the area, creating a rupture between the mountains and the coastal parts of Jounieh, further complicating the connection [22].



#### 2.2.5. Examination of Land Use Patterns

In Jounieh, the functions are diverse and vary across neighborhoods (Figure 37). In the mountains, most of the buildings are residentials. However, some of these residentials buildings accommodates commercial functions such as bakeries, small minimarkets, which serves for the needs of the residents that lives in the districts. Towards the highway and the zone between the coastal road, we notice that the majority are either educational institutions, banks or offices. However, the coastal part, also known as the historical center and Jounieh's sweetheart, is primarily the heritage area. It is the most traditional and oldest part of Jounieh. This heritage zone is mainly dominated by coffee shops, retail shops, resorts, and hotels whom are exploiting and privatizing its shores. The region features a majority of traditional Lebanese houses, particularly in the coastal area known as the old souk. Additionally, Jounieh is home to two historical churches of great significance, located within its districts .

Moreover, the area adjacent to the coastal region, known as the middle spine between the mountainous and coastal parts, is dominated by educational and medical buildings. This defines the character of the zone, providing potential for development. However, it also creates an obstacle due to its lack of activity, particularly at night. Therefore, while the institutions are closed at night, there is no longer any visible or physical attraction for pedestrians, resulting in an area that feels insecure and uncomfortable. The streets become empty and unfriendly, further deterring people from the area (Figure 38).





Mountainous Part ; Residential and Green 
Middle Spine Dominated by Educational and Medical Buildings 
Coastal Part ; Old Souk 
Land-use Pattern

Figure 38. Main Functional Spines of Jounieh (N.Maawad, A.Khoury)



As mentioned earlier, Jounieh's main characteristic and the core of its identity is its old souk, which is the most exclusive zone of the region having one of the oldest architectural heritages. Although traditional architecture can also be found in the mountainous area, these structures are at high risk of being replaced by new high-rise buildings. This transformation is driven by the lack of protection for these buildings and the emergence of new residential neighborhoods with high-rise, contemporary finishes. Consequently, many old buildings in this region are being replaced by newer ones due to demographic expansion and profit motives.

With that in mind, the historical center emerges as the sole area preserving these remnants, necessitating conservation and protection. Consequently, it stands as the only designated protected zone in the region, as the area is divided into two major zones, A and B (Figure 39). Zone A represents the protected zone and zone B represents the highest exploitation ratio in Jounieh, stretching from the heritage zone towards the mountains. Therefore, this strengthen the earlier thought regarding the traditional houses that are located in zone B of being exposed to high risk of being replaced to newer ones, as they are located in an unprotected zone.

With this in mind, we can strengthen our focus on shifting our attention towards the sole remaining heritage zone in the region. Thus, we advocate for action not only to revitalize this significant area but also to ensure its protection.[22]



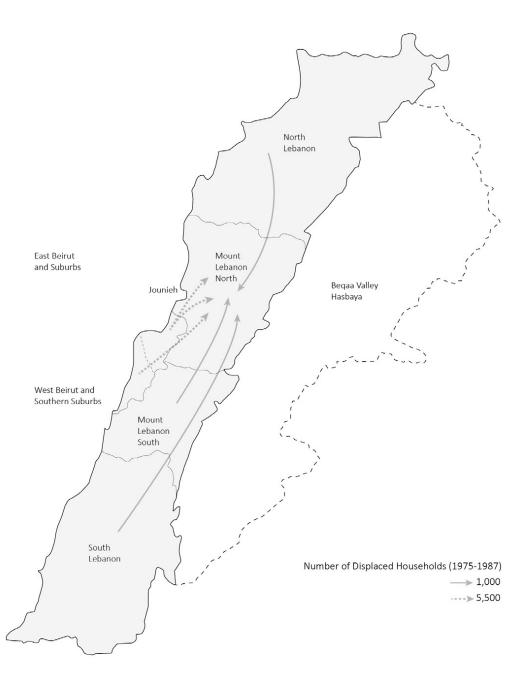
# **CHAPTER 03**

# **Shades of Society**

This chapter will explore Jounieh's social characteristics encompassing an in-depth analysis of its demographics, socio-economic status, and the impact of tourism on the city's dynamics. Hence, studying its social fabric enables us to understand the characteristics of the coastal bride, while determining its unique requirements. It offers crucial insights for the restoration of the urban heritage center. By understanding the specific needs and preferences of the local community surrounding the souk, restoration efforts can be tailored to align with their interests. Moreover, this analysis will then benefit us with sustainable development strategies, ensuring that restoration efforts are economically feasible and socially inclusive. Understanding these compositions of the area, facilitates the preservation and promotion of its cultural identity, attracting cultural tourism and fostering community pride.

# **02.3.1. Enforced Displacements (1975-1987)**

During the civil war, Jounieh encountered many migrants coming from Beirut. According to the statistical data, it is estimated that two thirds of Lebanese inhabitants changed places of residence between 1975 and 1990 and that one third did not come back at the end of the war. This internal migration has led to a change in compositional demographic and architectural layout of the city as multiple religious groups dominantly the Christian group fled the capital towards the coastal bride in order to find peace. Hence, despite the influx of migrants, the city's cultural fabric and identity remained largely intact, fostered by interactions within the same religious communities. However, this migration wave also contributed to what can be described as a "sectarian homogenization," resulting in the establishment of new territorial boundaries [46]. Consequently, daily movements became more constrained, with once vibrant spaces such as parks, pedestrian zones, and coffee shops now serving primarily as thoroughfares linking residential areas to workplaces and schools. As a result, urban fragmentation emerged due to the absence of cohesive governmental policies, leading to disorder that allowed migrant residents to illegally establish housing on public land. (Figure 41)



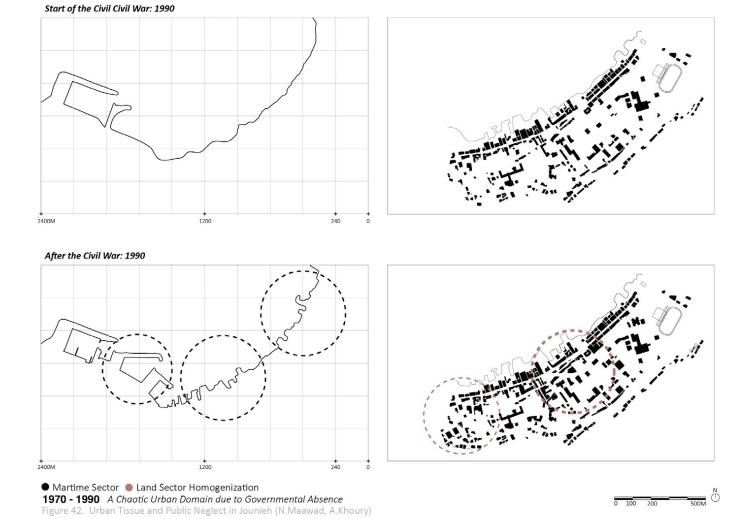
**1975 - 87** Internal Migration towrads Mount Lebanon - Jounieh
Figure 41. Migration in Lebanon During the Civil War. (N.Maawad, A.Khoury)

# 02.3.2. Demographic Status of Jounieh

#### Harsh Reality

After the war, many migrants returned back to their home region and some stayed in the city. In reality, as the work market became increasingly integrated, these spatial divides became less noticeable [43]. The homogenization phase resulted in the loss of city's character allowing an urban breakdown in terms of both society and architecture. Even in present times, the city suffers from governmental absence and public neglect, perpetuating the city's transformative layout in term of chaotic urban domain driven by demographic shifts and privatization of public spaces. This has left the city's layout in a state of disarray, with no solutions in sight.

Nowadays, Jounieh is home for more than 200,000 inhabitants representing diverse religious and cultural background. However, one religious group stands out as the prominent figure in shaping the city's cultural fabric.



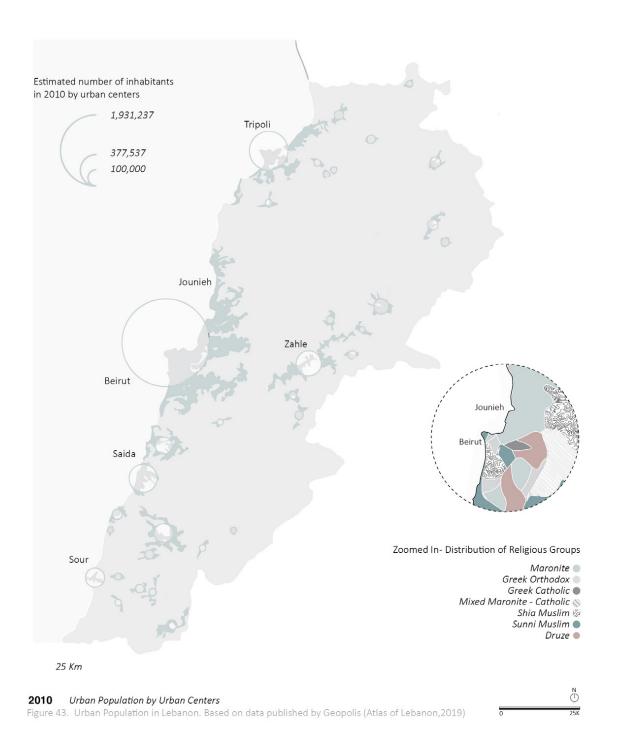
#### Understanding Our Community: A Demographic Overview

Demographic analysis, including factors such as age, income levels, and cultural backgrounds, allows for the prioritization of initiatives that resonate with residents and visitors alike. Therefore, in this section, an analysis of these particular subject has been followed in order to have a deeper assessment to our project.

Based on the latest demographic data from Worldometers (2024), Lebanon presents a complex and dynamic demographic landscape influenced by various factors. The country's population currently stands at approximately 6.8 million people, reflecting a diverse composition and significant demographic trends. The demographic pyramid of Lebanon illustrates a relatively balanced age distribution, with a notable concentration of individuals under the age of 30, comprising over 50% of the population. This youthful demographic profile not only signals Lebanon's potential demographic dividend but also underscores challenges related to education, employment, and social services for its youth.

In terms of gender, Lebanon exhibits a relatively balanced gender ratio across different age groups. This equilibrium plays a crucial role in shaping societal norms and dynamics, particularly in education, workforce participation, and household roles. It also mirrors ongoing societal shifts towards gender equality and empowerment initiatives in various sectors. Overall, Lebanon's demographic profile, as depicted in Worldometers data, offers a comprehensive view of its population structure, highlighting both opportunities and challenges. The demographic trends underscore the importance of policies aimed at fostering inclusive growth, addressing youth-related issues, promoting gender equality, and preserving cultural diversity within Lebanese society. Delving deeper into fertility rates, Lebanon has experienced a gradual decline, aligning with global patterns towards smaller family sizes and influenced by socio-economic changes impacting family planning decisions. Presently, the fertility rate stands at approximately 2.5 children per woman, indicative of reduced fertility compared to previous decades. The country's youthful age distribution points towards demographic dividend potential, where a larger working-age population can contribute significantly to economic development. However, it also necessitates strategic investments in education, employment opportunities, and social services tailored to the needs of younger generations, particularly in urban areas where demographic shifts are most pronounced.

While Lebanon's overall population growth rate has moderated in recent years, urbanization trends continue to shape its demographic landscape, with younger populations increasingly concentrated in urban centers seeking educational and professional opportunities. In navigating these demographic dynamics, understanding fertility rates and age distribution becomes pivotal for policymakers to effectively plan for future socio-economic challenges. Initiatives focusing on family planning support, educational enhancement, and sustainable economic strategies are essential to harnessing Lebanon's demographic potential while addressing associated social and economic disparities.



## 02.3.3. Socio-Economic Status

"The urbanization of the world is one of the most impressive facts of modern times and has brought profound changes in virtually every phase of social life". - Louis Wirth (1938)

Drawing upon the insights and works of prominent urban theorists and sociologists such as Louis Wirth and Lewis Mumford, they offered compelling perspectives on what constitutes a city and the nature of urban existence. Both theorists acknowledge the complexity of urban life through wide range of social, economic, and cultural dynamics and its impact on societies. In their respective articles "Urbanism as a Way of Life" [44] and "What is a City" [33], both authors agree that a city is not just a physical entity but a complex social construct that shapes the behavior, values, and experiences of its inhabitants. They emphasize the city's role as a space for diverse social interactions, facilitating a dynamic and multifaceted urban life. Furthermore, Louis Wirth emphasizes the dominance of cities over rural areas that is explained by the functional characteristics of urban centers, which thrive due to high demand for services and specialized skills that can only prosper in densely populated areas. Therefore, there is an interplay between socio-economy and urbanism illustrating how cities shape the fabric of the society.

#### Understanding Jounieh's Socio-Economical Status

Therefore, it is essential to understand the socioeconomic factors that plays a role in shaping the urban landscape. It affects the city's society and overall well-being of the inhabitants. It addresses the needs of the inhabitants as well as the city's economic growth, social cohesion, inequality ... Thus, in order to understand the socio-economic status in Jounieh, multiple factors should be taken into consideration:

#### Economic Disparities

In modern times, the Lebanese society generally presents four economic classes which are: wealthy, middle, below average and poor. Like any other major cities, Jounieh presents an economic imbalance between its residence. On the other hand, the city features three classes predominantly composed of a strong middle class, with the wealthy as a minority. However, recent interviews with numerous residents reveal that this middle class is gradually diminishing. This decline is attributed to the ongoing economic crisis, persistent political instability, and a lack of sufficient employment opportunities both in the region and across the country.

## Expense and Quality of Living

Overall, Jounieh has a moderate cost of living compared to large cities like Beirut. The expense of living in Jounieh sets a balance between affordable housing, purchasing essentials and amenities. The city has a diverse economic opportunity due to touristic, religious and architectural attractions. Therefore, the quality life is a mix of urban and coastal living. These cultural sites especially in the coastal side "old souk" have a vibrant nightlife and rich with restaurants and cafe all within the average limit of expense. This creates a balance between the inhabitants purchasing power and the living expense of the city. This makes Jounieh a distinguished city that have a stable standard of living compared to other major ones.

#### Employment Rate

The employment rate in Jounieh is low to moderate as it is not on the same level compared to major cities such as Beirut. It is difficult to secure a job opportunity in Jounieh due to fierce competition on the labor market. Youth unemployment rate is notably high the region, as most youth try to find job opportunities in the capital. Even for those who land jobs in Jounieh, the pay is often lower than what they could earn in the capital. This economic disparity underscores the challenges facing job seekers in Jounieh.

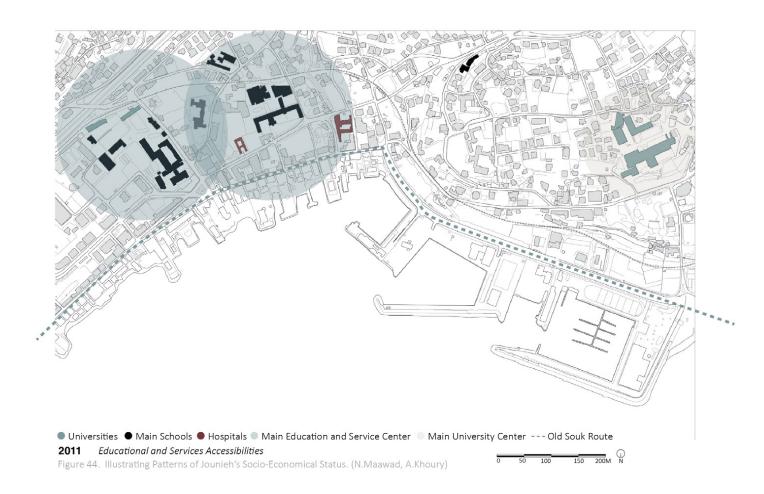
#### Education

Jounieh's economical factor strongly depends on the city's educational sector. The city has one of the highest educational rates in Lebanon and home for multiple prominent schools and universities in Lebanon. The city is filled with public, private and technical institutions that fosters an equal environment where individuals from all economic classes interact together without no discrimination. This act has provided all the Lebanese students across the country to register and learn in Jounieh's important educational institutions.

"Jounieh was a small fishing village before private schools started opening in and around the city. The education sector was responsible for attracting students from around Jounieh, which has contributed to the city's growth as a regional center (ICMA, 2008)[28]." - Mayor Juan-Antonio Hobeiche

#### Services Accessibilities

In terms of healthcare, Jounieh has one of the best healthcare in the country. Several important public and private hospitals are situated in the area offering a wide range of medical services. This concentration of top-tier healthcare facilities ensures that residents have access to comprehensive care, supported by ongoing research and advancements in medical science. Therefore, the socioeconomic status in Jounieh presents various economic backgrounds that coexist harmoniously together, shaping the prosperity and character of the city.



#### • Current Economic Situation in Jounieh

Due to political instability and corruption in the country, the Lebanese economy have undergone a crisis that was never experienced before. High sky rocking inflation have been observed and the local currency "LBP" have been severely devalued with respect to the American dollar. As a result, high unemployment and poverty rate have spread all along the country.

Furthermore, the Beirut Port Blast added a significant negative impact on the country's socio-economic sector. The has severely affected the well-being of residents, leading to increased levels of stress, anxiety, and uncertainty. The economy devalued further, resulting in higher prices for basic necessities and a decline in purchasing power all around the country. In addition, people have experienced reduced incomes and layoffs that allowed the widespread of insecurity in the country. Multiple protests have been held in the country, especially in Jounieh, demanding a reformed economy and justice for the Beirut port explosion. These demonstrations underscore the growing frustration among the population regarding the government's handling of the economic crisis and its failure to hold accountable those responsible for the devastating blast.







Cash Receipt		
Date	Mar 2019	
ltem		
Milk1Ltr	3,000 LBP	
Tomatoes 1 Kg	490 LBP	
Oranges1Kg	800 LBP	
Apples1 Kg	1,250 LBP	
Cucumbers 1 Kg	850 LBP	
Rice1Kg	1,100 LBP	
Chicken 1 Kg	2,800 LBP	
Total	10,250 LBP	

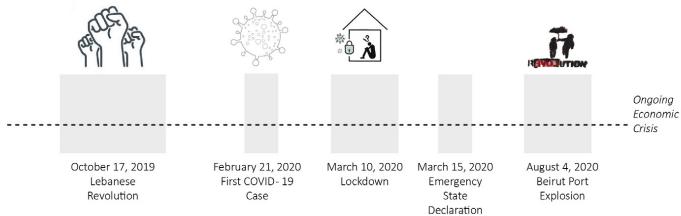
Cash Receipt	
Date	Mar 2020
Item Milk1Ltr Tomatoes1 Kg Oranges1 Kg Apples 1 Kg Cucumbers1 Kg Rice1 Kg Chicken1 Kg	6,700 LBP 1,250 LBP 2,300 LBP 2,850 LBP 1,700 LBP 2,350 LBP 5,000 LBP
<b>Total</b> All Items	<b>10,250 LBP</b> 22,150 LBP

Date	Mar 2021
Item	
Milk1Ltr	10,000 LBP
Tomatoes 1 Kg	5,000 LBP
Oranges 1 Kg	4,000 LBP
Apples 1 Kg	5,400 LBP
Cucumbers 1 Kg	4,000 LBP
Rice 1 Kg	6,400 LBP
Chicken 1 Kg	23,000 LBP
Total	10,000 LBI
All Items	57.800 LBI

# 2021 Devaluation of the Local Currency

Figure 45. Illustrating Inflation and Devaluation of the Lebanese Currency. (Lebanon Insane Food Prices article of Al-Jazeera)

https://www.aljazeera.com/news/2021/4/17/lebanon-faces-tough-ramadan-amid-soaring-food-prices



**2021** Timeline of Key Events in the Ongoing Lebanese Crisis

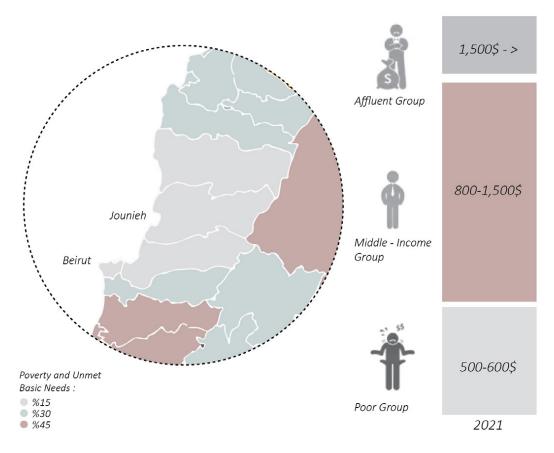
Figure 46. Timeline of Key Events and Ongoing Crisis in Lebanon (N.Maawad, A.Khoury)

Moving on, each neighborhood in Jounieh has its unique features. The four states of Jounieh share the same architectural, social, cultural and economic class. However, the only state which is Sah el Alma shares a higher neighborhood class compared to the other states. Luxury villas and apartments are mostly situated in this neighborhood and only wealthy people can afford living in them. The average family income in this area is the highest among the four states, starting from 2000\$\$ depending on the specific occupation of the family members.

The economic individual per capita differs along families in the city:

- Poor class: 500-600\$- Middle class: 800-1500\$- Wealthy: 1500\$- and above

Despite the devastating impact of the Beirut port blast and the persistent financial crisis, the resilient Lebanese people have shown remarkable determination in revitalizing their depressed society. Over the past two years, there has been a noticeable increase in tourism and various activities, injecting momentum into the country's efforts to address economic instability. Therefore, Jounieh, a key player in Lebanon's tourism sector, has been pivotal in attracting visitors due to its historical and cultural background. Through a series of ongoing events and initiatives, the city has fostered vibrant interactions between locals, tourists, and its rich historical heritage. This dynamic engagement not only enhances the appeal of Jounieh as a tourist destination but also stimulates economic growth and social cohesion within the region.



#### Poverty and Basic Need per Casa, Lebanon

Figure 47. Illustrating The Unfulfilled Basic Needs in Lebanon from 2008. (Atlas of Lebanon,2019)

A Growing Middle Group in Jounieh, Lebanon Figure 48. Diagram Showcasing Individual per Capita in Jounieh, Lebanon (N. Maawad, A.Khoury)

#### 02.3.4. Economic Status of Jounieh

It is important to assess Jounieh's economy which relies heavily on imports from surrounding cities and villages, particularly Beirut. This research will help us to assess how the restoration of the old souk will complement existing supply chains and meet the needs of local residents and businesses. Additionally, understanding the economic dynamics helps evaluate the potential impact of the restored souk on local businesses, ensuring that it fosters collaboration rather than competition.

Hence, the city imports retail goods from Beirut, vegetables and fruits from Nahr Ibrahim, Saida, and Sour, industrial materials from Zouk, and furniture, glass, and construction materials from Tripoli. These goods are transported by vehicles owned and operated by private individuals who reside in Jounieh and its surrounding [28]. This marks as a negative impact on Jounieh preventing the economy from growing and making the city overly reliant on external markets. This limits opportunities for local production and entrepreneurship, hindering an unstable economy.

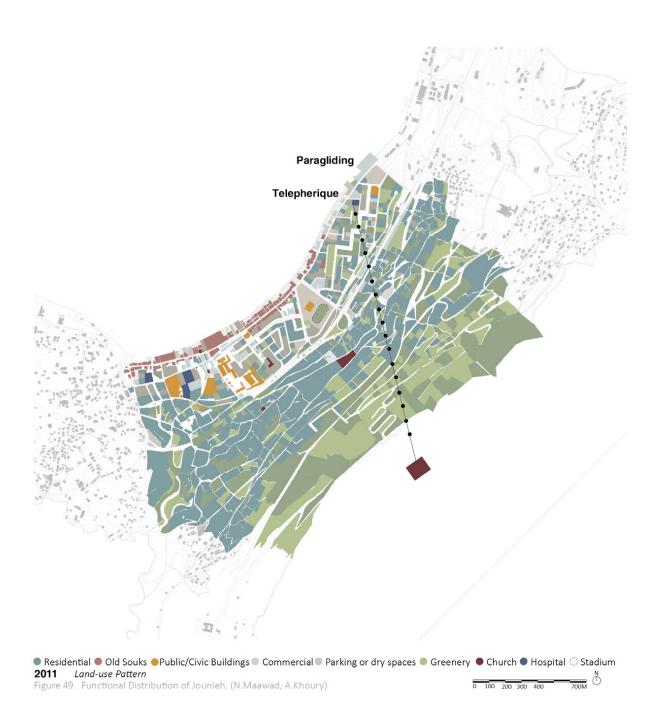
Moreover, Jounieh's commercial sector is diverse, comprising 91 restaurants, 21 pubs and nightclubs, 10 cafes, 6 marine resorts and health clubs, 2 amusement centers, 3 bars, 2 cinemas, 19 hotels, and approximately 5,275 retail shops. This being said, the majority of these social features resides in the old souk. However, after conducting multiple interviews with the locals, shopkeepers report a decline in visitors to the Old Souk, this is likely due to the competition from surrounding malls as well as retails stores that are selling medium quality items at a cheaper level [22]. Furthermore, recent statistics indicate a decline in the overall morale within the retail sector, with 40% of respondents believe that the sector will decline with an addition of 65%, as they are not planning on expanding their business. The key threats to the sector's survival include lack of security and political stability, economic crisis, inflation, declining incomes, and congestion [28].

In contrast, the hospitality industries predominantly situated in the old souks, are characterized by hotels, restaurants, bars/pubs, and nightclubs that demonstrates a more economic footprint. Hotels serve 53% out-of-city customers, while restaurants cater to 17.3% both in and out-of-city customers. Resorts have a particularly strong appeal to out-of-city visitors, with 77% of their customers coming from outside the city. As for hotels, restaurants, bars/pubs and nightclubs, they have a stronger economic footprint catering to 53% out-of-city customers (hotel), 17.3% in and out-of-city customers (restaurants) and 77% out-of-city customers (resorts) compared to the retail sector which caters to 43% within the city, 31% regional customers and 9% out-of-country customers. On the other hand, the retail sector primarily serves local and regional customers, with 43% within the city, 31% regional customers, and only 9% from out-of-country [28]. Therefore, the dynamics of hotels, pubs, resorts, and restaurants drive Jounieh's economic growth and enhance its identity by attracting visitors, while the retail shops, primarily serving local customers, contribute less to the city's economic vibrancy and identity.

## 02.3.5. The Impact of Tourism in Jounieh

Historical city centers are places known to attract many visitors due to the relevance in terms of heritage. However, the recent growth of tourist proved to constitute a threat to the conservation of their values. Therefore, it is to acknowledge not only the presence of tourist, but to understand the pressure they set that affects the safeguarding of "historical urban landscapes." [24]

Due to its historical essence and cultural significance, Jounieh is well-known for its touristic hub. Its multiple attraction points embody Kevin Lynch's concept of "imageability," which refers to the ease with which people can recognize, remember, and form a strong mental picture of the city's layout and key features [25].



This imageability draws tourists from all around the world, enriching the city's social and economic fabric. The old souk of Jounieh, with its narrow paths and intimate routes, allows visitors to integrate themselves in the city's historical ambiance. The architectural heritage and cultural background of the old souk attract tourists, creating a vibrant hub where locals and visitors interact. These nodes of activity serve as social and economic centers, fostering a dynamic urban flow that enhances the city's vibrancy. Moreover, the city consists of important recognizable features. The features include the Casino Du Liban which is the biggest casino in the middle east that hosts multiple huge theaters and interactive events. This iconic venue attracts numerous visitors, boosting the local economy and providing entertainment and leisure opportunities. Another important feature is the sporting facility Fouad Chehab Stadium that hosts important international and local sports events, further enhancing Jounieh as a vibrant dynamic social destination generating economic benefits through tourism-related spending on sports events, leisure activities and many more...

The most significant feature is the religious landmark that holds profound importance not only for Jounieh but for all of Lebanon. The landmark is situated in Harissa which is the highest peak mountain of Jounieh. This sacred area, featuring the prominent Harissa Church and the statue of the Virgin Mary perched atop a hill, offering a breathtaking view of the entire country. In addition to that, the presence of cable cars connecting the seaside area of Jounieh to this sacred site enhances accessibility, allowing tourists to easily visit and partake in religious activities. These diverse attractions collectively impact Jounieh's tourism by creating a complex experience that appeals to a wide range of interests. Economically, tourism generates significant revenue, supports local businesses, and creates jobs. Socially, it fosters cultural exchange and interaction between locals and visitors, enriching the community's cultural tapestry and enhancing its global reputation. Jounieh's blend of historical, cultural, and recreational attractions ensures its status as a vibrant, dynamic, and economically thriving destination. (Figure 50)





# **CHAPTER 04**

# Infrastructure Analysis

Planners and preservationists often prioritize the protecting historic buildings rather than preserving infrastructure, patterns and layout which are vital elements in preserving the historic character of a place. The urban layout along its networking system serves not only as a significant historical resource but also as a framework for future development and a guardian that defines a community's identity and its historic structures. In the article "Historic Infrastructure Left Behind: Should Urban Planners Protect Streets and Blocks?"[39]Brenda Case Scheer, emphasized that cities often prioritize the preservation of historic buildings over their street networks due to the lack of awareness of the importance of historic city layout. The latter addresses an intersection between infrastructure and heritage preservation through recognition of historic city plan. Therefore, highlighting the significance of infrastructure analysis in understanding and safeguarding historical cities as it involves recognizing the significance of street and lot patterns as integral components of a city's history and character.

Infrastructure analysis involves examining the physical and organizational structures that support human activities in a city, including street networks, public spaces, and urban layouts. In the context of historical cities such as Jounieh, infrastructure analysis can reveal insights into the city's spatial organization and historical development, as it identifies the city's unique characteristics. The analysis covers the connection networks that meets the demand of the inhabitants as well as the problems and challenges in terms of traffic congestions, implications on environmental health and mobility limitations. The forms of mobility present in Jounieh, such as public transportation, private vehicles and pedestrians, have an influence on the livability and accessibility of that region.

Consequently, the scope of study will develop how transportation networks are set up, how citizens utilize them, does the inhabitants have easy access to their workplace and residences, how does the main highway impact the city's connectivity, and most importantly how does it Jounieh's network impact and shapes the layout of the old souk? Thus, analyzing Jounieh's infrastructure unveils its historical heritage offering an understanding of the interplay between its urban connectivity and architectural heritage.

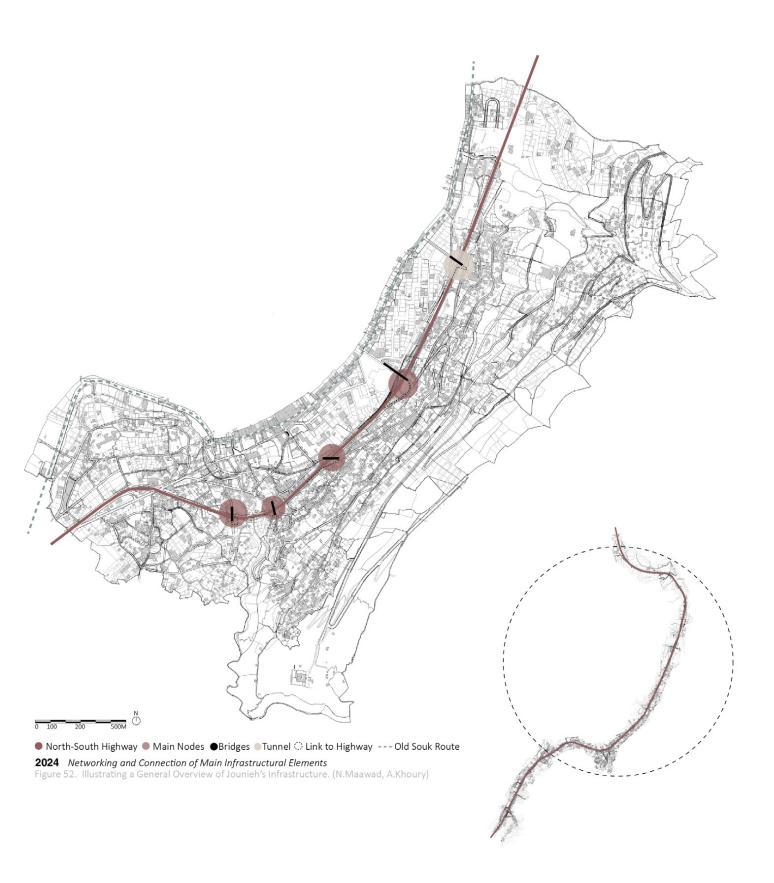
**1970** A Trip Back to The Golden Age of Rail Transport in Lebanon, Connected Jounieh, Beirut to Damascus and Haifa. Figure 51. Golden Age of Transportation in Jounieh, Lebanon (@LebanonTraveler/X)

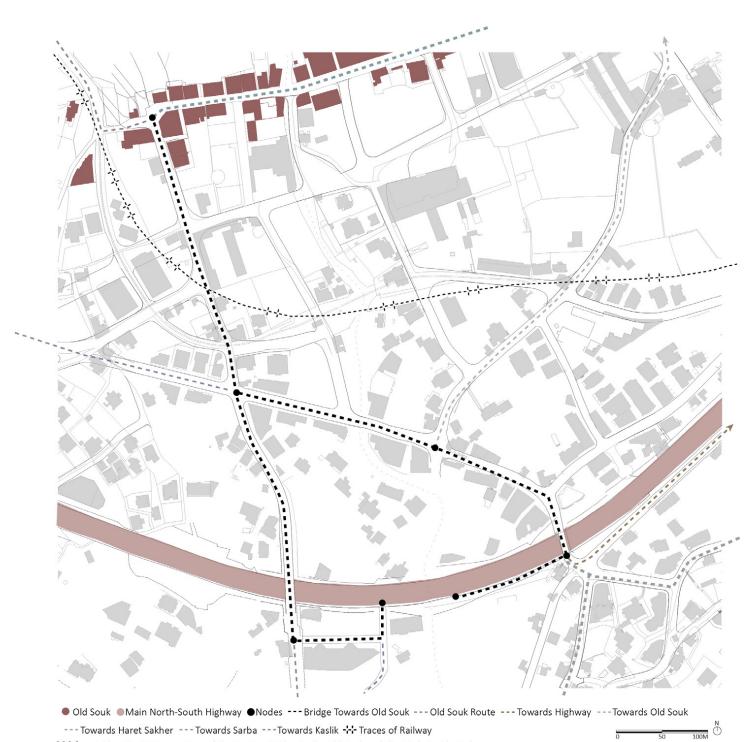
### 02.4.1. Mapping, Connections and Networks.

The heart of Keserwan casa is well known for its proximity among its states. It is characterized by the main highway that connects North to South and internal roads that are mostly narrow. The connections from the highway to the internal roads are facilitated through a network of bridges and tunnels. Jounieh is characterized by four important bridges and one tunnel, each bridge leads to a certain destination within the city. These destinations are also interconnected via secondary and seaside roads, enhancing the coherence and accessibility of the area. Moreover, all four bridges lead to the historic city. (Figure 52)

The first bridge which is characterized by "The Soldini Bridge" provides access to Sarba's residential areas and the end section of the old souk strip. The second bridge "Ghadir Bridge" connects the residential sectors of Ghadir and Sarba to the city center. Additionally, it serves as an interconnected bridge allowing access for residents leaving the city center towards the North-South highway (Figure 53). The third bridge known for "The Apotres Bridge" (Figure 54). This spine crosses the highway connecting the inhabitants towards Ghadir's residential and a mixed-use sector with predominantly educational facilities. This sector has more than three important historical schools as it leads towards the middle sector of the old strip. Finally, the Fourth bridge known as "The Fouad Chehab Bridge" (Figure 55) leads to Hart Sakher and its internal roads and marks the starting point of the old souk. This bridge connects the highway to the religious landmark Harissa and extends to major internal roads, linking residential and administrative areas across Jounieh. All these bridges are pedestrian-friendly, equipped with stairs from the highway that provide easy access for pedestrians to reach their destinations within the city. On the other hand, the tunnel connects Sahel Alma to another state called Maamelteine (Figure 56). This tunnel and exit are a vehicular connection that is considered as local entrance to the residence and links the mountainous and residential zones of Sahel Alma to Maamelteine, which is a hotel, resort, and used to be a night life destination.

Therefore, by examining the network of highways, bridges, tunnels, and internal roads in Jounieh we can understand how these infrastructural elements facilitate connectivity and mobility within the city enhancing the region's residential, educational, and historical identity.

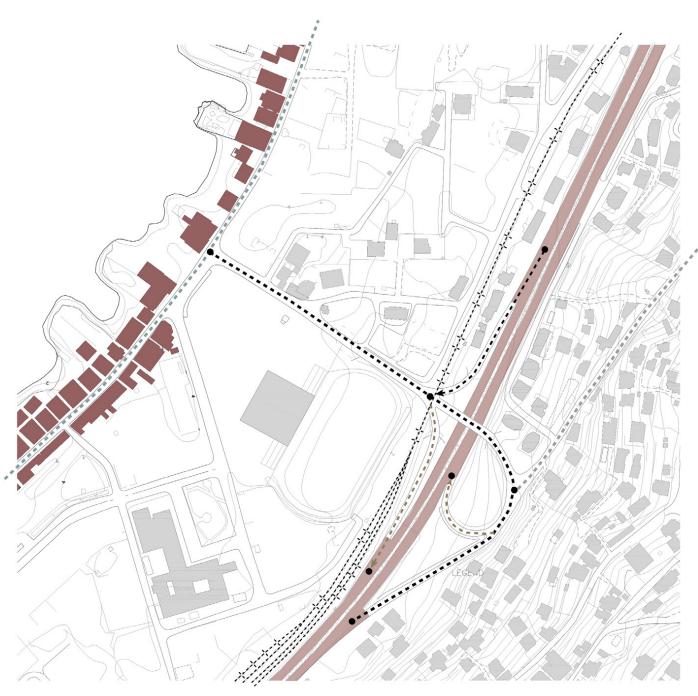




Bridge 01- 02: Connection of the Apotres Bridge to the Old Souk and the City's Residential
Figure 53. Mapping 01: Infrastructural Networks of Jounieh and its Connection to the Old Souk and City State. (N.Maawad, A.Khoury)



Figure 54. Mapping 02: Infrastructural Networks of Jounieh and its Connection to the Old Souk and City State. (N.Maawad, A.Khoury)



Old Souk Main North-South Highway Nodes --- Bridge Towards Old Souk --- Old Souk Route --- Towards Highway --- Towards Harissa **-∺** Traces of Railway

**2024** Bridge 04: Connection of the Fouad Chehab Bridge to the Old Souk and the City's Residential
Figure 55. Mapping 03: Infrastructural Networks of Jounieh and its Connection to the Old Souk and City State. (N.Maawad, A.Khoury)



Tunnel 01: Connection of the Sahel Alma Tunnel to the Old Souk and the City's Residential
Figure 56. Mapping 04: Infrastructural Networks of Jounieh and its Connection to the Old Souk and City State. (N.Maawad, A.Khoury)

## 02.4.2. Jounieh's Transportation Sector: Key Issues and Concerns

In this section, we will examine problems and issues, concerning the transportation systems that have been build up overtime. The sectors will include examining traffic congestions, parking spaces, atmospheric pollution, and their implications on environmental health and well-being. This analysis will illustrate how these problematic compromises the spontaneous enjoyment of locals and visitors on Jounieh and its historic area. Furthermore, the old souk with its historic architectural and urban style offers a distinctive character. Its narrow streets designed primarily for pedestrian activities are unsuitable for most vehicular movements. These narrow streets and tight corners challenge the historical strip, leading to continuous traffic congestions compromising pedestrian safety. Therefore, the over use of demand over capacity damages the historical urban fabric impacting the city's character and local's well-being. To add to that, car parking plays a significant problem in urban historic areas. Not only are there limited available parking spaces, but once cars are parked, they are often seen as an undesirable visual intrusion, diminishing the value of the unique qualities that makes historic strips appealing to visitors [34]. Therefore, the continuous expansion and high volume of traffic strain infrastructural elements, causing congestion and environmental issues that significantly impact Jounieh and its historic souk.



MTV correspondent: Heavy traffic is perceived along the two sides of the Jounieh highway Figure 57. Traffic Congestions in Jounieh, Lebanon (MTV Lebanon)

Heavy Traffic Congestions and High Rates of Vehicular Ownership.

Generally, there are around 1.75 million vehicles, including automobiles, lorries, buses, and well over 100,000 motorcycles, that are registered in Lebanon. Upon closer examination, it is estimated that around 1.5 million vehicles in the city are designated for transporting goods and people including commuting workers to their jobs. But with only 5.5 million people in the country, that means there are approximately 270 cars for every 1,000 people, making Lebanon one of the Middle East's nations with the highest concentration of car enthusiasts [46]. Lebanon's primary North-South highway frequently encounters severe traffic congestion, particularly as it approaches Jounieh, due to high use of motor vehicles. According to our reports, the primary cause of traffic jams is the high volume of vehicles heading towards the capital, heading from North and Jounieh towards Beirut. Interviews with Jounieh's residents mentioned that "In the morning, one must leave at least two hours early to reach Beirut due to traffic congestion, despite the distance only requiring 28 minutes without traffic. The traffic situation in this country is incredibly challenging." Moreover, a study of commuting patterns has been conducted [14]. The reports show that Jounieh residents face an average commuting time of 48.20 minutes, notably higher than the 28.76 minutes they consider as an ideal commuting time. This disparity indicates that many commuters in Jounieh spend more time on the road than they desire due to traffic congestion. Moreover, another major aspect is the underdeveloped infrastructure. Poorly maintained highways and internal roads marks in limited vehicular capacity that leads to traffic congestion. Additionally, numerous potholes, the complete lack of lane markings and street lights, the absence of merging and breakdown lanes, the inadequacy of traffic signs and signals, and slick pavement during extreme weather all contribute to the problem. These issues have a negative impact on the overall satisfaction of commuters. A study has shown that the overall satisfaction of commuters in Jounieh is declining daily, leading to increased dissatisfaction and frustration among its inhabitants [14]. Adding on that, congestion and accidents arise from two factors. First, the highway's high commercialization across various sectors forces drivers to slow down as they navigate through. Second, private and public buses frequently stopping at each bridge to pick up and drop off residents living near the city. These two factors are crucial as they significantly impact the "everyday life" of inhabitants who rely on the highway, posing dangers to their safety and well-being.

Furthermore, most inhabitants try to escape the highway traffic by taking the seaside road exit that leads to the old souk. This detour has caused an increase in vehicular traffic and congestion in the old souk. Its narrow and tight spaces cannot handle the capacity of these automotive, hence increasing frustration and environmental issues inside the historic area.



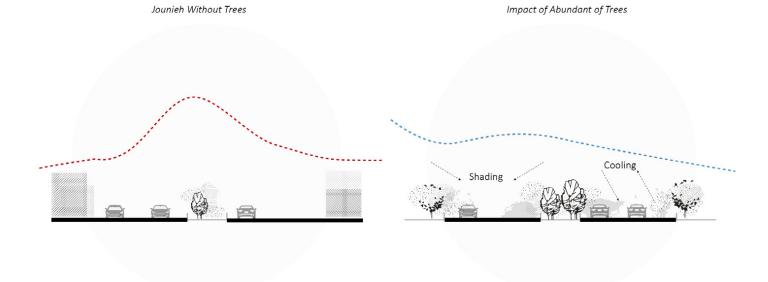
Light Traffic
 2024 Average Commute Time From Jounieh to Beirut - Without Traffic Congestion



Light Traffic ● Moderate Traffic ● Heavy Traffic ● Serious Traffic Conditions
 2024 Average Commuting Time From Jounieh to Beirut - With Traffic Congestion
 Figure 58. Illustrating Average Commuting Patterns from Jounieh to Beirut - With and Without Traffic Congestion (N.Maawad, A.Khoury)

Energy Consumptions and Impacts on Environmental Health.

Lebanon is mostly powered by vehicles that uses gasoline and diesel. According to an article, these power ups accounts for 97.9% of all fuels used in transportation and at least 40% of all oil consumed in the nation—an increase in demand for motorized mobility translates to an increase in energy consumption in the sector. The use of fuel releases greenhouse gases, such as the carbon dioxide (CO2), which has a great impact on climate change and global warming. As mentioned previously, due to traffic congestion commuters are spending too much time on the road surpassing the ideal commuting time. This is also increasing noise pollution that is disrupting the human life and health. Additionally, the lack of public transportation and due to the buses and cars outmoded engine technologies, older vehicle models play a crucial role in the increase energy consumption. Hence, the Jounieh and Lebanon have a very high demand of energy consumption making the transportation industry the second largest producer of greenhouse gases in the nation. On top of that, the lack of greenery and the lack of using materials that are highly reflective to solar radiation in the highway and the old souk, leads to the absorption of more heat, resulting into an urban heat island effect. This elevated temperature and lack of trees results into a low air quality filter that are impacting the health of Jounieh's inhabitants. Despite these challenges, hope still remains for improvement, especially with Lebanon's commitment to reducing emissions as outlined in the 2016 Paris Agreement. The country has pledged to cut air pollution by 15% by 2030 compared to 2010 levels. To achieve this, they plan to encourage people to trade in their old, fuel-inefficient vehicles for newer, more efficient ones. By 2040, the authorities aim for 10% of the population to own hybrid vehicles and 35% to drive eco-friendly cars. They also aim to increase public transportation usage by 15%, with plans to enhance the bus system to encourage more people to use it [46].



Theat Effect --- Cooling Effect

2024 Impact of Urban Heat Island Effect Due to Lack of Trees Along Jounieh's Highway

Figure 59. Section Illustrating the Impact of Trees on Urban Heat Island Effect in Jounieh (N. Maawad, A. Khoury)

Traffic Clogs the Roads of Jounieh, Lebanon.
Figure 60. Impact on Environmental Health (DVarchive)



### 02.4.3. Mobility Limitations

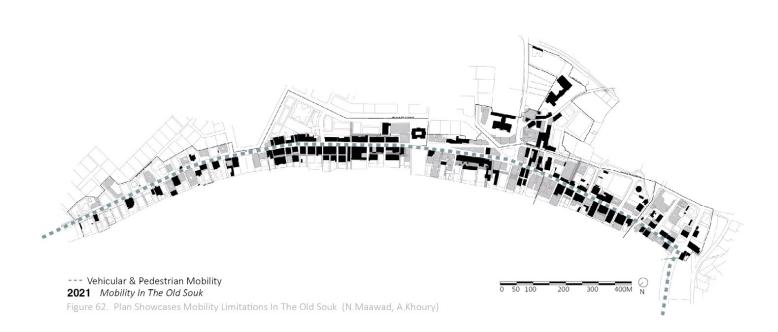
Mobility within the context of historic areas is defined as the ability for people and goods to move effectively and safely through the urban environment, in order to meet one's social and economic needs. The ability to move in ease is only made possible with the use of accessible transportation options. This encompasses various modes such as walking, cycling, public transportation... Due to the unique architectural style and infrastructural characteristics, this definition serve as a challenge for inhabitants as narrow streets and limited sidewalks dominates the landscape. [08].

Residents who enjoy urban areas and prefer to commute to work and social visits by walking and cycling contribute to an affordable and environmentally friendly society. These non-motorized options can be said to make the most of mobility. However, in Jounieh, people face severe traffic congestion, lack of public transportation, limited pedestrian lanes, and a lack of bicycle lanes labelling the city as a "poor urban mobility". Therefore, through local experiences and their perception, we will analyze the essential absence of Jounieh's mobility starting from its main highway towards the old souk.



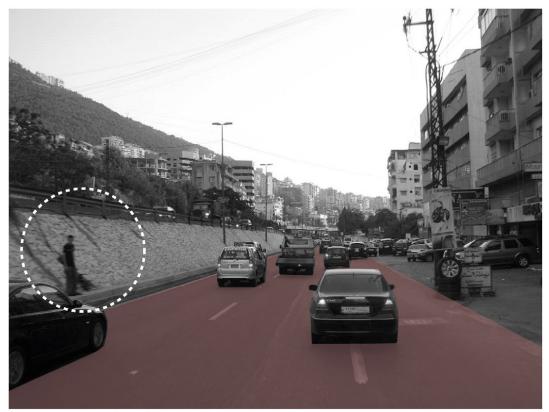
Accessibility In The Historical Souk

Figure 61. Mobility and Accessibility in the Old Souk. (SKYSCRAPER CITY- Jounieh)



Inadequate Bicycle and Pedestrian Areas: Good Luck Driving in Jounieh.

Due to rapid urbanization and unplanned development over the years, Jounieh has become a city with unwelcoming conditions for bicyclists and limited pedestrian pathways. Contrary to the European way of living, the priority in Lebanon is given to car drivers, who has the right exercise his power to not stop for crossing pedestrians. Starting from the main North-South highway, people often have to use bridges to cross from one point to another. Interviews with multiple locals and architects in Jounieh revealed that walking and moving along the main highway poses a significant risk of car accidents and endangers pedestrians and inhabitants. Contrary to the European way of living, the priority in Lebanon is given to car drivers, who has the right exercise his power to not stop for crossing pedestrians. This highlights another reason why driving in Lebanon is very dangerous. As mentioned by locals, pedestrians sometimes "jump" from one highway to another, bypassing cars instead of using the bridge, because they are "too lazy" to walk to it, putting their life at risk. In addition, the lack of organizing zones in the highway have restricted the use bicycles as a mode of transportation. Thus, encouraging private owned vehicles over an environmentally friendly mode of transportation. Moving on, towards major and internal routes of the states, there are limited number of areas that features pedestrian lanes. Walkways are only visible in these areas to ensure the safety of the inhabitants, on the hand, no crosswalks, pedestrian or bicycle signals are implemented which typically shows the lack of urban organization towards mobility. Lastly, the old souk is empowered by pedestrian paths that allowed easier accessibility to inhabitants to move freely and enjoy its unique characteristics. However, due to its narrow streets and compact spaces, it made it hard for cyclists to enjoy their move around the historic strip. Therefore, the unplanned and unorganized mobility features of Jounieh, have adopted risks and danger on individual's lives as it impacted the driver's and pedestrian safety making it a hard to navigate around the city. Locals and architects are urging for a more sustainable strategy on that topic in order to decrease incidents allowing a more safely and sustainable environment among residents.



A Pedestrian Risking His Life Crossing the Highway of Jounieh.

Figure 63. Showcasing Lack of Pedestrian Support in Jounieh. ([LB] Lebanon | Road Infrastructure)



A Cyclist Risking His Life Cycling In The Old Souk.
Figure 64. Showcasing Lack of Bicycle Support In The Old Souk. (@livelovejounieh)



# **CHAPTER 05**

Public Rights Denied: Privatization and Stakeholders

In this chapter, we will study the role of stakeholders in shaping Jounieh, with a particular focus on its historical old souk. We will explore how various stakeholders, including the municipality, the Maronite/Catholic Church influence urban development, preservation efforts, and community engagement. Our approach includes a review of relevant literature, interviews with local residents and municipal authorities, qualitative data and direct observations within Jounieh's old souk. We will examine the complex dynamics of privatization and its multifaceted impact on public lands, with a particular focus on its historical old souk. By examining spatial, social, and cultural dimensions, we aim to reveal the negative consequences of privatization on public spaces and heritage sites. Through a critical analysis, we will explore how privatization fosters socio-spatial segregation, increases living costs, and erodes communal ties and cultural authenticity. The historical context of Lebanon's laissez-faire approach and the influence of stakeholders such as the municipality and the Maronite/Catholic Church will be discussed to understand their roles in shaping Jounieh's urban landscape. Lastly, we will illustrate the ongoing struggle between public interests and private gains. This comprehensive examination will provide insight into the enduring impacts of privatization and the importance of strategic stakeholder engagement in preserving the city's unique character and heritage.

### 02.5.1. Stakeholders: Shaping the Destiny of Jounieh

Stakeholders play a crucial role in shaping the destiny of a historical city through their influence on decisions regarding development, preservation, and community engagement. These stakeholders can include government bodies, local residents, businesses, and architects, and others. Their impact can be seen in various factors such as implementing zoning regulations to protect historic buildings, cultural events that celebrate local heritage, businesses might invest in restoration projects that enhance tourism. In the article "Engaging Stakeholders in Contested Urban Heritage and Management" [23], the authors underscore that stakeholder adopt diverse perspectives and values to discussions surrounding cities and its historical sites. By means, they determine the fate of historical areas influencing decisions on preservation versus redevelopment ensuring that the city's historical fabric is respected while also meeting contemporary needs. In addition, they develop policies and strategies that promote the city's heritage zone and safeguards its cultural significance. Thus, studying the importance of stakeholder in Jounieh and particularly its historical old souk facilitates informed decision-making regarding preservation and development of the city. They enable balanced development that honors the past while embracing the future, creating vibrant and resilient urban environments. By engaging with local residents and municipal authorities, we were able to analyze the impact of the actions done by the stakeholders and how they affected its unique historical character. By means, we will be able to understand and adapt strategies in order to enhance and meet the needs of present-day visitors and residents.

In Jounieh, there are stakeholders of varying power and influence. The major stakeholder is the municipality which is directly responsible for the decision making of the city. It performs a combination of both administrative and technical duties that include engineering works and planning activities for urban development. The municipality manages services to ensure efficiency of work and community well-being as it enhances the quality of life through safety measurements and events for the locals. Moreover, the municipality's yearly budget is around 6,000,000\$ as its revenue primarily relies on the collection of taxes and issuance of permits. It is well established that municipalities play a crucial role in promoting local economies and advancing decentralization. Therefore, it has economical potential and responsibilities that fosters the growth of the city [28].

Furthermore, the municipality is highly associated with the wealthy and prominent families who resides in Jounieh. These families have electoral weight as they possess a direct political representation such as members of the parliament or member of the ministry and others. Hence, despite that Jounieh hosts 200,000 inhabitants it only has approximately 18,000 registered voters. This means that a small number of local citizens could directly impact the members of the municipality, affecting decision making, polices and strategies developments. The second major stakeholder is the Maronite/Catholic church. Jounieh serves as a symbol of the Maronite/Catholic church as it is under the influence of the Bkirki Monasticism, which owns a significant percentage of the lands in the city (Waqf), particularly the coastal line. However, the church not only influences decision-making in Jounieh as a significant landowner but also wields considerable political power. Its influence the political dynamics and strategical policies that governance the city.

Along these actors, many NGO and business owners, whether they reside in Jounieh or not are stakeholders of limited power that actively work in the fields of environmental conservation, cultural, community development. They contribute to initiatives aimed at sustainable practices, social cohesion, and enhancing the quality of life for residents and visitors alike.

### 02.5.2. How Does the Main Stakeholder Shape Jounieh and Its Old Souk?

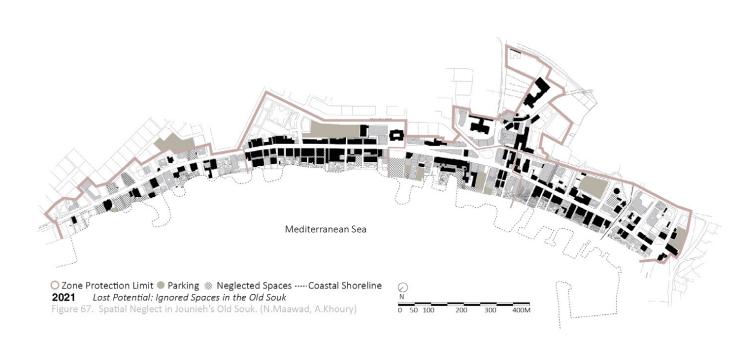
In Lebanon, the law forbids municipalities to take actions without the approval of the ministry in all fields. Therefore, the municipalities which is the major stakeholder is an administrative sector that has the right to take actions only in inner infrastructure and public spaces that are located in its region. On the other hand, principle public services and the major highway falls under the directory of the ministry.

The main responsibility is managing public spaces and the process of maximizing the spaces for public use. One of their major events was the "Jounieh Festival" that was held inside the city's historical strip. The old souk with its charming architectural elements was vividly luminated through cultural events that was characterized by concerts, local markets that filled the strip, and cultural themes that animated the city. This annual event, organized by the municipality, brings locals together and encourages interaction between visitors and residents, transforming the city's historical strip into a vibrant hub.

However, despite the success of managing cultural interactions, there have been some difficulties concerning public domains. Public use has been fully reduced to what local's call "out of service" as most of these spaces either located in the souk and outside of the historical region are mostly privatized as parking, or ignored open spaces that leads to abandoned areas. These neglects have shaped Jounieh's old souk into what residents refer as spatial divisions of "forgotten inner spaces". The lack of managing these spaces and systems have allowed the old souk to feel disconnected and fragmented from the city, undermining the souk's maximum potential.



Jounieh Festival held in the Old Souk Figure 66. Jounieh's Summer Festival, Bnoss Jounieh (@BnossJounieh)/X



#### 02.5.3. Privatization and Its Impact on Public Domain

شو عدا ما بدا... ما بتفرق مع حدا

"What Started Has Already Ended, It Doesn't Matter to Anyone." – Ziad Al Rahabani

In this section, we will demonstrate the negative effects of privatization on public lands in a spatial, social and cultural dimension. As historical sites and public spaces are privatized, the risk of commercialization sector weakens their authenticity and cultural significance. According to the article "Asian urbanisms and the privatization of cities" [20], the authors addresses how privatization reshapes urban environments, influencing social dynamics, spatial organization, and the overall quality of life in historic cities. The article highlights the impact of privatization on historical cities as it develops a socio-spatial segregation that only serves the need of certain groups, thereby increasing costs for residents and visitors alike. This situation makes it difficult for lower-income individuals to afford basic needs, thus contributing to their social exclusion. In addition, privatization leads to loss of accessible public spaces that serve as communal gathering spots, weakening community ties. Moreover, privatization often prioritizes profit-driven development over community needs, therefore weakening the city's unique character and local identity. Environmental concerns and conservation efforts of these historical figures are neglected, leading to the degradation of natural heritage within these urban landscapes. Therefore, the analysis will demonstrate how privatization have affected the old souk and the impact it left on Jounieh.

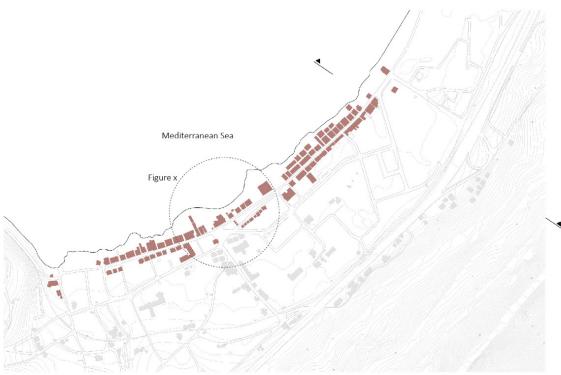
#### "Laissez-Faire", The Lebanese Way

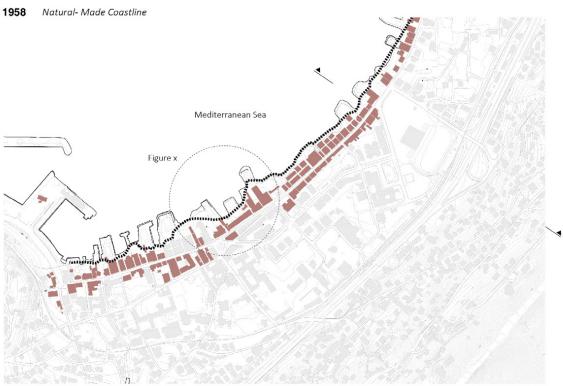
Compared to neighboring countries, Lebanon has a strong private sector. Since, its independence in 1943, Lebanon has adopted a liberal economic policy based on "laissez-faire principles", which gave a lot of freedom to the private sector in developing its capabilities. Therefore, the private sector was the driving force of the Lebanese economy. During the Lebanese civil war, the country experienced a significant governmental absence and intense political debates. This lack of governance left the Jounieh's inhabitants to act without oversight, leading to unregulated construction disregarding rules and guidelines. This resulted in an urban chaos as private individuals took over public lands and services and most importantly the bay area. Therefore, prospects for privatization Jounieh's areas are high and are concentrated along the coastline. The maritime public domain is subject to intensive exploitation, often illegally or in a way contradicting the general principles supposed to rule it. This occupation has been known precisely and documented by state services, even though it is in fact tolerated and sometimes facilitated.

Therefore, prospects for privatization Jounieh's areas are high. Indeed, the severe lack of public resources needed to rebuild and rehabilitate services that were heavily damaged after sixteen years of war makes privatization a highly plausible solution. Hence, privatization can provide adequate financial and technical resources to undertake the badly needed rehabilitation works. [05]

Nowadays, the remaining open spaces in Jounieh are either negative spatial layout or privately owned spaces that could be parking spaces, food truck shops, blocked areas... The problem is that the city has lost many public services that address the needs of its residents, such as parks, green spaces, children's playgrounds, and various other amenities. Additionally, the municipality has identified leftover spaces belonging to the public transportation network. These leftovers are traces that reminds Jounieh's residence of the "Golden Age" that includes past railways and other public services.

One of the most important concerns is the privatization of the old souks and the bay area. The land of the souks is mostly owned by "Waqf" which is the Catholic Church Monastery. On the other hand, the residential part is resided by private wealthy individuals. Furthermore, by law, the beach is considered maritime domain and should be open to the public. However, during the civil war, the coastal line was privatized. Some spaces especially narrow paths that sits in between traditional buildings are passages that leads to Jounieh's public beaches. These passages are protected by law decree number 17621. Nevertheless, these paths are neglected and untreated, and in poor condition, resulting in weakening Jounieh's perception and accessibility for residents and visitors. Adding on that, the privatization included beach resorts, coastal paths, five stars hotel, pubs, and public beaches that are privately owned. Hence, after the civil war, the government issued a decree stating that the individuals that have privatized public maritime areas must pay a substantial yearly penalty.



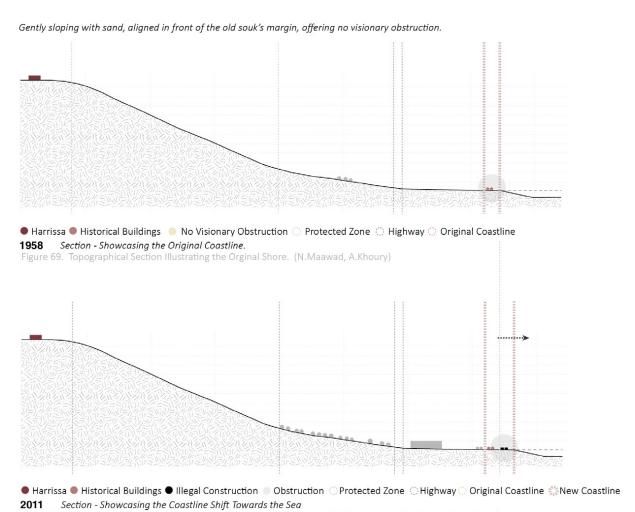


Man-Made Coastline: Privatization of the Bay Area

### 02.5.4. A Stakeholder with A Vision: The Right to my City.

#### "Reminiscing A Good Time of Life"

Furthermore, in 2017, the municipality of Jounieh had a vision to restore the coastline to its original state. The aim is to demolish the illegal privatized sector of the coastline, setting back the shore for a distance of 20 meters filling the slope with sand, leveling it to align in front of the old souk's margin. Thus, the shore will be restored as a public beach free to all local and visitors in the city, therefore, respecting public domains as it was before. Adding on that, a boulevard will be constructed in order to seperate the old traditional houses from the sea. This project was approved by the ministry and was ready to be implemented. However, protest by private coastline owners and political pressure have attempted to delay and stop the project's progress and mission. Despite having the municipality's efforts to restrain the ongoing pressure, Lebanon in 2019, plunged into economic crisis as the whole country protests against the failing government. Subsequently, in 2020, Lebanon including Jounieh, faced the COVID-19 pandemic, leading to widespread lockdowns across the country. Hence, these three factors have contributed to the dismissal of the project. The municipal efforts were dismissed as Lebanon is still suffering from an economic crisis that is affecting the administrative sectors and the government itself. Therefore, no solution has yet been implemented in order to readapt and restore the illegal privatization of the coastline to the public use in the historic region.







Architectural Design Analysis



# **CHAPTER 01**

Architectural Style in Jounieh, Old Souk

بتحسسو قصة من حجارة و قرميد "It Is Like a Story, Made of Stones and Tiles" – Unknown

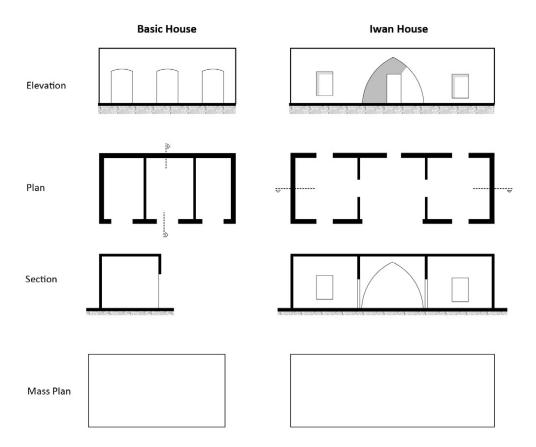
Lebanon and specifically Jounieh have witnessed multiple expansion and architectural styles within the years. It has embodied different historical and cultural styles that were influenced starting from the Phoenicians, Romans, Ottomans, French Mandate until the independency. Within this mixture of heritage of different cultural and architectural backgrounds, Lebanon and particularly Jounieh found itself with a remarkable architectural feature known as the Lebanese House. Hence, in this chapter, we will explore and analyze different housing typologies found in Jounieh, with a particular focus on the old souk. Our study will draw not only from reports and articles but also from multiple interviews with prominent local architects that have studied and analyzed the Lebanese House.

The Old Souk: A Glance Towards the Mediterranean Sea Figure 72. Iconic Gems in the Old Souk (N.Maawad, A.Khoury)

#### 03.1.1. Housing Typologies in The Old Souk: A Beautiful Masterpiece

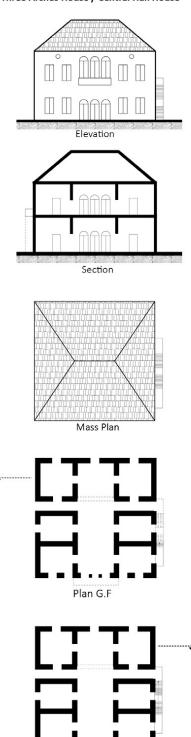
Zooming in on the old souk, a mixture of different architectural housing typologies can be observed. Starting from the least present, the Basic Lebanese House is known for its single unit housing represented with its known amazing craftsmanship of stone displacement [10]. The second most existing style is the Iwan House. This house features a wide pointed arch that opens to a spacious entrance having two symmetrical rooms distributed adjacent the room. Its neat and outstanding stone picking craftsmanship with its remarkable pointed arch attracts the attention making it an important architectural element in the Lebanese heritage (Figure 73). Finally, the most existing and fascinating style is the Central Hall or The Three Arches House. This architectural is known for its simplicity, mastery of craft, clarity, and harmony with its surrounding landscape [12]. This period of architecture is characterized by prosperity and admiration display. The central hall house played that role showcasing wealth and social class that presents the middle class and higher societal status (Figure 74)[46].

This typology formed a revolution that was built across Jounieh and especially the old souk reflecting a significant change with respect to traditional basic house. The central hall house known as "The Three Arches House" (Figure 75-76) is the most notable and existing house in the old souk. Its façade features an ornate triple-arched entrance that opens to the outside. Inside, rooms are symmetrically distributed around a central hall, and a balcony overlooks the garden or the main street. The ceiling is covered with a sloped red roof that blends in the souk into one unified unique character.



Lebanese Traditional Housing Typologies
Figure 73. Illustrating Lebanese Traditional Housing Typologies in the Old Souk (N.Maawad, A.Khoury)

#### Three Arches House / Central Hall House



Three Arches House/Central Hall Lebanese Traditional Typologies
Figure 74. Illustrating Three Arches House Typology. (N.Maawad, A.Khoury)

Plan Level +1



Figure 75. Demonstrating Traditional Lebanese Housing Typologies in the Old Souk. (X/@beauty of Lebanon/ Balconies of Jounieh).

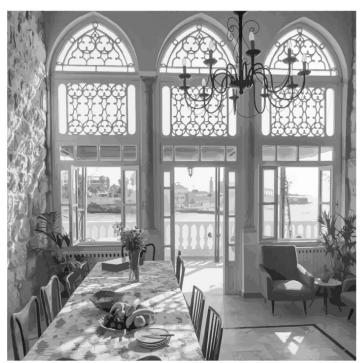


Figure 76. Demonstrating The Interior of a Traditional Lebanese Three Arches House. (Instagram/@Interiorblink)

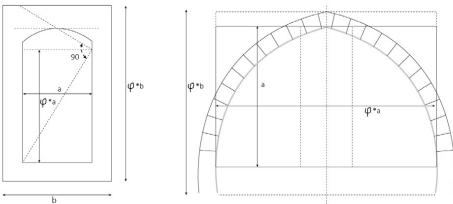
#### 03.1.2. The Golden Ratio: A Lebanese Gem

In architectural theory, proportion is a fundamental concept. The writings of Vitruvius, particularly in his work "De architectura libri decem", are crucial for understanding how proportions were integrated into architectural design [17].

Based on Vitrivius' Book, there are three essential qualities to define a balanced building: firmitas, utilitas et venustas. [12] In other words, firmitas refers to the stability and durability of the building. A good building should be well structured in order withstand environmental factors. Utilitas serves as usefulness. A building should serve its intended purpose effectively and efficiently. It should be designed with functionality in mind, accommodating the needs of its users. Lastly, venustas denotes for appealing qualities. A good building should also be aesthetically pleasing which involves considerations of proportion and harmony. Vitruvius emphasized the importance of symmetry and proportion in architectural composition. He believed that just as the human body exhibits inherent proportions that contribute to its beauty and functionality, so too should buildings. Therefore, balanced buildings are more attractive to the eyes than other buildings due to the principles of the golden ratio. The golden ratio, also known as divine proportion, is a geometric proportion that has been conceived to bring natural balance and visual harmony to any design. (Figure 77)

In this essence, the traditional Lebanese housing found in the old souk evolves all the essential qualities to be defined as a well-designed building. Its durability and structural strength are well maintained to withstand environmental factors. Moreover, the spatial organization of the buildings serves the needs of the users. The central hall with different its model of rooms that are symmetrically planned enhances the specificity of the user. Lastly, their visual harmony blends within the urban landscape. Their proportions and crafted materials create a sense of delight and admiration to user's perception. The beauty lies in the proportions of using the golden ratio in their windows and arcs. These smooth finishes and golden geometric precision have enabled the buildings to stand out as exemplars of architectural beauty among all others.





#### Geometric Precision of Lebanese Historic Traditional Windows and Arches

Figure 77. Demonstrating the Geometric Precision of Traditional Lebanese Architecture (The use of the golden ratio in three traditional Lebanese architectural elements: Window, Mandalun and pointed arch. by Antoine Dib)

# 03.1.3. Linking Geometrical Beauty and Historical Characteristics

In architectural theory, the concept of proportion serves as a bridge between functionality and aesthetics. Therefore, as mentioned in the other chapter, a well-designed building embodies the principles of a golden ratio that works profoundly in traditional Lebanese architecture in the old souk.

This chapter will move from exploring the theoretical groundworks of architectural proportions to a focused analysis on the characteristics of traditional buildings in the old souk. By examining their volume, inner spaces, openings and decorations, we aim to demonstrate the importance and cultural appreciation of these buildings. Their durability, functionality, and aesthetic harmony sets a legacy of design excellence reflects the cultural identity of Lebanon.

The following discussion will delve deeper into the architectural features of these historical buildings, shedding light on their past functions and how they continue to inspire. By preserving their distinctive craftsmanship and cultural significance, we not only honor the past but also ensure that these traditional values guide future design strategies

Jounieh's Historical Value

Figure 78. Blending in Geormetrical Beauty and Historical Characteristics.(Lebanon in a Picture)





### **CHAPTER 02**

# **Characteristics and Functions**

A study of Volume, Inner Space, Openings and Decorations.

In this chapter, we will illustrate the importance of the old souk's traditional buildings in terms of volume, inner space, openings and decorations. Through this, the analysis will include studying the buildings characteristics and its past function that will help us to develop a stronger approach in the design phase. Furthermore, these buildings reflect the cultural fabric of the old souk. The buildings features are currently preserved, highlighting the remarkable craftsmanship in its details, functional spatial configuration, textured facades, ornamental patterns, and material choices.

Those characteristics allows these buildings to provide a sense of emotion and pride to the Lebanese people. Their textures, finishes, and unique craftsmanship helps in understanding traditional values and ensures that preservation of cultural strategies is a need in our society.

A Traditional Lebanese House in The Old Souk of Jounieh

Figure 79. Showing A Historical Lebanese House. (@liveloveJounieh)

03.2.1. In Terms of Volume
Blending Two Typologies: Iwan and Three Arches House

In Jounieh's historical souk, the three named architectural typologies are randomly situated each with different length and dimension along the strip. This non-repetitive blend has enhanced the old souk's visual harmony allowing it to distinguish itself among all the other souk in the country. Furthermore, the integration of two different traditional typologies is present and developed, highlighting the innovative architectural blend in Jounieh during that era. The Iwan house is blended and integrated with the Three Arches House. The Iwan House known for its appealing vault is set at ground floor level. This type features commercial use such as shop, market, bar... The Three Arches House, on the other hand, features a residential sector that starts from the first level and onwards. Regardless of the blend, the maximum height of buildings in the old souk is limited to three stories. Moreover, the majority of these buildings, have a hidden stair that act as division between the commercial area and the residential part. Hence, upon opening the wooded door a small lobby appears featuring an approximately of four-meter height stairs that leads to the residential sector. Therefore, the introduction of blended typologies has enhanced the old souk's architectural practicality and harmony along the strip.[32]



Blending Typologies Volume - Functions Commercial Sector Residential Sector **2024** Building Functions

Figure 80. Illustrating Building Functions In The Old Souk (N.Maawad, A.Khoury)

A Mix of Models: Materials Used

The Lebanese Traditional Housings in Jounieh are well known for its natural crafted stone. Each set of stone is crafted differently in a way giving a visual pleasure to the receiver. Each type may differ in their architectural style,however, they all share the use of the same material, showcasing the importance and appreciation of their quality and craftsmanship.

Furthermore, the ground floor level which acts as a public function, are filled with arched stone doors that are either filled with metal barriers or wooden ones.

A notable example is the central hall house in Jounieh, its charming three arches alongside its delightful balcony composes the structural essence of the building. The three arches are made up of single glazed glass offering simplicity and a minimalistic appeal. In front of the windows, wooden louvres are placed, serving as a shading mechanism that blocks sunlight entering the interior of the building. Additionally, the balcony consists of a thin dimension concrete, approximately ten to twelve centimeters thick, which are structurally supported by stone designed brackets anchored to the wall and enclosed with thin metal balustrade that ensures the safety of the residents. Moreover, the ceiling features a sloped red-tiled roof that allows water to drain down the slope. An extended metal overhang runs along the roof's edge, preventing water from fully dropping onto the streets and directing it safely away for rain harvesting.



Jounieh's Architectural Blend
Figure 81. Demonstrating the Integration Between Iwan House and Three Arches House(Jounieh and Our Lady of Lebanon · Best Travel Guide · Beirut)



Is The Three Arches House a Lebanese Icon or a Western Replica?

At that time, the Three Arches House with its red tile roof symbolized not just prosperity, but a fascination to copy the West, influenced by the travels of many Lebanese to France and Italy. This sparked a debate if whether the Three Arches House is considered as a Lebanese design, or was it a copied model from the western world to adapt to Lebanon and especially Jounieh's condition?

We have interviewed and asked multiple local architects in order to provide a bold answer. Some have stood in considering this typology is considered to symbolize our character and national icon, while others view it as a copied model from the western world. On the other hand, the majority of the answers reflect a surprising integration of both copied elements and national identity. The traditional building style is a blend of various elements, and this integration of multiple hybrid features enhances its uniqueness. To start with, a significant portion of materials is sourced from Europe, including roof tiles and iron I-beams from Italy and France, cast iron railings from England, industrially sawn timber from Romania, and marble tiles from Italy. In addition, the most unique feature, the triple arch, is said to be imported from Venice. However, the origins of the central house's spatial organization and planning remain unclear. [46]

Abandoned House : Materials Used to Built The Three Arches

Figure 83. Traditional Lebanese Housing Features or a Western Architectural Influences in the Old Souk: Materials Used in the Old Souk (Vatican News)



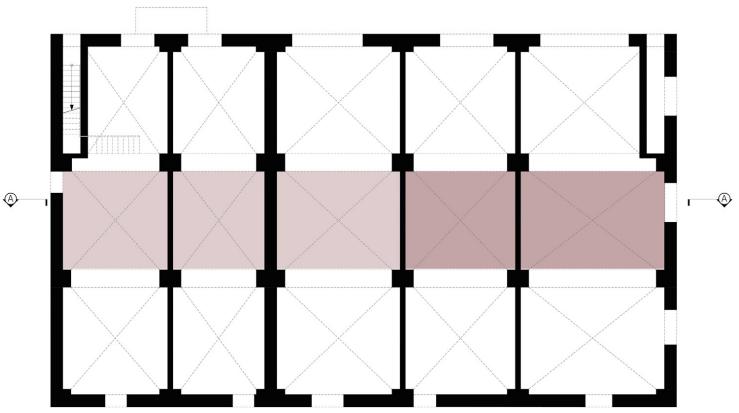
## 03.2.2 In Terms of Inner Space: Vaulted Ground Floors: Symbols of Cultural Continuity

The selected buildings buildings not only serve as traditional symbols through their architectural exteriors but also derive significant value from their structural elements. Currently, on the ground floor level, they still retain the original ribbed vaults, which enhance both their historical significance and structural integrity. The ribs act as a skeletal framework, channeling the weight of the ceiling and roof down to the supporting columns or piers. This have accomplished a larger open space making it easier to circulate. While three buildings have preserved the aesthetical appeal of the vaults, others where either destructed or poorly maintained surrounded in decay and humidity. Therefore, preserving the structural style embodies a historical value, the neglected buildings highlight the need for thoughtful restoration to safeguard their structural integrity and aesthetic significance. We will focus on illustrating the ribbed vaults of Building 02, as it shares the same structural approach with the other buildings.

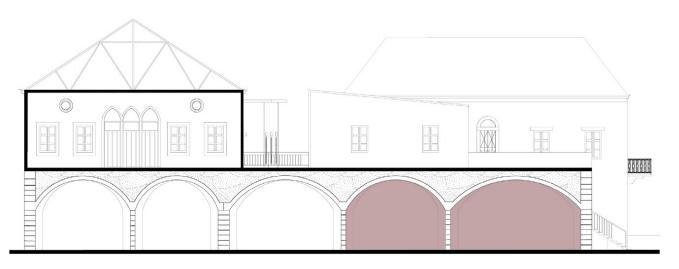


Building 02 - Ribbed Valuts
Figure 84. Interior View Highlighting Ribbed Vaults in Jounieh's Historic Old Souk , (N.Maawad, A.Khoury)





2 Building 02- Ground Floor Plan Scale 1/200



Illustrating the Ground Level Vaults- Section A-A of Building 02 Scale 1/250 Ribbed Vaults

**2024** Ribbed Vaults Section A-A - Building 02

Figure 85. Illustrating Inner Spaces, Section A-A of the Ribbed Vaults In The Old Souk (N.Maawad, A.Khoury)

## **Artisanal Workshops: The Architecture of Craft and Their Function**

Not only is the old souk known for its diverse architectural styles but also for the exquisite craftsmanship displayed within its spatial divisions. Historically, the souk was a targeted destination where people would visit to purchase unique artisanal goods, often located on the ground floors of the buildings. [32] While this tradition continues today, it is unfortunately not uniformly preserved throughout the entire souk, particularly in the selected area.

The upcoming diagrams will detail each building's ground floor function, illustrating their historical role in craft production. However, not all the buildings have maintained their craft role, as some were abandoned overtime. Currently, only Buildings 2, 3, and 4 continue to serve their craft-related purposes. These visual representations will support the conceptual approach by clarifying the program and function of each building.

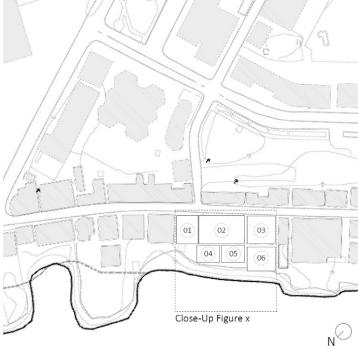


Figure 86. Localization Plan (N.Maawad, A.Khoury)



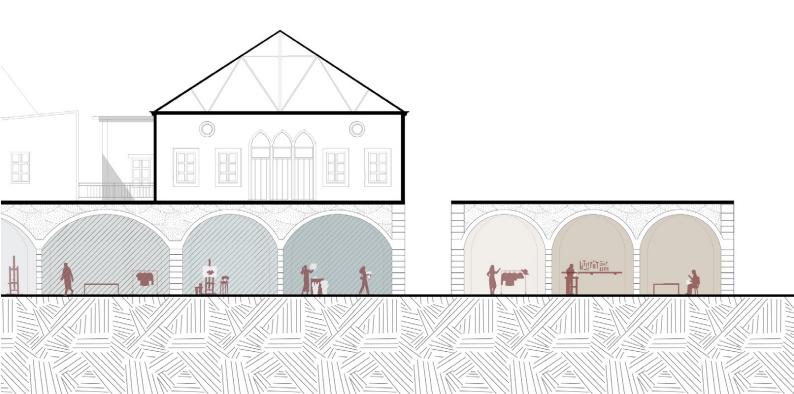
Figure 87. Plan Illustrating the Current Functional Layout of Artisanal Workshops in Jounieh's Old Souk (N.Maawad, A.Khoury)

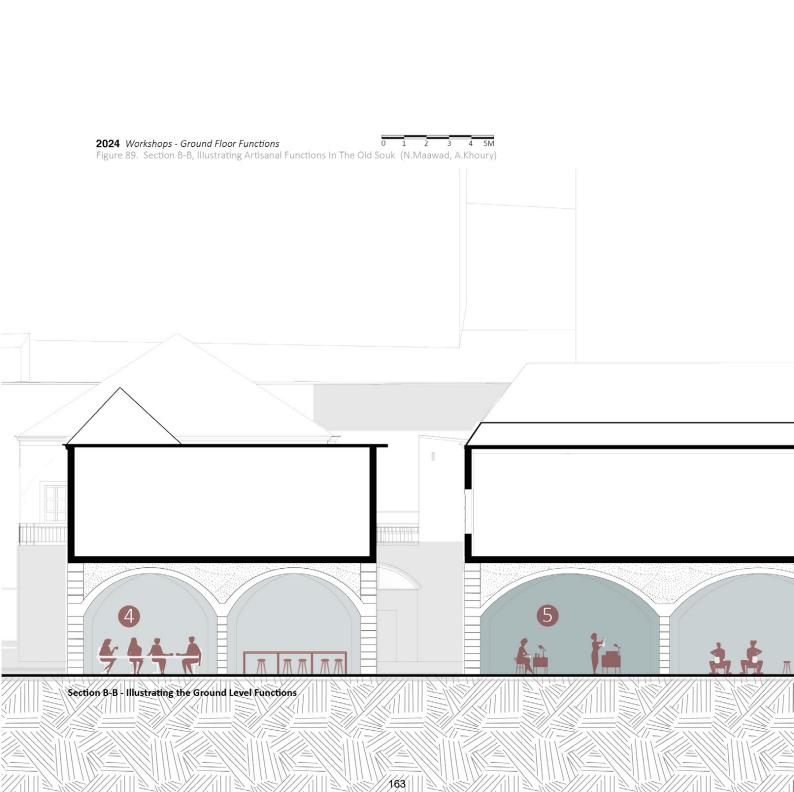


Workshops - Ground Floor Functions
Figure 88. Section A-A, Illustrating Artisanal Functions In The Old Souk (N.Maawad, A.Khoury)



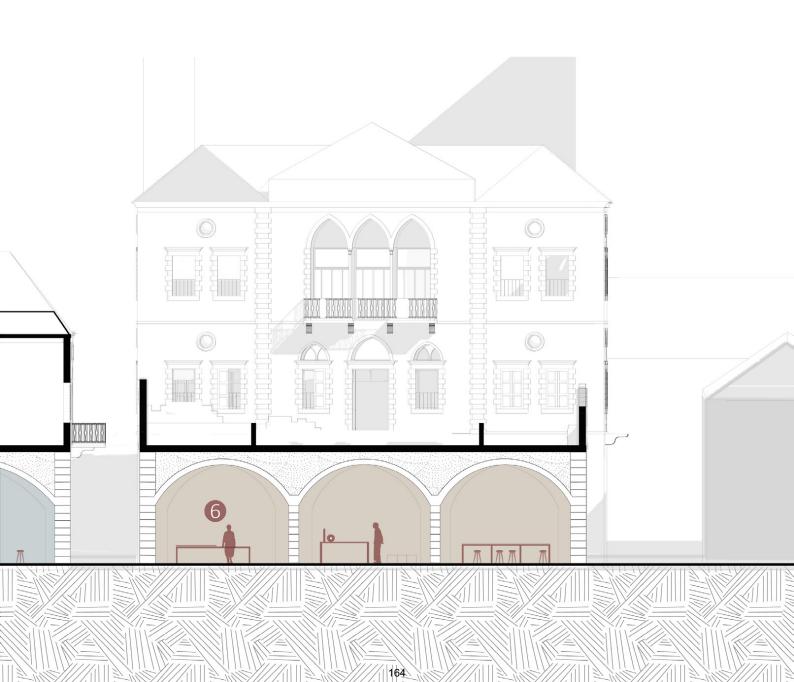








- Shoe WorkshopPottery WorkshopArtisanal Metal Workshop









Abandoned Overtime
 Still in Use
 Current Situation of the Crafts Workshop
 Figure 90. Showcasing The Current Situation of Craftsmanship
 Workshop in the Old Souk of Jounieh (Nour Maawad, Alex Khoury)





Abandoned Overtime
 Still in Use
 Current Situation of the Crafts Workshop
 Figure 91. Showcasing The Current Situation of Craftsmanship
 Workshop in the Old Souk of Jounieh (Nour Maawad, Alex Khoury)



Abandoned Overtime Still in Use

Current Situation of the Crafts Workshop

Figure 92. Showcasing The Current Situation of Craftsmanship

Workshop in the Old Souk of Jounieh (Nour Maawad, Alex Khoury)

# 03.2.3. In Terms of Openings and Decorations Features of Lebanese Traditional Buildings In The Old Souk

The Lebanese Traditional Building found in the old souk, stand out due to their notable artistic features. These features include: Three arches, ground floor arches, small curricular openings, window with decorative ornaments, decorative roof stone molding, stone corbels, decorative railings ... In the upcoming conversation, a specific example will be shared from the Lebanese old souk. However, all these traditional buildings share more or less the same opening and decorative features.

#### In Terms of Openings:

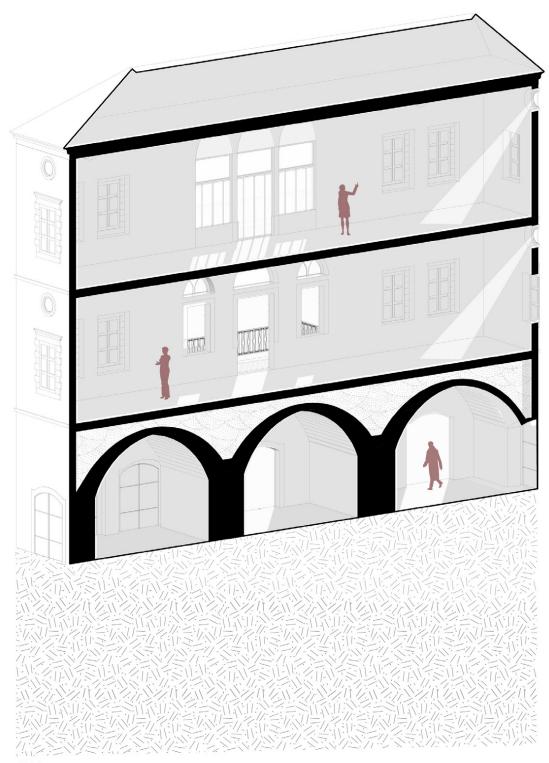
Starting off with the three arches, these features reflect the rich Lebanese history, culture and architectural evolution overtime. It represents a connection with the past respecting and highlighting the high skills of historical builders and stonemasons. Moreover, these arches create a visual pleasing pattern due to their sense of symmetry and ornamental design. Their elegant value and sense of harmony allows the building's façade to stand out and distinguish itself among other building facades. Not only do they act as a decorative feature, they also serve as a structural purpose. The arches play a role of a supporting element that distributes the weight from the top of the building to the supporting walls below. Therefore, making it as an essential structural support of the building.

The ground floor arches are integral component in the Lebanese Housing. They serve as a cultural significance representing a blend of historical influences, contributing to the unique architectural identity of Lebanon. Moreover, they serve as both a functional and aesthetical point view. In terms of functionality, they are always located on the ground floor level that often serves as public or commercial uses such as shops, workshop and many more... Their high ceiling allows natural ventilation to circulate into the building acting as a sustainable cooling method. Adding on that, they are known for there structural stability and durability as they allow the building to be more resistant by distributing the weight equally to the ground. Aesthetically speaking, they express a harmonious blend of old influences and stone craftsmanship making it visually appealing with their charming monotonous sequences.

Moving on, the circular window openings results in the building's uniqueness. These round windows, adds a decorative and artistic trace, as its charm breaks the repetitive rectangular forms. In term of functionality, these openings with there specific small size and positioning allows natural light to enter specific space of the building. This reduces the need of artificial lighting during the day. This demonstrates the sustainable design principles that was used back then, which remains an effective method in modern times.



Building Opennings and Decoration Features
Figure 93. Illustrating Traditional Lebanese Building Features In The Old Souk (N.Maawad, A.Khoury)



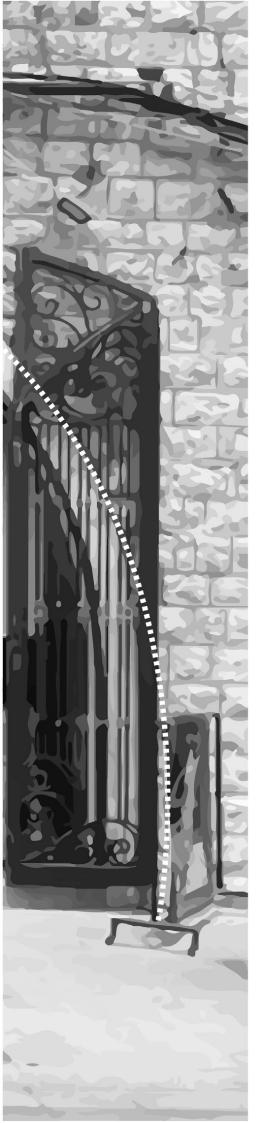
**2024** Maximizing The Importance of Natural Light Due To Openning Features
Figure 94. Enhancing Natural Light Through Architectural Openings in Jounieh's Old Souk (N. Maawad, A. Khoury)











Building Opennings and Decoration Features
Figure 95. Traditional Lebanese Building Features In The Old Souk (N.Maawad, A.Khoury)

### In Terms of Decorations:

Furthermore, the rectangular windows are proportionally aligned featuring a balance and an order style of façade. Ornaments stand out above the rectangular windows, shaped in a carved stone and carefully detailed with an artistic touch. This creates a visual pleasure to the human eye and highlights the openings of the building. This decorative stonework represents a cultural symbol that represents a harmony and beauty, as well as reflects skills of masonry craftsmanship.

The decorative roof stone modeling features a carving design with artistic and aesthetical appeal. Not only does this decorative design appear pleasurable to the eye, but it serves as a protective feature. It blocks the rainwater from entering to the building, as it directs them away from the walls helping to prevent erosion and maintain the integrity of the building.









Stone corbels plays an essential part in the Lebanese architectural housings. In terms of functionality, they serve a structural support, anchored into the main structure, holding the balcony. In terms of value, they add decorative importance to the façade providing a visual appealing sight to the observer.

Lastly, decorative railings showcase the typical traditional ironwork. These detailed patterns are designed to ensure protection for those on balconies. They serve as an architectural identity reflecting the historical taste of the period in which they are constructed.



**2024** Building Opennings and Decoration Features
Figure 96. Traditional Lebanese Building Features In The Old Souk (N.Maawad, A.Khoury)

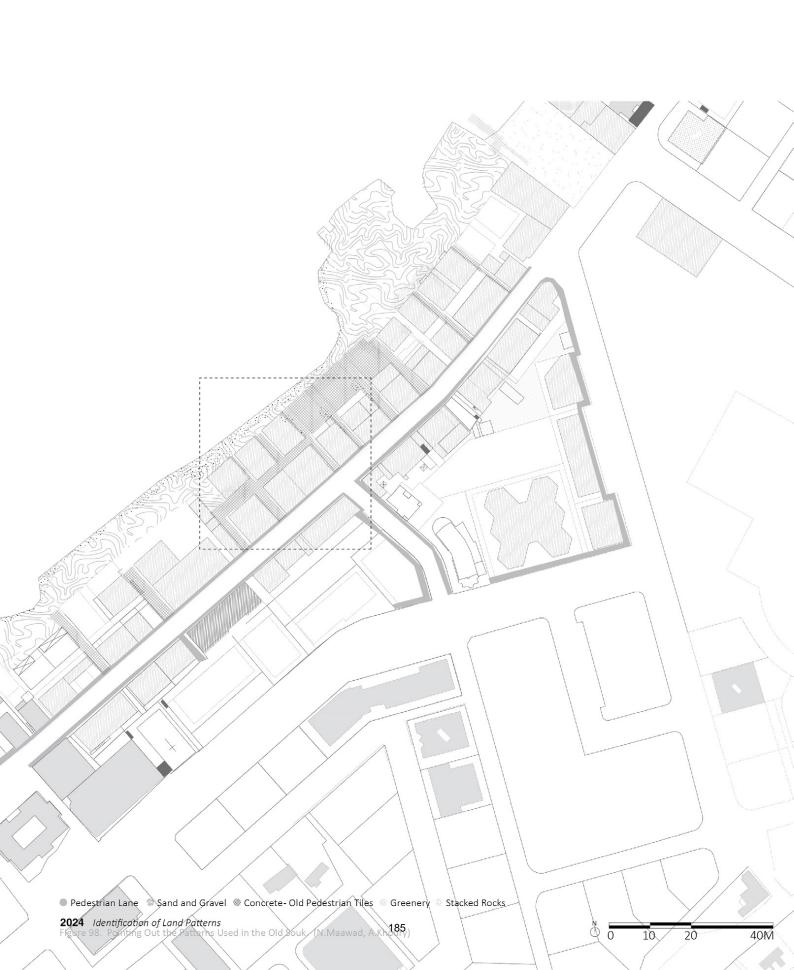


# **CHAPTER 03**

# **Exploring The Old Souk's Urban Pattern**

This chapter contributes into a comprehensive analysis of the urban fabric of the old souk of Jounieh, aiming to uncover the built-in characteristics and materials that define its unique identity. By examining elements such as pavements, the nature of these pavements, the materials used, the presence of greenery, and the lightscape and nightscape , this analysis sets the groundwork for effective restoration strategies. The primary objective is to assess the current condition of the old souk's urban fabric and identify the strengths and weaknesses of its constituent elements. To achieve a thorough understanding of the old souk's urban fabric, a multi-faceted approach was employed, including mapping, material analysis, observational studies, and interviews.

This methodology ensures that the analysis is thorough and grounded in both quantitative and qualitative data, providing a detailed understanding of the existing conditions and guiding informed decision-making in the restoration process. By identifying historically significant materials and assessing their current state, the project can prioritize preservation efforts and plan the integration of new elements to enhance livability and appeal achieving the goal of restoring and revitalizing the old souk of Jounieh, ensuring it remains a vibrant and cherished part of the urban landscape.



### 03.3.1 Examining The Souk's Pattern

Based on interviews with locals and direct observations, we found that the neglected spaces and corridors are uniformly covered with concrete. According to the municipality, these corridors once served as the main entrance and exit for the public beach before the civil war. Unfortunately, these areas have been neglected since then, and the original patterns have almost faded due to a lack of maintenance. In contrast, there is an abundance of greenery adjacent to the old souk, extending towards the Mediterranean Sea. These green areas vividly enliven the neglected spaces. However, within the old souk itself, there is no patterned greenery, likely due to the limited space, which cannot support tall trees.

The most significant concern lies in the area between the coastline and the old souk. This strip is covered with dirty sand and gravel, littered with broken glass and cans. This unused and abandoned area has been polluting the sea since the civil war. Ideally, this horizontal strip should highlight the beauty of the horizon between the sea and the traditional old houses of the souk. However, it currently presents a negative image of both the old souk and the Lebanese coastline.

The following section illustrates the patterns used in the historic strip and highlights the sense of community fostered between the buildings with respect to the neglected spaces and the Mediterranean Sea.



Historic Buildings

**2024** Identification of Land Patterns

Figure 99. Section Highlighting Land Use Patterns in Jounieh's Old Souk (N.Maawad, A.Khoury)

### 03.3.2 Discovering The Souk's Nightscape

Jounieh's old souk has a defined blend of history and one of the most captivating aspects of this strip is its distinctive lightscape and nightscape. As evening falls, the souk transforms into a harmonious scene, illuminated by old fashioned poles that casts a warm lighted color. These warm lights set the tone by enhancing an aesthetic appeal and emotional impact evoking a sense of nostalgia, transporting locals and visitors to a vibrant historic and cultural atmosphere. In addition, the use of this warmed color highlights the traditional architectural material that contributes to the uniqueness of the old souk. Following the interview and according to the survey data we collected, we observed that the use of warm lights by the municipality have allowed residence to feel safe. They have expressed a pleasant and relaxant environment when walking at night. This have allowed a welcoming environment in the old souk for pedestrians, enhancing their overall experience.

Moreover, when Jounieh Festival begins, multiple wired warm colored bulbs are stretched from one historic building to the other. According to the survey, this creates a much more luminous environment to the festival allowing a relaxant and a vibrant cultural atmosphere. Lastly, locals expressed concerns about the lack of lighting in the neglected spaces that are half way after the ignored corridors leading to the shoreline. They feel that these poorly illuminated spots create an unsafe environment when passed by them towards the sea. Despite the lack of use and dirt along the shoreline, the reported inhabitants believe it's important to maintain adequate lighting in these areas to ensure safety. Locals emphasized the importance of improving these areas by saying, "adding luminosity and cleaning the shoreline of the dirty gravel and sand, would allow visitors and locals to use the shoreline as a public space to sit, relax, and enjoy the sound of the sea."

**2019** Warm Light Dominates The Old Souk
Figure 100. Light Patterns in the Old Souk. (Beiruting Events)







Ongoing Situation



An Old House in Jounieh
Figure 102. Picture That Speaks About The Current Dynamics in Jounieh, Lebanon (@livelovejounieh)

# **CHAPTER 04**

# The Current Study of Jounieh and Its Old Souk

In this chapter, we will provide a well-rounded understanding of the current state of Jounieh and its old souk from both urban and architectural perspectives. Our methodology will involve several local opinions, reports and questionnaires distributed to local residents, as feedbacks were given back exclusively from those who live in Jounieh, interviews with local inhabitants, and demand studies that was voiced by the Lebanese and particularly Jounieh's people, analyzing the expressed concerns and frustrations of Jounieh's residents, to understand the present challenges facing the city.

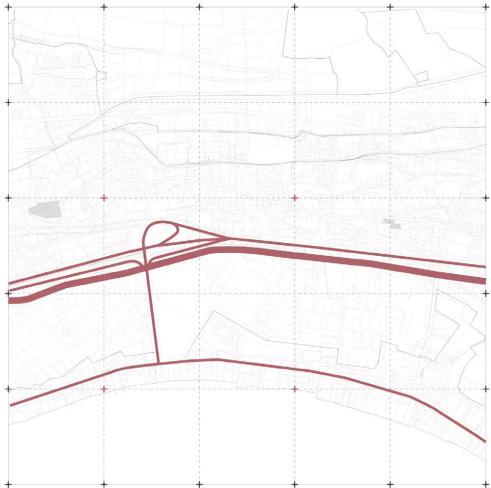
## 04.1. Understanding The Current Situation on an Urban Level

After interviewing multiple residents of Jounieh and compiling reports from various local households, it is evident that the locals are increasingly frustrated with the poor maintenance and management of the city's infrastructure especially the North-South highway. Persistent issues such as potholes, faded lane markings and lack of water sewage are a significant concern. Additionally, the frequent lack of electricity, which results in street lights being turned off as the government fails to provide sufficient power creating an unsafe and frightening experience for drivers on the highway. Rapid urbanization has led to daily increases in traffic, overwhelming the streets of Jounieh and failing to meet the high demand from the growing population. The absence of adequate pedestrian-friendly paths and bicycle lanes makes it difficult for residents to move safely across the city, especially from one side of the highway to the other. This deficiency is a major issue, contributing to local dissatisfaction and making Jounieh less attractive.

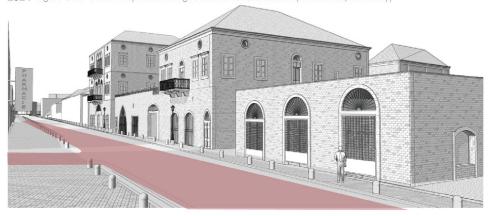
Moreover, pollution is another major concern for the residents. The absence of greenery and public adaptation strategies has weakened the quality of the environment, affecting the well-being of inhabitants. The locals are particularly focused on restoring Jounieh's charm, especially its historic strip. They aim to revive the public beaches by pushing the municipality to reclaim the shoreline and dismantle privatized sectors that have invaded on public spaces. Despite these efforts, illegal construction continues along the coastline, with new shops being built. The governmental policies and penalties have failed to abolish the privatized activities, leaving the privatized coastline sector unchecked. Therefore, new plan should be thought of to address and rectify the situation.

Moving on, residents have a shared goal of revitalizing Jounieh as a tourist destination to boost the city's economy. Although Lebanon is experiencing a flow in tourism, making it one of the most visited places in the world, however, Jounieh has not seen a corresponding increase in touristic activity. This is largely due to poor management and a lack of planned activities. In that sense, Jounieh's old souk remains a charming symbol of Lebanon, but locals agree that more restoration and adaptation strategies should be adopted in order to revive the vibrancy of the city.

# 04.1.1 Infrastructure Analysis



2024 Figure 103. Urban Map: Illustrating Jounieh's Infrastructure. (N.Maawad, A.Khoury)



# 04.1.2 Green Spaces Analysis

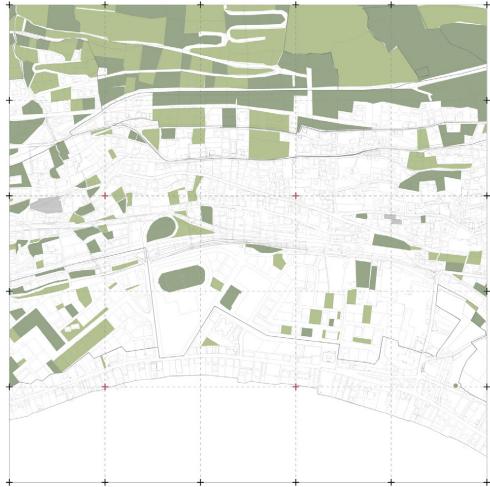
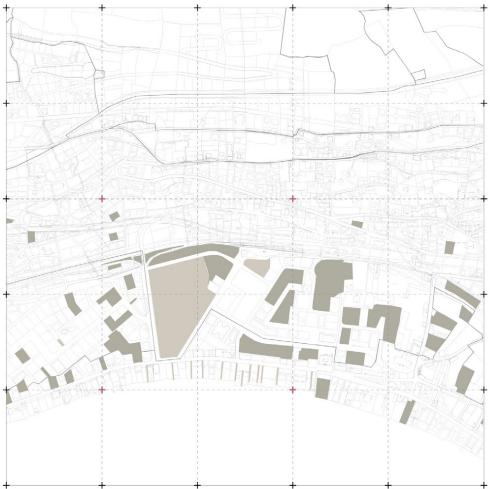


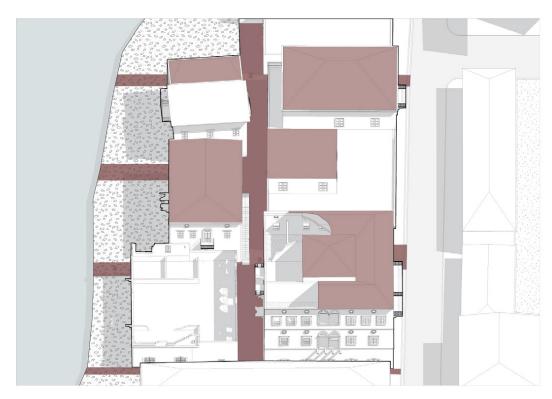
Figure 104. Urban Map: Illustrating Jounieh's Green Spaces. (N.Maawad, A.Khoury)

# 04.1.3 Neglected Spaces Analysis



2024 Figure 105. Urban Map: Illustrating Jounieh's Empty Parking and Neglected Spaces. (N.Maawad, A.Khoury)





Neglected Spaces
 Roof Tiles
 Mediterranean Sea
 Road
 Grass
 Gravel
 Sand
 Axonometric View of the Old Souk
 Figure 106. View Portraying Neglected Spaces in the Old Souk. (N.Maawad, A.Khoury)

Between each traditional building lies neglected spaces that have created a series of urban voids, each with its unique spatial pattern. These spaces are often abandoned and overlooked, as they have negatively impacted the old souk's functionality. From empty parking lots to narrow corridors serving solely as pathways to the coastline, these spaces have contributed to an aesthetic decline in the souk, disconnecting its vibrant heritage from its urban surroundings. Due to the lack of proper care and attention, such urban voids have lowered the architectural value of the buildings contributing to a negative perception of space by creating safety concerns and gaps that weakened the coherence of the old souk.

From the inhabitant's perspective, these spaces are missed opportunities as they could have supported an interaction between the coastline and the old souk through a pathway green space or a social community activity. The lack of planning has led to a disrupt in between the historic strip and the coastline. Hence, addressing these urban voids is crucial to reconnect the overall function of the old souk in order to create opportunities for community interaction, transforming neglected spaces into valuable urban assets.

# 04.1.4 Urban Fabric Analysis

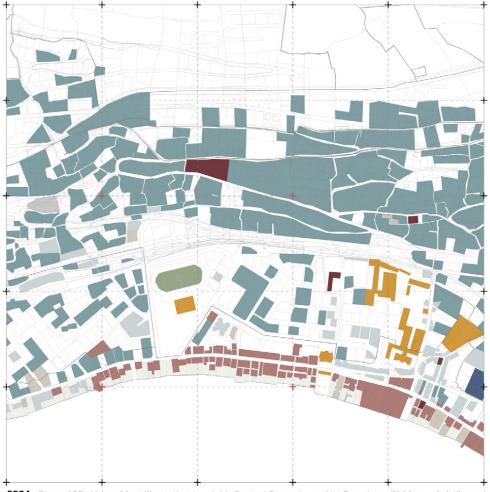


Figure 107. Urban Map: Illustrating Jounieh's Current Dynamics and its Functions. (N.Maawad, A.Khoury)

### 04.1.5 Synthesis

#### Nature vs. Expansion

In Jounieh, urban sprawl is rapidly replacing the green mountain scenery with concrete structures. This expansion destroys natural habitats, disrupts biodiversity, and mars the area's iconic beauty. The loss of greenery threatens the region's ecological balance and diminishes its cultural and environmental value.

#### Heritage and Greenery Vanish Amid Jounieh's Urban Boom

In Jounieh, the destruction of heritage buildings is erasing the city's rich architectural history while urban expansion eliminates the remaining greenery. These historic structures, once symbols of cultural identity, are being demolished to make way for modern developments, contributing to the loss of Jounieh's unique charm. The intensification of construction has not only replaced these landmarks but has also wiped out the natural green spaces, which are now almost nonexistent in this part of the city. This unchecked urbanization threatens both the cultural and environmental fabric of Jounieh.

#### Jounieh's Nightscape: Empty, Dark, and Insecure

At night, this part of Jounieh transforms into an uninviting and insecure area. The presence of offices and schools, which close after working hours, leaves the streets deserted. Poor lighting exacerbates the problem, creating a dim and unwelcoming nightscape. Additionally, many empty lots, often repurposed as parking spaces, contribute to the lifeless atmosphere, making the area feel like a "dead city" after dark. This lack of activity and inadequate urban planning foster a sense of insecurity, deterring community engagement and evening vibrancy.

#### Flood risks

Jounieh's inadequate drainage system leads to water accumulation during heavy rains, creating unsafe conditions and increasing environmental risks.

#### Privatization of shore

The privatization of Jounieh's shore limits public access, commercializes coastal areas, and threatens environmental sustainability.

Greenery Lost to construction

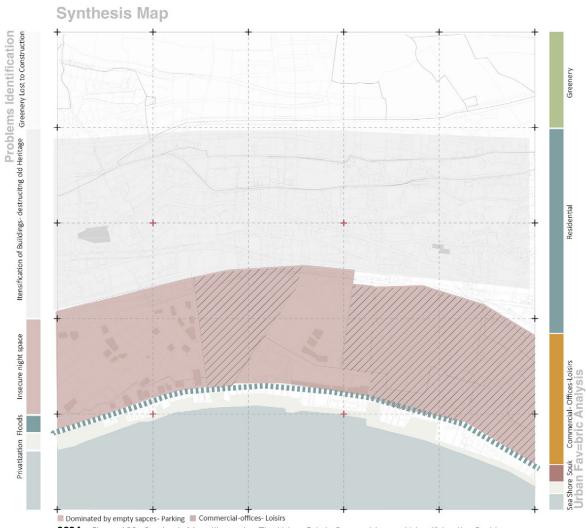
Itensification of Buildingsdestrucitng old Heritage

Insecure night space

Floods

Privatization

Privatization of



Dominated by empty sapces- Parking Commercial-offices- Loisirs

2024 Figure 108. Synthesis Map: Illustrating The Urban Fabric Composition and Identifying Key Problems.
(N.Maawad, A.Khoury).



Jnderstanding The Current Situation on an Architectural Level
Given the restrictive financial situation, the municipality remains unable to rejuven

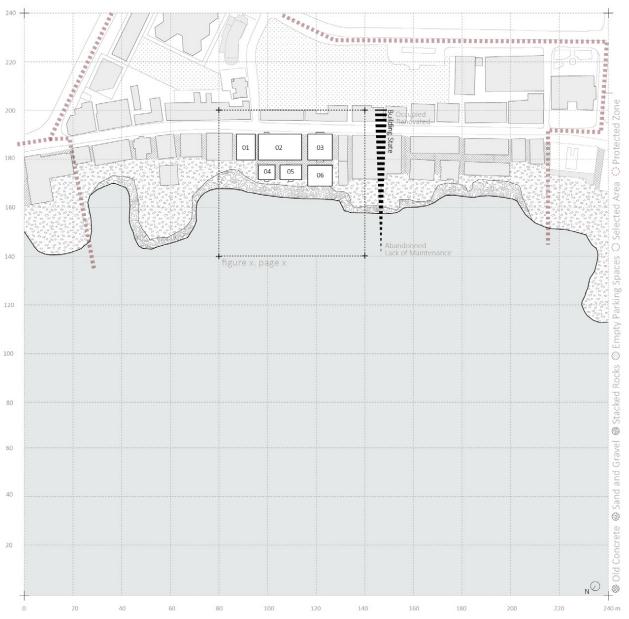
Given the restrictive financial situation, the municipality remains unable to rejuvenate the neglected spaces in the old souk, particularly those along the seaside. Currently, the seaside public space is marred by backfilling activities, with rocks and dirty gravel dominating the area. The coastal zone continues to be occupied by touristic establishments, leading to ongoing conflicts between these businesses and the government over their removal from the coastline.

On a more positive note, the majority of the old historic buildings have been fully restored and renovated, now occupied by locals. The ground floors of these buildings still serve as retail shops, with markets and local businesses reopening inside the old souk. However, some buildings identified in the analysis remain in a state of deterioration. The municipality lacks the authority and resources to renovate or restructure these properties, leaving them as hidden ruins facing the Mediterranean Sea.

Figure 109. Showcasing the Current Architectural Situation in the Old Souk of Jounieh (@ExclusiveServicesGroupSarl)

# 04.2.1 Selected Area of Intervention

On an architectural scale, the selected area of intervention will focus on the six most in danger buildings in the old souk. Some of these buildings are abandoned, while others are still inhabited but remain at risk. Their location and position represent Jounieh's historical identity, uniquely situated between the historic Old Souk's Street on one side and the Mediterranean Sea on the other. In two ways, these buildings hold a symbol of resilience. On one hand, these buildings are exposed to the sea meaning they face environmental concerns such as erosion and alteration of material, yet they still stand firm. On another hand, especially with rapid urbanization taking place, they hold presence of local architecture and cultural identity of the old souk of Jounieh.



Selected Area of Intervention
Figure 110. Selected Area of Intervention (N.Maawad, A.Khoury)

### 04.2.2 Comparing Facades: Main Strip and the Mediterranean Seaside View

Presently, the municipality and the private sectors have successfully restored the main façades of the historic selected buildings facing the main road, restoring the traditional charm and architectural harmony. Adding on that, these restored facades provide a sense of safety for the residents, as it refreshes the appearance of pedestrians, promoting a lively urban atmosphere that increases social and touristic interactions along the strip. This careful preservation also underscores the municipality's commitment to heritage, offering both aesthetic appeal and a reassuring sense of continuity for the community. In contrast, the selected buildings have been partially restored, with efforts focused primarily on the facade facing the main strip. The facade facing the Mediterranean seaside has been neglected, left to deteriorate as decay and rust slowly erode its structure. This lack of attention has made the seaside facade feel unsafe, discouraging residents to walk through it. The absence of a clear plan for this neglect only heightens the disparity, leaving one side vibrant and welcoming, while the other fades into abandonment and avoided by the community.

On another note, as studied in the analysis, the historic strip has a fully defined way of construction characterized by a consistent three-story height and distinctive red-tiled roofs. The selected area, not only serves as the heavily damaged area in the old souk, but it also highlights the incomplete preservation of the traditional roof tiles across the buildings. Three of the buildings have dismantled their traditional roofing structures, while others have retained them, and one stands in a deteriorate state.

Therefore, the contrasting states of preservation within this area underscore the need for a unified approach to restoration, one that respects the historic architectural integrity while addressing a new conceptual and constructive approach that would revive the selected area and the old souk.

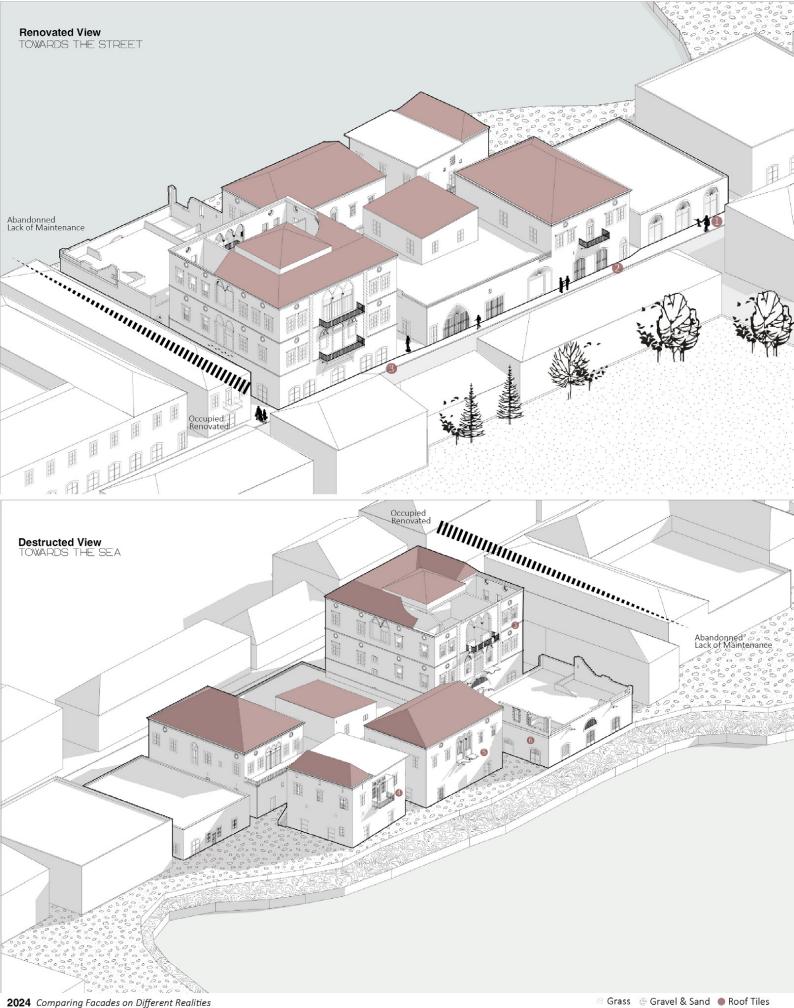
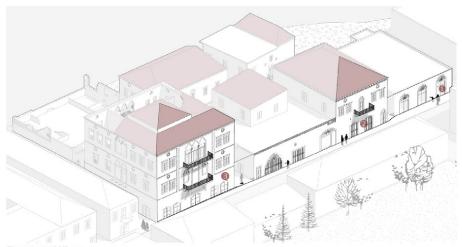


Figure 111. Comparing Facades of the Same Historic Buildings Each in Different Realities in the Old Souk (N. Maawad, A. Khoury)



Renovated View TOWARDS THE STREET







Figure 112. Showcasing Renovated Facades Towards the Historic Strip (N. Maawad, A. Khoury)

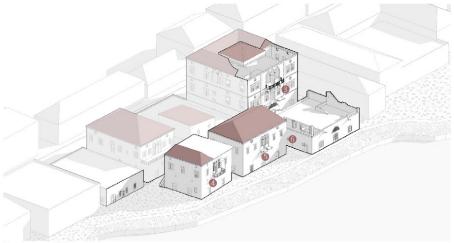
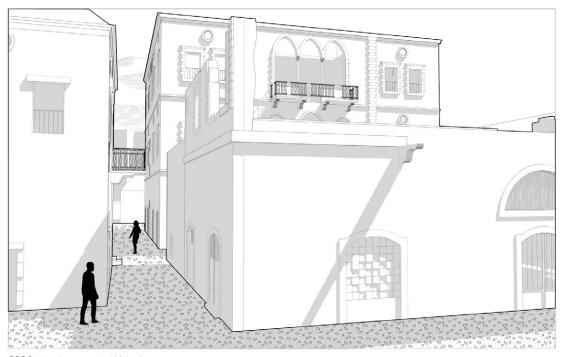




Figure 113. Showcasing Destructed Facades Towards the Mediterranean Sea (N. Maawad, A. Khoury)

### 04.2.3 Identifying Key Concerns

After analyzing and conducting the decay assessment of the selected buildings, this chapter will focus on demonstrating the current architectural and structural breakdown. Specifically, we will pinpoint the major concerns such as structural damage, surface cracks, material aging, deformation and many more... all related to the building's facade. This analysis will provide a clear understanding of how to intervene effectively and what aspects to build upon during the conceptual phase.



**2024** Key Concerns In Old Souk
Figure 114. Highlighting Specific Building Concerns In The Old Souk (N.Maawad, A.Khoury)





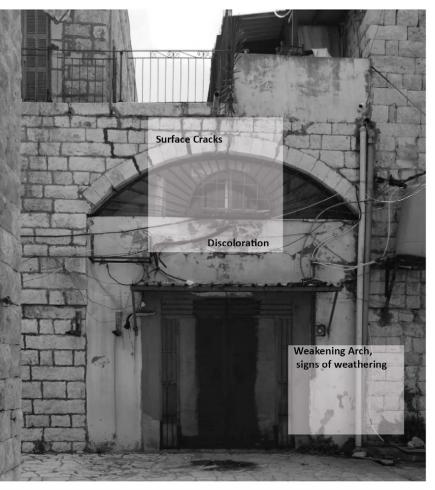
**A-** Building 01



Figure 115. Identifying Critical Concerns of the Selected Buildings in the Old Souk of Jounieh (N.Maawad, A.Khoury)



**B-** Building 02





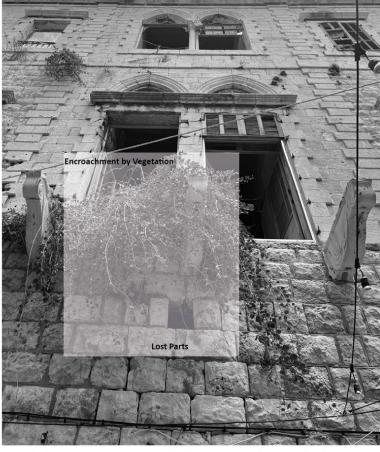






**C-** Building 03





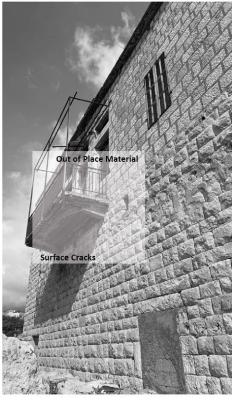


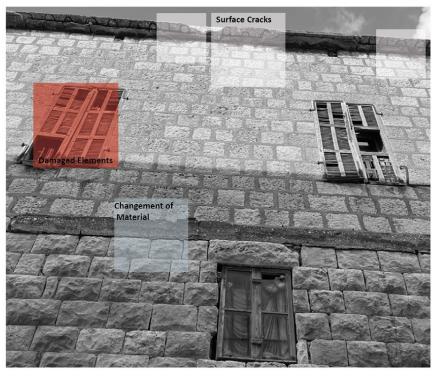


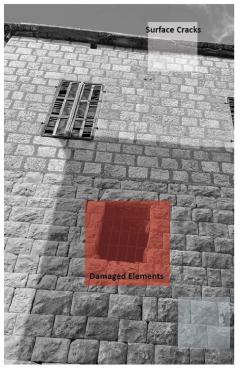


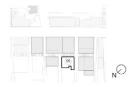
**D-** Building 04



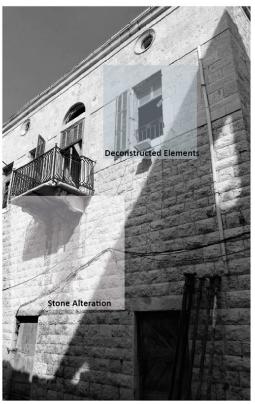


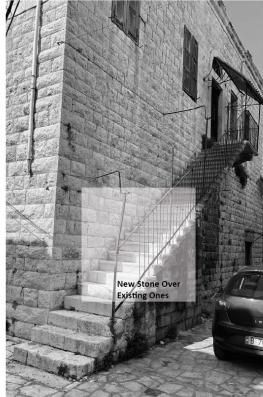






**E-** Building 05



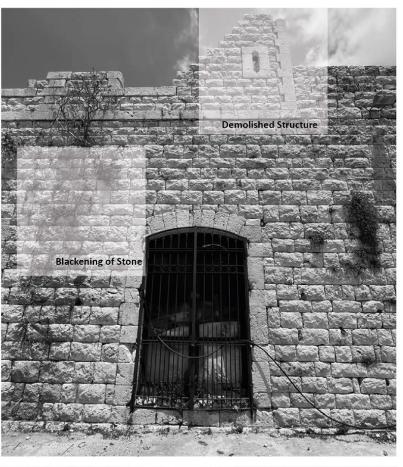








F- Building 06



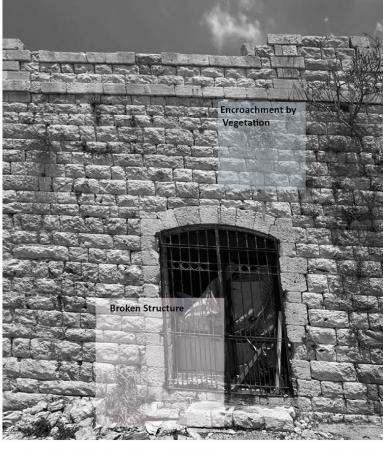








Plate IX: The Seven Lamps of Architecture - Ornaments from Rouen, St. Lo, and Venice

Figure 116. Seven Lamps of Architecture Source: Piemags/RTM, The Seven Lamps of Architecture-Ornaments from Rouen, St. Lo, and Venice, 1880-1910. Engraver: R. Cuff. After: John Ruskin. Stock photo from Alamy. Image ID: 2ROCBBK

#### **CHAPTER 04**

## **Assessment of Current State of Conservation**

"For, indeed, the greatest glory of a building is not in its stones, or in its gold. Its glory is in its Age." – John Ruskin

This chapter explores the preservationist philosophies of several renowned figures, applying their principles to the analysis and conservation of historic buildings. It examines how these philosophies can be related to the conservation of Jounieh's old souk buildings, offering insights into preserving its cultural and architectural heritage. By examining the signs of aging and decay in the old souk, we seek to maintain the unique architectural and historical character of the historic strip. Hence, the goal is to shed light on the urgent need for preservation efforts to protect the architectural heritage and cultural significance of the area.

The methodolgy will include documentations, decay analysis, reports, condition assessments and articles and mutiple insights... By integrating these steps, the study will highlight different housing typologies within the souk that exhibit the most severe signs of deterioration, illustrating the urgent need for preservation efforts. These insights will serve as a foundation for developing a preservation strategy that respects the "golden stain of time" and ensures the longevity of these historical structures for future generations.

#### 04.3.1. Memories in Stone: A Study of Decay in Architectural Heritage

Starting from the John Ruskin's "The Seven Lamps of Architecture" [37], the legacy of a building is underscored through its timeless historical and emotional touchstone. According to his book, the true glory of a building is not in its physical materials, but in its age and the stories it embodies. The building should be constructed with a future vision, ensuring that the structure and the surface are crafted with care and thoughtfulness, so future generations can appreciate and honor them. Moreover, he introduced the "intervention with care" as not to reconstruct the building, but to preserve the present elements. This intervention maximizes its preservation and memorial aspect. Hence, Ruskin emphasizes that old buildings serve as witnesses to historical events, a unique memorial presence of our descendants. Adding on that, the presence of the building's ancient structures bear witness to the passage of time connecting different eras and cultures. That cultural and emotional connection towards these elements acquires an architectural ability so called "golden stain of time". This metaphorical expression suggests that the value of the building gains beauty and value as they age enhancing a voicefulness, watching over humanity becoming part of the collective memory and identity of a nation. Furthermore, William Morris's "The S.P.A.B. Manifesto"[31] emphasizes the importance of preserving historical buildings in their original state. Morris argues against restoration that alters the original structure and suggests instead that any necessary repairs should be made to support and protect the building without introducing new artistic elements. He advocates for treating ancient buildings as monuments of past craftsmanship and culture, which should be maintained but not modified to fit modern needs. If a building becomes unsuitable for current use, he suggests constructing a new one rather than changing the old.

Moving on, the S.P.A.B Approach [31] emphasizes that the 'old' of a historic building is a valuable quality. It is the patina of time that distinguishes the old from the new. Those signs like ripples in plaster, depressions in roof ridges, and worn stair treads, are valuable characteristics that differentiate them from newer constructions. The article [40] of "Matthew Slocombe" suggests that the S.P.A.B promotes a moderate approach to dealing with these signs of aging. Rather than eliminating these features, thoughtful management and maintenance are recommended to preserve the building's integrity while mitigating severe decay. This philosophy respects the patina of time, ensuring the historical essence of the structure remains intact.

According to "Prevenzione e manutenzione per i beni culturali edificati" [09], the book suggests that preserving old buildings is like caring for someone with a chronic illness. Instead of trying to make the building perfect again, the goal should be on slowing down its natural aging and deterioration. The reference to Alois Riegl highlights the idea that the "pathological condition" of deterioration is a natural event, inseparable from the artifact itself, and that the signs of aging contribute to the building's antiquity and historical value. Adding on that, in "Restauro Architettonico" [16], the author addresses the need to preserve the monument handed to us from the past in order to investigate the causes that produce its ageing and degradation. It highlights the need for thorough investigation into these causes, especially within the context of complex phenomena. By doing so, effective preventive measures can be implemented to slow down the processes of alteration and decay, ensuring the longevity of these monuments for future generations.



#### The Old Souk's Signs of Aging?

Jounieh's historical strip, characterized by its blend of traditional architectural houses, is currently undergoing signs of aging and decay. The preservationist philosophies mentioned starting with Ruskin's "intervention with care" aligns well the need of the old souk. The traditional buildings found have witnessed a historical presence, filled with cultural and emotional value. The crafted set of stones, the three arches' windows, the balcony, the simplicity within time of aging created a touch of beauty and value maximizing the collective memory of the souk. Moreover, the importance of the "Patina of Time" and other distinctive features that are present in enhances the unique character of buildings and the souk itself. Aligning with the S.P.A.B approach, these features should not be eliminated rather to preserve and respect the structural essence the remains intact. Hence, the principles outlined in "Prevenzione e manutenzione per i beni culturali edificati" and "Restauro Architettonico," ensures the understanding of natural aging and the causes of degradation. This understanding enables the implementation of effective preventive measures aimed at ensuring the longevity and preservation of these historical buildings. By respecting the 'golden stain of time' and the patina that signifies historical authenticity, we can analyze the decay of Jounieh's old buildings in a manner that allows us to implement measures slowing deterioration while preserving the cultural and architectural integrity of the souk for future generations.

#### 04.3.2. Decay Analysis

METHODOLOGY

Therefore, the methodology for the decay analysis of Jounieh's old souk buildings integrates insights from preservationist philosophies. It begins with historical and architectural documentation to capture the buildings' cultural and historical significance. The analysis prioritizes a detailed condition assessment to identify signs of alteration and degradation. This analysis covers both visual inspections, a large photodocumentation and imaging in order to evaluate structural integrity. This methodology not only aims to address current decay but also respects the patina of time that contributes to the souk's historical and architectural significance.

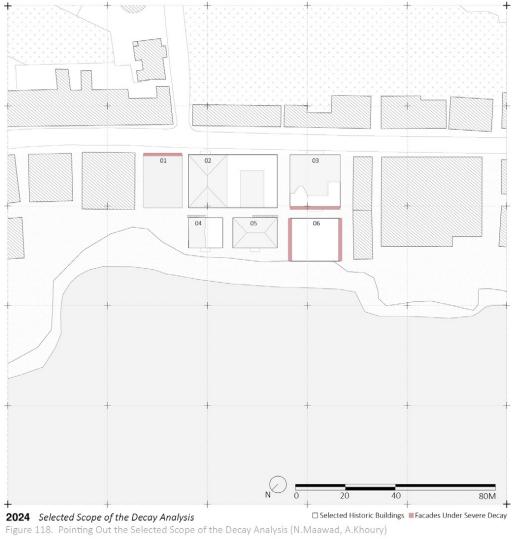
We will illustrate three different housing typologies present in the old souk that are currently serving as the most severe signs of alteration and degradation. All these decay signs have happened due to aging consequences within time, lack of maintenance, environmental condition such as pollution, physical damage and multiple other causes. By highlighting these decaying structures, we aim to shed light on the urgent need for preservation efforts to protect the architectural heritage and cultural significance of the old souk.

However, not all façades of the decayed buildings are abandoned. According to reports from the municipality, residents have acquired only part of the building to live in. Therefore, we will demonstrate the most degraded façades among these six typologies.

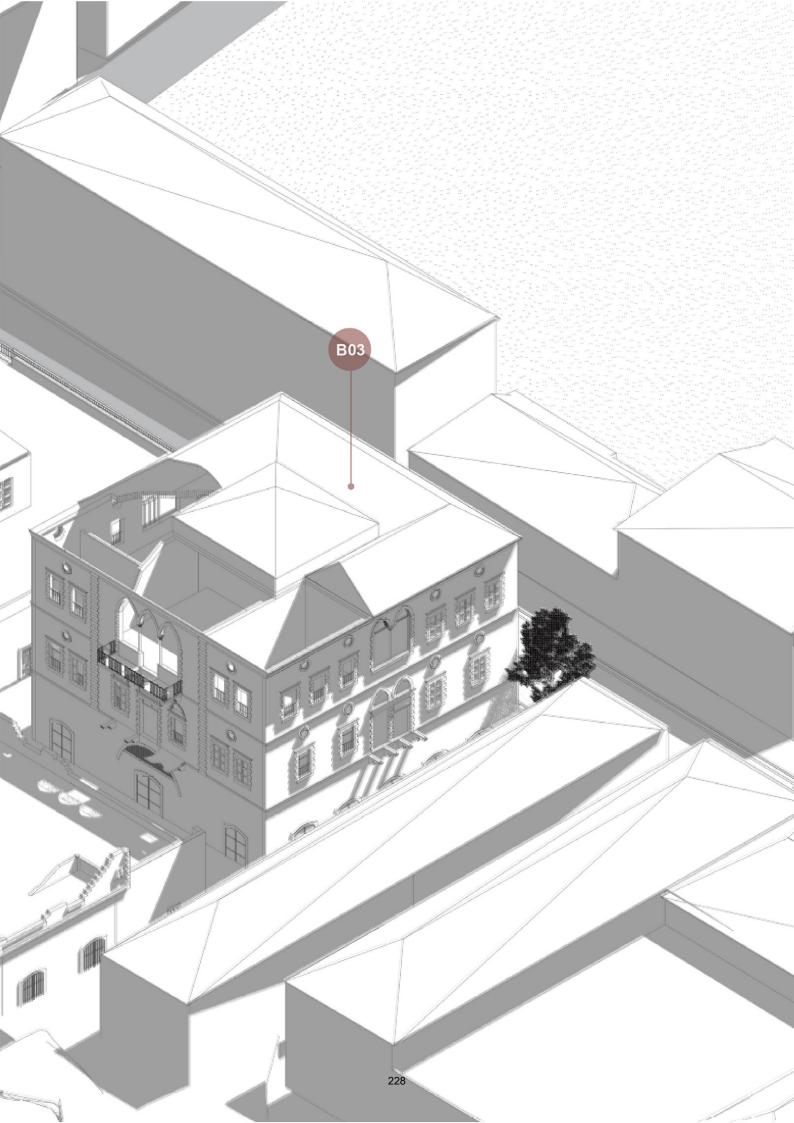
# METHODOLOGY

GEOMETRICAL SURVEY MATERIC SURVEY STATE OF CONSERVATION HYPOTHESIS OF INTERVENTION

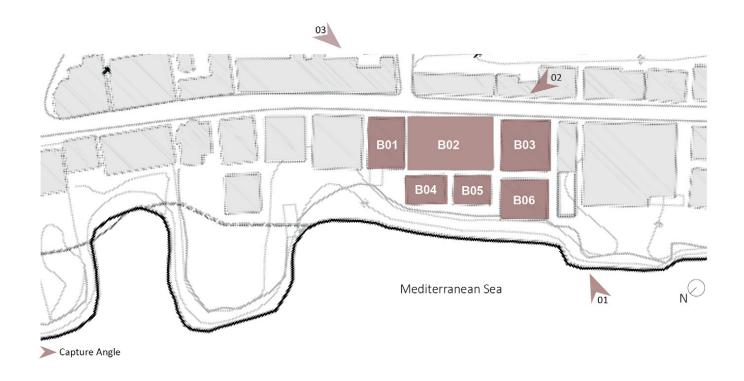
Selected Scope of The Decay Analysis (Google Earth)

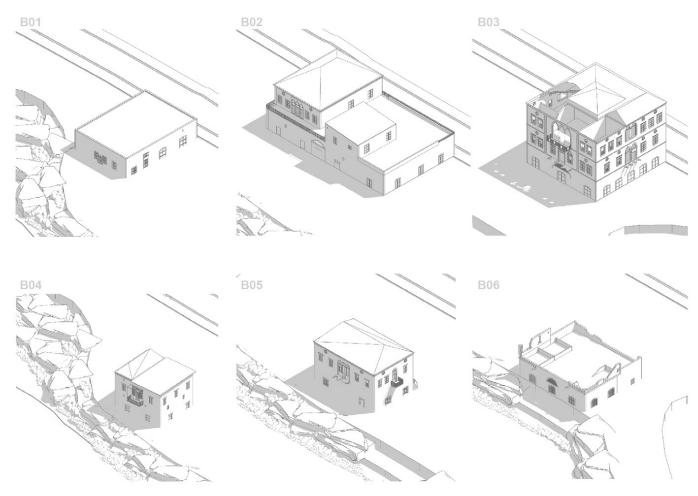












Isonometric View of the Selected Buildings
Figure 119. Introducing the Selected Buildings (N.Maawad, A.Khoury)

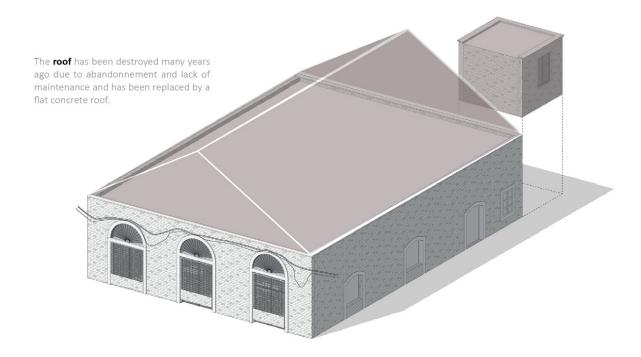
# **BUILDING 01**



Building 01

This building is currently undergoing some restorations therefore, **the small part** was actaually added by the owners many years ago and has been demolished recently by the owner of the current building.





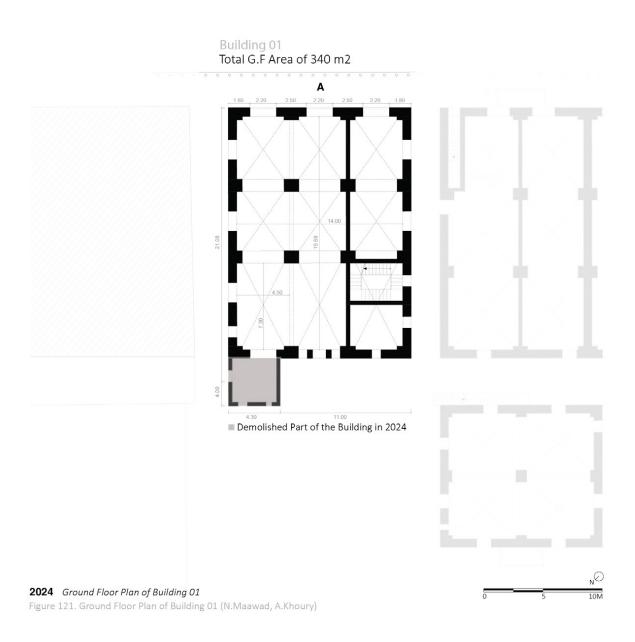
#### 2024 Isonometric View of Building 01

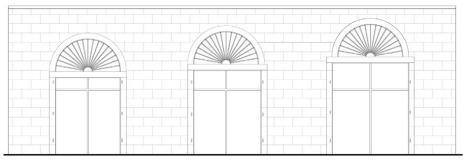
Figure 120. Introducing Building 01 (N.Maawad, A.Khoury)

■ Demolished Parts of the Building

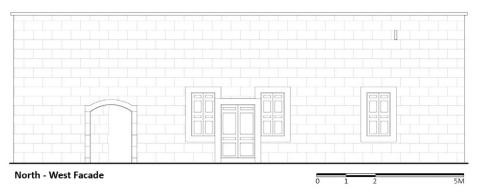
# 01. GEOMETRICAL SURVEY

# **BUILDING 01. STATE OF CONSERVATION ANALYSIS**

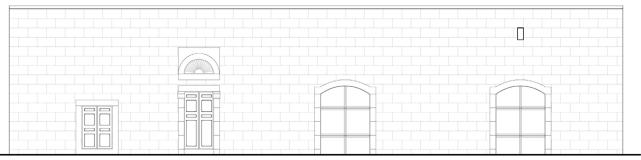




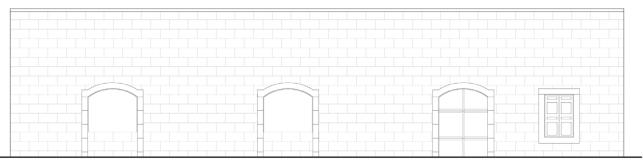
South - East Facade



Elevations of Building 01 Figure 122. Illustrating Elevations of Building 01 (N.Maawad, A.Khoury)



South - West Facade



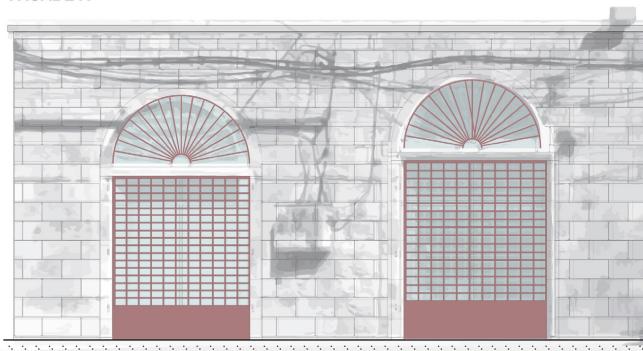
North - East Facade

**2024** Elevations of Building 01

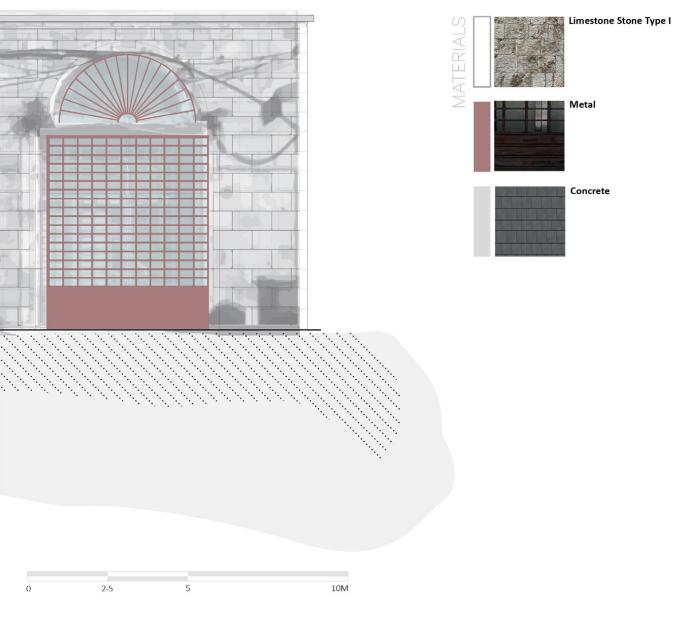


#### **02. MATERIC SURVEY**

#### **FACADE A**

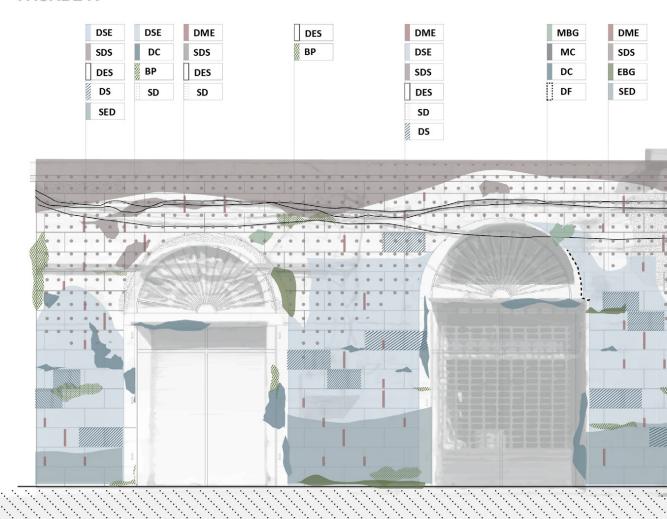


**2024** Material Analysis of South - East Facade of Building 01 Figure 123. Materic Survey of Building 01 (N.Maawad, A.Khoury)

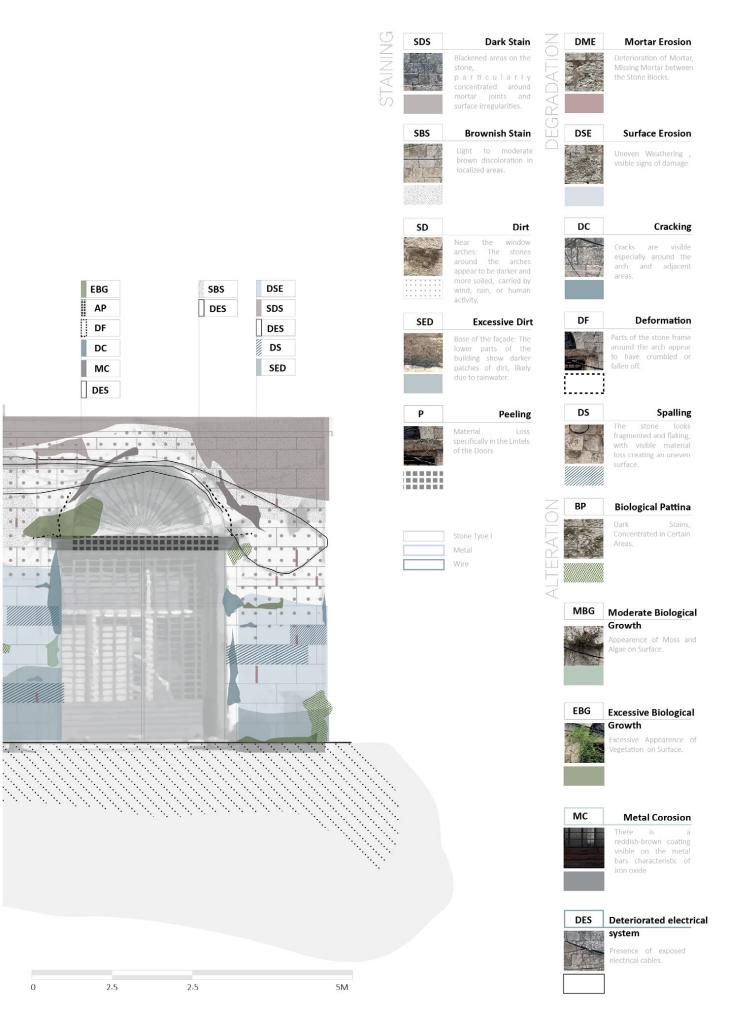


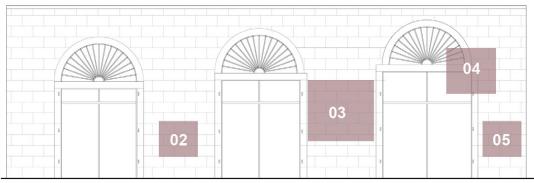
# 03. STATE OF CONSERVATION

**FACADE A** 



**2024** Decay Analysis of South - East Facade - Building 01 Figure 124. State of Conservation of Building 01 (N.Maawad, A.Khoury)





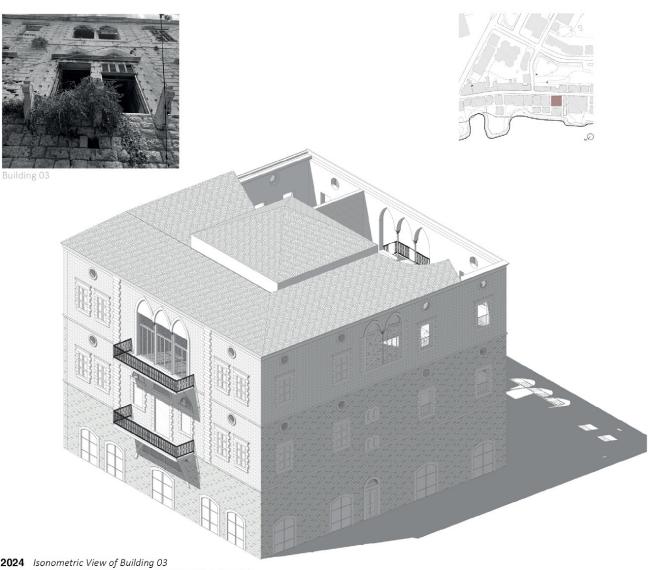


*Close-ups of Building 01*Figure 125. Photodocumentation of Building 01 (N.Maawad, A.Khoury)



 Introducing Building 03 Figure 126. Perspective View of Building 03 (N.Maawad, A.Khoury)

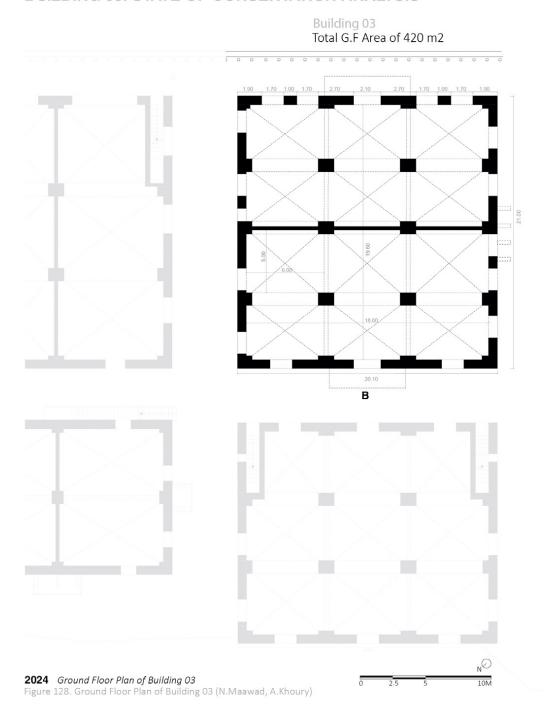
# **BUILDING 03**



Isonometric View of Building 03 Figure 127. Introducing Building 03 (N.Maawad, A.Khoury)

# 01. GEOMETRICAL SURVEY

## **BUILDING 03. STATE OF CONSERVATION ANALYSIS**





South - East Facade



North - West Facade

**2024** *Elevations of Building 03*Figure 129. Illustrating Elevations of Building 03 (N.Maawad, A.Khoury)



South - West Facade



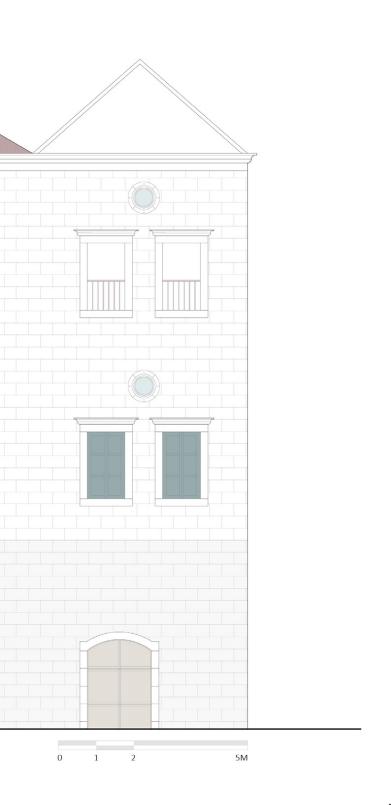
North - East Facade

**2024** Elevations of Building 03

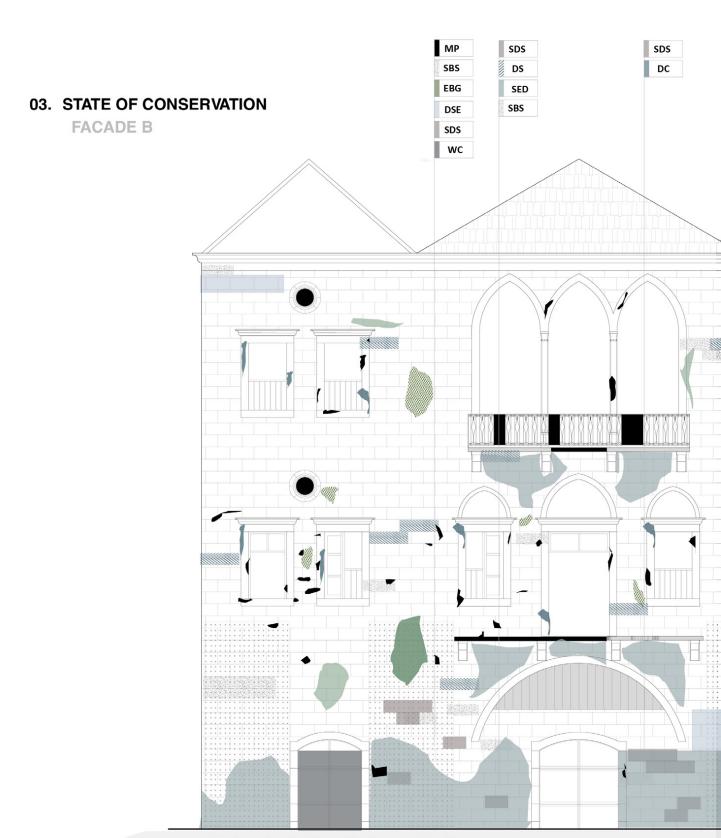
## 02. MATERIC SURVEY



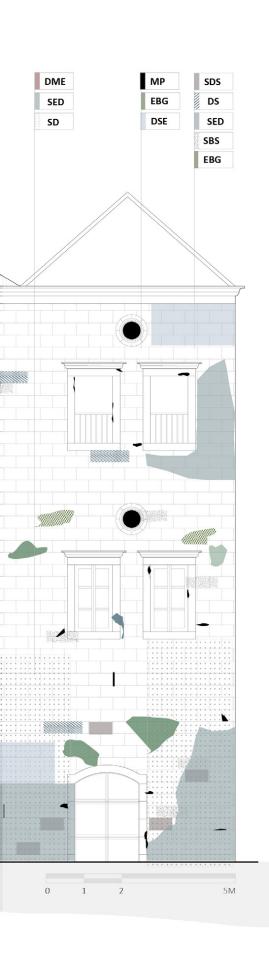
*Material Analysis of North- West Facade of Building 03* Figure 130. Materic Survey of Building 03 (N.Maawad, A.Khoury)

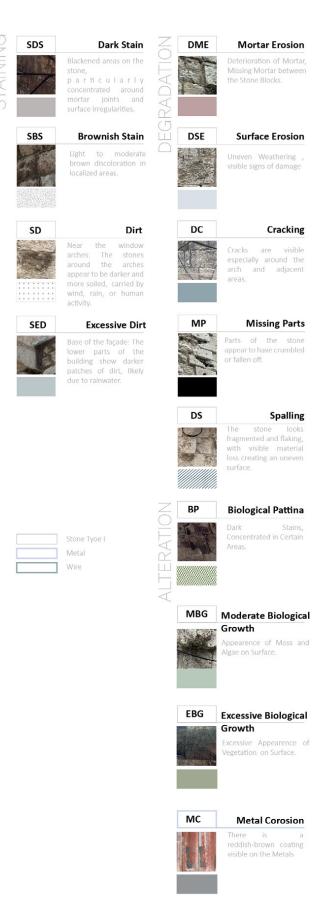


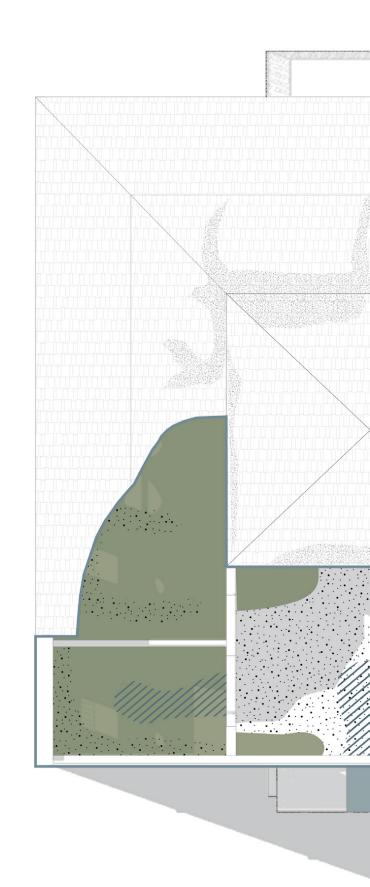




Decay Analysis of North - West Facade - Building 03
Figure 131. State of Conservation of the elevation of Building 03 (N.Maawad, A.Khoury)







Decay Analysis - Mass Plan - Building 03 Figure 132. State of Conservation of the Mass Plan of Building 03 (N.Maawad, A.Khoury)





- Erosion of Red Tile
- Stone Residue and Debris
- OCracked Part
- Missing Element
- Color Alteration
- Excess Biological Growth



 Close-ups of Building 03 Figure 133. Photodocumentations of Building 03 (N.Maawad, A.Khoury)

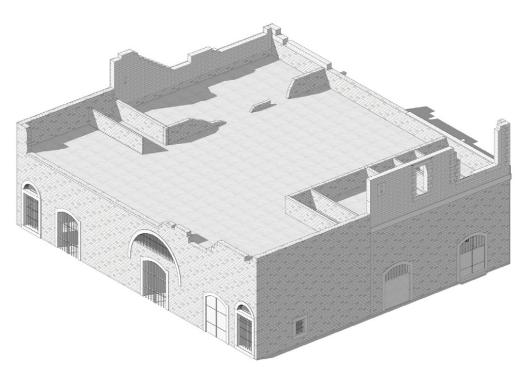


## **BUILDING 06**





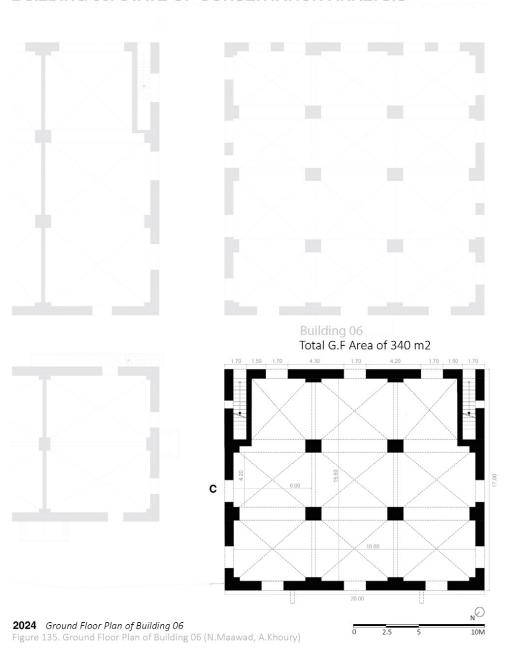


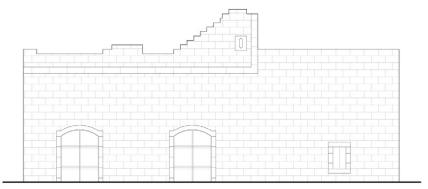


Isonometric View of Building 06 Figure 134. Introducing Building 06 (N.Maawad, A.Khoury)

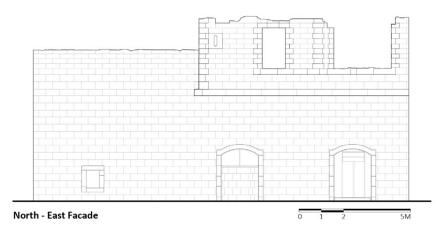
## 01. GEOMETRICAL SURVEY

### **BUILDING 06. STATE OF CONSERVATION ANALYSIS**

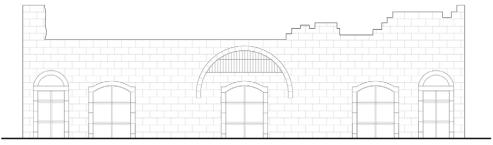




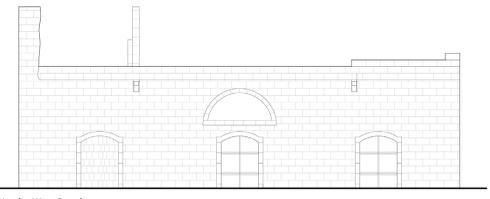
South - West Facade



*Elevations of Building 06*Figure 136. Illustrating Elevations of Building 06 (N.Maawad, A.Khoury)



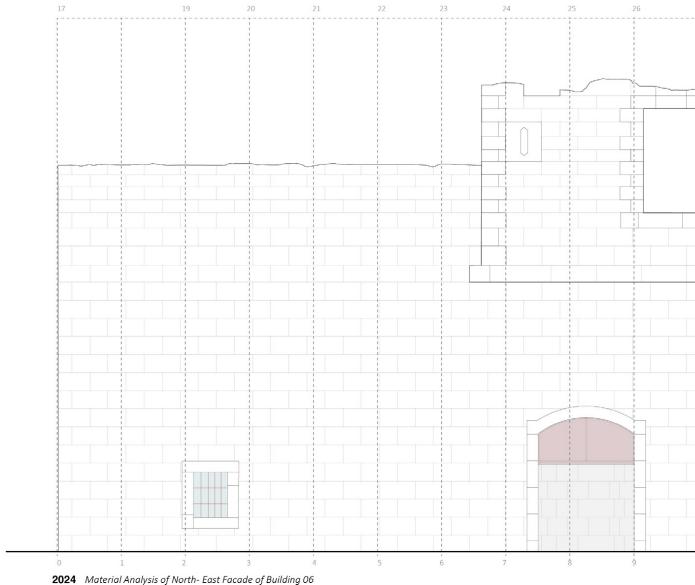
South - East Facade



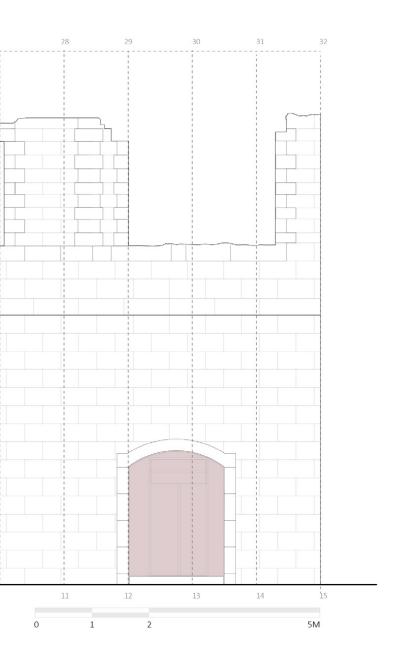
North - West Facade

**2024** Elevations of Building 06

## 02. MATERIC SURVEY



*Material Analysis of North- East Facade of Building 06* Figure 137. Materic Survey of Building 06 (N.Maawad, A.Khoury)



Limestone Type III

Limestone Type IIII

Glass

Rusty Metal

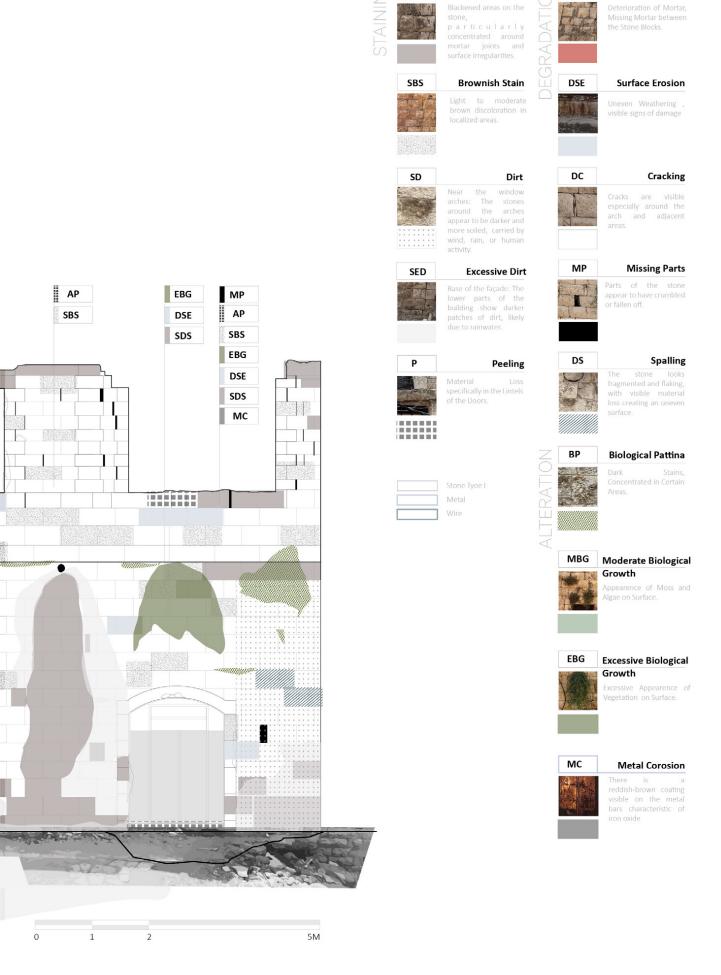
### 03. STATE OF CONSERVATION

**FACADE C** 



**2024** Decay Analysis of North - East Facade - Building 06

Figure 138. State of Conservation of the Elevation of Building 06 (N.Maawad, A.Khoury)

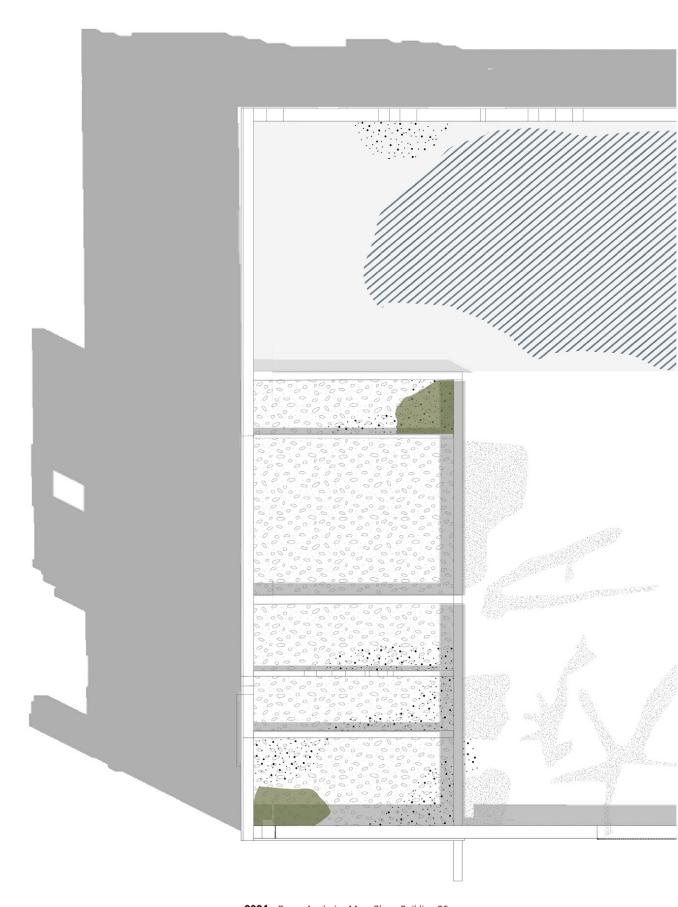


SDS

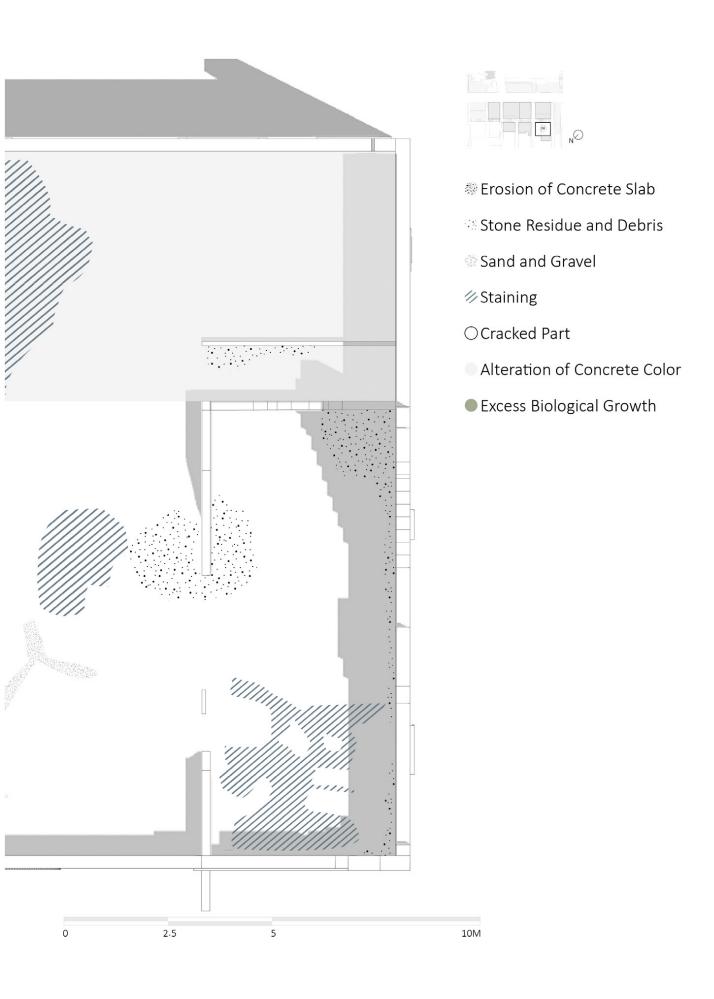
Dark Stain

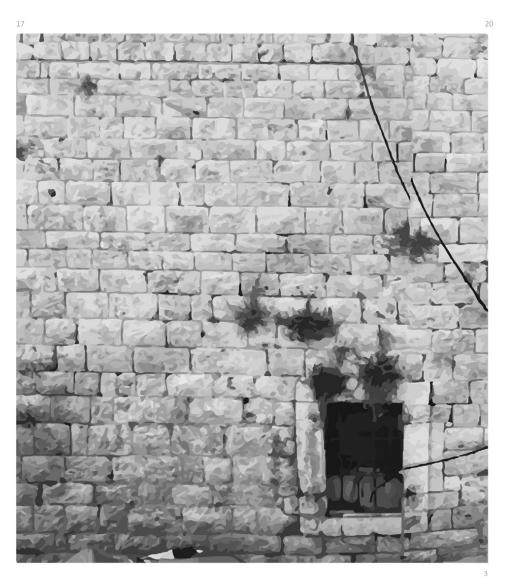
DME

**Mortar Erosion** 



Decay Analysis - Mass Plan - Building 06
Figure 139. State of Conservation of the Mass Plan of Building 06 (N.Maawad, A.Khoury)





*Close- up of Building 06*Figure 140. Photodocumentation of Building 06 (N.Maawad, A.Khoury)



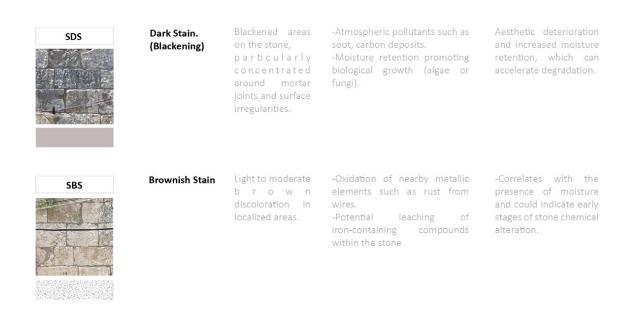
# DEGRADATION BY ENVIRONMENTAL DAMAGE

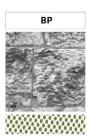
Samples	Pathology	Description	Causes	Impact
DME	Mortar Erosion	Deterioration of Mortar, Missing Mortar between the Stone Blocks.	-Environmental Exposure: Due to water inflitration, humidty and salt from sea air lead to chemical breakdown of mortar.  -Freeze-Thaw Cycles: Seasonal temperature changes causing water in the mortar to freeze and expand resulting in cracking the material.  -Biological Growth: Moss, alage and plants growing in joints can penetrate and breakdown the mortar further.	Structural Instability: Potentially causing stone to shift and fall out.  Aesthetic Damage: Degrades the appearence of the building
DSE	Surface Erosion	Uneven Weathering of The Stone, showing visible signs of damage such as, discolored cracked areas, which may be slightly raised or deeply reccessed in places	-Salt Crytalization: Salt can crystalize in the stone pores and this repeated cycle of wetting and drying can worsen the damage.  -Freeze-Thaw Cycles: Seasonal temperature changes causing water in the cracks of the stone to freeze and expand resulting in cracking amd erosing the material.  -Rainwater and Humidty: Constant exposure to water especially rain can lead to dissolution of certian mineral in the stone weakening the structure.	Structural Weakening: The stone can become weak and porous and prone further damage. Therefore, might affect the structural strength of the building  Aesthetic Damage: Degrades the appearence of the building
DC DF P	Material Loss, Cracking and Deformation, Peeling	Parts of the stone frame around the arch appear to have crumbled or fallen off.  Cracks are visible near the stone e I e m e n t s , especially around the arch and adjacent areas.	-Caused by weathering, poor maintenance, or structural stress.  -Detachment may have occurred due to thermal stress, water infiltration, or mechanical stress.	-Structural Impacts that leads to instabilityAccelerated Decay: Exposes underlying layers to weathering, increasing vulnerability to further damageStress Redistribution: Missing parts can shift structural loads, leading to cracking or collapse in other areasLoss of Original Appearance: Alters the historic or visual character of the material or structure.
DS	Spalling	Spalling is visible on the horizontal section of the facade. The stone a p p e a r s fragmented and flaking, with visible material loss creating an uneven surface.	-Moisture Infiltration: Water entering the stone freezes and expands, causing the outer layers to break offSalt Crystallization: Soluble salts within the stone crystallize, exerting pressure that leads to detachmentThermal Stress: Repeated heating and cooling cycles weaken the material over time.	-Structural:  Weakens the ledge, compromising its ability to bear load or resist environmental stress.  -Aesthetic:  Creates an uneven, deteriorated appearance.

## ALTERATION BY ENVIRONMENTAL DAMAGE

Samples	Pathology	Description	Causes	Impact
SD SED	Dirt and Surface Accumulation	Near the window arches: The stones around the arches appear to be darker and more soiled, carried by wind, rain, or human activity.  Base of the façade: The lower parts of the building show darker patches of dirt, likely due to rainwater.	-Rainwater can carry dirt from the surrounding environment and deposit it onto the building's surface.  -Human Activity: The building's location and human activity around it can also contribute to dirt accumulation. Foot traffic, dust stirred up by vehicles, or regular disturbances to the surface	-Acceleration of Surface Weathering: Dirt can trap moisture on the surface of the stone, especially in areas with high humidity, as the dirt holds water against the stone.  -Aesthetic Damage: Degrades the appearence of the building
SDS SBS	Staining	A c c i d e n t a l pigmentation on the surface due to foreign material (rust, copper salts, o r g a n i c s , varnishes).	Biodegradation agents, oxidation of metallic elements.	-Aesthetic Damage: Reduces the aesthetic appeal by altering the original appearance of the stoneIndicates underlying issues such as moisture infiltration or biological growthTraps moisture, which accelerates further degradation of the materialMask deeper structural damage, complicating future restoration efforts.

## IDENTFYING THE DIFFERENT TYPES OF STAINING OBSERVED COLOR ALTERATIONS

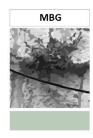




**Biological Patina** 

Dark Stains, Concentrated in Certain Areas. -Due to high humidity and exposure to moisture plants take root in cracks and porous areas of the building material which can accelerate decay by trapping moisture with the stone leading to further erosion and biological growth.

-Moisture Retention: Biological staining can increase the risk of erosion and mortar deterioration.



Moderate Biological Growth (Algae/Moss) Appearence of Moss and Algae on Surface.

-Due to the type of stone, being more porous and weathered throughout time, offers places to plant roots to anchor. -Root Damage: Overtime these roots could penetrate mortar joints causing cracks and structural damage.

-Biological Decay: Algae, moss, and fungi contribute to biological decay, eating away at the stone surface over time.



Excessive Biological Growth (Vegetation)

Excessive
Appearence of
Vegetation on
Surface.

-Due to poor drainage and water retention on the surface. This can create an ideal conditions to plant growth. -Aesthetic Degradation:
Excessive vegetation
can obscur the
architetcural detail and
age building
prematurely.

#### DAMAGED CAUSED BY ORGANIC AGENTS



Metal Corosion (Rusty) There is a reddish-brown coating visible on the metal bars characteristic of iron oxide

-Moisture and Oxygen Exposure: The metal is exposed to water (rain, humidity)

-Lack of Protective Coating: The metal lacks a protective layer

-Environmental Conditions: Exposure to outdoor weather, pollution, or nearby sources of salt. -Structural Weakening:
Corrosion reduces the
cross-sectional area of
the metal,
compromising its
strength.

-Aesthetic Damage: The rust detracts from the visual appeal of the structure.

-Expansion and Cracking: Rust can expand, causing pressure that may lead to cracking or deformation of the surrounding materials.

WILD.



Deteriorated Electrical System Presence of e x p o s e d electrical cables.

Anthropogenic (human-caused)

Exposed electrical cables pose safety risks, structural damage, functional issues, and aesthetic disruption, especially near moisture-prone areas.



#### 01. HYPOTHESIS OF INTERVENTION

**DIAGNOSIS: WHAT THE EVIDENCE SUGGESTS** 

The systematic analysis of the building conditions, elaborated into a symptomatic descriptions, helped in understanding how thoses variables correlations are influencing the buildings states. Thoses factors are namely environmental factors, material composition and construction techniques. The enhanced ability to manipulate digitized data as layered information systems using CAD and a photometric analysis has significantly contributed to this process. Although long-term monitoring remains indispensable, detailed documenting and the interpretation og the current conditions allows conservators to hypothesize trends and explore potential cause-and-effect relationships. Instrumental monitoring is critical for generating quantitative data to capture subtle changes over time. However, determining what to monitor, where, how, and when depends on a foundational understanding of the key parameters influencing change, as derived from the initial assessment of the existing physical evidence.

Documenting conditions comprehensively, supported by supplementary materials such as records of past uses, maintenance, and treatments, provides a basis for developing a working prognosis. This prognosis can predict causes, trends, patterns, and the relative significance of observed conditions. Such findings may be further refined and confirmed through additional investigative methods, leading to a more precise diagnostic framework.

The field survey conducted produced key observations that summarize major recorded conditions. These observations, analyzed in relation to environmental and microclimatic factors, wall orientation and exposure, material composition, construction methods, and prior interventions, reveal a complex interaction of factors influencing the performance and degradation of the building materials over time. Organized by condition type and complemented by graphic data (refer to figures.141-145), these summaries allow for the exploration of patterns, trends, and anomalies associated with time, location, and condition type. The application of advanced mapping tools such as ArcView facilitates predictive modeling of conditions, offering improved risk assessment capabilities for cultural heritage resources at various scales.

Although definitive conclusions regarding the mechanisms and rates of deterioration must await the finalization of environmental monitoring data, the visual survey and accompanying architectural, material, and mortar analyses provide preliminary correlative observations [47]

METHODOLOGY

In the realm of heritage conservation, prioritizing interventions is a crucial step in safeguarding historical sites and their architectural integrity. With limited resources and the inherent complexity of historic structures, adopting a systematic methodology ensures that restoration efforts are both effective and impactful. In this chapter we will conduct a statistical evaluation of the analyzed facade in the previous chapter of the six historic buildings. After having identifyed their respective pathologies, we are going to establisha clear framework for intervention. By addressing the most degraded structures and the most severe pathologies first, the project aims *to preserve the historical and cultural essence of these buildings while ensuring their longevity*.

#### Importance of Prioritization in Intervention

The first step of the process is to Determine the most crucial building in need of intervention in first. This decision hinges on several factors, including the extent of degradation, the type of pathology present, and the potential risk of further damage if left unaddressed. Buildings with advanced stages of degradation, characterized by significant structural damage or material loss, pose a higher risk to public safety and to the overall integrity of the site. Therefore, such buildings must be prioritized to prevent irreversible damage.

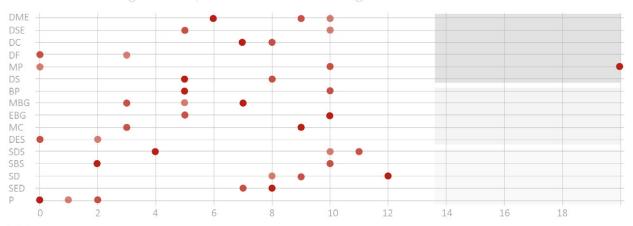
The state of a building must meet specific criteria to warrant immediate intervention. For instance, structures exhibiting severe degradation, such as extensive cracks or substantial material loss, should be addressed before those with less critical issues, such as surface discoloration or minor alterations. The focus should remain on preserving the original materials and structural stability, as these are pivotal in maintaining the historical authenticity of the site.

#### **Prioritizing Severe Degradation and Pathologies**

After having conducted the first selection, in terms of each facade, the ones with greater degradation, particularly those with structural issues, should be at the forefront of intervention plans. Structural damage, such as deep cracks in load-bearing walls, compromises the stability of a building and increases the risk of collapse.

Specific pathologies, such as cracks and material loss, demand immediate attention. Cracks, especially those in load-bearing components, indicate structural weakness and can propagate over time, exacerbating the damage. Similarly, the loss of critical elements, such as decorative stonework or wooden beams, not only diminishes the building's aesthetic and cultural value but also compromises its structural integrity. By addressing these pathologies early, restoration efforts can mitigate further degradation and extend the lifespan of the building.[47]

#### Breakdown of Degradation, Alteration and Staining



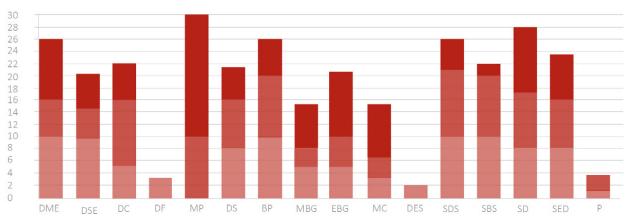
#### **2024** Breaking Down the different type of pathologies affecting the Facades.

Figure 141. Comparing the Level of Affection of Every Facade by the Identified Pathology. (N.Maawad, A.Khoury)



 $\textbf{2024} \quad \textit{Breaking Down the percentage of Alteration, Degradation, and Staning}.$ 

Figure 142. Diagram Illustrating which Building has the Highest Percentage of Degradation. (N.Maawad, A.Khoury)



**2024** Comparaison of the Pathologies of Each Facade.

Figure 143. Diagram Comparing the Severity of Pathologies on Each Facade. (N.Maawad, A.Khoury)

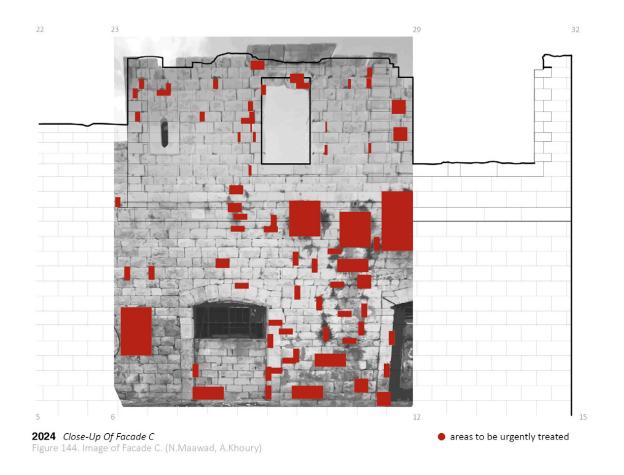
To comprehensively analyze and compare the conditions of the three buildings under study, we developed a detailed graph (figure 141) illustrating and breaking down the various pathologies observed in each building. The graph serves as a visual representation that highlights the intensity and distribution of degradation, alteration, and staining across all buildings, as well as the specific pathologies contributing to these categories.

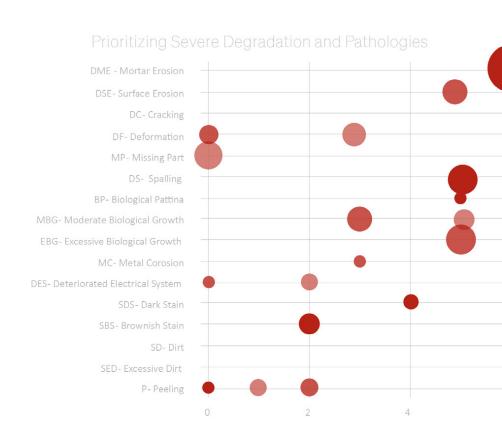
The process began with categorizing the overall states of degradation, alteration, and staining for each building. These broad categories were then further subdivided into specific pathologies such as spalling, cracking, surface erosion, dirt, moderate biological growth, dark stains, excessive dirt, and peeling. Each pathology was quantified based on its intensity and prevalence within the corresponding building and was represented as a percentage to facilitate comparison.

The graph juxtaposes the intensity of these conditions for each building, providing an insightful breakdown of their respective states. Building 02 (Facade B) emerged as the most degraded among the three, with the highest percentage of degradation observed in (figure 142). This is particularly evident in the breakdown of pathologies, where Building 02 displays significantly higher levels of spalling, cracking, Missing Parts compared to the other two buildings. Additionally, the graph indicates moderate to high levels of dirt accumulation and biological growth, further emphasizing the severity of the building's condition and so the need to do an immediate intervention in order to prevent further degradation and improve the buildin s longetivity.

Given the results of the graph, it is evident that Building 02 (Facade B) should be prioritized for intervention. The intensity and prevalence of pathologies in this building indicate an advanced state of material loss and structural instability, making it the most urgent case for restoration. Addressing the severe degradation in this building is critical not only to prevent further material loss but also to preserve its structural integrity and historical significance.

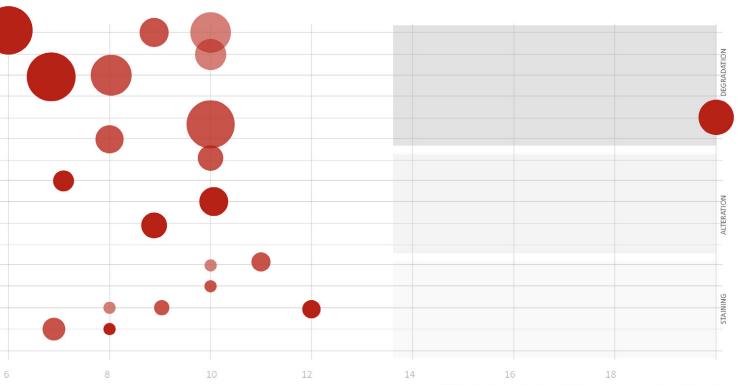
Therefore, all graphs provided a clear, comparative framework for understanding the conditions of the buildings and helped identify the urgency of, Building 02 (Facade B) to be the primary focus of restoration efforts, ensuring that its severe pathologies are treated promptly and effectively to prevent further deterioration.





The figure illustrates the comparative severity of degradation, alteration, and staining across the three buildings while breaking down specific pathologies for each. Building 02 (Facade B) stands out as the most severely degraded, with significant issues like spalling, cracking, and surface erosion, which pose structural risks. These critical pathologies must be prioritized to ensure the building's stability and occupant safety.

For the other buildings, the figure highlights pathologies such as biological growth and dirt that, while less severe, require attention to prevent further deterioration. By focusing first on severe degradation pathologies, especially in Building 02, we can stabilize the structure, address safety concerns, and lay the groundwork for broader restoration efforts. This approach ensures that resources are directed efficiently to the most urgent needs.



**2024** Identifying the Crucial Pathodologies to be Treated Urgently. Figure 145. Diagram Ilustrating What Pathologies Should be Urgently Treated. (N.Maawad, A.Khoury)



Close-up
Figure 146. A Facade View Highlighting Traditional Lebanese Architecture. (N.Maawad, A.Khoury)



Design Proposal The Strategy

### **CHAPTER 05**

## **Restoration & Design Proposal**

"Sakaloune el Nass Aanak Ya Habbibi..."- Fairouz "People spoke about you, my beloved..."

This chapter transitions from the analysis and synthesis phase to adaptation potential strategies for urban restoration. It serves as a comprehensive goal by which urbanism connects with restoration guided by design approaches aimed at reconnecting the urban fabric of Jounieh with its historical and cultural strip through the restoration of the old souk. By focusing on strategies that blends and respects the past, this chapter underscores how urbanism and restoration meet together to preserve and revitalize a historical city that is in need of change.

The proposed potential strategies aim to address multiple scales, starting with an urban approach illustrated through various masterplans that emphasize the historic significance of the old souk as a central strip. These strategies will transition in an architectural focus on six key buildings identified for preservation. These buildings are in need for an adaptive strategy that seeks to revive these structures while respecting the shoreline and the historic fabric of the city.

Finally, the design intervention focuses on how to bridge modern dynamics in a traditional city that serves traditional character. Thus, the strategies presented aim to demonstrate how these two dimensions can converge, breathing new life into Jounieh's old souk while preserving its authenticity and cultural significance.





#### 05.1. The Written Approach

This thesis serves as the vital process of exploring the role of urbanism and restoration in preserving and reviving a historic city. The aim is to address the challenges of maintaining a historic city's character while adapting it to modern needs, without constructing any new buildings. Through this effort, several critical questions arise: How can we reconnect this long-lost urban fabric to its shoreline while respecting its historical identity? Moreover, how can we retain the perception of this area as an ancient city while adapting its buildings to modern use, highlighting their historical significance? Lastly, amidst Lebanon's ongoing challenges, how can we adaptively reuse and restore these historic buildings to highlight their significance and cultural value?

To answer these questions, the project proposes a series of potential strategies focused on urban revitalization, architectural adaptation, and sustainable design. At the urban level, the neglected spaces in the historic strip are transformed through innovative landscapes and urban artifacts. These artifacts blend modern artistic elements with the cultural and historical essence of the site, breathing new life into the area. This approach aims to create dynamic active spaces that encourage social interaction, cultural activities, and greener urban living. The integration of greenery and the use of sustainable materials also contribute to reducing pollution and fostering a healthier environment.

Therefore, the project integrates urban expressions transforming neglected spaces within the historic strip into vibrant hubs of activity. These expressions and art figures play a crucial component in reconnecting the historic strip to the shoreline. The interconnected network of narrow pathways, serves as key spatial divisions that guide visitors towards the shoreline. The primary goal is to create a seamless connection between the old souk and the waterfront. These narrow spaces will be animated with urban artifacts, serving as inviting markers that lead people toward the shoreline. At the waterfront, a "corniche" — a promenade running along the cliffside — is introduced, extending from the old souk final destination along the coast. This promenade provides a seamless transition between the historic and natural elements of the site, inviting people to engage in public activities, enjoy scenic views, and foster social connections.

Urban sustainability is at the core of the rehabilitating the city. Enhanced urban greenery, including parks and open spaces, will contribute to improved air quality and reduced pollution in the historic zone. The use of sustainable materials throughout the project will help decrease the overall carbon footprint while promoting healthier lifestyles. Furthermore, another key element of the urban strategy is the enhancement of nightscapes. Strategic lighting is used to illuminate historic buildings and spaces, emphasizing their architectural grandeur while ensuring safety and accessibility. These interventions not only celebrate the historic significance of the site but also make it more inviting and vibrant during late hours.

On an architectural note, the approach focuses on preserving and adaptively reusing six severely decayed historical buildings. By honoring their original character and historical significance, we aim to introduce modern functionality, transforming these structures into active participants to the urban fabric. This approach ensures that their heritage is both preserved and practically utilized, playing a vital role in the area's revival.

These buildings are adaptively reimagined as a cultural hub, featuring artistic and craft workshops, museums, music school, and a historical cultural library. The ground floor regains its public feature, welcoming visitors and interns into dynamic workshops, transforming the space into a vibrant, interactive cultural workshop and facility that represents the historic identity of the area.

The upper levels will feature private spaces dedicated to a cultural functional program aimed at enhancing Jounieh's cultural sector. On an interior note, we aim to preserve the original surfaces and historical architectural elements. Modern interventions, including new structures and circulation systems, will be thoughtfully integrated to create a blend between the historical essence of the past and the needs of the present. These new features emphasize the significance of preserving historic architectural elements, creating a visual contrast. This contrast not only highlights the evolution of architectural styles but allows both historical and modern elements to stand out and be appreciated as distinct yet complementary components.

In conclusion, these strategies preserve the historical identity of a city while adapting it to modern needs through urban revitalization and architectural restoration. Therefore, by intertwining both urban and architectural strategies into one unified conceptual approach, the historic strip is reimagined as a lively, functional, and culturally significant active space. This unified thread, blends together.



Figure 148. The Dialogue Between the Past and Present Tense. (Inside Beit Beirut)

#### 05.2. Case Studies

This section explores case studies that emphasize the importance of reviving historic urban spaces and restoring past buildings. On an urban level, one of the main challenges is the presence of neglected and abandoned spaces, which often lack initiatives for revival by municipal authorities. These patterns result in a loss of historical significance for traditional buildings on an architectural level, as they become disconnected from the historic context of the old souk. To prevent this isolation, it is essential to provide effective support that promotes connectivity and ease of movement, particularly along key axes linking the park, the old souk, and the shoreline.

The critical point connecting architectural and urban levels is the design of spaces, which enhances connectivity and revitalizes historic buildings, underscoring their cultural significance. Hence, how can these spaces be designed to meet the social needs of inhabitants while respecting the historical and cultural demands of the urban context?

A prominent example is the Superkilen Park in Copenhagen [41], designed by BIG. This project transformed a spatial division within an urban context into a vibrant, multifunctional urban park. The design incorporates diverse activities that celebrate global cultural identities, fostering communal participation and social interaction. By integrating artistic features, unique pavement designs, and thoughtful landscaping, the park creates a dynamic and functional space that serves both cultural heritage and modern needs. Its participatory approach, adaptability, and focus on active engagement demonstrate how neglected spaces can be revitalized into thriving hubs that blend historical significance with contemporary relevance.

Furthermore, Pigalle Duperré court [21] in Paris serves as a remarkable example of urban revitalization within a historical context. Once an abandoned space, the area was transformed into a leisure activity designed in an artistic manner, that reimagines the visual parallels between past, present and future. This demonstrates how urban spaces honor historical heritage while embracing modern design principles. Hence, the residual space goes from being a problem to a one of the most prominent areas in the historic context, blending in functionality with aesthetics and expressions to transform the space into a vibrant socio-cultural hub.

This underscores how the use of these expression sets the dialogue between the past and the present allowing for an urban revitalization. This contrast harmonizes the area on both an urban and architectural level, drawing attention to the architectural details of the historic structures. The Pigalle Duperré court stands as an inspirational example of cultural continuity, connecting heritage, sport, and art with the present, framing historical building creating an active space.





Moving to the architectural scale, the primary objective is to preserve the historic building's surfaces and structures, both interior and exterior, without causing any damage. In addition, the aim is to adaptively reuse the abandoned historic buildings, transforming them into a function that meets the need of the society and the historic building.

A significant restoration case study is the bakery of Caserma Santa Marta, restored by Caramssi Studio di Architetti [06]. The architect prioritized the preservation of historical surfaces and structures, ensuring that the original textures were retained to maintain the building's authenticity. Going from an abandoned problem into an adaptive solution, the architect uses contemporary functionality in a historic framework. Hence, transforming the abandoned space into a vibrant functional environment exemplifying the principles of adaptive reuse. In their restoration, the studio incorporated new modern materials into the old space, setting a dialogue between the old preserved textures and the new modern ones. Therefore, the blend sets the overall tone and allows the historic building to standout as an enriched architectural identity.



Beit Beirut in Lebanon serves as a model of adaptive restoration, embodying a respectful and innovative approach to preserving history. Originally constructed in a historical context, the building stands as a powerful landmark, embodying the memory of the Lebanese Civil War. The architect's vision was deeply rooted in honoring the memory of the place while adapting it to contemporary use.

The architect has preserved the exterior surface showcasing its iconic bullet-riddled façade and traditional yellow stone texture. These elements retain the essence of the building's historical and memorial significance. The interior, however, the architect intervened with care. The latter preserved the damaged texture of the interior surfaces, stabilizing and reinforcing the building's structure with steel. This balance establishes a dialogue between the past and the present, allowing visitors to reflect on the city's history while appreciating its architectural resilience.

Lastly, Beit Beirut [29] exemplifies adaptive reuse, transitioning from a traditional residential building to a sniper post during the war, and finally, to its current role as an urban cultural museum. This transformation not only preserves its architectural integrity but also redefines its purpose. It stands as a testament to how architecture can bridge the gap between memory and modernity, making it a must-see cultural landmark.



Figure 152. Interior View of Beit Beirut. (https://www.youssefhaidar.com/projects/p118)





The Strategy



#### **CHAPTER 03**

### **Urban Scale**

"Baadak alla Bali," – Fairuz

This chapter will be mainly focused on reviving the urban scale of the Old Souk.Our approach integrates multiple sustainable strategies, mapping schemes, and illustrations that best exhibit our conceptual urban and architectural vision.

The design aims to demonstrate the crucial role of urban restoration in reviving a city currently in decline, highlighting its historical and traditional identity. Neglected spaces, in between Spaces as well as abandoned buildings of the old souk have left Jounieh struggling, causing it to lose its long-standing identity as "The Monaco of the Middle East." To address this, urban adaptation must intervene in a manner that meets and regenerates the needs of the city's inhabitants while preserving the collective memory, emotional value, and the cultural and historical identity of the souk. The goal is to achieve a new thematic approach that adapts to the ongoing environment, meeting the old souk's demand and capacity.

The Methodology consist in Analysing the urban Fabrics and identifying the key elements and characteristics creating a numerous of maps and illustrations leading us to our conceptual approach.

#### 05.3.1. Visionary Approaches for Urban Development in Jounieh.

This section will illustrate a microscale approach to urban adaptation, focusing not only on the old souk strip itself but also on its surrounding areas, with the aim of reconnecting fragmented urban spaces into a unified whole. The primary objective is to reestablish a connection between the people and the shoreline while restoring and preserving the historic identity of the souk. The strategy will propose interventions that highlight the significance of historic buildings by integrating them into contemporary urban needs.

This raises essential questions: How can we reconnect a man-made, chaotic, historic city to its roots? How can we breathe life into a neglected strip and bridge the gap between societal needs and urban design? Is it possible to intervene thoughtfully and cautiously while respecting the cultural and historical importance of such cities?

Our visionary urban planning approach addresses these questions through a conecptual strategy that are explained through multiple phases of illustrations. While acknowledging the challenges posed by chaotic and often illegal planning, we have focused on elements that can be revived and maintained. A key aspect of this approach involves reclaiming and activating negative spaces—abandoned and underutilized areas within the urban fabric. These spaces can serve as dynamic interfaces, linking people to the shoreline and connecting the various segments of the souk.

By transforming these spaces, we not only enhance their value but also address societal needs by reviving the activities and vibrancy that have been lost in this historic area. This initiative has the potential to boost the area's appeal, not only as a tourist destination, but to local communities across different socio-economic phases in Lebanon's future. Additionally, abandoned areas will be transformed into vibrant parks, sustainable parking facilities, and adaptive commercial landscapes. These revitalized spaces will enhance the historic city's value, not only by preserving its architectural heritage, but by allowing the integration of green and dynamic elements with respect to the historic buildings into the historic strip.

Furthermore, we address critical spatial divisions and propose sustainable strategies to tackle pressing environmental challenges, such as flooding. For instance, we plan to introduce innovative rainwater management systems and permeable green pavements to mitigate flood risks in the area. These interventions are designed to harmonize with the existing historic buildings and urban fabric, preserving their integrity while enhancing functionality.

This approach respects the character and history of the site, emphasizing a balance between sustainability, social relevance, and spatial unity. By thoughtfully integrating environmental and social considerations, we aim to create a new urban strategy that not only meets immediate needs but also ensures long-term resilience and vitality for this historic city.

# Urban

Rethinking Abandoned Spaces: **Breathing Life into Jounieh's** Historic Souk.



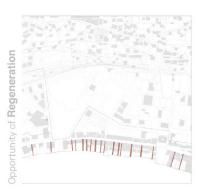


Negative Spaces

Rethinking In-Between Spaces

Reconnecting the City and Its Shore: Bridging Divides in Jounieh.





Urban Sustainability

Rethinking Sustainable Practices

**Integrating Sustainable Practices** for a Resilient Future







**Urban Restoration** 

Rethinking Restoration Practices Urban Lightscape and Nightscape

**Historical Hub: Restoring Its Historic Charm** 

**Urban Opportunities** 



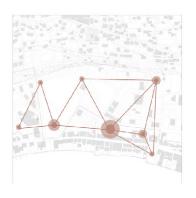




**Urban Potentials** 

**2024** Rethinking Urban Strategies: Listing Urban Potentials and Opportunities
Figure 155. Highlighting Key Urban Potentials and Strategies For Revitalizing Jounieh and its Old Souk (N.Maawad, A.Khoury)

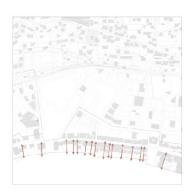
## **Strategy**



#### Creating New Urban Nodes and Cultural Hubs

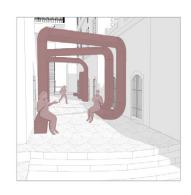
After a detailed analysis of the old souk of Jounieh, we identified several negative and neglected spaces that leads to insecurities in the old historic center. As a first strategy, we aim to transform these neglected spatial areas into vibrant nodes that serve multiple purposes. Parks, well-managed parking spaces, and commercial public areas, we aim to introduce these multi-functional urban nodes to foster a sense of community and safety. This initiative goes beyond reviving the old souk itself, integrating a dynamic animation that welcomes a more vibrant urban space for everyone.





#### Activate The Voids

The second strategy focuses on reviving the privatized and underutilized in-between spaces, aiming to reconnect the people with their city and its shoreline. This approach seeks to connect the fractures within the divided urban fabric, aiming to revive the point of intersection between the old souk and the Mediterranean Sea. By enhancing these neglected areas, the strategy not only reclaims the city's relationship with its natural beauty but also addresses the social and spatial disconnection, uniting the community and revitalizing its connection to the sea.

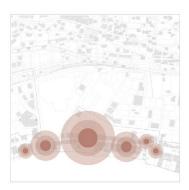




#### Introducing Sustainable Practices

Sustainable practices are key strategies the in order to revitalize the urban historic field. We addressed critical issues in order to resolve persistent flooding crises, such as upgrading the drainage system, installation of permeable pavements and advanced rainwater harvesting systems to manage stormwater efficiency. Furthermore, the creation of multiple green spaces throughout the historic site will not only enhance an aesthetic and environmental value, but will contribute to mitigate urban heat island effect and improving the overall quality of life in the strip.





**Urban Strategies** 

#### Reviving **Historical Center**

The central historic strategy aims at recreating Jounieh's historic hub, bringing back life to the semi-abandoned strip. This involves preserving, restoring and reinforcing existing structures to safeguard their architectural and cultural significance. Therefore, we aim to reawake quarters of abandoned buildings in the old souk, transforming them into vibrant hubs and spaces that honor their historical significances while meeting contemporary needs. Additionally, we seek to enhance the nightscape lens by introducing well-designed lighting in order to improve the ambiance, highlight key architectural features, and ensure a safer environment at night.



#### 05.3.2. Rethinking Negative Spaces.

#### 01

#### Breathing Life into Jounieh's Historic Souk.

Rethinking Abandoned Spaces

In the previous analysis, we have identified the main problems and issues concerning the negative spaces in the old and surrounding areas. Therefore, the main goal is to create a hub that connects the nodes within the spatial system of Jounieh. They serve as functional, symbolic and physical points of connections that organizes the flow of space in the historic city. Currently, many of these abandoned areas are either forgotten or repurposed as disorganized parking lots. Our vision is to revitalize these spaces by converting them into green parks, eco-friendly parking spaces, landscaped pavilions, public commercial areas... These divisions will not only enhance communication and interaction among the inhabitants, but will introduce a green and sustainable flow throughout the historic city, revitalizing it with fresh energy and life. By interconnecting these revitalized hubs, we aim to establish a unified network that seamlessly links all key nodes within the historic district, transforming it into a vibrant, thriving, and environmentally conscious urban center.

Therefore, this sector will be explained through illustrations that serves as an urban catalogue. These catalogues will act as a communication tool, providing a clear explanation of the functional and spatial designs within the nodes. These urban catalogues will be integrated in the masterplan that will serve as the overview of the whole historic site.

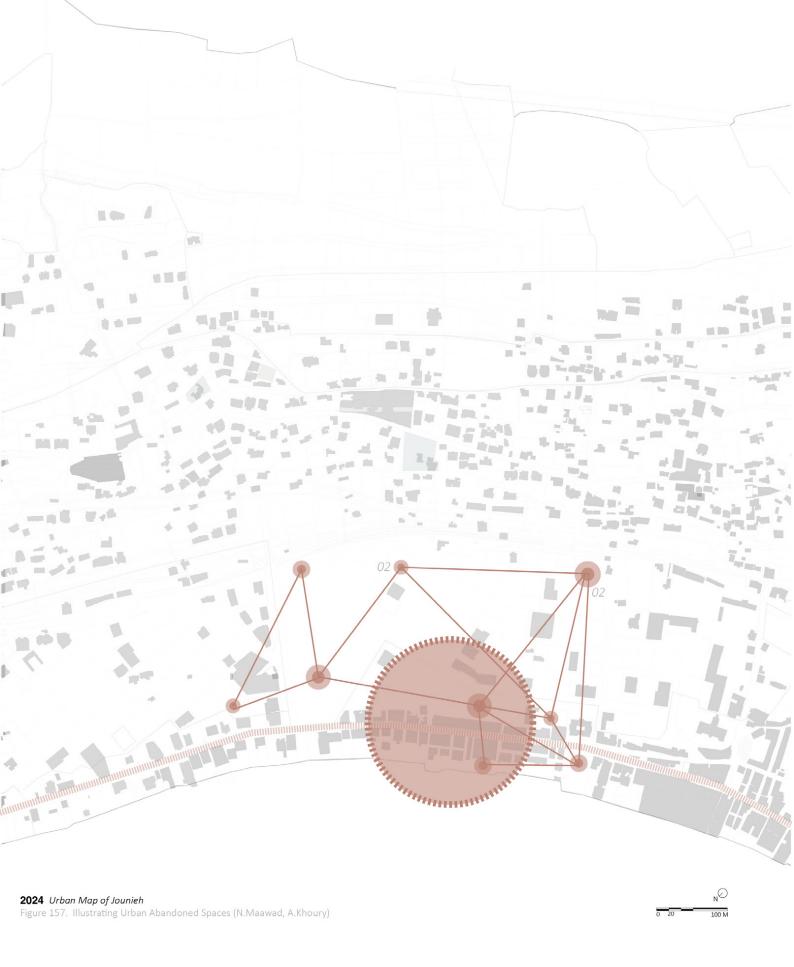




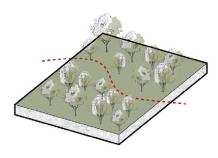


**2024** Abandoned Spaces

Figure 156. Illustrating Urban Negative Spaces (N.Maawad, A.Khoury)



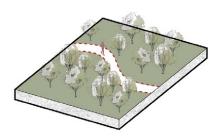
#### Potential Abandoned Spaces Urban Catalogue



#### Band A:

#### **Untouched Natural Habits**

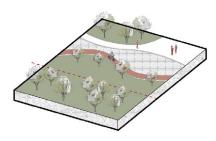
The park is densely filled with trees, creating a fresh atmosphere. However, some spots won't have walking paths, filling those areas with a more natural and untouched vibe, perfect for preserving wildlife habitats and offering a peaceful retreat for visitors seeking solitude.



#### Band B:

#### Dense Trees and Walking Paths

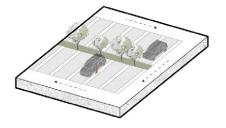
Walking paths are designed to blend with the natural environment, leading to other activities and the historic souk. This natural phenomena adds organic vibrancy in the historic city.



#### Band C:

#### Combining Organic Flows

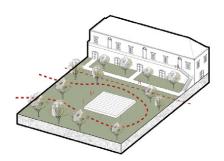
Natural elements, such as water, are integrated into the park's design, creating an organic flow. This integration enhances the interaction between bicycle and walking paths, fostering a cohesive and engaging experience for visitors heading towards the historic strip or other nodes.



#### Band D:

#### **Eco-friendly Parking Zones**

These green parking zones are placed to meet the needs of the people. Due to the lack of organized parking spaces, the latter promote a more efficient and improved urban life, lowering the urban heat island effect in the historic center.

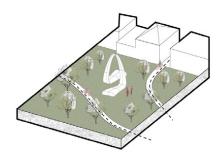


#### Band E:

# Pavilions, Parks, and Respecting Historical Buildings

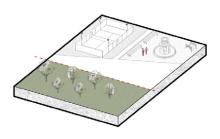
Establishing a respectful line of harmonious balance between the green flow park and the historical buildings. The historical buildings will restore their classical charm filled with an eco-conscious perspective.

Meanwhile, on the other side of the park, organic pathways and structures, including pavilions and vibrant activity spaces, will provide a dynamic environment that complements the cultural and architectural legacy of the area.



#### **Band F:** Linking Park- Narrow Historic Spaces

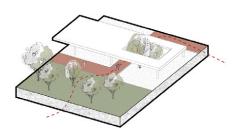
Bicycle and walking paths are interwined with the narrow street that leads to the historic old souk. This smooth connection allows the green environment to blend into the historic strip, and further extend to the shorline. Symbolic features fosters intercation among people, enriching the cultural and social fabric of the space.



#### Band G:

#### Bringing Heritage-Leisure Hubs

Leisure activites are integrated within this historical context combining multiple activities and intercations. This unique and enriching experience, allows people to enjoy the past while engaging in contemporary activities. These activities brings life back into the strip, turning their surroundings into a vibrant socializing hub.



#### Band H:

#### **Public Activities**

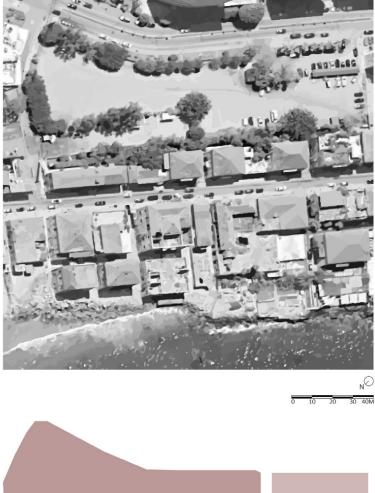
Commercial Activities such as pavilions, shops , markets ... are set to encourage the space in both cultural and social manner. These connect communities together and allows for a better urban experience among the nodes and the historic strip.

#### **2024** Urban Catalogue: Bands of Potential Strategies for Revitalizing Abandoned Spaces

Figure 158. Illustrating an Urban Catalogue of Potential Strategies for Revitalizing Abandoned Spaces in Jounieh and its Old Souk. ( N.Maawad, A.Khoury)

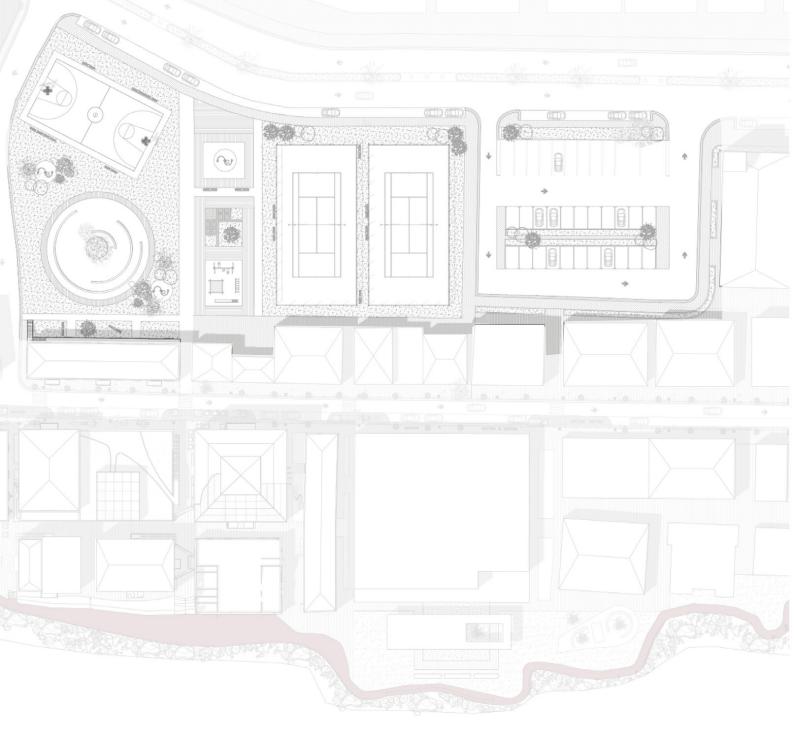
# Proposal Node 03

#### BAND D + E + G



G D E

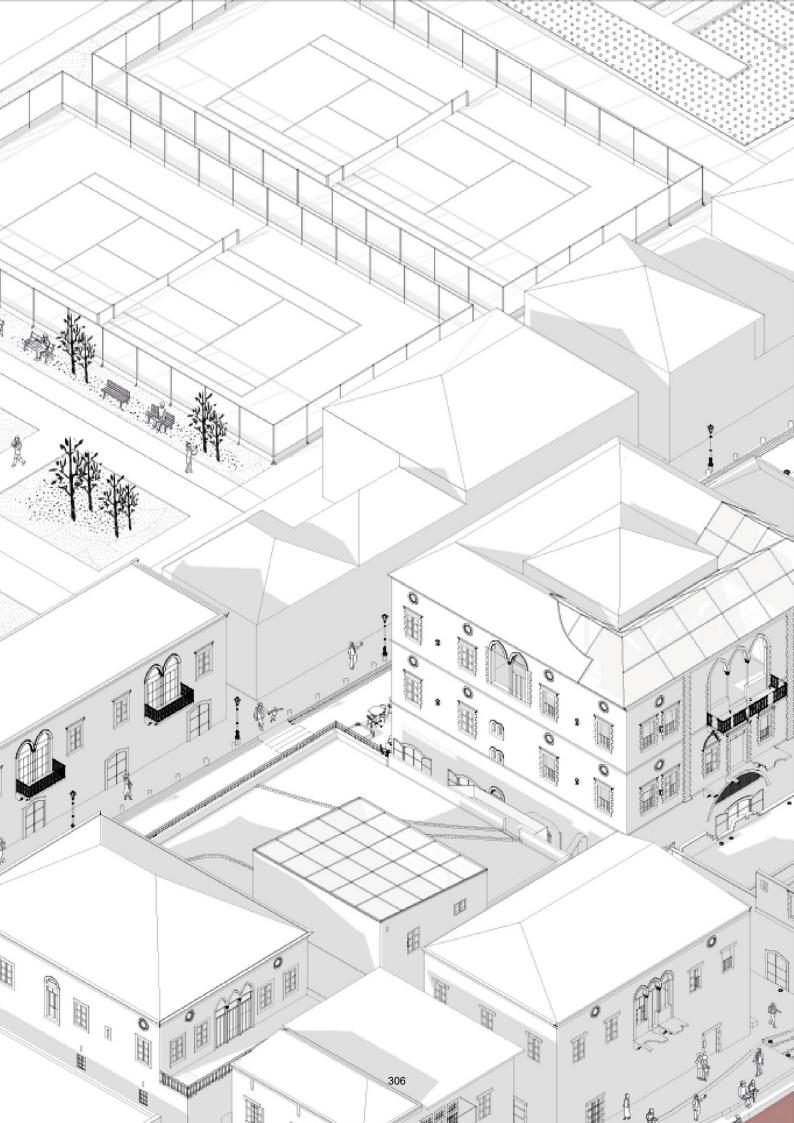
**2024** Combining Bands of Potential Abandoned Strategies
Figure 159. Combining Bands of Potential Strategies for Revitalizing Abandoned Spaces in Jounieh and its Old Souk (N.Maawad, A.Khoury)



 Close-Up Plan of the Final Outcome: Adaptive Strategy for an Abandoned Space
Figure 160. Close-Up Plan of the Final Outcome Strategy for Revitalizing Abandoned Spaces in Jounieh and its Old Souk (N.Maawad, A.Khoury)



















#### 02

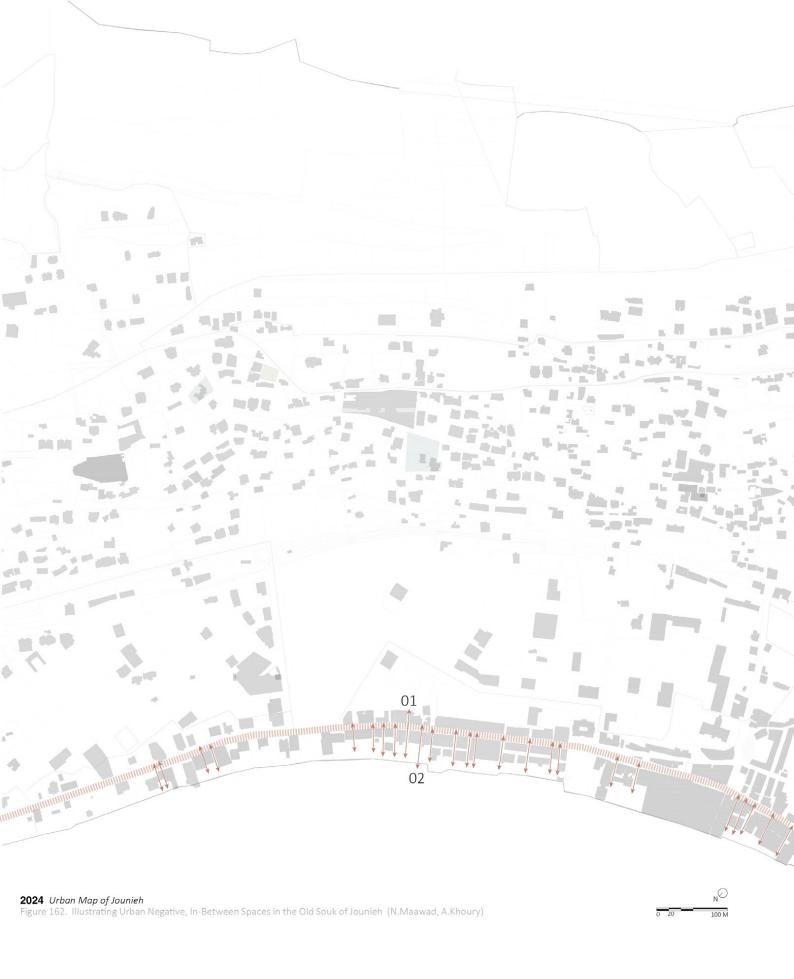
#### Reconnecting The City and Its Shore: Briding Divides in Jounieh

Rethinking In Between Spaces

Through our analysis of the neglected spaces in the old souk, we have identified that these in-between divisions significantly contribute to the lack of interaction between the shoreline and the souk itself. To address this, the revitalization of the historic strip will focus on key activities and arrangements that will break this rupture reconnecting the souk to the shoreline and enhance the overall urban quality of life.

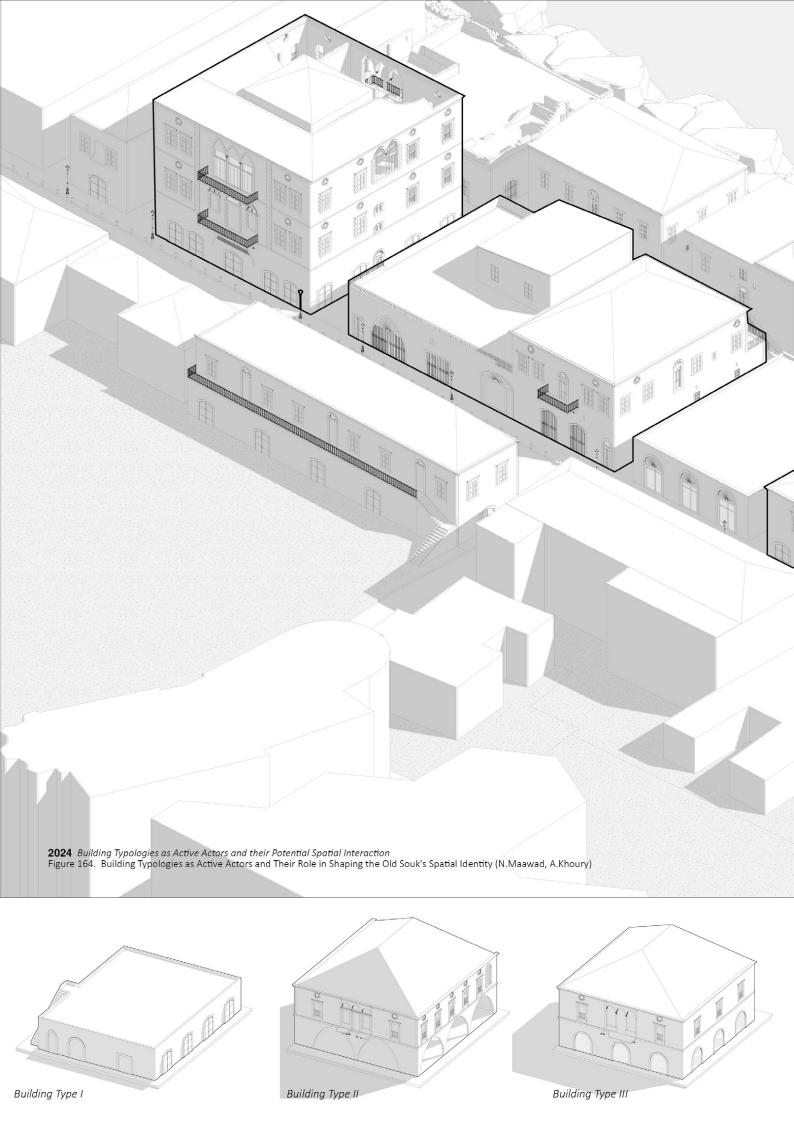
These activity strips act as cohesive elements, gluing the historic city to the coastal shore and fostering a sense of unity. Omni-visible and accessible at all times, these strips highlight the importance of both the souk and the shoreline. We will illustrate multiple diverse design potential prototypes that each in -between strip will serve. Each prototype serves as a functional and spatial extension of the historic souk towards the shoreline, with functions carefully tailored to the height and context of adjacent buildings.

- -Prototype A: Operates on ground level as the pedestrian path is carefully landscaped according to the openings of the both buildings. Benches are inspired from ruin stones serve as markers, emphasizing the historical significance of the remaining site ruins.
- -Prototype B: This design incorporates building typologies with exterior staircases, creating a primary pedestrian path alongside a greenery strip. Urban benches, crafted from artifacts and historic stone, blend modern artistic expression with traditional elements, celebrating the harmony between the old and the new.
- -Prototype C: This design features two identical-height buildings connected by an elevated platform that will be trimmed and refined to highlight the historical importance of abandoned or neglected structures of the historic building, transforming them into active spaces. Carefully integrated without damage, the platform transforms neglected spaces into vibrant hubs for community interaction, enhancing the connection between the historic strip and the coastline.
- -Prototype D: Operates on ground level, connecting the main park to the in-between spaces and extending all the way to the shoreline. Through this strip urban furniture and artifacts will be designed and placed animating the strip, integrating different types of arts that act as benches and artistic expression. These elements respects and honor the historical building's legacy allowing the building to stand as a unique character with its architectural details often creating a dialogue between the past and the present cultural expressions.

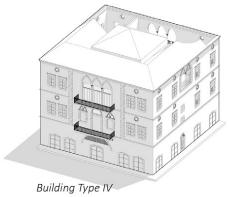








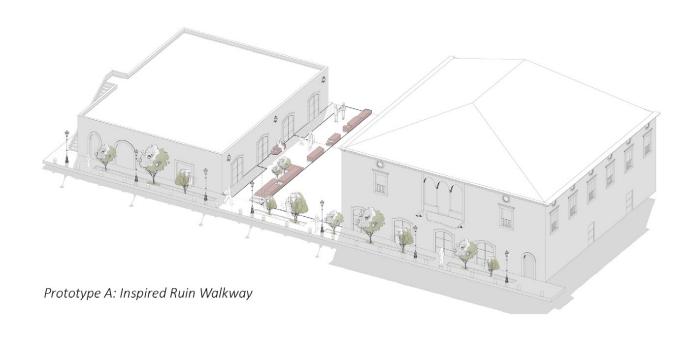




### **Building Typologies as Actors in the Old Souk**

- **-Building Type I:** Represents the one-story buildings of the old souk, characterized by an exterior staircase or, in some cases, without any staircase.
- **-Building Types II and III:** Both serve to represent the two-story buildings of the old souk, however, they both differ in their ground floor design, with each catering to distinct types of openings found in the old souk.
- -Building Type IV: Demonstrates the three-story buildings commonly seen in the old souk.

We will demonstrate how various types of building typologies interact and exchange with one another with respect to their in-between spaces , creating unique combinations of landscapes and modern cultural designs, connecting the old souk with the shoreline.





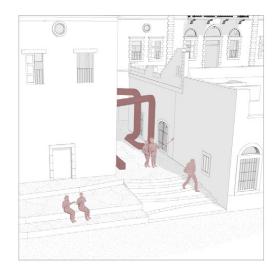
Prototype B: Hertiage Steps with a Glimpse of Modern Expression

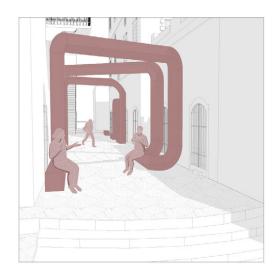




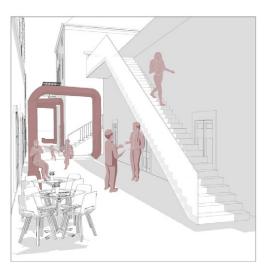
Prototype D : Heritage Meets Artistic Path of Expressions

*Urban Catalogue: Prototypes of Potential In - Between Strategies*Figure 165. Illustrating Prototypes of Potential Strategies for Reviving In-Between Spaces in The Old Souk of Jounieh (N.Maawad, A.Khoury)

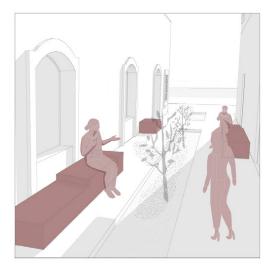












In-Between Strategies: A Framework of Urban Spaces and Cultural Integration" Figure 166. Views of Urban and Cultural Prototypes, In-Between Strategies for Revitalizing Jounieh's Old Souk (N. Maawad, A. Khoury)











#### 05.3.3. Urban Sustainability

## 03

#### Integrating Sustainable Practices for a Resilient Future

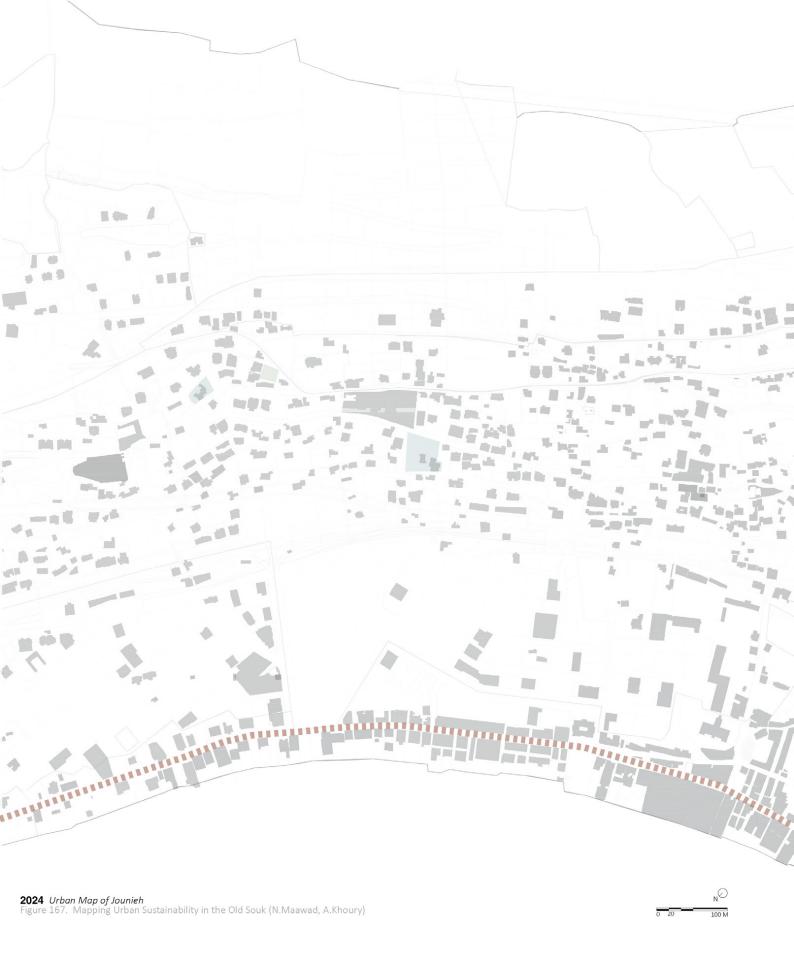
Rethinking Sustainable Practices

The analysis revealed that Jounieh, particularly the old souk, has been experiencing significant flooding, a problem that has been worsening in recent years due to the lack of effective drainage systems and sustainable urban planning measures. Additionally, the flooding poses safety risks as the persistent water exposure is causing structural damage to buildings, compromising their stability and endangering the lives of residents and visitors.

To address this issue, we have proposed the integration of sustainable design strategies, with a focus on implementing permeable pavements and rainwater drainage systems. The current state of the old souk demands a quick and sustainable action to prevent the excess runoff. Together, these two solutions aim to preserve the historic charm of the old souk in Jounieh while ensuring a safer and more protected urban environment for its residents.

Moreover, these strategies add value to the old souk by reducing the surface runoff and protecting the builings and hitorical pathways. Through this reduction, the old souk becomes adaptable to climate change, cooling the urban environment and reducing urban heat island. In addition, the captured rainwater can be repurposed for replanting vegetation, and allow vegetation to grow in surrounding areas, further contributing to temperature regulation and a better urban environment.

Therefore, the sustainable urban practices are in need to enhance a safer community and protect the historical importance of the buildings and the souk itself.



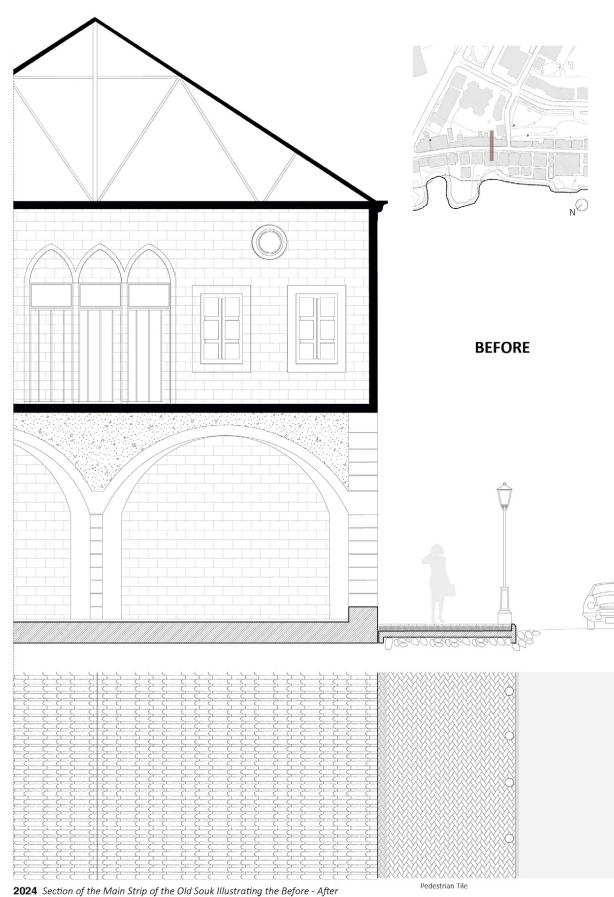
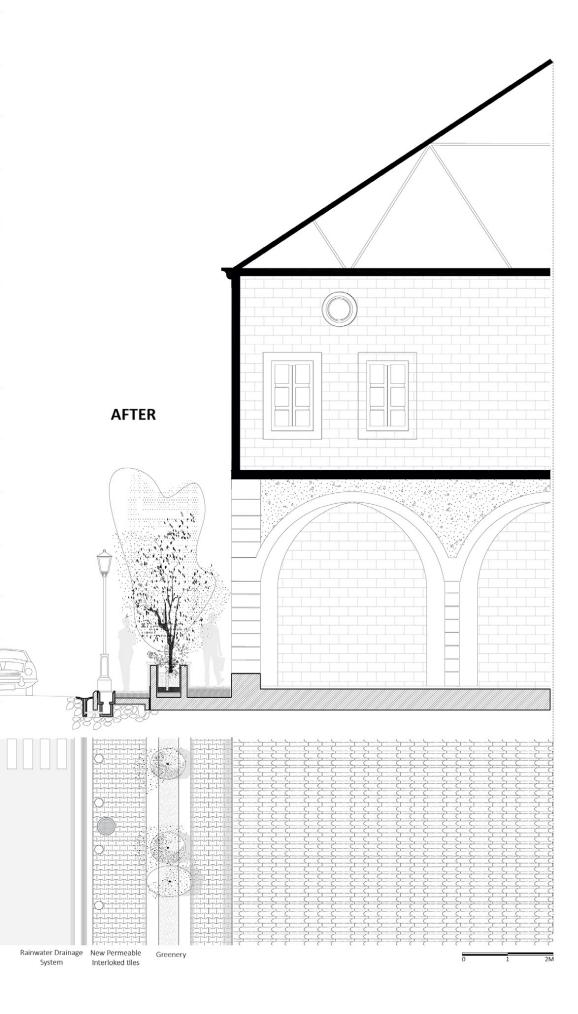
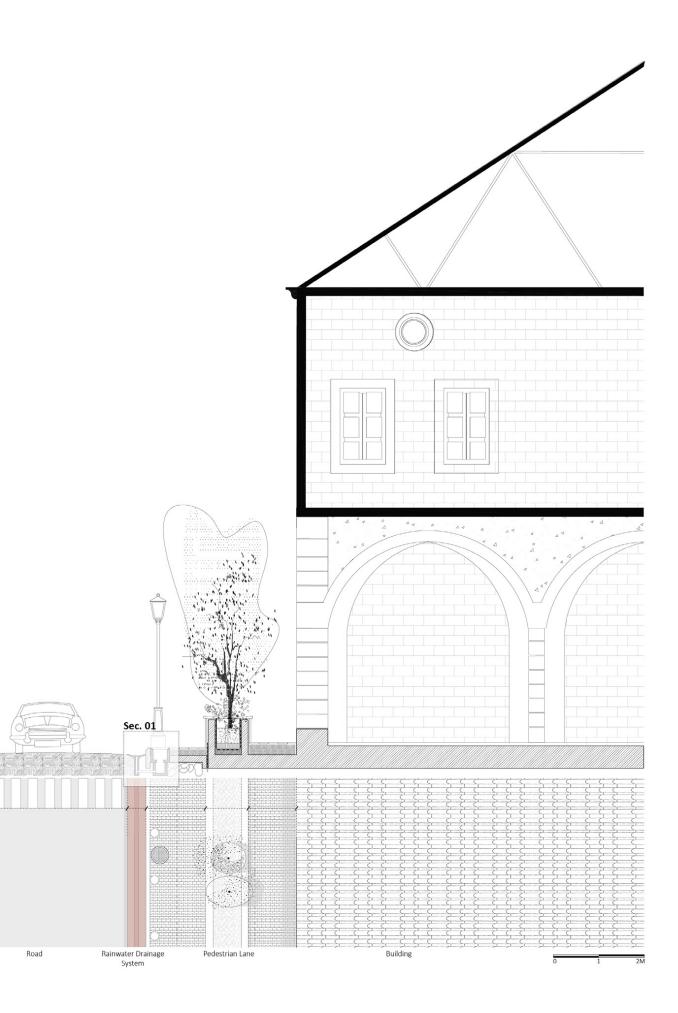
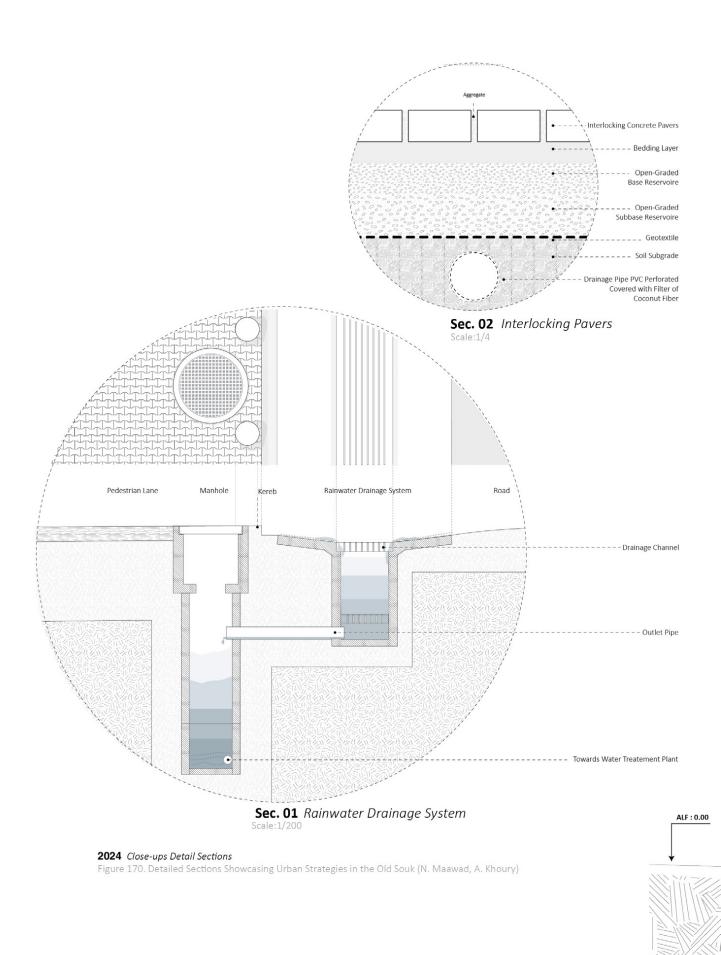


Figure 168. Section Highlighting The Transformation: Before and After Urban Sustainable Practices in the Old Souk (N.Maawad, A.Khoury)











## **BEFORE**

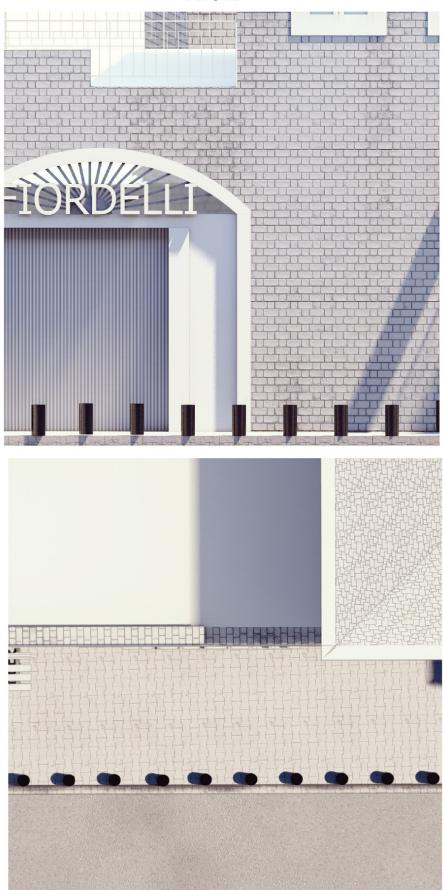


Figure 171. View of Pedestrian Route in the Old Souk: Before Sustainable Integration (N.Maawad, A.Khoury)

# **AFTER**



Figure 172. View of Pedestrian Route in the Old Souk: After Sustainable Integration (N.Maawad, A.Khoury)



Figure 173. View 02: Before Sustainable Integration in the Old Souk (N.Maawad, A.Khoury)





Figure 174. View 02: After Sustainable Integration in the Old Souk (N.Maawad, A.Khoury)





Figure 175. View 03: Before Sustainable Integration in the Old Souk (N.Maawad, A.Khoury)

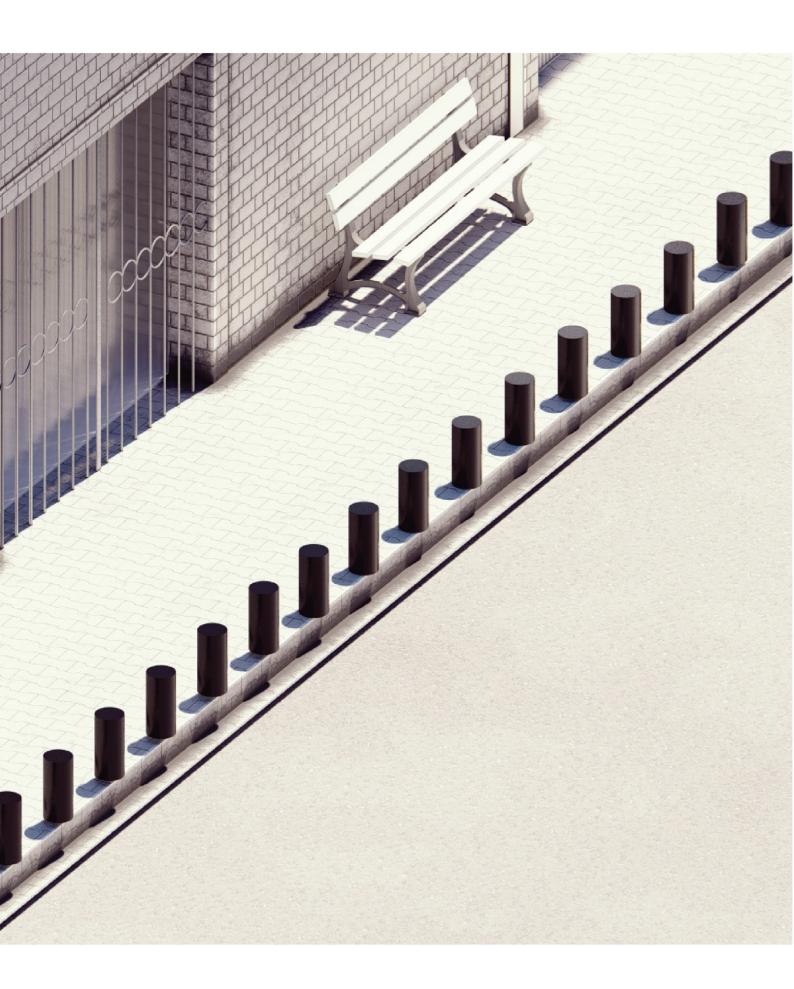
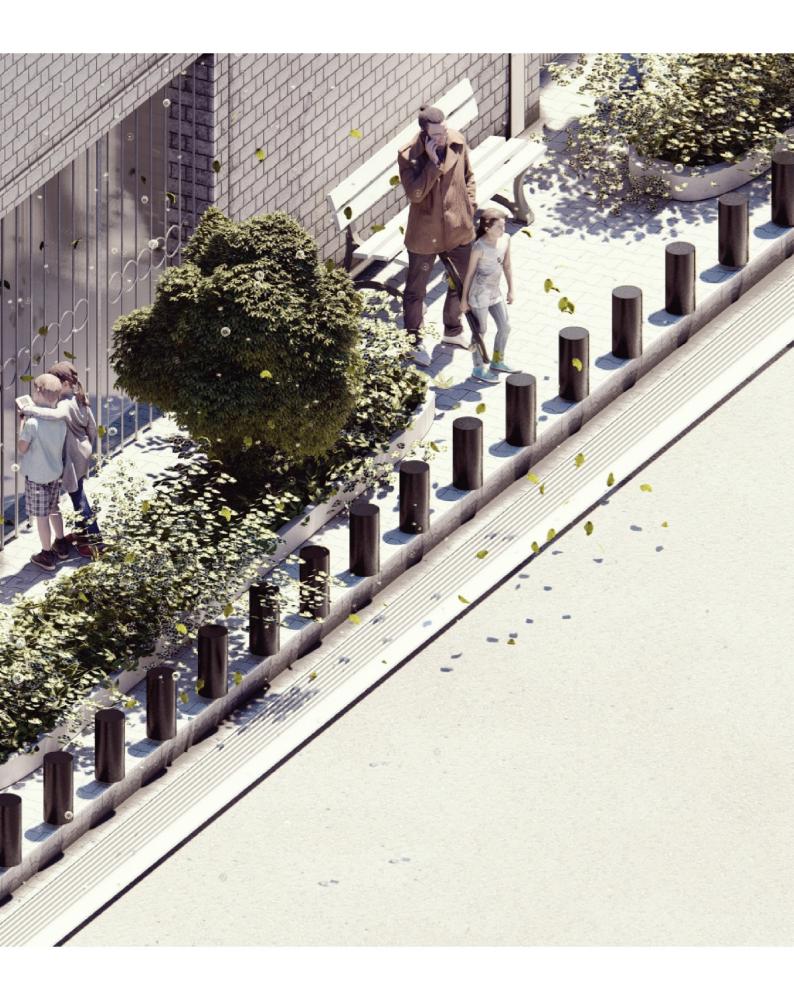




Figure 176. View 03: After Sustainable Integration in the Old Souk (N.Maawad, A.Khoury)



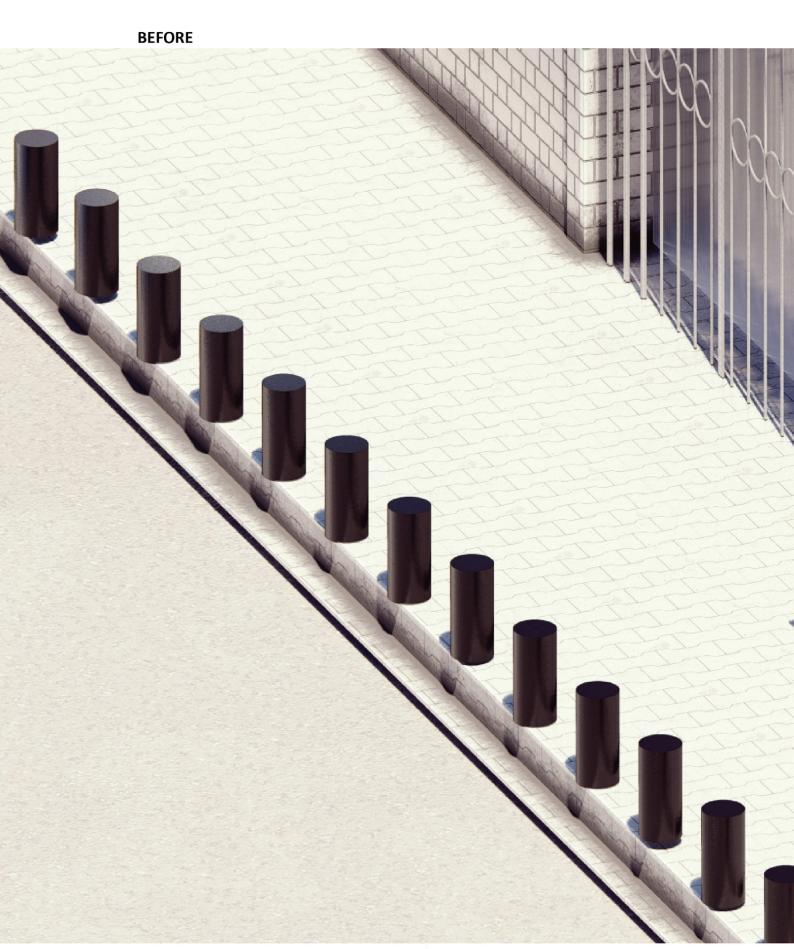
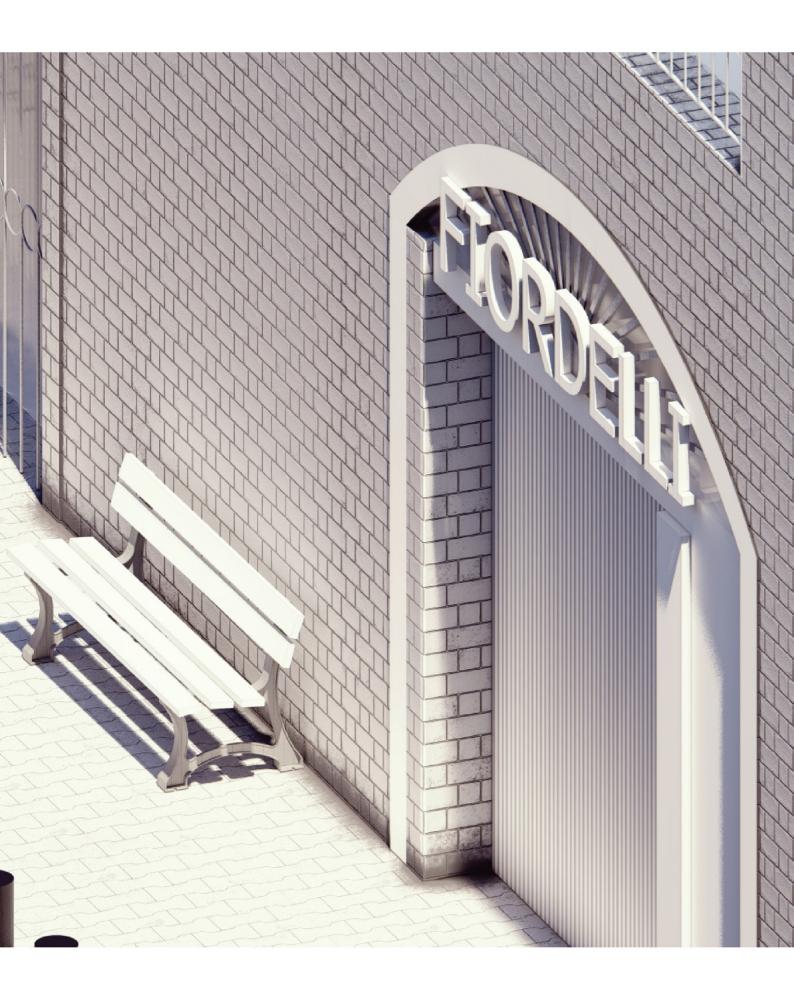


Figure 177. View 04: Before Sustainable Integration in the Old Souk (N.Maawad, A.Khoury)



# **AFTER**

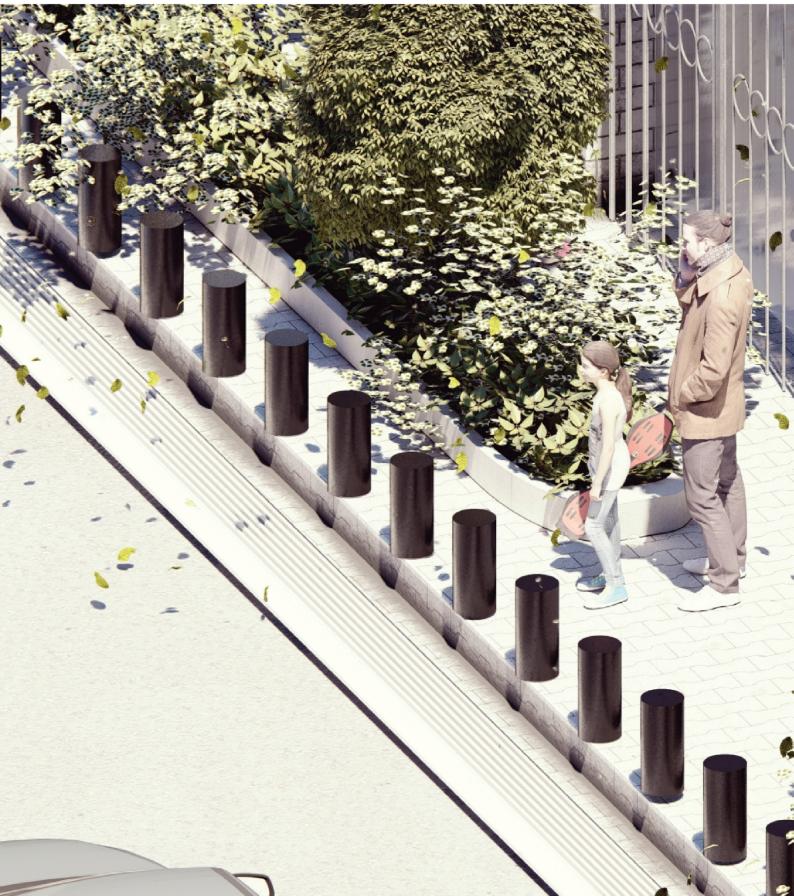
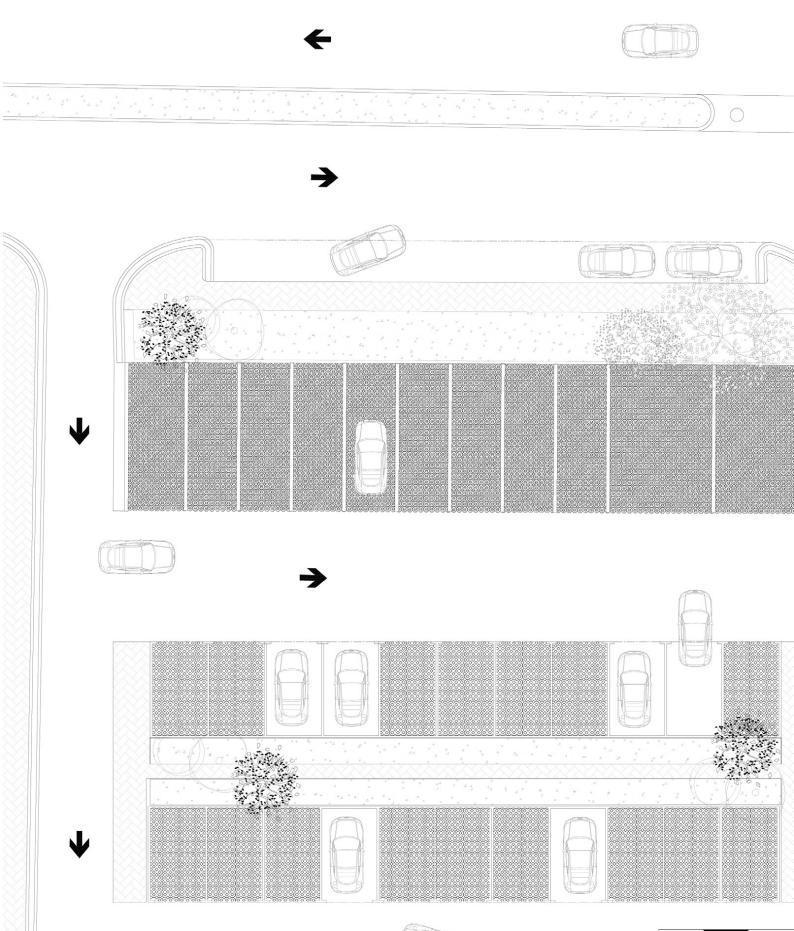
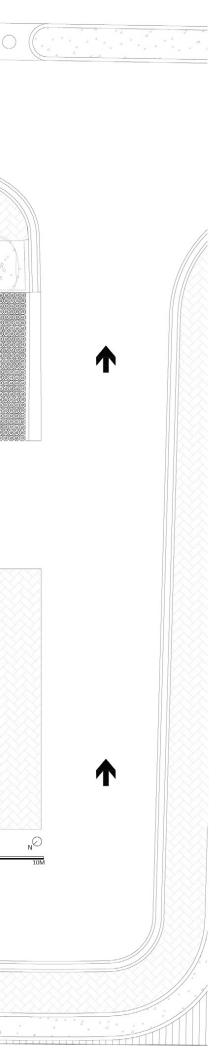


Figure 178. View 04: After Sustainable Integration in the Old Souk (N.Maawad, A.Khoury)





Turf Parking Pavers Plan of Jounieh
Figure 179. Plan of Turf Parking Pavers in Jounieh (N.Maawad, A.Khoury)



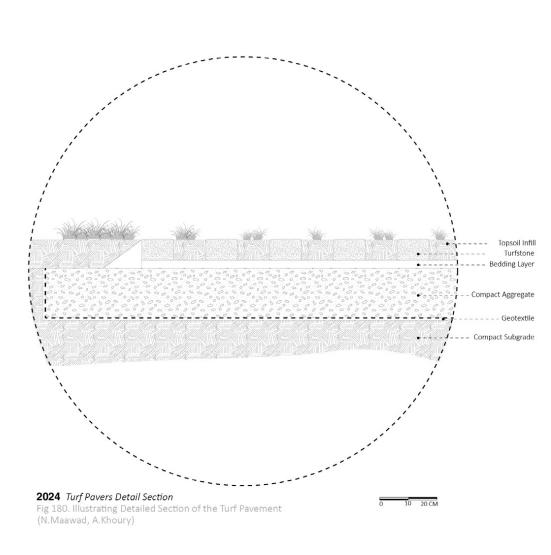




Fig. 181. The Use of Turf Pavements in Parking Spaces as a Sustainable Material in Jounieh. (N.Maawad, A.Khoury)



## 05.3.4. Opportunity of a New Historical Hub

### 04

## **Historical Hub: Restoring The Historical Legacy**

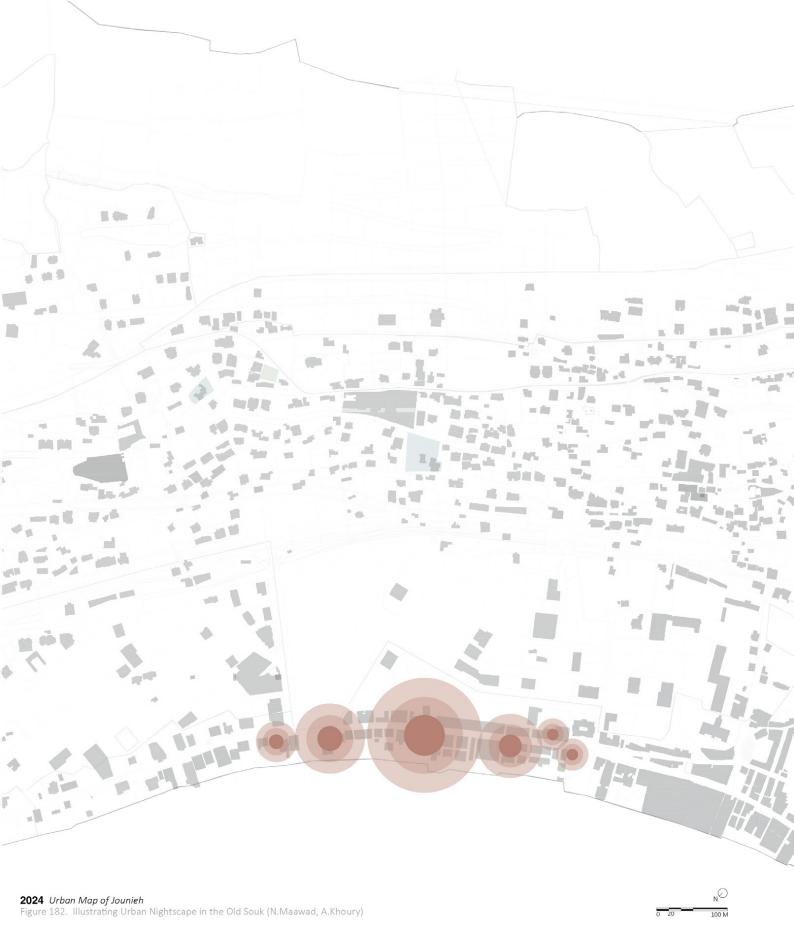
Rethinking Urban Nightscape

This chapter delves into the methodology adopted to rethink and revitalize the historical center, transforming it into a vibrant hub that attracts people and breathes new life into its surroundings. The historical souk, a site of immense cultural and architectural significance, has unfortunately fallen into a state of neglect and stagnation. Through a detailed analysis of its current condition, several pressing issues were identified that contribute to its decline. These include the prevalence of abandoned buildings in its vicinity, the dominance of limited and uninspired commercial functions, and the lack of proper urban lighting, which renders the area uninviting, particularly at night. The souk's desolation, coupled with a prevailing sense of unsafety after dark, has resulted in its diminished role as a community and cultural center.

Our analysis revealed that despite its historical value, the souk has been stripped of its vibrancy and purpose, failing to meet the needs of modern urban life. This understanding prompted the need for a transformative approach—one that not only preserves its historical identity but also reimagines its functionality in a way that fosters social, cultural, and economic activities. This chapter outlines the comprehensive methodology undertaken to achieve this vision, emphasizing a balanced approach that integrates preservation with innovative interventions.

By identifying the key factors contributing to the souk's decline, this methodology aims to propose strategies to reconfigure and breathe new life into the historical center. The goal is to create a dynamic space that not only respects its heritage but also meets contemporary urban needs. The approach includes on enhancing and valurizing the souk on a urban level through nightscape and lightscape.

In rethinking the souk, this chapter also considers the importance of public spaces that encourage community engagement and foster a sense of belonging. The revitalization process seeks to balance historical preservation with modern utility, creating a space that resonates with both its past and its future. Through this detailed methodology, we aim to provide a blueprint for the urban nightscape transformation of the souk into a lively, safe, and inclusive hub while also valorizing the architecture through the use of lights .

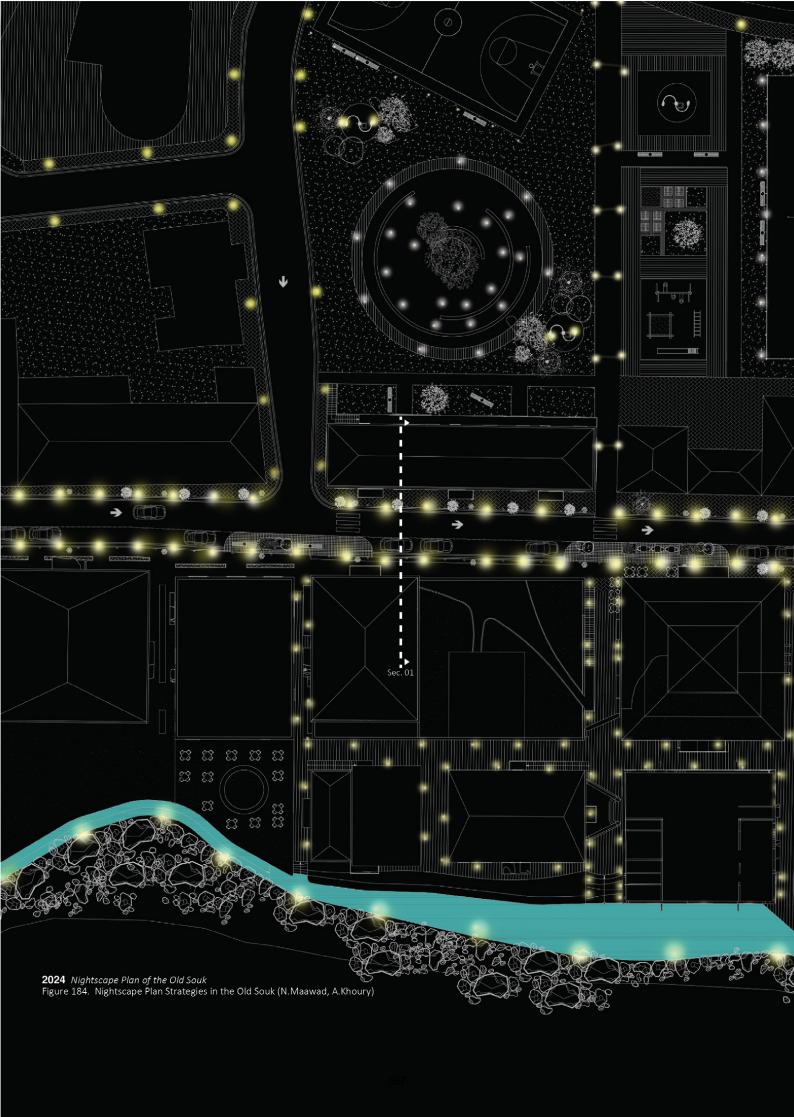


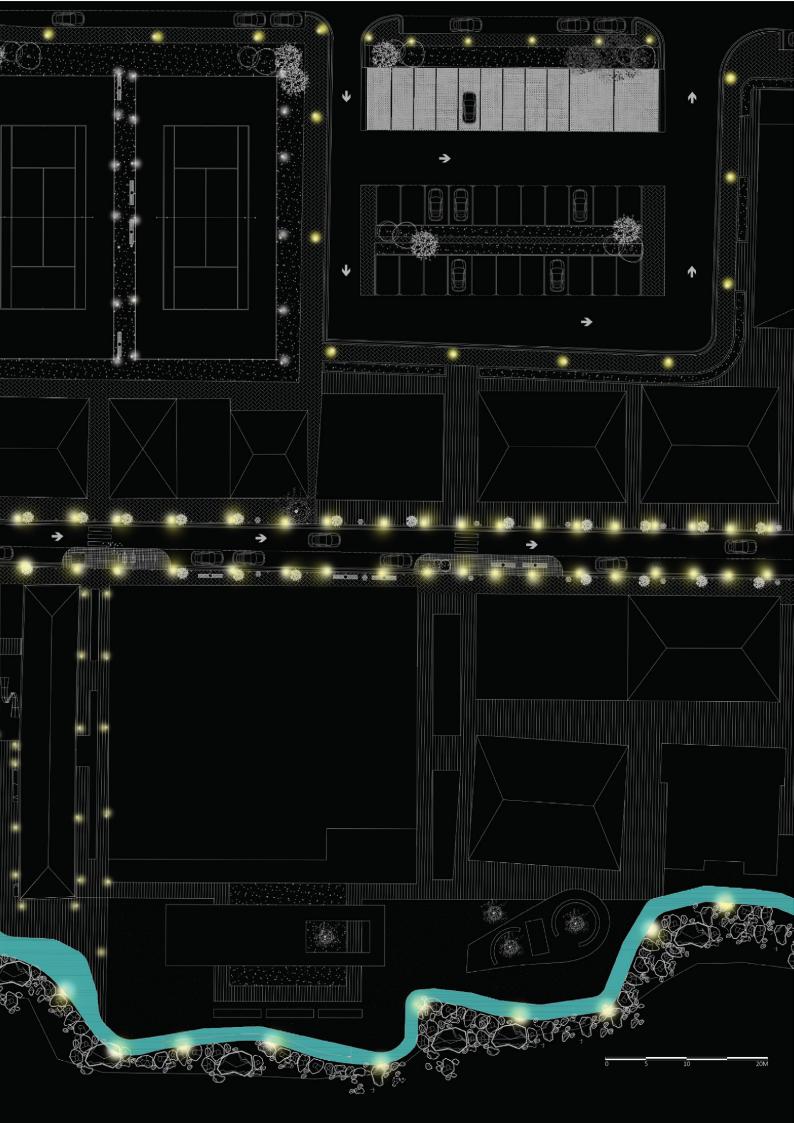




**2024** Light Placement in the Old Souk
Figure 183. Urban Level: Lighting Strategies, Enhancing the Atmosphere of the Old Souk as an Urban Historic H
(N.Maawad, A.Khoury)













Enhancing the Charm and Importance of Historic Buildings Through Lighting Strategies
Figure 186. View 01: Enhancing the Charm and Significance of Historic Buildings Through Lighting Strategies (N.Maawad, A.Khoury)

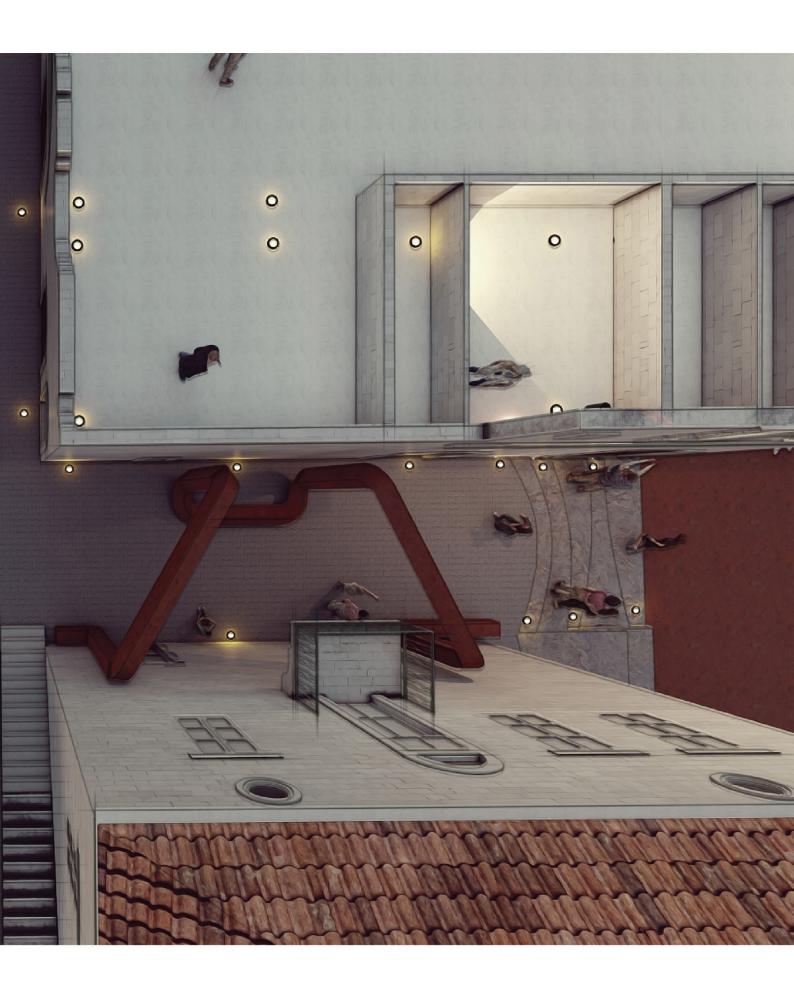




Figure 187. View 02: Enhancing the Charm and Significance of Historic Buildings Through Lighting Strategies (N.Maawad, A.Khoury)





Figure 188. View 03: Enhancing the Charm and Significance of Historic Buildings Through Lighting Strategies (N.Maawad, A.Khoury)





Figure 189. View 04: Enhancing the Charm and Significance of Historic Buildings Through Lighting Strategies (N.Maawad, A.Khoury)



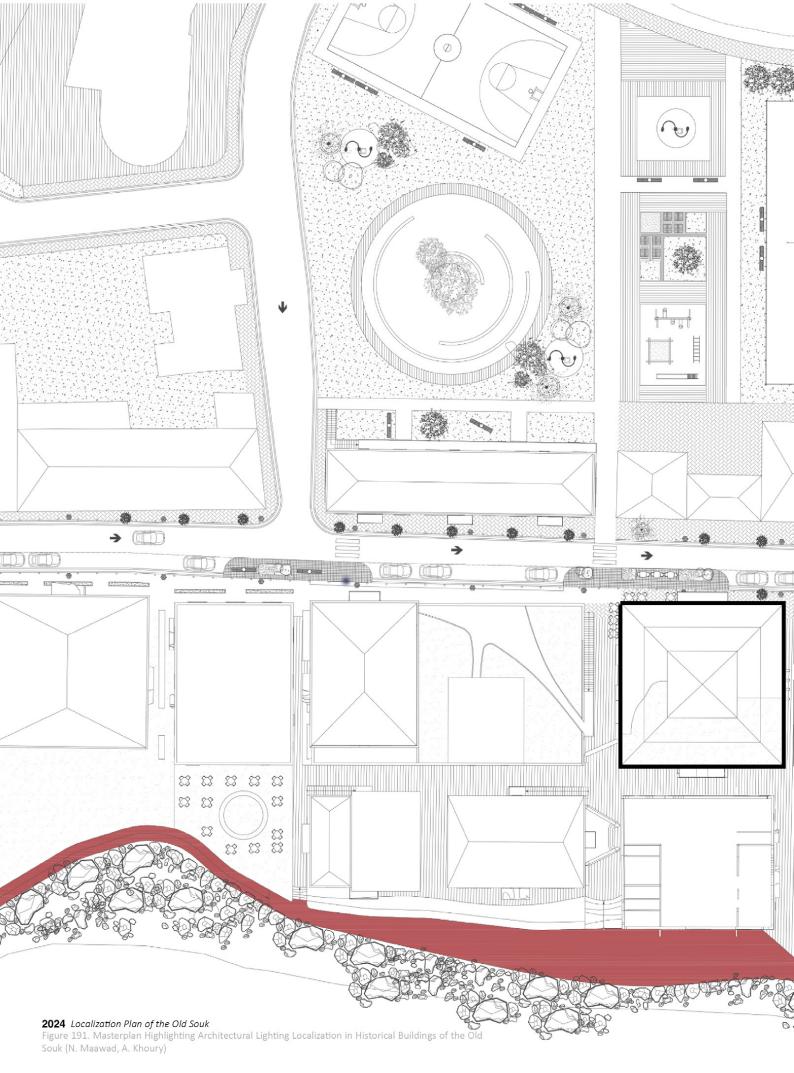
# on A Architectural LEVEL

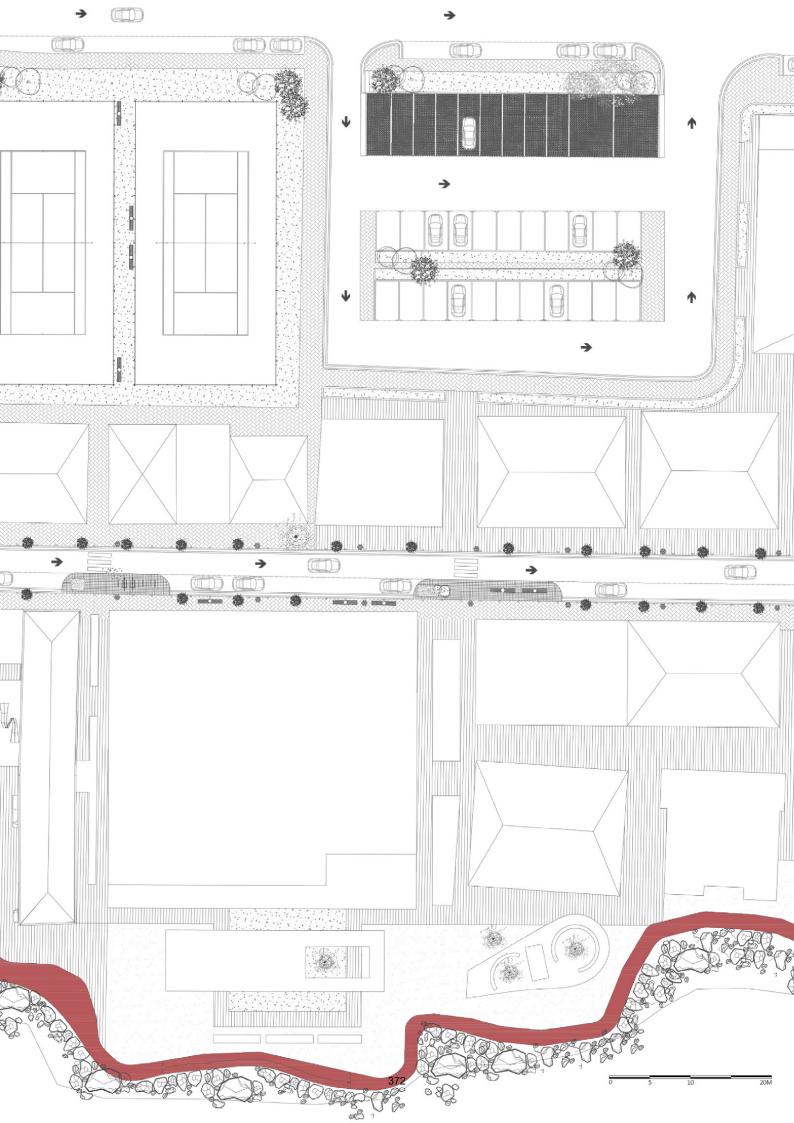


Figure 190. Architectural Level :Enhancing the Architectural Significance



of Traditional and Historical Buildings Through Lighting Strategies. (N.Maawad, A.Khoury)

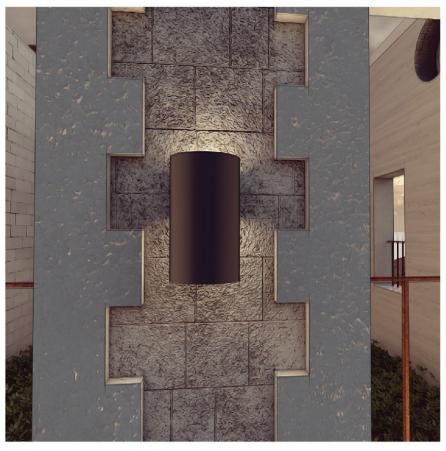












Emphasizing Historical Buildings
Figure 194. Close-up View of Lighting Placement and Type (N.Maawad, A.Khoury)

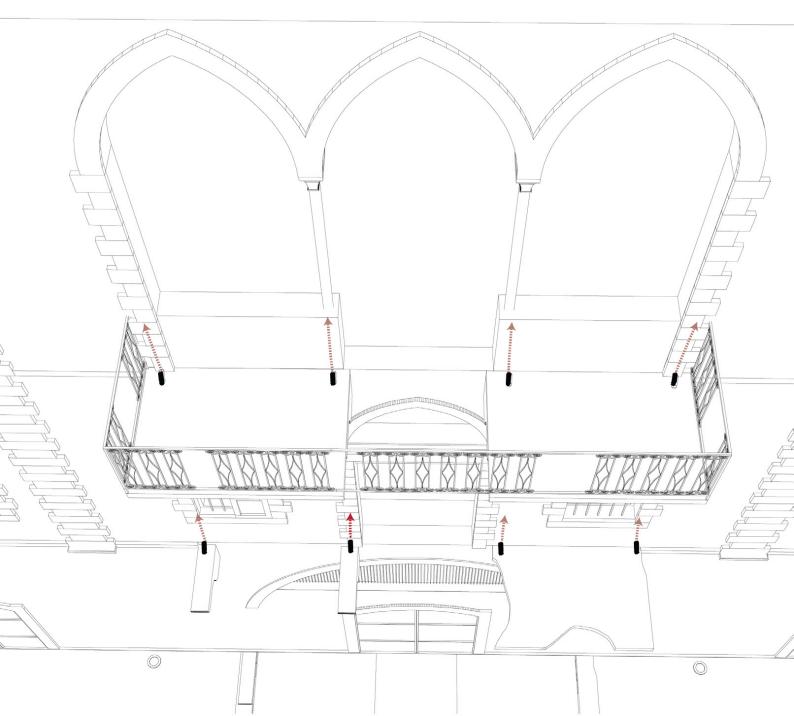
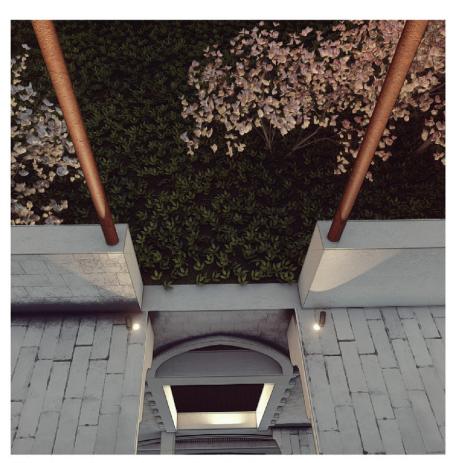


Figure 195. View 02: Lighting Placement on Historical Building 03 (N.Maawad, A.Khoury)



Enhancing the Charm of Historic Buildings Through Lighting Strategies
Figure 196. View 02: Close-up View of Lighting Placement and Type (N.Maawad, A.Khoury)

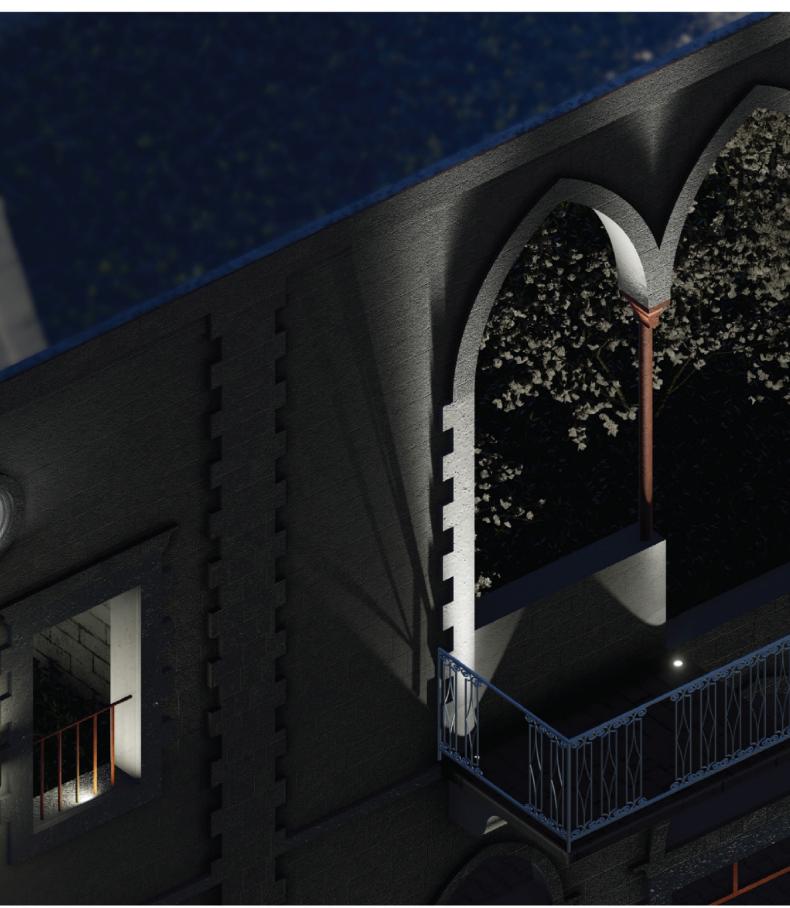


Figure 197. Architectural View 01: Enhancing the Charm and Significance of Historic Buildings Through Lighting Strategies (N.Maawad, A.Khoury)





Figure 198. Architectural View 02: Enhancing the Charm and Significance of Historic Buildings Through Lighting Strategies (N.Maawad, A.Khoury)





Figure 199. Architectural View 03: Enhancing the Charm and Significance of Historic Buildings Through Lighting Strategies (N.Maawad, A.Khoury)

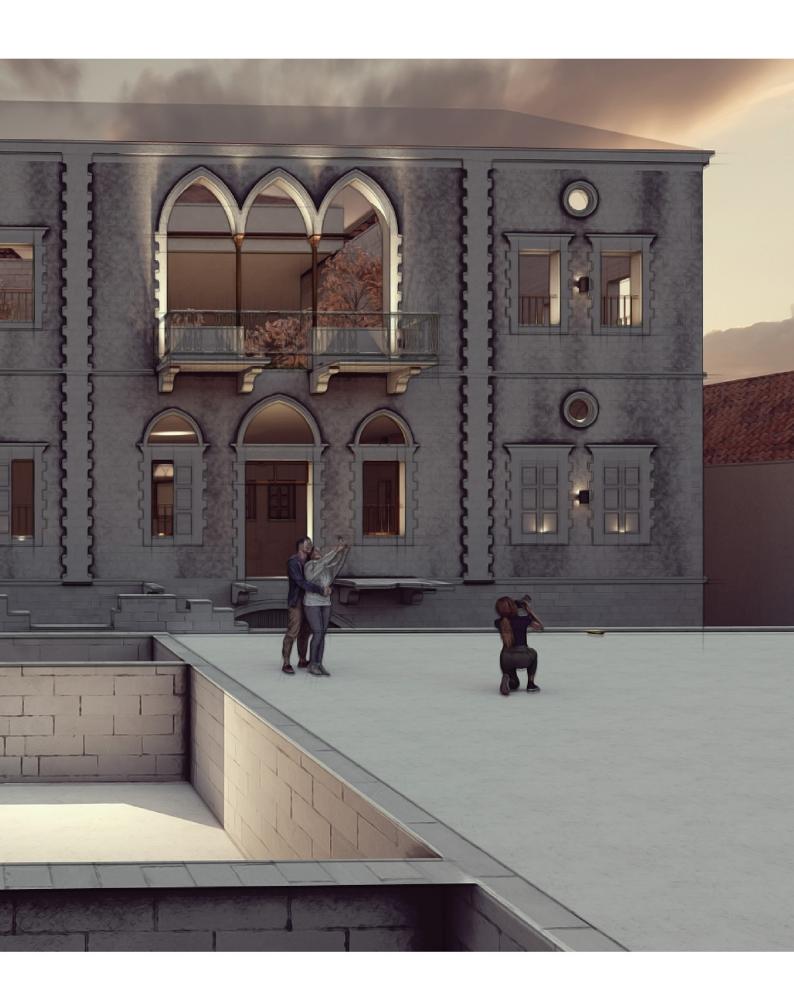




Figure 200. Architectural View 04: Enhancing the Charm and Significance of Historic Buildings Through Lighting Strategies (N.Maawad, A.Khoury)



## 05.3.5. The Masterplan

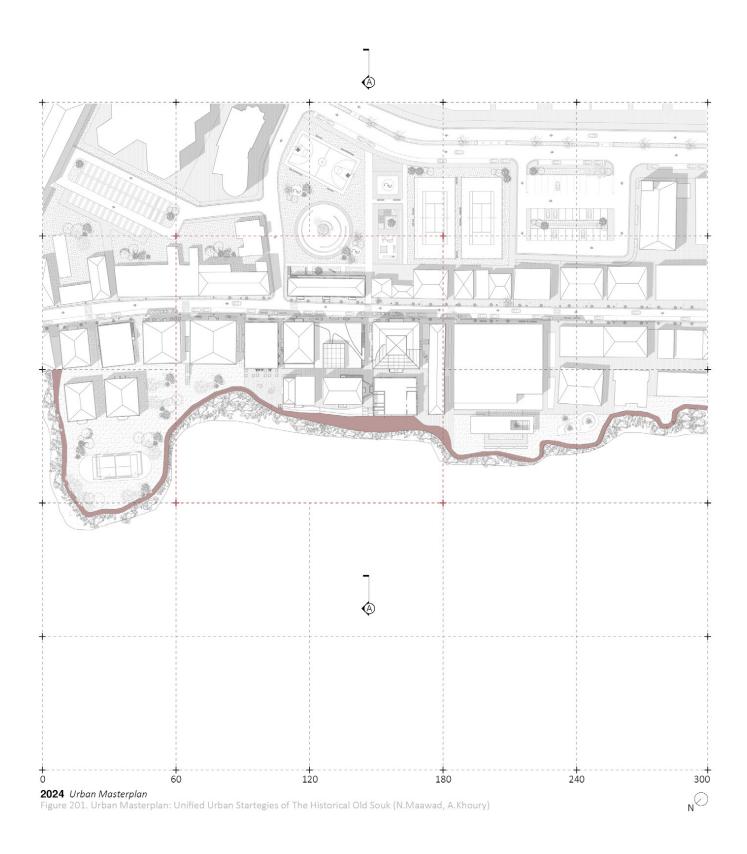
## 05

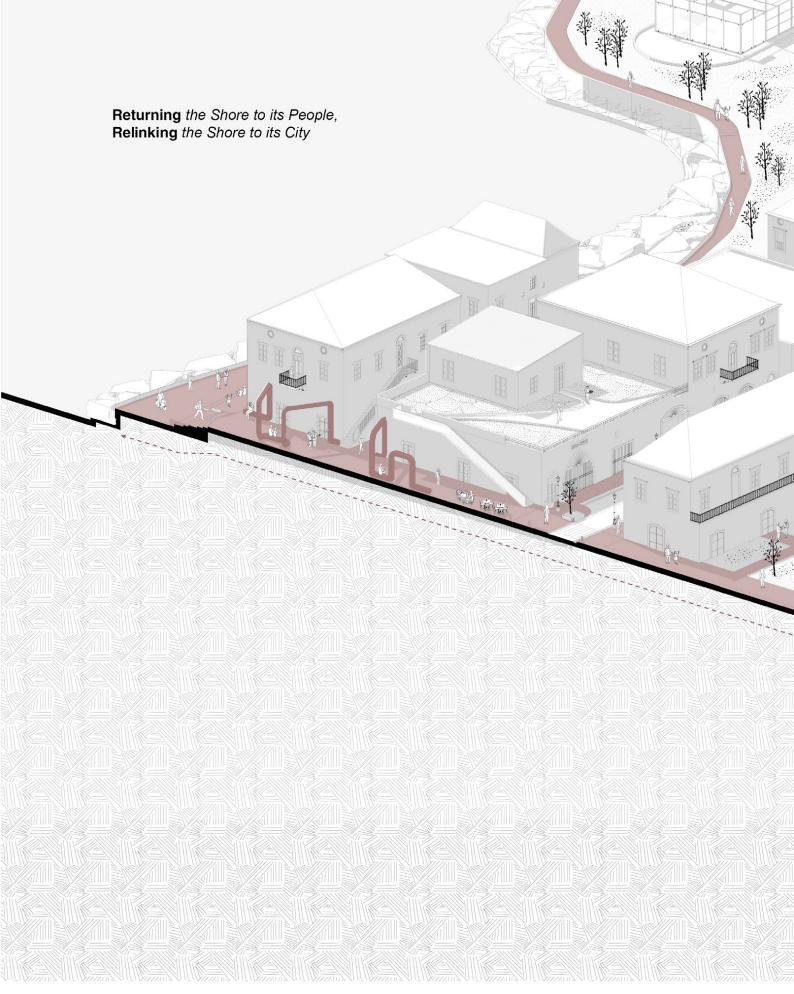
### Unified Urban Potentials: Masterplan of the Historic Old Souk

The Urban Strategy

The masterplan integrates all the proposed potential strategies, starting with neglected spaces, including abandoned and in-between areas, and advancing towards a sustainable and restoration approach. The overall strategy results in the revival of the old souk, blending urban artifacts that animate the spaces and encourage public activities. These interventions aim to reconnect the old souk with the shoreline, creating a flow starting from the park towards the in-between historic spaces and finally leading to the shoreline.

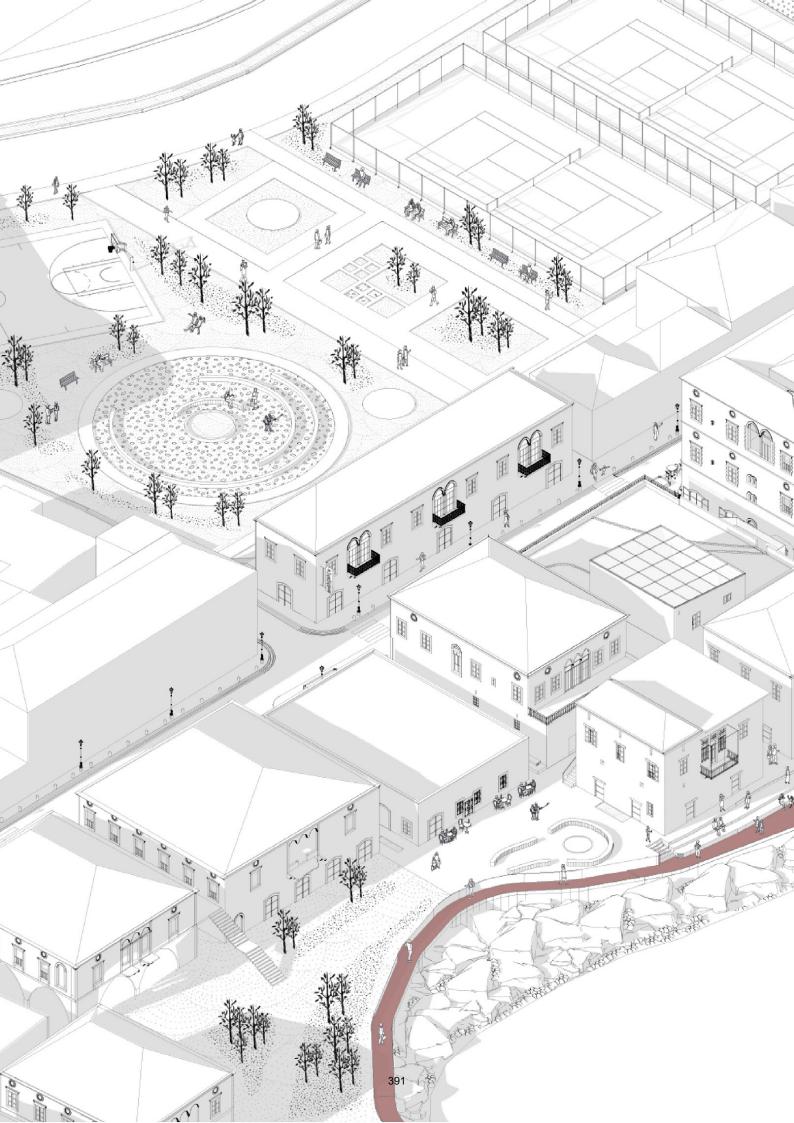
At the waterfront, the promenade, or "corniche," invites people to engage socially while connecting with the natural elements and the historic architecture of the old souk. This design approach respects the cultural and environmental significance with respect to the Mediterranean Sea, fostering harmony between the historic builings and its natural surroundings.





Illustrating Urban Connection With Respect to the Historic Buildings- Section A-A of the Old Souk
Figure 202. Section Illustrating the Urban Connection Between the City, its Historical Souk, and the Shoreline. (N.Maawad, A.Khoury)





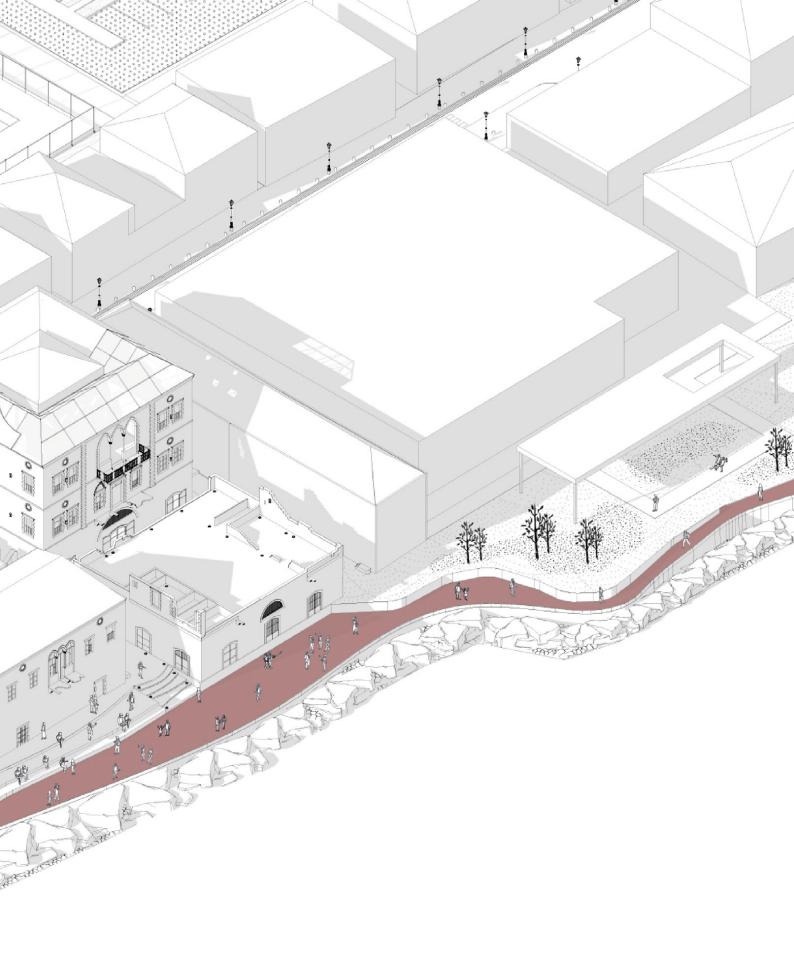












Figure 206. View 03, Urban Revitalization of the Historical Old Souk. (N.Maawad, A.Khoury)

























### **CHAPTER 04**

## **Architectural Design**

"Baadak alla Bali, " – Fairuz

This chapter will illustrate the restoration and transformation of the iconic Old Souk of Jounieh into a vibrant cultural hub. The aim is to preserve and extend the legacy of these historical buildings that contributes as a long lifetime of past experiences. Through our architectural and ongoing analysis of these buildings, we have emphasized the address of conservation and adaptive reuse strategies. Therefore, we seek to breathe new life into the souk while maintaining its authentic architectural character and historical identity.

The methodology focuses on conserving and restoring these historic buildings in their current conditions to extend their lifespan and honor their historical and cultural worth. The most severed and damaged structures will undergo minor additions or modifications, tailored to meet specific needs of their new functions, while prioritizing the protection of damaged surfaces. Hence, adaptive reuse strategies will be integrated to give new purpose to the structures. These interventions will be carried out with respect for the architectural integrity of the souk, ensuring a harmonious blend of restoration and modern adaptation.

Through these efforts, the chapter aims to illustrate how the Old Souk can serve as a dynamic cultural space that bridges Jounieh's rich past with its evolving future. By reimagining this historic site, the project aspires to create a hub that fosters artistic expression, community engagement, and cultural dialogue, while preserving the essence of the souk for generations to come.

#### 05.4.1. From a Lifeless Historical Center to a Vibrant Pulse.

#### The Transformation of Jounieh's Old Souk into a Cultural Hub

The Old Souk of Jounieh has long stood as a silent observer to the past pressing challenges. Its streets and structures reflect decades of neglect that led to loss of vibrancy and interactive activities. Once an animated center of life, the historic strip today is largely forgotten, frequented only by few inhabitants, those living nearby or working within its proximity. While some buildings still hold their historical charm, others stand abandoned or have certain structures deteriorated and in a bad condition. This stark contrast serves as both a reminder of its potential and an urgent call to action. The time has come to restore the pulse of this historic center, to not only reclaim its place in our cultural landscape but also to preserve its significance for future generations.

Historically, the Old Souk was a thriving hub of craftsmanship and creativity, where artisans, traders, and local communities came together to innovate, build, and trade. It was a place where Lebanese culture found expression through the hands of its people—where the beauty of handmade crafts, vibrant markets, and community gatherings brought life to its narrow streets. However, as Lebanon experienced waves of conflict and instability, the Souk transformed into something more profound: a place of refuge. It became a sanctuary where people sought safety, protection, and a sense of stability during difficult times. This unique history, both as a center of creativity and a place of strength makes the Souk very special.

Our vision is to honor this unique identity by revitalizing the Old Souk and transforming it into a cultural hub that bridges its rich past with a vibrant future. This space will celebrate the artisans and craftsmanship that once defined it, providing a platform for local talent to thrive. At the same time, it will serve as a dynamic cultural gathering space, fostering interaction and providing a safe and welcoming environment that revives its historical role as a refuge. Hence, by adaptively reusing these historical buildings, the vision transforms them into a vibrant cultural platform filled with interactive and cultural activities. This initiative aims to attract both locals and tourists back to the historic strip, seeking an authentic connection to our heritage and coastal journey.

The transformation of the Souk will highlight not just its physical restoration but its symbolic rebirth as the heart of Jounieh. This revitalized space will provide opportunities for artisans to showcase their crafts, for communities to connect, and for history to come alive. It will stand as a testament to Lebanon's resilience, a celebration of its cultural wealth, and a reminder of the importance of preserving our shared heritage. By breathing life back into the Old Souk, we aim to create a dynamic space that honors its legacy while embracing the potential for a brighter, more adaptive and connected future.



#### A Cultural Interactive Space

Our analysis revealed that the old souk was historically known for its vibrant artisanal interactions. To revive this memory back, we transformed the ground floors of these abandoned historical buildings to dynamic cultural spaces. Notably, some buildings that were still operational such as the clothes and carpet workshops, were preserved in their original function, ensuring continuity of their artisanal manufacture. Meanwhile, the abandoned ground floors were restored and repurposed into vibrant cultural spaces for workshops, restaurants, and cultural activities. Hence, this reuse aims to continue the artisanal and cultural legacy of the souk aiming to boost back the Lebanese production and restoring its vibrant strip as a dynamic and interactive hub.

This initiative aims to restore the souk's historical role as a hub of community interaction, where visitors can not only observe but also actively participate in traditional crafts and cultural experiences. By offering these interactive opportunities, the space will attract people to the historic strip, creating a bridge between the past and a culturally enriched future.

Lastly, on the ground floors, certain historical features, such as doors, have been carefully restored and preserved as symbolic elements that honor the building's heritage. While these doors no longer function in their original capacity, they now serve as protective guards for the glass panels, blending preservation with practicality.

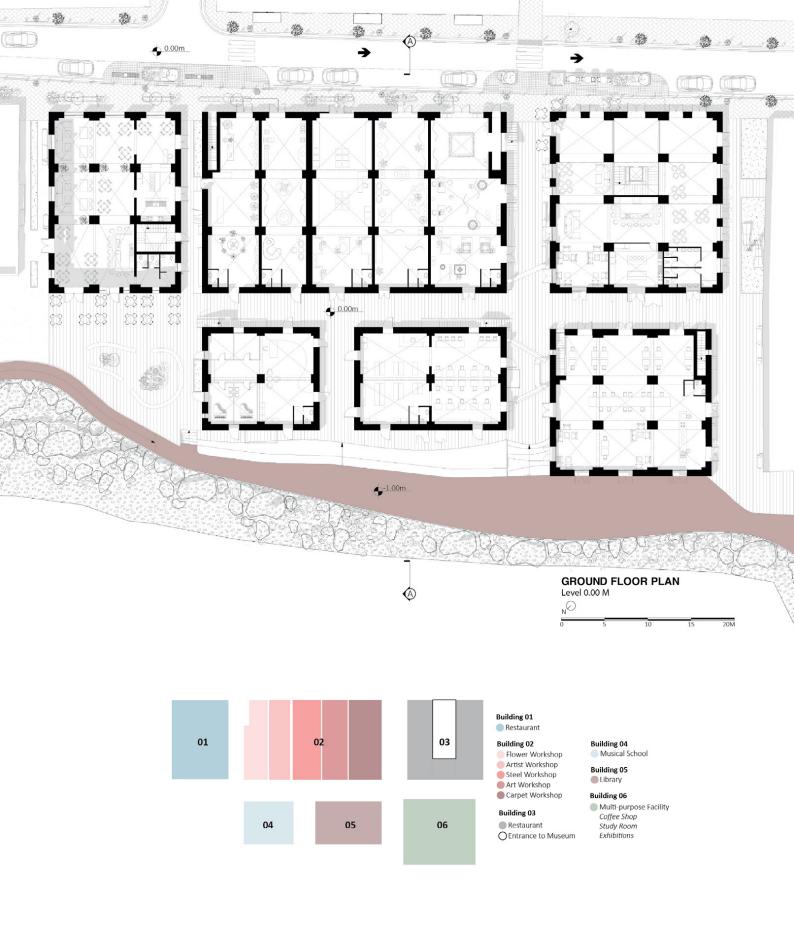


Figure 213. Ground Floor Plan of The Selected Historical Buildings, Illustrating Adaptive Reuse Strategy , and Highlighting Their New Functions (N.Maawad, A.Khoury)



Preserved as symbolic doors to honor the heritage, but serve as a protective guard.

#### Restoring the Beauty of Historical Ruins

The first floor, once completely abandoned, has been fully restored and repurposed to host vibrant cultural activities. This transformation includes the introduction of a botanic garden and enhanced greenery, emphasizing the importance of sustainability and fostering a better quality of life. The restored spaces are filled with cultural events and activities integrating a lively atmosphere into these historic areas.

On an interior level, the abandoned spaces have been repurposed to highlight their original functions while celebrating the architectural beauty of the past. The iconic three arches are preserved are reintroduced, showcasing their historic significance and making the interior not just a functional space but a tribute to the architectural masterpieces of the past. This design approach creates a space that resonates with the perception of old times and their timeless charm.

Moreover, all damaged balconies in the buildings have been structurally strengthened while retaining their weathered appearance. These balconies serve as a visual dialogue between past and present, symbolizing resilience and adaptation over time. Their preserved imperfections invite visitors to reflect on the stories of the past while appreciating their lasting presence today, highlighting their architectural techniques, traditions, and historical narratives.

Lastly, building 06 has been repurposed as an exterior temporary exhibition that houses historical ruins crafted from the renowned stone of the old souk. This initiative blends the area's rich history with its evolving cultural narrative, fostering a vibrant space where the past and present come together connecting present and future generations to their history. This initiative fosters a deep appreciation for preservation and educational value. Visitors are offered an immersive experience, highlighting the significance and awareness of safeguarding historical ruins while uncovering the stories behind these ruins. The space transforms these ruins into artistic expressions, filled with cultural interpretations blending ancient influences with modern elements to create a dialogue between history and contemporary culture. The ruins are covered with a metal covering to protect their fragile surfaces from further deterioration, ensuring their preservation and maintenance for future generations.



Figure 214. First Floor Plan of The Selected Historical Buildings, Illustrating Adaptive Reuse Strategy , and Highlighting Their New Functions (N.Maawad, A.Khoury)

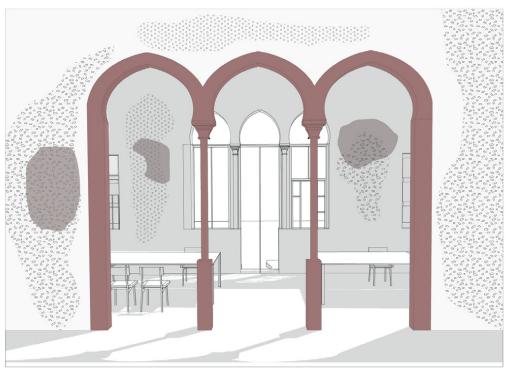


Figure 215. Interior View of Building 05, Restoring the Architectural
Beauty (N. Maawad, A.Khoury)

Cornishe

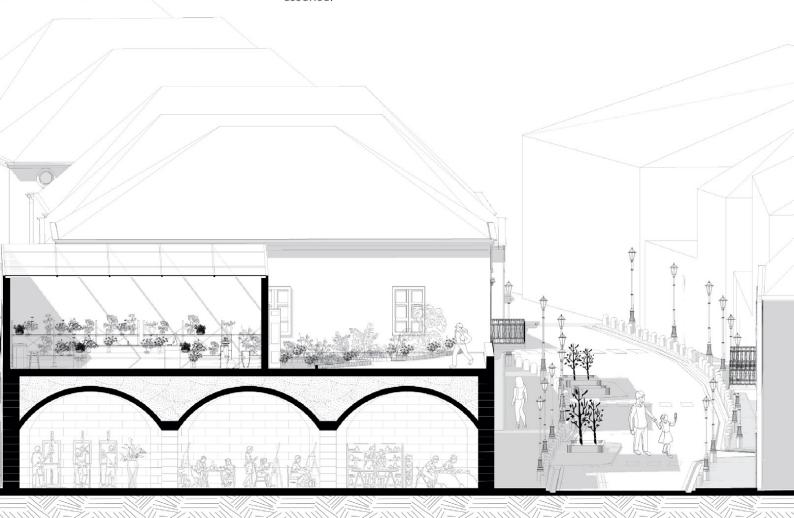
417

2024 A Thematic Approach of Restored Historic Buildings - Section A.A.

#### Blending Urban Revival with Architectural Adaptation

This section highlights the integration of restored historic buildings with the coastal promenade, creating a harmonious blend of urban and architectural restoration.

The restored interiors of these historic structures illustrate the thematic relationship with their exteriors, intersecting social and interactive spaces with cultural activities, fostering a dynamic relationship between with the historic buildings and the shoreline. Section A-A demonstrates this state, as the integration of the botanic garden with the library creates a unique flow of cultural and green activites with respect to the urban promenade. The result is a vibrant connection between nature, culture, and history, offering an experience that celebrates the area's heritage while enhancing its urban landscape. Finally, the addition of bleacher-style stairs further enhances this connection, offering an engaging public space that encourages interaction and appreciation of the area's historical and coastal essence.



#### 05.4.2 Every Building Represents the Celebration of a Lebanese Trait

The adaptive reuse of every building in the Old Souk of Jounieh aims to celebrate and preserve the tangible and intangible traits of Lebanese culture and production. The concept was guided by a philosophy of minimal intervention, ensuring that only the structures in critical condition received the necessary restorative work to prevent further damage. For the majority of the buildings, conservation and repurposing were prioritized, respecting their original integrity and architectural significance. This delicate approach reflects a commitment to safeguarding the souk's historical essence while breathing new life into its spaces.

The ground floors have been thoughtfully reimagined as vibrant hubs for local production. Workshops now celebrate traditional crafts such as carpet weaving, steelwork, pottery, and artistic endeavors, providing a space where these timeless practices can thrive and be appreciated by both locals and visitors. Additionally, a restaurant was introduced to honor the Lebanese culinary heritage, offering a gastronomic experience deeply rooted in the nation's traditions.

A particularly significant intervention was on Building 03, where its roof has been transformed into a museum. This space showcases Lebanese art and heritage, made all the more special by the preservation of its original arches and architectural traits that embody the nation's identity. Other buildings have been repurposed into libraries and study rooms, fostering a culture of learning and providing spaces for youth engagement. This initiative addresses the challenges of youth migration due to economic and social conflicts, emphasizing the value of nurturing Lebanon's future generation. It also pays homage to the country's rich literary heritage, highlighting figures like Gibran Khalil Gibran, renowned worldwide for their contributions to literature and thought.

The remaining buildings have been converted into cultural and educational centers that celebrate Lebanese traditions. A conservatory now supports the country's musical heritage, while a dance school dedicated to the Lebanese dabke ensures that this vibrant cultural expression continues to unite communities. Together, these transformations create a headquarters for cultural preservation and revitalization, where the Old Souk becomes not only a celebration of Lebanon's past but also a foundation for its future. This initiative reaffirms the importance of cherishing the nation's heritage in its many forms, ensuring it remains an integral part of the community's identity.

# THE CULTURAL HUB

Legebration of The Lebanese Local Productions
The Lebanese Configuration

The Lebanese Culinary
The lebanese Dance Dabke

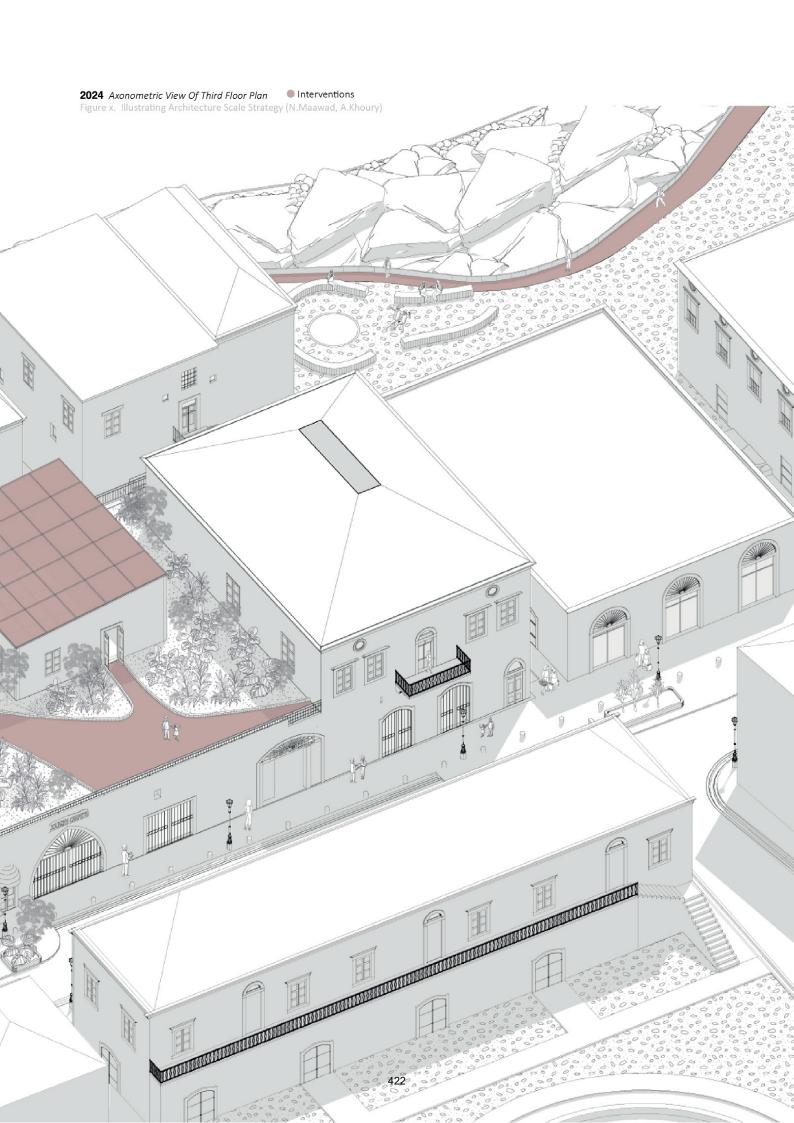
The Lebanese Music

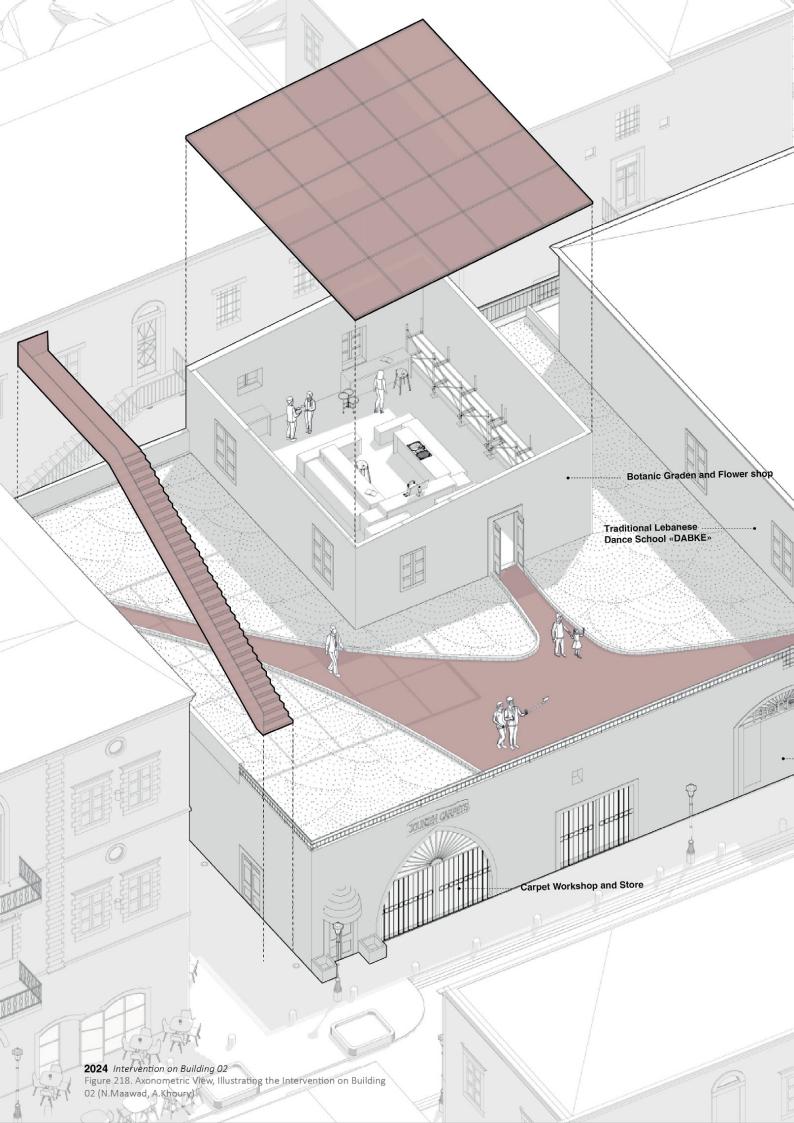
The Lebanese Heritage

The Lebanese Culture

The Lebanese Youth

The Lebanese Architecture







#### **BUILDING 02**

Intervention



Building 02 will be transformed in a way that honors the memory of the historic structure while fostering a green and sustainable environment. To achieve this, an exterior staircase will be designed, inspired by the building's traditional typologies, serving as a welcoming pathway for visitors to a green platform. This platform will feature a botanical garden on the roof, promoting a healthier and more vibrant lifestyle that reinforces local heritage within the historic strip.

A free-form landscape will be introduced, encouraging visitors to appreciate the importance of integrating sustainable green practices. This initiative aims to set an example for the adaptive reuse of historical buildings within the old souk, raising awareness of the need to integrate green features to promote a better quality of living, blending traditional heritage with modern sustainability.

Additionally, a glass roof is intervened into the flower shop, reimagining its function while maintaining a deep connection to its historical context. This green intervention will balance preservation with innovation, breathing new life into the area while respecting its cultural and sustainable value, ensuring resilience against climate change in the historical urban context.







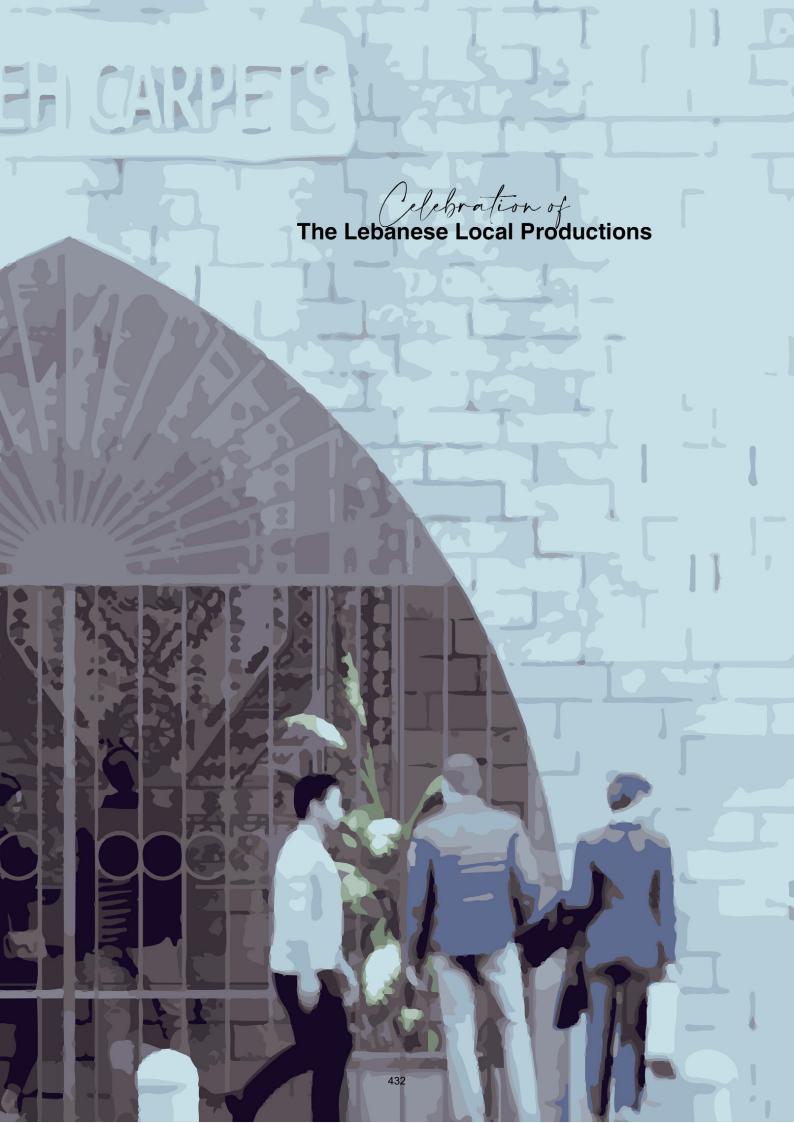




















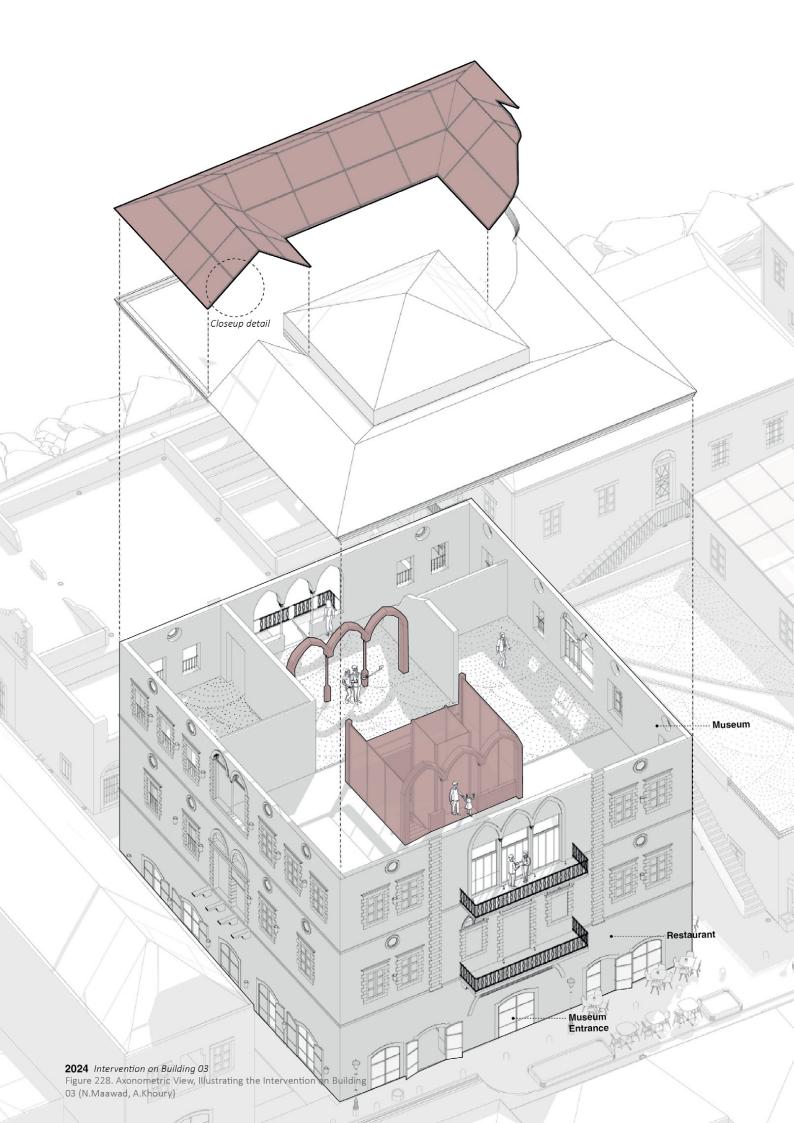


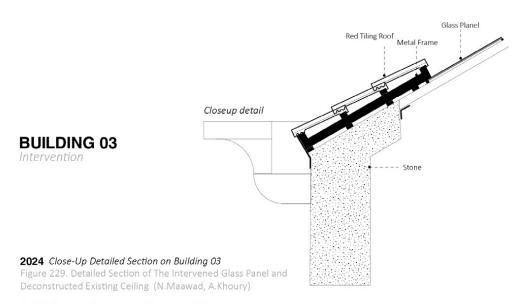


Celebration of The Lebanese Dance «Dabke»









## A Dialogue Between Past and Present

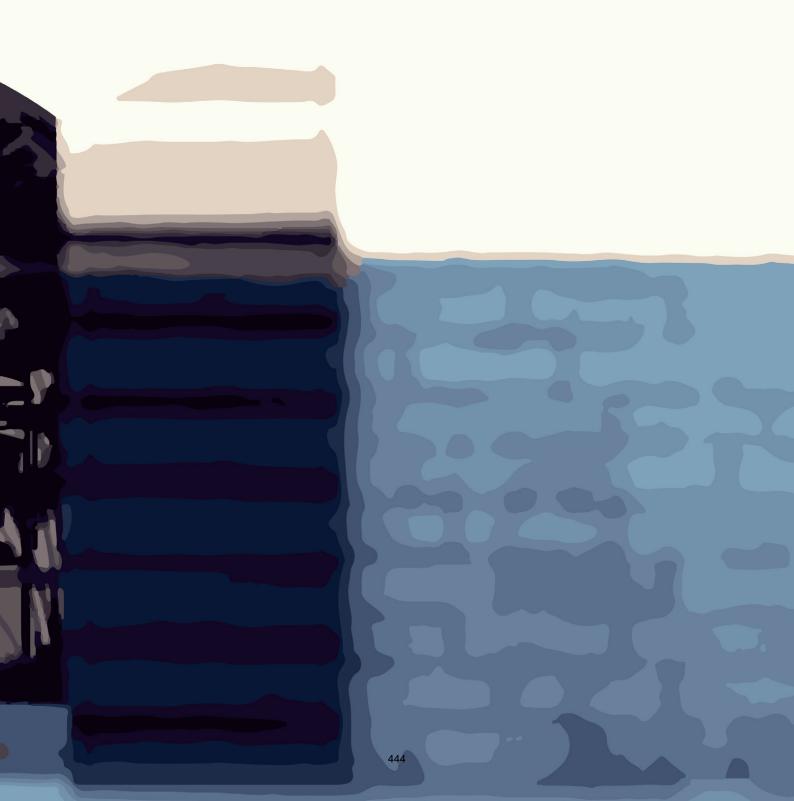
Building 03 showcases an intervention with care that honors the building's historical story. The exterior façade is restored and maintained as it is, while the interior is reimagined to highlight its architectural masterpiece: the iconic three arches. These arches serve as a focal point, welcoming visitors into a transformed space.

Inspired by the typological interior staircases of the old souk, the staircase is enclosed within glass panels, that connects to the building's diverse functions. The ground floor is repurposed as a restaurant, creating a vibrant social space. The first floor houses a museum that celebrates the building's heritage, while the second floor features a unique blend of a museum and a an already present garden converted into a botanical gardento preserve the state of the building as well as the collective memory of the place. The intervention also involves strengthening and maintaining the building's damaged structures, ensuring the longevity of its historical elements. The intervention protects the craftsmanship and techniques of the past, which are valuable representations of history and heritage. This approach not only safeguards the building for future generations but also respects its original design, creating a meaningful connection between the past and present while allowing the space to serve new functions.

Using modern techniques, the half-destructed roof is enclosed with a new glass roof that enhances the visitor experience by offering a botanical garden under natural light. This initiative sets a striking contrast between traditional and contemporary materials, celebrating an interplay between restoration and innovation, embodying a blend of the past and the present.



elebration of The Lebanese Culinary





















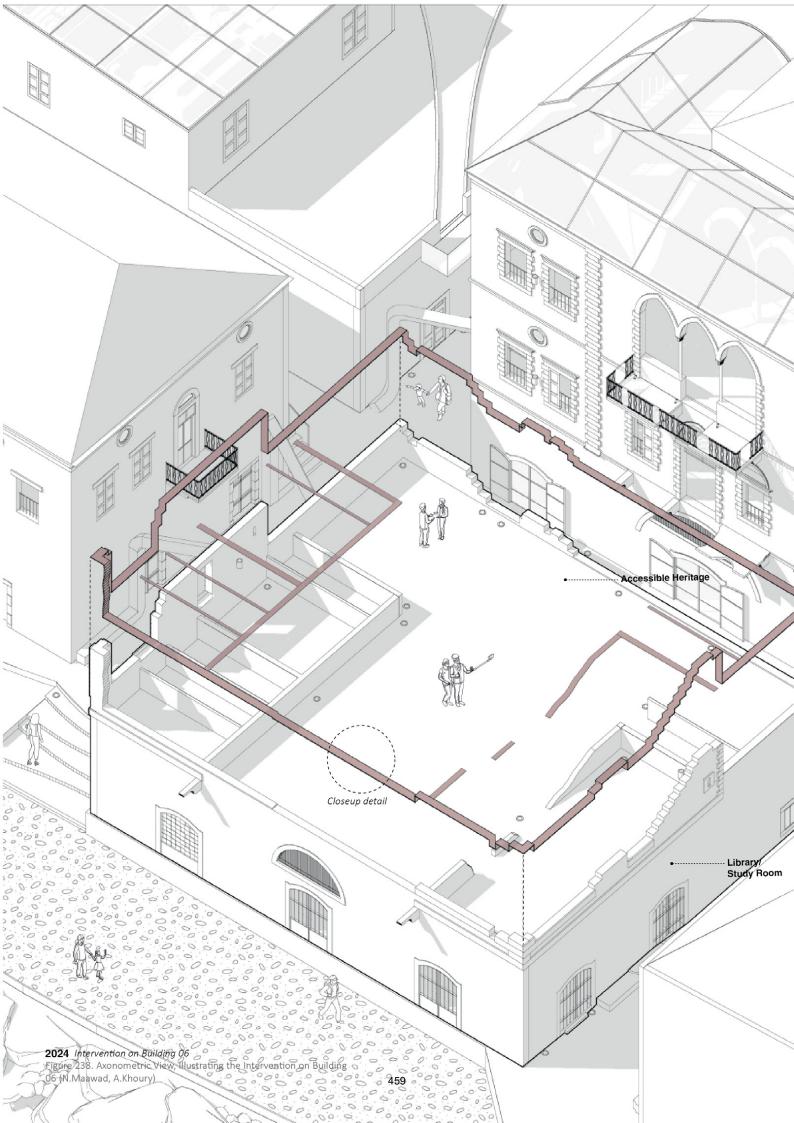


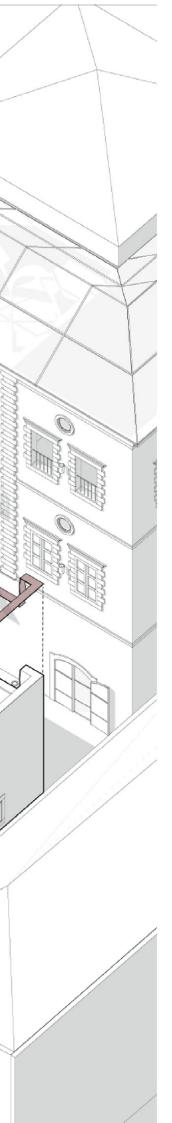






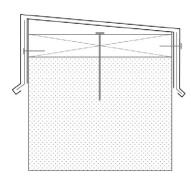






## **BUILDING 06**

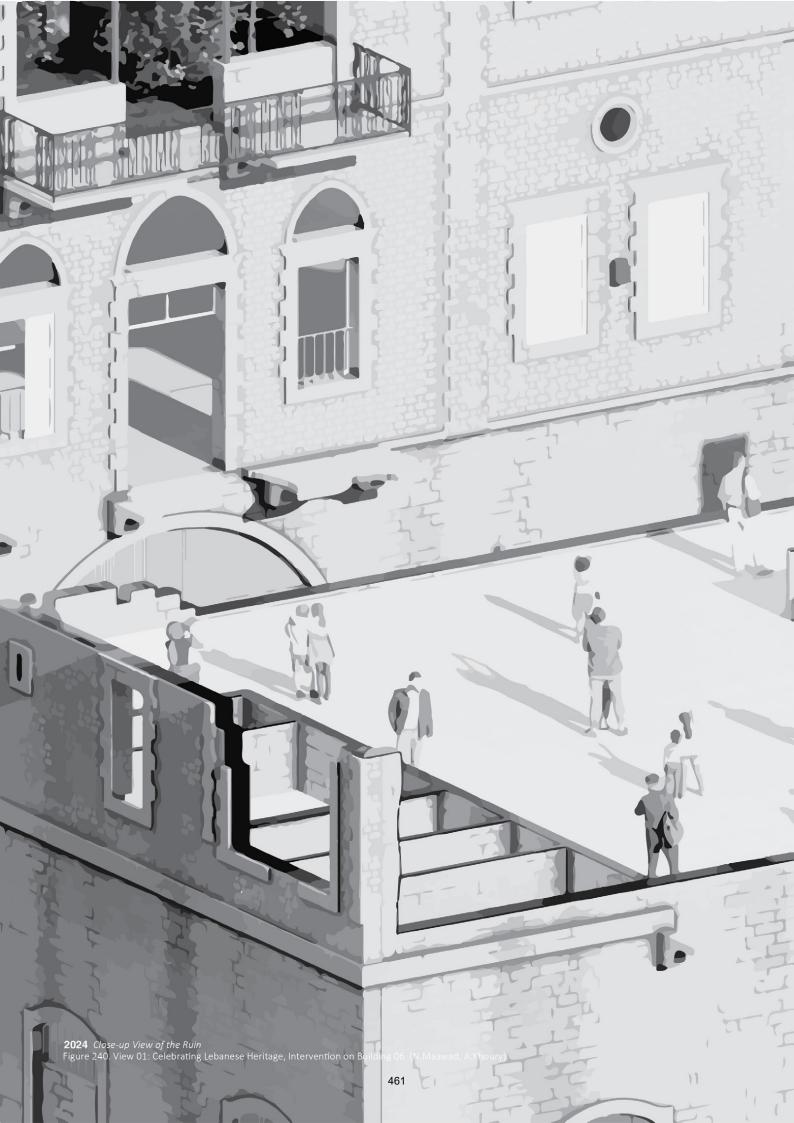
Intervention



**2024** Close-Up Detailed Section on Building 06
Figure 239. Detailed Section of The Intervened Metal Plate on Historical Surfaces (N.Maawad, A.Khoury)

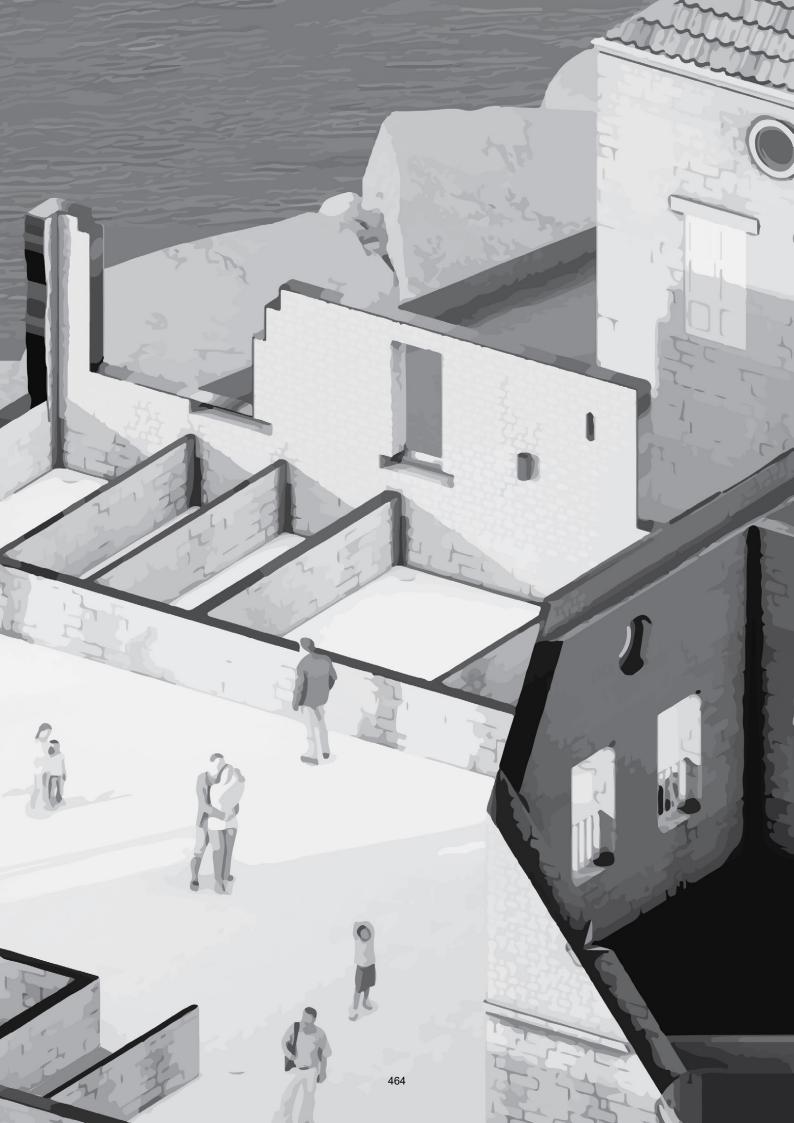
## Preserving Ruins: A Dialogue Between Heritage and Modern Interpretations

Building 06 has been carefully preserved in its original state, showcasing its ruins and historical trimmed stones. It has been repurposed as an open-air temporary exhibition, celebrating artistic expressions that symbolize the interplay between ruins and expressions. To safeguard the structure from further deterioration, a protective metal sheet has been introduced. This intervention not only shields the surface but also emphasizes the significance of preserving ruins as an integral part of the historic strip. The building now stands as a powerful reminder to the value of heritage and the dialogue between history and modern artistic interpretation.





























Conclusion

To Conclude

The journey of this thesis has been a profound thematic approach filled with discoveries, analysis, exploration and transformation, rooted in the intersection of urbanism and restoration, with the Old Souk of Jounieh serving as the focal point of our study. Beginning with a goal to reconnect Jounieh's historic fabric, filled in natural heritage and cultural value, this work addresses the pressing challenges and conflicts that the city has faced. At the heart of this effort, this research aims to breathe life back into its iconic Old Souk, a space rich with history yet burdened by decades of neglect, waiting to be reimagined into a dynamic cultural hub that not only honors its rich past but also adapts to meet the demands of a modern evolving society. Through our analysis of the Old Souk's challenges and opportunities, this thesis has demonstrated how restoration and urban revitalization can intersect to create a better future for heritage sites. The proposed strategies aimed to identify major challenges that ruptures the historical city apart. These issues underscored the urgent need for intervention, not only to preserve the physical integrity of these spaces but to restore their role as a historical symbol that represents the Lebanese architecture. Each interventions provided a framework that ensured the historical identity of the Jounieh and its iconic Old Souk remains intact.

Therefore, urban interventions aimed to transform neglected spaces into vibrant hubs of activity, reconnecting the historic strip to the shoreline through artistic pathways, green landscapes, and interactive urban artifact that produces new opportunities for social and cultural interactions. The introduction of a coastal promenade not only restores the physical and visual link between the Old Souk and the shoreline but also establishes a space that celebrates the coexistence of heritage and modernity.

Architectural intervention focused on preserving and adaptively reusing six critical historical buildings that require immediate attention. These interventions aimed at honoring the authenticity of traditional Lebanese architecture while incorporating modern functionality. The buildings are adaptively repurposed into a vibrant cultural hub, featuring spaces for cultural workshops, museums, and educational and interactive activities, serving as pivotal anchors for a revitalized and engaged community. The juxtaposition of old and new elements highlighted the evolution of architectural styles, setting a dialogue that emphasizes the balance between the importance of preserving historical heritage while embracing modern needs.

The intersection of urbanism and restoration proved to be a pivotal in achieving the goals of this thesis, highlighting their mutual importance in revitalizing Jounieh's Old Souk. Urbanism provided the broader framework for understanding the spatial dynamics that shaped our strategies to reconnect the city together. Meanwhile, restoration aimed at preserving the cultural and historical identity of the city's heritage. Together, these disciplines offered a unified approach that not only safeguarded the historical character of the Old Souk, but also demonstrates how preserving history and redefining modernity can work hand to hand to enhance the significance of a historical site. Therefore, this thesis stands as a call to action for preserving historical and cultural heritages, demonstrating that modern expressions and designs can coexist with and enhance the legacy of the past. It envisions a future where Jounieh and its iconic Old Souk is not just remembered but actively lived and celebrated, ensuring its vibrancy for generations to come.

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