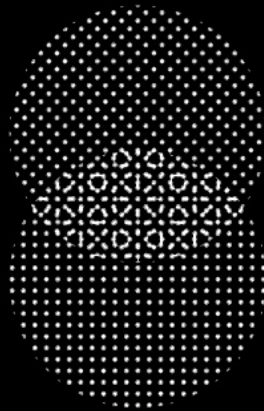
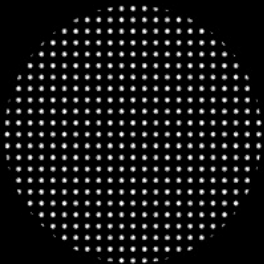
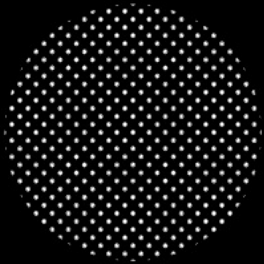


BEIRUT

FROM PUZZLE TO MOSAICS





Politecnico Di Torino Department of Architecture and Design

Master thesis in Architecture for the Sustainability Design

Beirut, from Puzzle to Mosaic

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For Beirut, and the blurred notions of a home

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ABSTRACT

"Puzzle to Mosaic" presents a comprehensive exploration of Beirut's urban landscape, capturing its incredible possibilities and inherent complexities. This thesis uncovers the intricate puzzled pieces that shape Beirut's current urban fabric and proposes strategies in context of urban acupuncture, to piece them together into a cohesive and vibrant mosaic.

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PART I

INTRODUCTION

Appealing to the metaphor of “therapeutic urban acupuncture”, this thesis will experiment this framework on Beirut – a city with puzzled socio-cultural and economical conflicts.

Beirut grapples with the pressing challenge of limited, almost non-existent, public spaces. In recent years, Beirut has encountered acute difficulties, such as political unrest, social tensions, an economic downturn, and environmental degradation. Neighborhoods in the city have suffered from big neglect, a lack of investment, and social fragmentation as a result of these difficulties. On top of that, the government in Lebanon has been criticized for its inability or unwillingness to effectively address the various problems and challenges facing the country, often lacking the necessary skills, resources, and political will to do so (Amnesty International, 2020). This scarcity of public spaces poses significant implications for the well-being and unity of Beirut's inhabitants, as it restricts opportunities for social cohesion, recreation, and cultural exchange, an urgent need after the chronology of traumatic events. To address these challenges and promote

the sense of local socio anthropological community, urban acupuncture has emerged as a promising approach. Contemporary planning faces numerous challenges, but there is potential for revitalization through the concept of urban acupuncture. Imagine using targeted landscapes to breathe new life into abandoned communities. Envision cities designed as focal points of urban acupuncture, where strategic interventions can stimulate positive change and inject vitality into neglected areas, providing meeting spaces in a deprived context. Successful implementations in the world like Taipei and Sao Paolo. By embracing this approach, we can harness the power of localized interventions to address urban issues and create an urban network of improvements. Urban acupuncture offers a promising framework for improving public spaces to play a role as vibrant and sustainable spaces.

AIM AND OBJECTIVES

According to the above mentioned reasons, the goal of this thesis is to explore the possibilities of urban acupuncture in creating and revitalizing public spaces in Beirut. By examining the city's unique interplay of socio-cultural conflicts, and after the 4th of august explosion in 2020, we aim to identify vulnerable areas that require regeneration. We then proceed to analyse urban voids as potential spaces and apply the research of urban acupuncture in their development. Through a nuanced understanding of Beirut's specific context, we will explore ways in which creative, tactical, and selective small-scale (but scalable) interventions can unleash their potential as a cost-effective and politically convenient way to animate tangible urban transformation at the “brick-and-mortar street level”, and allowing citizens to take a leadership role in bottom-up planning (Milstead, 2017) This approach has been successfully applied in various cities worldwide, including Taipei, and can be tailored to Beirut's specific needs and challenges.

The structure is divided into eight parts, each focusing on different aspects related to the application of urban acupuncture in revitalizing public spaces in Beirut. It starts with a depth explanation of Beirut to understand the current problematics before addressing them. Then a thorough research of urban acupuncture is taken to understand its strengths and weaknesses, following the framework of scholars like architect and urbanist Manuel de Solà-Morales (1939–2012), architect, planner and Brazilian politician Jamie Lerner (1937–2021), and Finnish architect and theorist Marco Casagrande. These two topics are then combined to assess the potential of urban acupuncture in public spaces to regenerate Beirut's fabric. As a result, a preliminary proposal is experimented following a categorized approach, followed by reflections on the impact.

Through this comprehensive structure, the thesis aims to provide insights into the potential of urban acupuncture in revitalizing public spaces in Beirut and addressing the city's socio-cultural conflicts and urban voids.

In summary, by focusing on the scarcity of public spaces and positioning Beirut within the context of urban acupuncture, this thesis aims to contribute to the existing body of knowledge on creating

vibrant and inclusive urban environments. Through a comprehensive exploration of the topic, we seek to understand and then offer concrete solutions to address public space challenges in Beirut and inspire similar initiatives in other cities facing similar issues.

METHODOLOGY

The methodology is obtained by using a mixed-method approach that combines qualitative research, literature study, semi-structured qualitative interviews, quantitative analysis, and a preliminary design. To situate the research within the current scientific debate, pertinent articles were examined that highlight the interdisciplinary elements of urban acupuncture and Beirut's fabric, such as the technical, social, anthropological, and political components. The scope and limitations were in the absence of thorough spatial data directly relevant to Beirut, thus posing a substantial obstacle to this undertaking. Therefore, a deep examination to the current conditions was done in order to pinpoint locations in need of revival.

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List of acronyms:

AUB	American University of Beirut
BCD	Beirut Central District
BUL	Beirut Urban Lab
CDR	The Council for Development and Reconstruction in Lebanon
COVID19	COronaVirus Disease of 2019
DGUP	The Directorate General for Urban Planning in Lebanon
DIY	Do It Yourself
GDP	Gross Domestic Product
GIS	Geographic Information System
JFAA	Jut Foundation for Arts & Architecture
LNMP	Lebanese National Master Plan
NGO	Non-Governmental Organization
OCHA	UN Office for the Coordination of Humanitarian Affairs
OEA	Order of Engineers and Architects in Lebanon
PPP	Public-Private Partnership
RTOs	Regional Technical Offices
RPPL	Reviving Public Places in Lebanon
SDGs	Sustainable Development Goals
SWOT	Strengths, Weaknesses, Opportunities, Threats
URO	Taipei's Urban Regeneration Organization
URS	Urban Regeneration Station in Taiwan
UNHabitat	United Nations Habitat

2.1. Localization

Lebanon in the world:

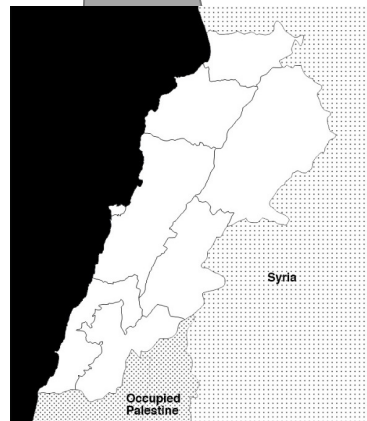
Lebanon is a small sized country of 10452 km² located in the Middle East region. It has a long coastline on its west facing the Mediterranean Sea and shares the rest of its borders with Syria and occupied Palestine.

The population is around 5.3 million people (202) with 4.5 million citizens and 1.5 millions refugees from Syria, Palestine and Iraq. Lebanese citizens are registered with 18 different sects, making Lebanon the most religiously diverse nation in the Middle East. It includes five Islamic sects, eleven Christian sects, and the Druze sect. Since 1932, Lebanon has not undertaken an official population census. (Office of international religious freedom, 2022)

**based on the projections of the United Nations, the last official census conducted in Lebanon was in 1932.*



Figure 1 Map of Lebanon in context of the world and its neighbors – created by the author



Government:	Parliamentary republic
Independence:	22 November 1943
Area:	10,452.00 km²
Water Area:	170.00 km ²
Land Area:	10,230.00 km ²
Population:	5.3 million* (2023)

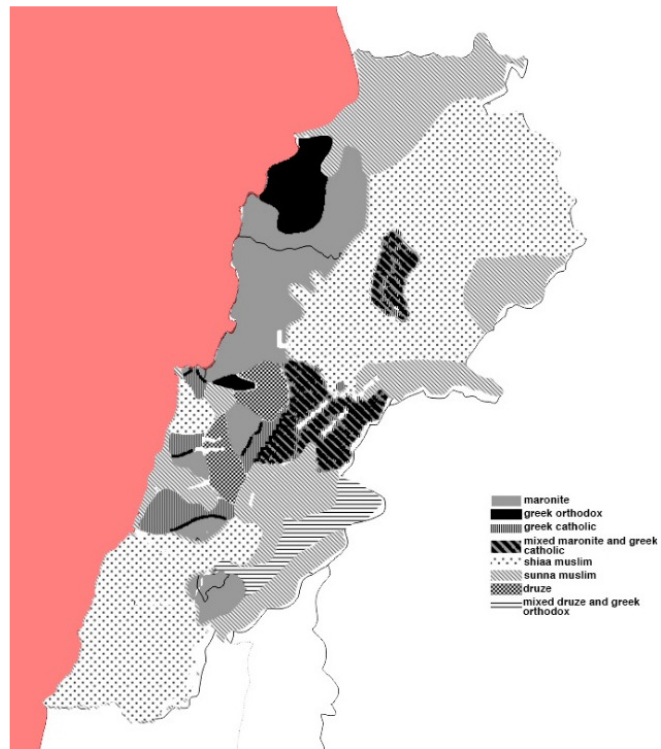


Figure 2 Map of the different religious groups distribution in Lebanon - created by the author

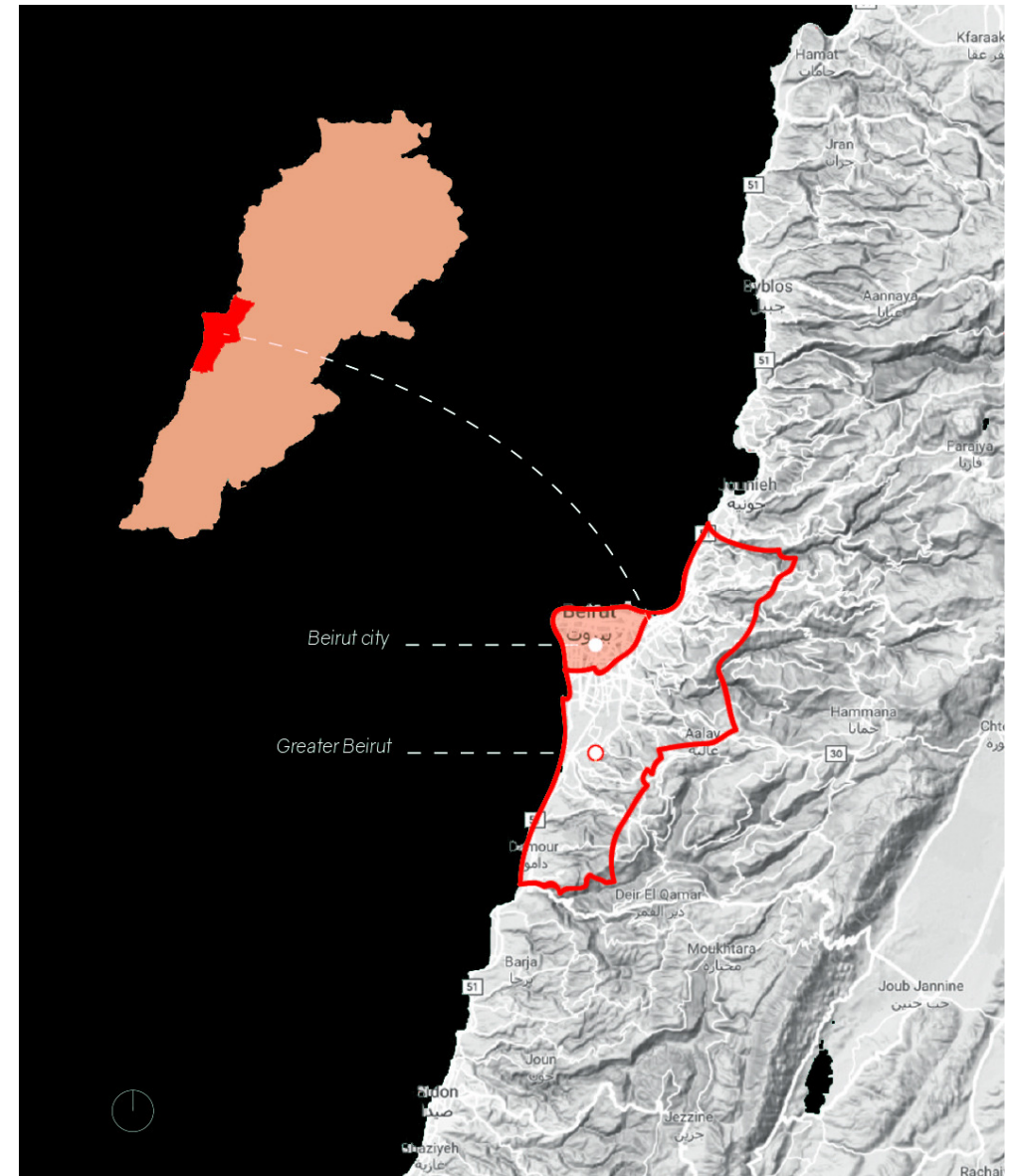


Figure 3 Beirut localization map - created by the author

Beirut in Lebanon

Urban Context

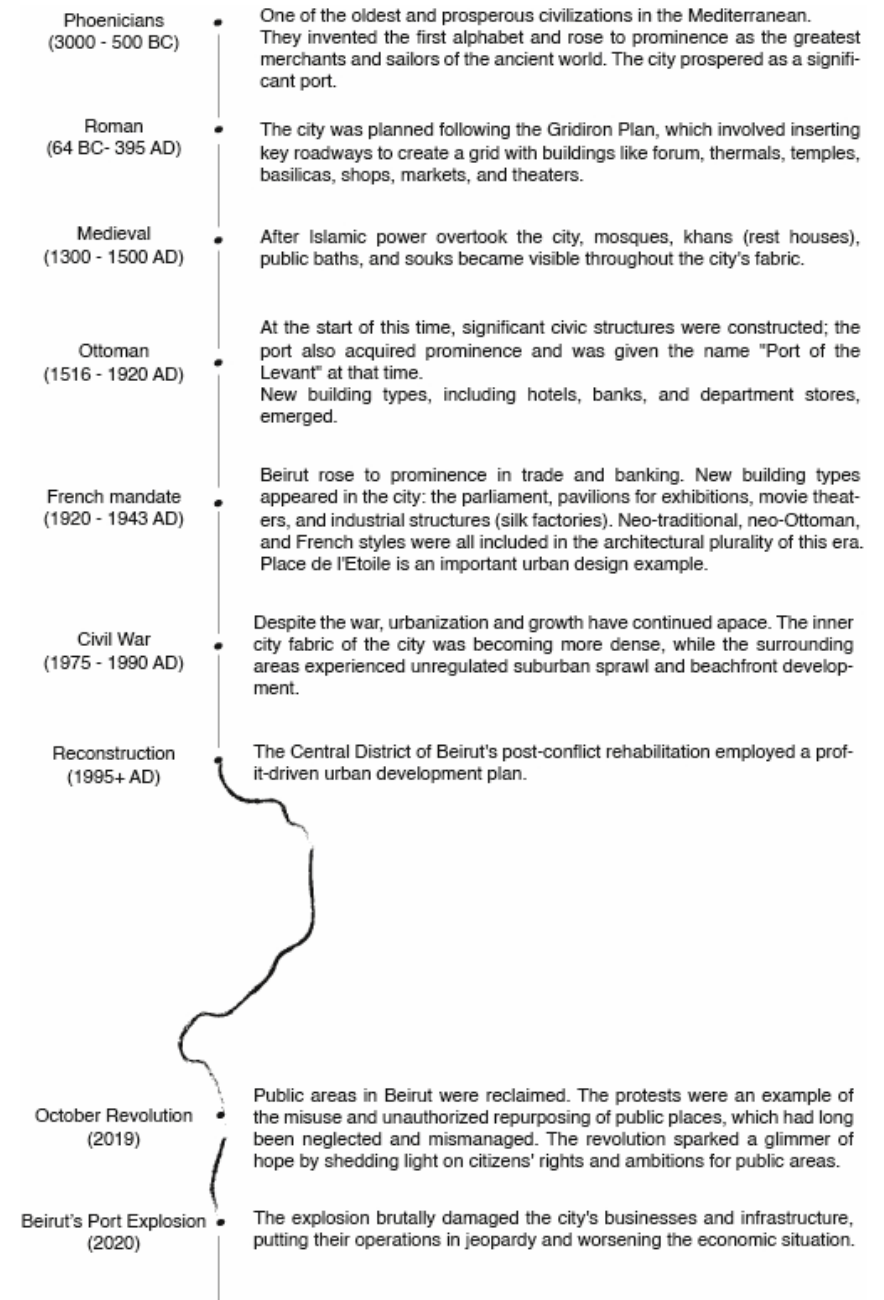
It has been compared to the Phoenix since it has gone through eight cycles of devastation and regeneration, the most recent one being in 2019 after the explosion at the Beirut port.

Compared to other cities in Lebanon, Beirut has the widest range of religious affiliations.

Downtown Beirut showcases thirteen diverse historical eras that have shaped the city's cultural scene. The region has built-up remnants from the French colonial era as well as sites and monuments dating back 5000 years and layers of civilizations from the Canaanite to the Ottoman, including the Phoenician, Persian, Hellenistic, Roman, Byzantine, Umayyad, Abbasid, Crusader, and Mamluk periods.

Historic timeline

(Yassin, 2012) (Zeidan, 2023)



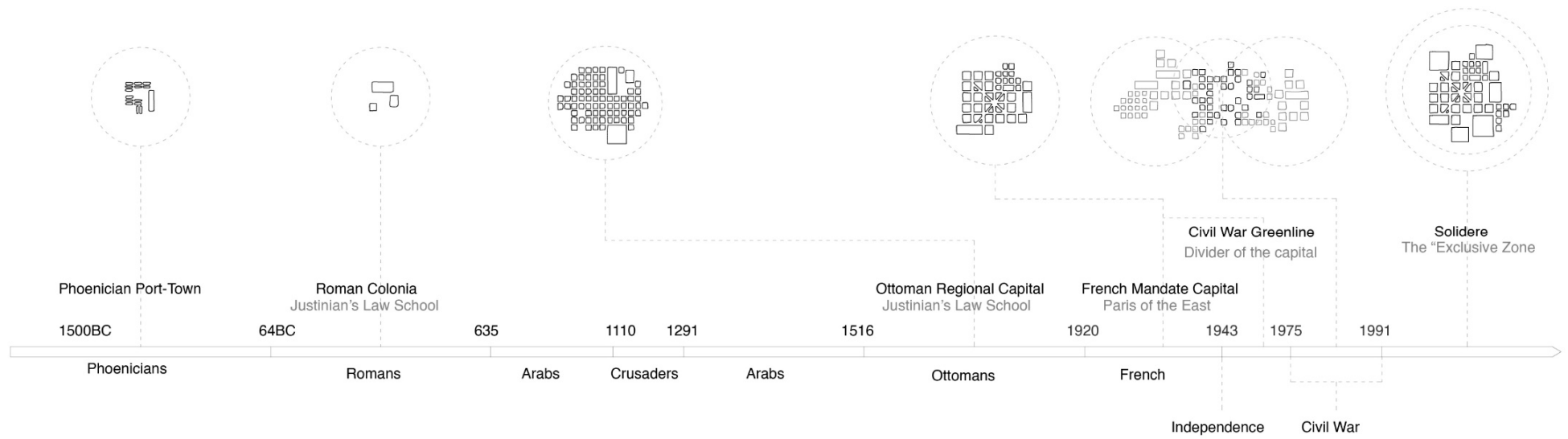


Figure 4 Historic timeline of Lebanon – modified by the author

2.2 Beirut before and after the civil war

“The Paris of the middle east”

Beirut once radiated as "the city of light in the Levant" between the 1950s and 1970s. The Lebanese Golden Age transformed the city into a center that was more than just a political and economic center.

French influence remained as a mix with the Arab culture, making Beirut a cosmopolitan city that was shining because of its architecture, cuisine, fashion, entertainment, and liberated culture, making it a city worthy of comparison to Paris.

Beirut had achieved control and order in the middle of the 1970s and was the main city port connecting trade with Europe and Asia. The city was well-known worldwide and its residents were creating not just a physical city but a collective memory rich in tradition in every corner and alley.

The city center was a popular and attractive destination. The Lebanese frequented the area and were able to enjoy and exchange their own goods and services; this trade was based on an economy of fabrics, apparel, gold, money exchange, leather, and groceries like fruits, vegetables, and meats; banks, cinemas, nightclubs, and hotels could be found in the city; it had

everything; and transportation was also available. Beirut was called Paris of the east not only for its aesthetics and culture, but also for its international performance.

**“
Lebanon was at one
time known as a nation
that rose above
sectarian hatred; Beirut
was known as the Paris
of the Middle East.”**

(Roger Ebert, 1942 - 2013)



Figure 5 Photo of Martyrs Square from a Postcard in 1960s

The green line – Beirut's division (1975–1991)

During the Lebanese Civil War (1975–1991), the Green Line in Beirut divided the Christian East from the Muslim West. As fierce fighting and devastation engulfed the busy core area, it actually turned into a "green" demarcation line as lush vegetation took over. This quickly turned into a wilderness area situated right in the center of a dense city fabric, a symbol for the failure of urbanity to be a space of coexistence for its citizens. (Abboud, 2018)

The complex Lebanese Civil War, which lasted from 1975 to 1990, was an armed conflict. Numerous reasons contributed to the battle, including sectarian strife, political and economic unrest, and the inflow of Palestinian refugees.

The so-called "Green Line," which divided eastern Christian Beirut from western Muslim Beirut with a difficult-to-heal rift that has persisted to the present, ran through the city's center during the Lebanese Civil War when Beirut was split into sectarian territories controlled by religious and ethnic militants. The Green Line established itself as the "Ground Zero" where most of the fights and destruction had occurred, stretching from Martyrs square, the center of the city, to the Beirut-

Damascus motorway. Ironically, it was the area that divided and united the divided city at the same time. (Bak, Berisha, & Grimm, 2022)

**“Beirut! There's no
Beirut. Today it's East
and West”**

(West Beirut Movie, 1998)

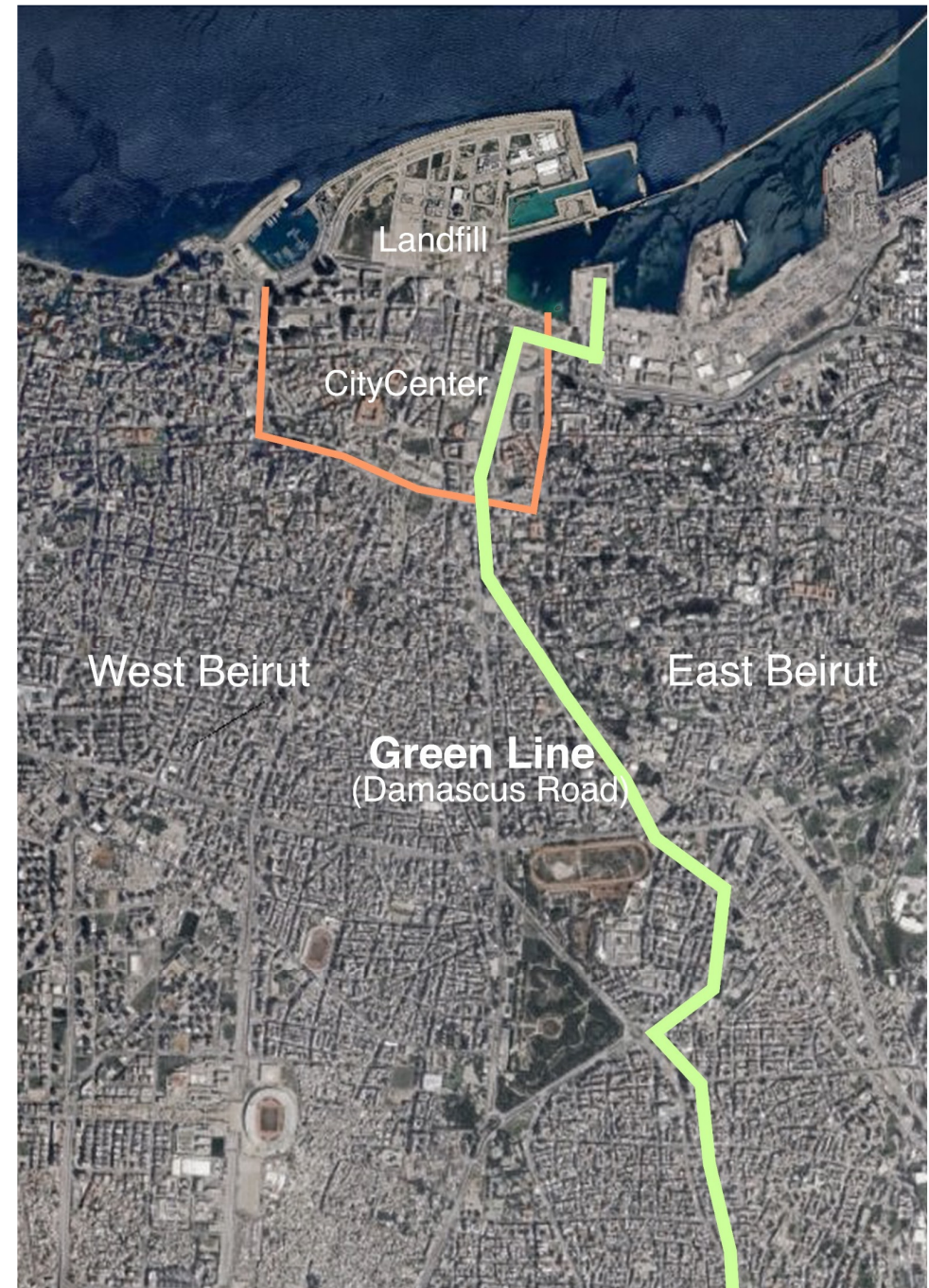


Figure 6 Map of the green line division – source Google Earth – modified by the author



Figure 7 Schematic isomtry showing the green line
Source: (Bak, Berisha, & Grimm, 2022)



Figure 8 The green line division between East and West Beirut

2.3 History of urban planning in Lebanon

The urban fabric of Beirut has changed over the course of its long history, displaying a layering of many civilizations. Beirut was the focus of spatial planning in Lebanon, as literature finds the first master plan in this city, proposed during the French mandate (1922-1946). Road grids and layouts were emphasized, zoning was the main apparatus giving importance to economic growth, and environment questions were little. The development of coastal cities evolved on tourist economy rather than agricultural or industrial planning. A “top-down” approach favored the powerful rich class of politicians and landowners, which translated into physical buildings with disregard to social needs and biophysical degradation. (Ebohon, El Asmar, & Taki, 2012).

On top of that - as will be further discussed later - there were “exceptions” made periodically regularizing illegal buildings. Spaces are being considered as a “commodity to be exploited to its maximum capacity without regards for the natural and man-made environment”. This uncontrolled urban expansion was acute during the civil war (1975-2000), taking over agricultural land, as well as the coastal line up the panoramic mountain hillsides.

In 2002, a new period started for the Lebanese National Master Plan (LNMP), where urban planning took the whole Lebanese territory in an extensive method. Unfortunately, economic biases still took over social welfare, thus lacking a sustainable holistic approach, a crucial need for Lebanese territory. There is no evidence that there is a participatory decision making, planners show final stage master plans to the society, and the tiny change to this rigid state is not to be considered a healthy form of consultation. (Ebohon, El Asmar, & Taki, 2012)

Beirut's Urban Expansion (1800-2000)

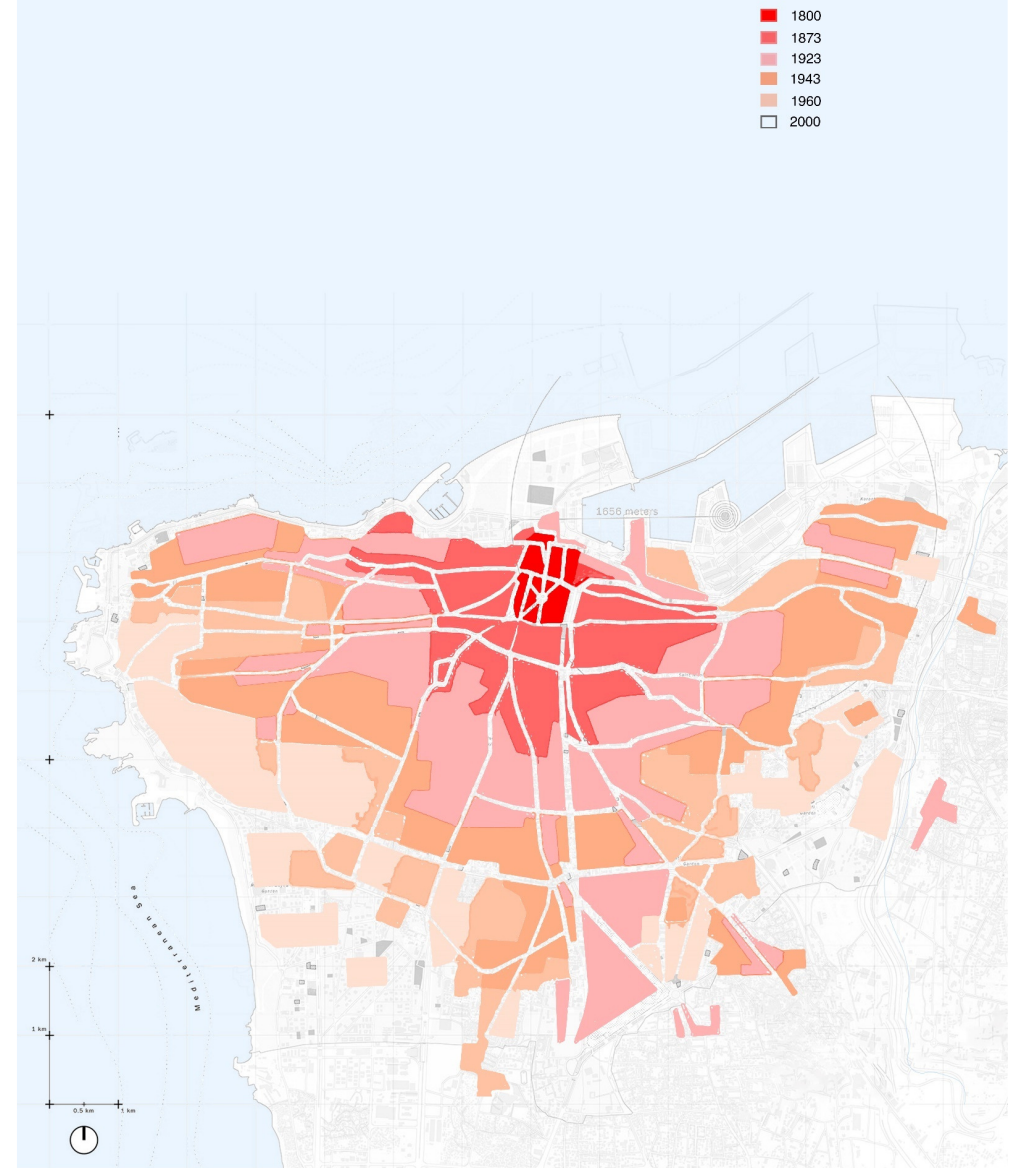


Figure 9 Map of Beirut's urban expansion (1800-2000) – created by the author

Current issues related to planning

Urban planning is one of several difficulties that Lebanon is now dealing with. 87% of the population now lives in urban areas as a result of the nation's rapid and unchecked urban expansion. Major cities and coastal towns have been combined into a single metropolitan region due to a lack of governmental policies or plans, which is challenged by a lack of fundamental infrastructure. Lebanon's urban planning system requires change. The crisis in Lebanon has made it clear that institutional actors at the national and local levels must address contemporary issues. What makes Beirut even more complex is that it also needs planning in a context of a divided city. Thus, it is important to understand its history while developing urban planning.

A. Post-war profit-based reconstruction

After the civil war, a privately-led real-estate company owned by former Prime Minister, called Solidere, was given the task of rebuilding the once-bustling city center.

The subsequent reconstruction, erased the downtown's history and transformed its formerly bustling markets and public squares, where people of all sects and social classes used to mix, into a expensive retail complex housed in appealing buildings, surrounded by streets that limit pedestrian access. The ancient sites that are still standing, such the once-opulent Grand Theatre from the 1920s and the former L'Orient offices from the same decade, are largely inaccessible or abandoned and in poor condition. Howayda al-Harithy, a professor of architecture and urban planning at the American University of Beirut and the research director of the Beirut Urban Lab, says that "the heart of the city was always vibrant and mixed." She argues that it is now a ghost town because it is a location for the elite. The fact that it remains [mostly] empty is evidence that it is out of reach for everyone else. (SEWELL, 2020). The leftovers of the city, hidden within all the lavish structures that surround it, became its icon. Beirut became a gentrified city, and citizens hold

nostalgia for old Beirut, an all-inclusive Beirut. Solidere failed to reconcile and reintegrate its citizens.

In the process of rapprochement and reintegration in postwar conditions, the politics of remembering and forgetting play a significant role. This is due to the power of memory to unite or separate individuals. Lebanon after the conflict is not an exception to the rule. Like all other transitional nations, it must follow a "peace-building" strategy that recognizes and values regional issues and realities. It must especially include local perspectives on what should be remembered and what should be forgotten. The reality is that Lebanon's peace-building efforts have largely disregarded the worries and realities of the larger populace. This is due to the a neoliberal strategy taken in the country to peacebuilding. According to some academics, the primary problem with liberal and neoliberal approaches to achieving peace is that they disregard grassroots, people, daily life, and bottom-up processes and overlook the 'local'. In other words, the strategy ignores the opinions of locals. (Makarem, 2012)



Figure 10 High-rise modern building adjacent to a historical war damaged structure



Figure 11 Parametric modern mall adjacent to a historical war damaged house



Figure 12 Street life Beirut 1960 before the civil war



Figure 13 Beirut Green line during the 1975-1990 Lebanese Civil War



Figure 14 Beirut streets after the post civil war reconstruction – a restricted place

B. A Brief History of Public Spaces in Beirut

The majority of Lebanon's public areas were built during various political eras, including the Ottoman, Roman, and French periods. The Sanayeh Garden, the Serail and its gardens, Sahat Al Sur (Riad Solh Square), and the Corniche are examples of public areas that date back to the Ottoman Empire. These areas were created as a declaration of the Empire's dominance and as tools to modernize the city, following the model of Istanbul. The French Mandate changed the city and helped pave the way for the creation of an independent Lebanese state. The city now represents the French way of life with its cafés, cinemas, and promenades. Sahat Al Hamidiyah (Martyrs Square), Place de l'Etoile, the Pine Forest, and the Corniche—all of which were designed during the Ottoman era—were among the public areas created under the French Mandate. Planning in Lebanon was influenced by the French Mandate in terms of policies, regulations, and plans that continue to define the city to this day. Plans that had been developed placed a strong emphasis on public areas, the transportation system, and urban growth due to population growth. For instance, the 1954 Ecochard plan, as it is currently modified, emphasizes the value of public space. However, when it

came to implementation, open areas received less attention than streets. Public places were becoming less important in plans and implementation, particularly in light of the prevalence of private development and the prominence of the real estate market in Lebanon. This resulted in the lack of breathing room in particularly crowded urban regions with an increasing population. Beirut's ongoing unrest during the 1975 civil war period reduced its traditional public areas to fragmentary vestiges, obliterating them completely. The capital was split between east and west by the conflict, which contributed to social isolation and decreased utilization of public places. (Nazza & Chinder, 2018). This removal created a significant void in people's daily public life and distorted Beirut's societal foundation. The post-war attempts to reunite the split city and reestablish its public spaces were only empty gestures. The limited public places in Beirut struggled to regenerate or else altered how they were used by the public. (Saad, 2020)

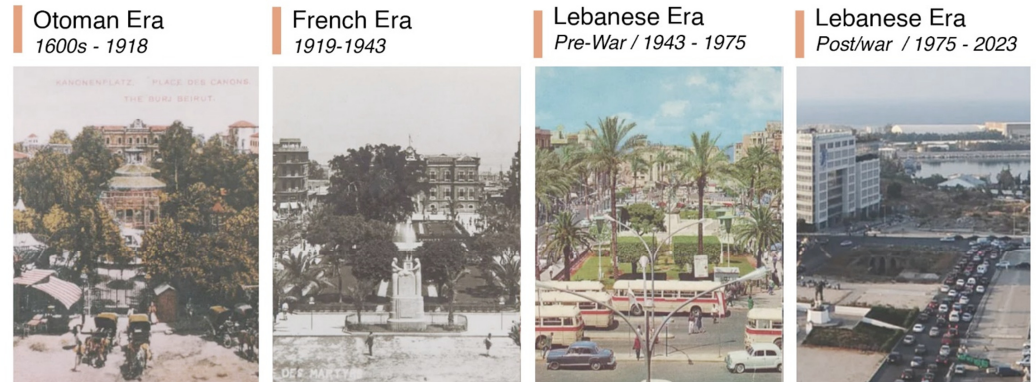


Figure 15 Evolution of the main square in Beirut through different governments

C. The law of exceptions – Illegal settlements

In the most recent history of Lebanon, any change in the legalization of urban regulations is decided based on political needs, rarely on technical necessity. This does not only highlight the state's involvement in the realm between legal and illegal, but it also highlights how most of Beirut's urban fabric is following exceptions and suspensions in the law given to its agencies. The word "exceptions" does not refer to the illegal incentives that are "passed under the table" of small-level bureaucrats. It's the model that policy makers use to momentarily suspend a law, but never modify it.

Illegal settlements in Lebanon are not just the result of people constructing illegally, the state is a big actor organizing and managing the production of this illegality. On one hand specific political parties take control in building, forming a sort of protection umbrella to its supporters, and then after a couple of years, would negotiate with the government to legalize these buildings, and often neighborhoods. In example after the 2006 Israeli war on Lebanon, the Islamic resistance in Lebanon, rebuilt over 200 buildings in Harek-Hreik, none having a permit at the time they were built. Eight years later the political party

negotiated an exception to legalize them, after the action was made. On the other hand, high-rise towers ask a permit from the Higher Council of the Directorate General of Urbanism—skipping the municipal procedures where permits are usually generated. In the council each permit is studied case by case, on the basis of specific case studies. Thus "the exception is the main rule for this category of buildings" as one of the public sector employees expressed.

Planning is mostly documented as logical and as a rational process, however, the mentioning of these examples is to show this contrast with the reality of most third world bureaucracies. "In contrast, the empirical documentation of planning practices, particularly in the Global South, unravels messy, circular, frequently failed projects that give in to corruption, sectarian and ideological tensions, and numerous other hurdles that preclude the possibility of planning. In other words, the investigation of planning practices that are "actually existing" or that are suspended from the application of planning law can teach us a lot about how a city is organized spatially, the types of claims that are made and accepted, and the conflicts over the right to control its spaces. (Fawaz, 2017)

D. Regulations

Since 1961, the Lebanese building code has mandated that a building permit be issued before any construction work is undertaken. With a technical overview from the DGU, local authorities (Municipalities) grant permits. A permit must adhere to zoning regulations and construction codes in order to be issued. The latter impose building restrictions (such as minimum lot sizes, maximum building heights, and minimum facade lengths), which significantly restrict building activities in Beirut's urban fringes. These codes have serious legal penalties for violations. Constructions that lack a building permission or that differ from the original permit in their final finished forms must be demolished at the owners' expense, according to the building code.

E. The relation between politics and urban planning in Beirut:

In the low-income neighborhoods of suburban Beirut, an analysis of building permits allows the understanding of the exception of these rules, and thus the explanation of how the urban fabric took the shape it has today. In the 1950s, there was a big exodus from rural areas to the city, fleeing the poverty in the rural areas and the alarming situation on the lebanese-israeli borders. In 1961 Beirut's peripheries were categorized as sub-urban, low-density zones, making house acquisitions quasi-impossible to the low-income residents. At the time there was a 50m2 permit in the rural areas allowing farmers to build a shelter in a simplified procedure. This "farmers permit" was used in the urban peripheries as a permit exception, and research shows it was the result of mobilization movements that demanded the rural society to dwell in the city. It was adopted by the DGU after being negotiated between the mobility leaders and political actors. However, this "administrative arrangement" was not founded on a legal basis as it authorized informal dwellings while violating the urban and building regulations, making the homeowners unaware of the illegal framework. This tolerated arrangement gave a one-time pass to the city without providing a long-term stay: to redo,

expand or develop one's house. Looking at these factors, one can predict what really happened, citizens would bypass the law to develop their housing structures, taking all opportunities, including the state's weakness and the rise of militias during the civil war (1975-1900).

Then in the 1990s – after 15 years of war where illegal urbanization grew - another one-time exception was issued by government planners to facilitate the process of post war reconstruction, called "refugee permits" or "regularization permits". So, a big number of citizens got the permit and build "back" their houses, even if the latter was already a violation of the regulations. The proof was bought from low-level bureaucrats' testimonials. And this other "exceptional facility" "tolerated" the type of citizens that were impoverished by military violence. In parallel, the "regularization permit" allowed developers and house owners to rectify the legal status of their dwelling in return of monetary penalties. In both these cases, this legalization is stigmatized since its allowance is based on the acknowledgment of a "in violation of building and urban regulations" status.

Since 1971, the Lebanese building law allows building with "special architectural value" a level of flexibility in its urban regulations. This was

commonly an incentive for architects to produce projects with special characteristics that benefited the surrounding area. It is permitted from the DGU'S Higher Council – one of the highest Lebanese urban planning authorities. Since 1990, the post-war reconstruction was based on extra-local investments in the city (Lebanese expatriates and Arabs). The council has given this exception under the Article 16 to these large-scale high-end buildings, even if these exceptions held a clear violation of safety laws, like the example of buildings in relation to the airport's safety line. (Fawaz, 2017)



Figure 16 Google earth buildings comparison of Haret Hreik between 2005 and 2011

From these examples we can understand how low-income and informal settlers have the right to enter the city (by arrangements), but their longevity can be secured facing displacement threats. So, it is important in our proposal to understand how our proposal can ensure the longevity of the citizens in the area. "They are the 'populations' that Partha Chatterjee (2004) contrasted to the 'citizens', those who may be granted 'favours', but never entitlement." (Fawaz, 2017)

This investigation also shows the political parties' ways of showing their own power on urban and thus national scale, as they bend zoning regulations to "protect" these areas from other populations (meaning other identity of populations) "encroachments". "This is where the exception manifests itself in its most complex relation with the law, reflecting, reproducing and reconfiguring who has the right to the city but also who can govern it." (Fawaz, 2017) Because in most cases, even when an exception was made to legalize most buildings, the regulations that puts these houses in an illegal status remain the same unchanged, thus the planning agencies continue to "cast a shadow over their legitimacy", by that giving more power to the political groups as an ever defender of their supporters. The political groups never ask to change urban regulations to

maintain these exceptions as a "favor" for them that will be later revoked, instead of giving them the entitlement to the right of the city. This gives these populations an identity as members of a political group, instead of citizens, especially that these exceptions are made in well-defined areas in the city. Thus, they become a strengthening body for the political party in the governing body. (Fawaz, 2017) In parallel, in the case of "facility exceptions", these are given based on technical basis. But in reality, these are given in exchange of favors, based on the influential power of the political figures. In some cases, the strongest developers would even bypass the council, taking approvals from the presidency status.

While exceptions are frequently granted without regard to location, there is often a strong association between specific exception types and the zones in which they are granted because these zones serve to repeat and reinforce the dynamics that initially gave rise to the exceptions. As a result, accommodations for low-income city people are often found in certain geographical regions, particularly the "peripheries" that eventually turn into urban slums, or unofficial communities, in the metropolis. Additionally, they are kept as "grey zones," places where

development in the future would be desirable if it were politically feasible.

In conclusion, it is feasible to argue that the process of providing exceptions in building permit procedures represents an informal zoning that establishes the timing, location, and manner in which specific exceptions are granted and certain types of structures are built. Through the various ways the legislation is applied, this zoning contributes to the fragmented areas of the modern metropolis. These exclusions in many ways exemplify the same conscious neoliberal calculation. Socially, they attempt to separate city people by choosing some, rejecting most, and reclassifying others as political constituency.

“As much as they betray indeed a planned organization of the city, they also betray the hybrid nature of the Lebanese sovereign and the multiple pressures that it faces.”

“They are the ‘populations’ that Partha Chatterjee (2004) contrasted to the ‘citizens’, those who may be granted ‘favors’, but never entitlement.”

(Partha Chatterjee, 2004)

Socio-economic vulnerability by operational zone

The socio-economic status of households living pre-blast in each zone was estimated by UN-Habitat based on (1) a national ranking of 498 disadvantaged area undertaken to inform the ongoing UN-Habitat-UNICEF Neighbourhood Profiling project and (2) a visual assessment in the field on 12 August 2020 by BUL

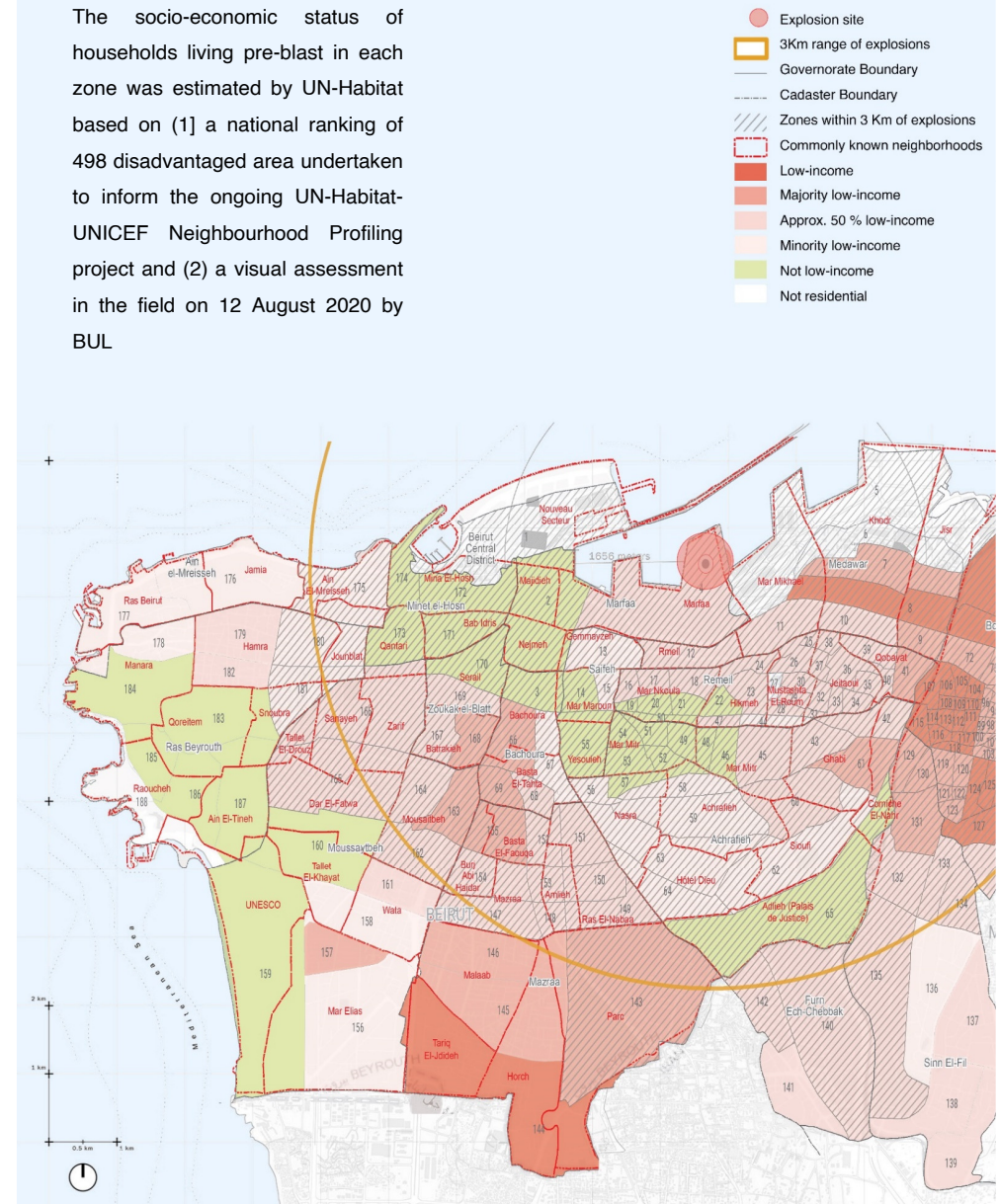


Figure 17 Socio-economic vulnerability by operational zone – information based on OCHA - map created by the author

2.4 Beirut today:

The revolution – October 2019

The 2020 Lebanese Revolution, also known as the 17 October Revolution, started after the government unveiled new tax policies, which sparked significant demonstrations throughout the nation. Long-standing discontent with the ruling class, which has been in place since the civil war in the 1970s and 1980s, served as the catalyst for the protests. Protesters continued to gather throughout 2020 and 2021, calling for the government to be overthrown. (Maalouf, 2020)

Public places in Beirut were reclaimed as a result of the 2019 Lebanese Uprising after years of neglect and poor management. The rights to public space and an improvement in everyone's urban quality of life were among the requests made by the demonstrators.

This perspective on the architectural lessons learned from a revolution is concluded with one final, brief (but startling) point: user-generated sustainability. In this case, people have found amazing sustainability solutions without the aid of outside financing or expertise. These initiatives have demonstrated a kind of concern for sustainability that non-architects share

with us, ranging from recycling initiatives to the addition of vegetation to streets and buildings alike, to full-on studies on endangered buildings' live-load capacities that allowed the spontaneous regulation of visitors' quotas within these structures.



Figure 18 Thousands of protesters on Martyrs' Square during the first weekend of demonstrations (October 20, 2019).

4th of August – Beirut's port explosion

On the 4th of August a massive explosion occurred in Beirut, Lebanon. It was caused by a fire that broke out in a warehouse at the Port of Beirut, and is considered one of the largest non-nuclear bombs in the world, destroying the port with its warehouses and silos, and damaging more than half of the city. Over 6,500 people were hurt, 300,000 people lost their homes, and 207 people died in the explosion. (Stevens, 2020)

This had a significant impact on local businesses and the national economy. The explosion made many of the city's businesses vulnerable to failure and made Lebanon's economic crisis worse. "You can't delete it from my head. You can't cancel it from my memories. You can't cancel it. The hour and a half I lived. An hour and a half of fear. An hour and a half of pain. The explosion itself, there's a difference when you see it in videos and when you see it with your eyes," Habboush said. "My life changed. The first month I couldn't accept myself. My son didn't come near me for two months. He was afraid of me...There's no life even though we're still alive, but we're dead inside. They killed us from the inside. They slaughtered us from the inside." (Fakih, 2021)

Due to Lebanon's severe economic situation and the government's failure to provide reconstruction aid, the rebuilding efforts following the Beirut explosion on August 4, 2020 have been slow and difficult.

The structures had withstood the civil war, the conflict with Israel in 2006, and the recent, largely unregulated real estate investment and reconstruction. Architects, activists, scholars, and locals gathered to rebuild and make sure that the history and architecture of the destroyed neighborhoods—as well as the right of citizens —are preserved. (SEWELL, 2020). This showcases the will of a bottom-up approach that flourished facing catastrophes - and a glacial paced, more of inexistent - government.

Since the Beirut's port explosion on August 4, 2020, life in much of Beirut has been halted. Numerous buildings in the neighborhoods surrounding the port have been completely evacuated. Old and young, native born or recent immigrants, renters and owners, Lebanese and migrants, used to live there. The same may be said about the proprietors of supermarkets, repair shops, storage facilities, design studios, workshops, ateliers, offices, bars,

restaurants, pharmacies, schools, hospitals, and other establishments.

The sounds, scents, and movements of daily life have been replaced by those of emergency responses: the screeching noises of glass, the dust and noise of shovels clearing rubble, the sirens of rescue vehicles, the deployment of police, the work of survey teams, and the motions of volunteers all help to halt time. (direct experience)

**“
The explosion itself,
there's a difference
when you see it in
videos and when you
see it with your eyes.
They killed us from the
inside. They
slaughtered us from the
inside.”**

(Habbouch – Resident in Beirut, 2020)



Figure 19 The destruction after the explosion



Figure 22 "My government did this" graffiti facing the port



Figure 21 4th of august explosion destruction of heritage buildings - Mar Mikhael



Figure 20 Citizens as volunteers for post-blast construction

Beirut 2020 4th of august explosion damage

Orange and yellow pixels are moderately or partially damaged, while dark red regions show the most serious damage. An area measuring 30 meters by 30 meters (about the size of a baseball infield) is represented by each colored pixel.

- Explosion site
- Direct Impact Radius
- severe damage
- moderately damaged
- partially damaged

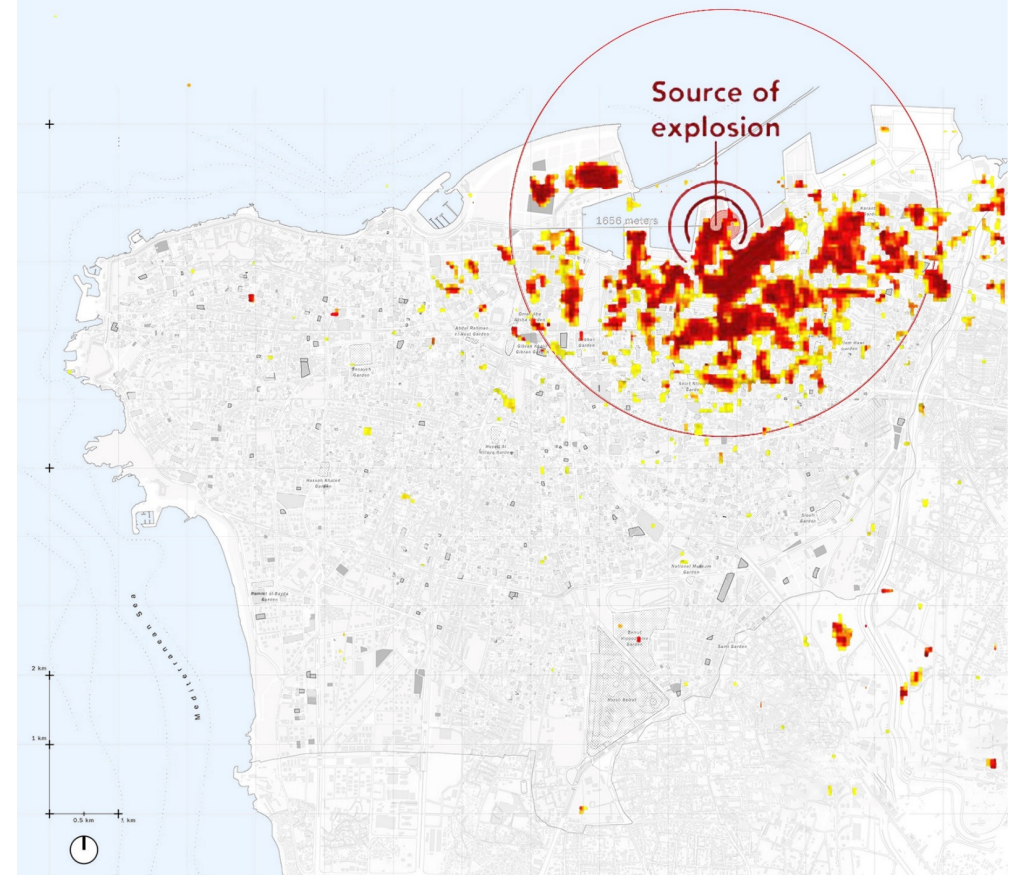


Figure 23 Damage proxy map from the Fourth of August blast, info collected by researchers at NASA's Advanced Rapid Imaging and Analysis (ARIA) – created by the author

Current economic crisis, the national currency's depreciation, and political failure

The worst, multifaceted catastrophe Lebanon has ever experienced has been ravaging the country for almost three years. The simultaneous economic effects of the COVID-19 breakout and the enormous Port of Beirut explosion in August 2020 have further aggravated the ongoing economic and financial crisis that began in October 2019. According to the Spring 2021 Lebanon Economic Monitor, the economic and financial crisis in Lebanon is one of the worst to have hit the world since the middle of the nineteenth century. (The World Bank In Lebanon, 2022)

Politicians in Lebanon have been unable to put reforms into place. With rising debt, poverty, and unemployment because of the crisis, the economy of the nation continues to suffer greatly. Basic services have been difficult for the government to provide for its people, and the level of living has dramatically decreased.

Many of Lebanon's residents are angry and frustrated because of the country's continuous economic crisis, and many of them blame the governing class for the nation's issues. The public's trust in the government has been destroyed by

the governing elite's corruption and poor administration.

To add up to a failing government, there is also a lack of funding. The international community has declined to provide financial support before Lebanese officials implement crucial changes and eradicate systemic corruption. However, the political deadlock has come at a high cost, particularly given the weakening economy and a caretaker administration that will be unable to enact new legislation or take any action beyond the bare minimum.

Reclamation of public space - Lack of, and dire need for, public spaces amid inflation and societal distress

Public space has gradually decreased during the war years (1975–1990). Public spaces that had been overrun by fighting were associated with hostilities, risks, and consequently fear. Downtown Beirut was the scene of intense fighting in the early stages of the conflict before turning into a no-man's land that was divided for 15 years by the demarcation line. These worries about a hostile public environment persist today. (Lakrouf, 2020)

Since that time, no national policy has attempted to restore the connection between the people and their urban surroundings. Public space is monopolized by irrational and unlawful occupations and privatizations, making roadways the only “public” space today. The few public meeting places in Beirut are either restricted (like Horsh Beirut) or (semi-)private and politicized (like the marina in Zeitouna Bay or downtown Beirut). This new social selectivity is demonstrated in the new post-war souks of Beirut. Before the conflict, a wide range of daily activities were conducted there, but now the Beirut Souk is a luxurious outdoor shopping center with rigorous security in place at entry points. The city center has lost its

former dynamism as a result of privatization. (Lakrouf, 2020)

According to The Legal Agenda, a nonprofit research and advocacy organization based in Beirut, public space projects are not present in Lebanese cities and towns because of post-civil war (1975–1990) planning regulations that failed to include public areas as part of their plans. This was impacted by skyrocketing real estate prices, which encouraged development and speculative activity in the real estate market while oblivious to the necessity for public gathering places and open spaces in urban planning. Private organizations tried to control and influence public areas as neoliberal policies took hold of the economy. As a result, public gathering spaces in cities, like restaurants, shopping centers, and resorts, have become more marketed.

The 2019 Lebanese Uprising was one such attempt to reclaim public areas. It has been accomplished on three levels:

- Multipurpose public spaces: where protesters are transforming Beirut Central District's huge formal streets into dynamic and vibrant urban areas.
- Open public areas, including the once-quiet Samir Kassir Garden, which is now a bustling gathering spot.
- Public urban facilities: The Eggand the crumbling Grand Theatre are being given new life as a community center and an observatory, respectively.

Placemaking and the reclaiming of public areas have been noticeable thus far during the 2019 Lebanese Uprising. It has brought people from all ages, religions, genders, and walks of life back together by reconfiguring public places into ones of harmony. (Sinno, 2020)

In the revolution, mobilized population was in the locations shown in this map. First, young people: the under-30 age group, which is suffering from a high unemployment rate (22% for those under 24), is the group most affected by the current financial crisis. There are also households with young children or parents who are yearning to watch their children take to the sky to build a better future for them. Since October 17, everyone from Christians to Sunni and Shiite Muslims to the high-end women of Ashrafieh to the exuberant and troubled teenagers of Tariq el-Jdidé has learned that they are not alone, that their fellow countrymen are going through the same struggles, albeit obviously to very different degrees, and that the Lebanese people exist.

"So here and there, the psychological barriers of fear of the "other" and the forbidden are broken down" (Lakrouf, 2020)

Beirut is a densely populated, highly urbanized city with few, inadequately planned, and badly managed open public areas. Neighborhoods have undergone a severe transformation as a result of the privatization of land, at the expense of public life. However, unoccupied sites in neighborhoods, whether they be constructed, unbuilt, unbuildable, public, or private, present important chances for rethinking urban public life. How would an active urban practice revitalize local public life and spatial practices in Beirut?

The locations chosen for revolution serve as confirmation of Lebanon's severe urban dysfunction, one of the numerous instances of state failure in this nation. Public spaces, which were once valued and crucial for fostering relationships with others, civic engagement, and the common good, have either been renovated or built from scratch and have evolved into both the support for and the targets of protesters' demands. How can we continue to assert these spaces during the crisis as crucial locations for the exercise of democracy and the expression of individual and collective freedoms?



Figure 24 Demonstrators occupying private marina Zeitouna Bay to protest against the privatization of the coast (November 10, 2019) - Yammine Yammine.



Figure 25 Demonstrators occupying private marina Zeitouna Bay to protest against the privatization of the coast (November 10, 2019) - Yammine Yammine.



Figure 26 Protesters recreate a lounge ambience on the Ring, the highway that circles the city center and links the east and the west of the city (October 29, 2019).-Ines Lakrouf.



Figure 28 Wall in Beirut Central District with the phrase "Reclaim your Public Spaces" (Wael Sinno/UN-Habitat)

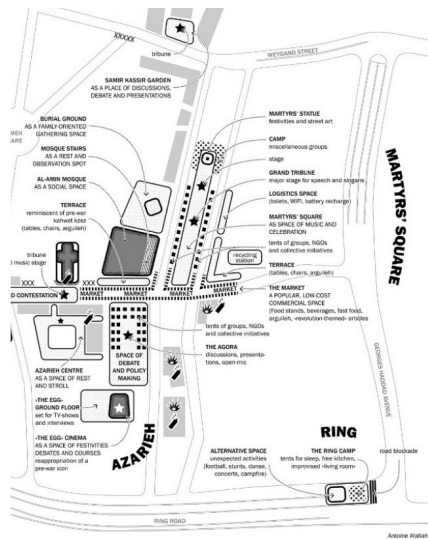


Figure 27 Plan showing the occupation of downtown Beirut on October 27, 2019 – Al Balad courtesy



Figure 29 Images of Martyr's square functions in Beirut golden ages (public space), after the war (private parking), and during the revoltion (reclaimed public space)

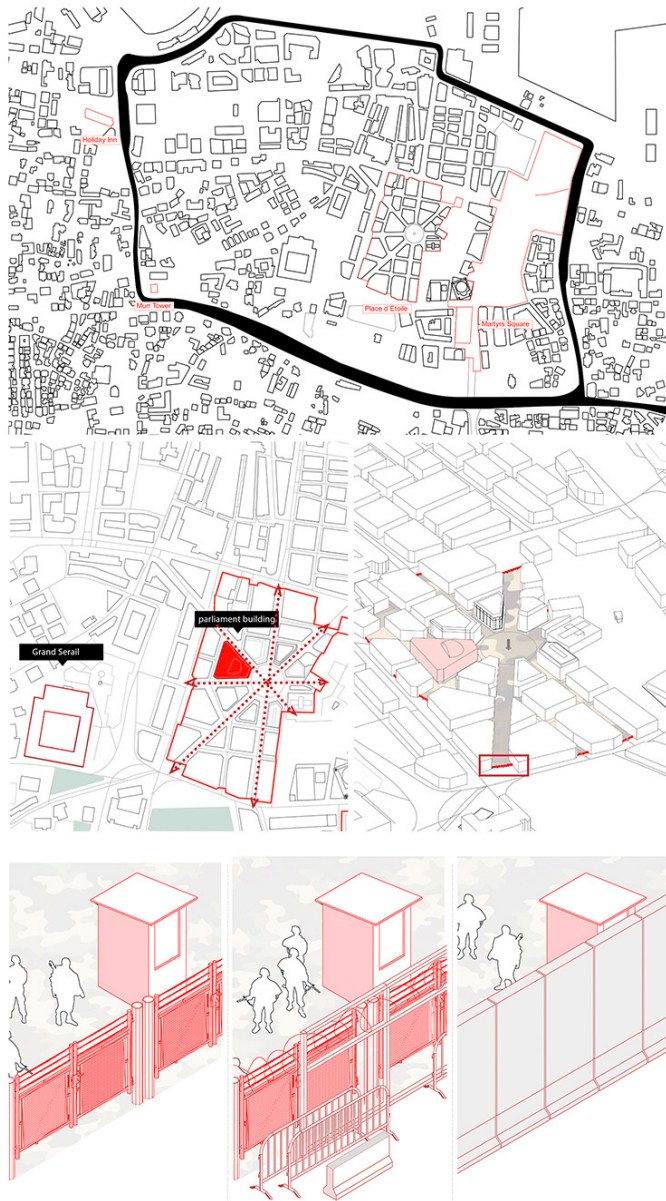


Figure 30 Relevant areas of government control and blockage of public spaces during the revolution

Source: (Bak, Berisha, & Grimm, 2022)

During the protests, Beirut residents encountered a variety of responses from the local authorities in the city's parks, squares, and streets. First and foremost, the government wished to maintain the "safe" or deserted conditions of these public areas. As a result, they made the decision to disperse the masses using heavily armed militia, as well as by setting up cameras and sealing off certain areas of the city. (Bak, Berisha, & Grimm, 2022)

Although Martyrs Square was the focal point of the 2019 protests, the streets also played a significant part, which resulted in many changes to the citizens of Beirut's daily life. The protest march was held on several major streets in the downtown area, substantially limiting traffic flow. People made the decision to reclaim the public spaces by blocking the streets in order to salvage the feeling of control, reestablish the sense of self and power of community, and make their voices heard at a time when they felt vulnerable and faced an all-too-visible threat to their own sovereignty. (Bak, Berisha, & Grimm, 2022)

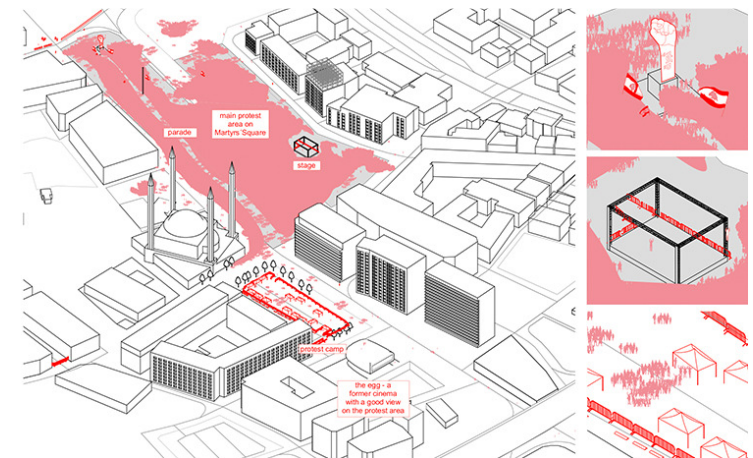


Figure 31 Schematic isometry representing citizens's tents and stage - use of public space during the revolution

Source: (Bak, Berisha, & Grimm, 2022)

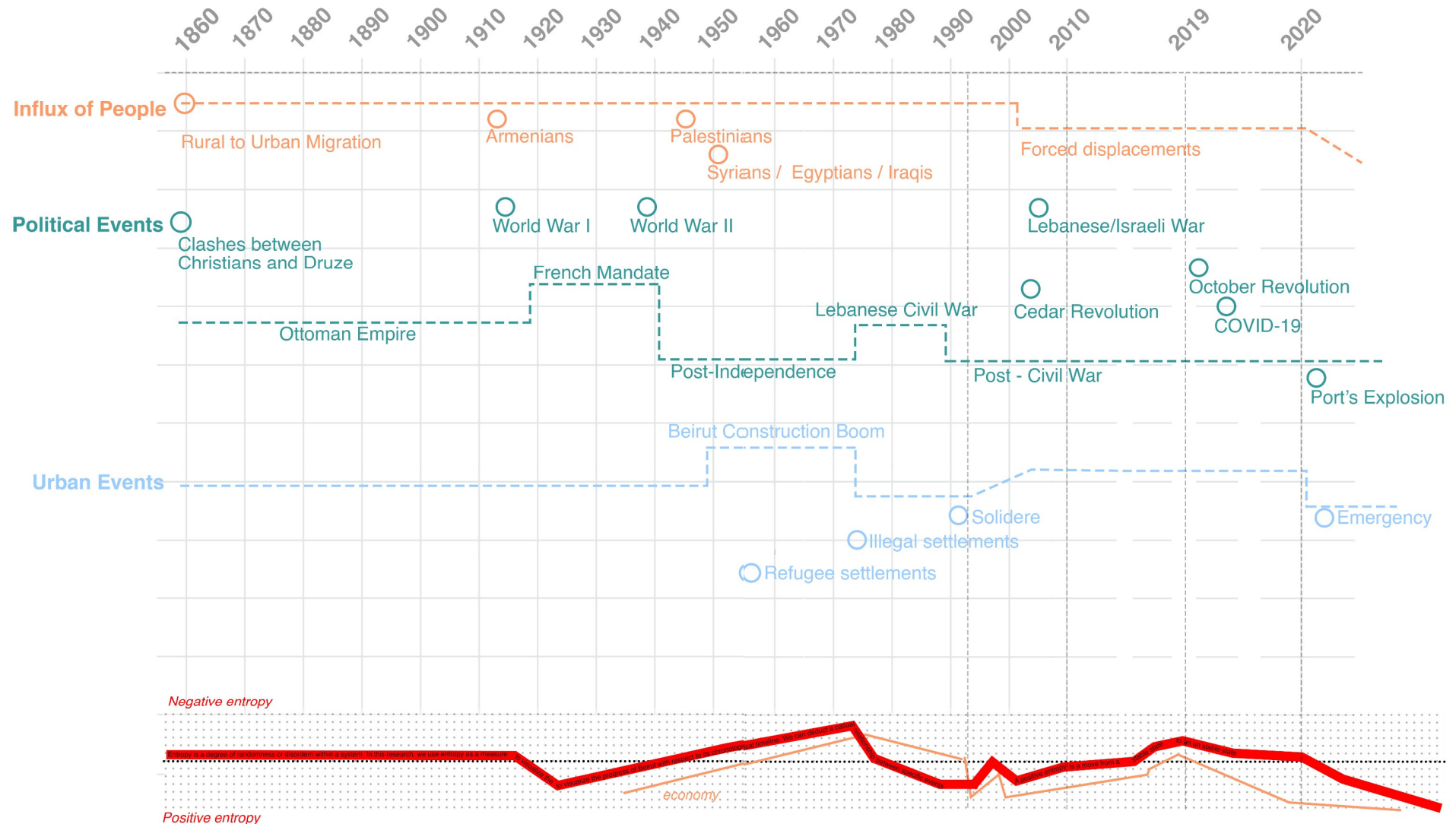
2.5 An Entropic Timeline:

En-tro-py is frequently used to refer to the degree of disorder or unpredictability present in a system. It serves as an analogy for a lack of predictability and order. In the context of our study, the entropic timeline is increasingly producing a positive entropy or a growing decline into disorder when the nation is in a condition of instability. Therefore, the use of time as a healing therapy is indisputable. The suggested timeline depicts a more optimistic future for Beirut and a declining entropy level. It has been difficult for stakeholders to take significant actions to revitalize Beirut because of the challenging political and economic problems the nation is going through. As a response, the suggested interventions serve as a form of urban acupuncture.

(Andraos, 2020)

The following timeline image is a summary of the elaborated sub-chapters – created by the author.

An Entropic Timeline



3.1.1 Metaphor

The idea of urban acupuncture has been studied by prominent figures like Manuel de Solà-Morales (1939–2012), Jamie Lerner (1937–2021), Mayor of Curitiba, Brazil from 1971 to 1992, and Finnish architect Marco Casagrande. I aimed to enhance my knowledge of the theoretical underpinnings and practical implementations of this new urban planning strategy by exploring their publications.

“Just as good medicine depends on the interaction between doctor and patient, successful urban planning involves triggering healthy responses within the city, probing here and there to stimulate improvements and positive chain reactions. Intervention is all about revitalization, an indispensable way of making an organism function and change.” (Jaime Lerner, “Urban Acupuncture”, p.1) (Puttkamer, 2021)

The first literature appearance of the word “acupuncture” dates from 100 BCE, in the Han period in China. It derives from the Latin words “acus” (needle) and “punctura” (puncture). Specific points on the body are injected with tiny needles in the ancient Chinese practice of acupuncture to stimulate the flow of energy, or “qi” (pronounce it “chee”) Over the ages, acupuncture spread throughout East Asia before

being brought in the 20th century to Europe and North America. Acupuncture is becoming a common complementary or alternative medicine that is used all over the world. (Deadman, Al-Khafaji, & Baker, 2007)

The term “urban acupuncture,” first appeared in the 1990s. It describes the application of acupuncture principles to regenerate and enhance metropolitan settings. It entails locating small-scale built-environment interventions that can benefit the neighborhood, like establishing green areas or enhancing transit infrastructure. Urban acupuncture seeks to improve the livability and sustainability of urban areas.

The theory of urban acupuncture is an urban environmentalist theory, merging urban design with the traditional Chinese medical theory of acupuncture “Acupuncture relieves stress in the body, urban acupuncture relieves stress in the environment” (Casagrande, 2013). It is an urban theory that came into practice recently, and still not researched sufficiently. It creates small-scale interventions as a catalyst for the larger urban fabric. Areas are chosen by an overlapping of social, economic and ecological analysis, and further developed through a “dialogue between designers and the community” (Casagrande, 2013)



Figure 32 Urban acupuncture as therapeutic urban needles

3.1.2 Early history and appearance of the concept in urban planning

Since the early sign of human agglomerations, the citizens were the city-makers before any official governmental model was created. In example, around 7000 BCE, the first urban road in Khoirokoitia, an island in Cyprus, was built to connect the citizens and merchants in different levels using a system of steps and pathways. Without any dominating governmental assembly, these residents were not only in charge of creating and maintaining the road. "They understood its importance for the survival of the village" (Garcia, 2015) and thus illustrate the start of citizens leading city development, forming today's urban acupuncture.

Jumping forward a few thousands of years, the "woonerf" was a local citizens' plan to reduce the cars traffic in Delft's residential zone. The residents fragmented roads themselves during nighttime and thus forced cars to be more attentive while crossing their neighborhood. This led to a road more harmonious with bicycles and pedestrians as well. At first it was ignored by the municipality, but after an obvious success, they created a model

out of it. And then the Dutch Parliament followed in 1976 by regulating it in the national streets code. (Garcia, 2015) These innovations, starting from a small-scale citizen's led project and then spreading, show the potential of urban acupuncture. With the fast socio-economic growth, large urban planning is the standard rule. Nevertheless, the concept of urban acupuncture will give planners and citizens a fresh eye to urban transformation.

3.1.3 Definitions and School of thoughts

The names architect and urban planner Manuel de Solà-Morales (1939–2012), Jamie Lerner (1937–2021), architect, urban planner and Mayor of Curitiba, Brazil from 1971 to 1992, and Finnish architect and theorist Marco Casagrande are the most frequently mentioned individuals when discussing urban acupuncture. According to Casagrande (2013), De Solà-Morales is credited with being the first to employ urban acupuncture in urban planning in 1990. Urban acupuncture, in the words of De Solà-Morales, entails "small interventions, which create a ripple, not comprehensive development [and include] embellishments like the sinuous canal side bench...." De Solà-Morales has stressed the significance of always making "concrete" interventions while bringing about change that extends beyond the actual physical interventions that are being carried out (de Solà-Morales, Citation2008). He is well recognized for being linked to interventions that took place across Europe, particularly in Barcelona, Spain. (Hemingway & De Castro Mazarro, 2022)

Like De Sola Morales, Lerner placed an emphasis on change independent of interventions. Urban acupuncture, in Lerner's words, "rejuvenates a 'sick' or

'worn out' region and its environs with a single touch of a critical point. Just like medicine works, this intervention will start a chain of beneficial events that will improve and heal the entire system. No matter how effective planning may be, according to Lerner, "a plan by itself cannot bring about immediate transformation. Usually, a spark is what starts a current that spreads. True urban acupuncture is what that is, in Lerner's opinion, of good acupuncture. (Lerner, 2014)

The effectiveness, affordability, and social aspects of Lerner's programs make them noteworthy. Recycling, sanitation, health, education, recreation, and other land use activities were among the efforts that Lerner oversaw. The United Nations Environmental Award (1990) and coverage in reputable publications like The New York Times have helped him earn prominence on a global scale. He has been acknowledged as one of the most important urbanists in the world. (Hemingway & De Castro Mazarro, 2022). Lerner provides examples of urban acupuncture from all over the world in his book. Some of the pinpricks he suggests for cities include rebuilding community centers and cinemas, establishing pop-up cafés. The most well-known example of his work was the BRT, an integrated mass transportation system based on Bus

Rapid Transit. Instead of proposing a traditional model of expensive subway system, Lerner created surface transportation, which has since emerged as the least expensive and fastest mode of transportation inside Curitiba. According to him, cities integrate a variety of purposes, which is why we want gathering places and vibrant, appealing public areas. These may increase the lack of urban functions.

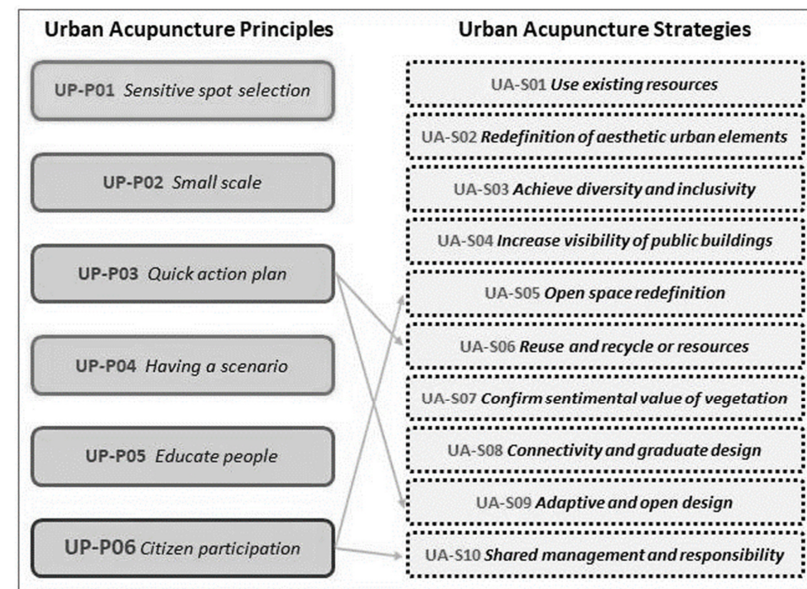


Figure 33 Urban Acupuncture Principles vs Strategies.

**“
Just like medicine
works, this intervention
will start a chain of
beneficial events that
will improve and heal
the entire system.”**

(Jamie Lerner –2014)

Jaime Lerner suggests Urban Acupuncture using these and other techniques in his book:

- Music and other sounds (or silence)
- Scents
- Colours
- Lights
- Water
- Smart transport
- Landmarks

What about the acupuncturists, though? Urban acupuncture is an art that may be practiced without a formal education, claims Lerner. Instead, his book exhorts us all to get outside and begin searching for the empty spots and uninspiring locations that may use a "needle" of urban intervention.

This approach was recently adopted and further developed by Marco Casagrande, a Finnish architect and social theorist. This school of thought "eschews massive urban renewal projects in favor of more localized and community approach that, in an era of constrained budgets and limited resources, could democratically and cheaply offer a respite to urban dwellers". He views cities as living energy organisms with intertwining layers of urban energy flows. These flows predefine the activities of citizens and urban development. It is an

intriguing new vision that adopts a new lens to city observation, adding a new dimension: cities are not just a collection of structures, spaces, streets and users (Lerner, 2014). Our cities are complex living organisms with "overlapping flows of chi", the chi being a term used by urban planner Casagrande referring to the energy than can be "tapped, manipulated, or repaired" (Chan, July 31, 2017). Pinpointed sustainable projects serve as needles to revitalize the broader community by healing its parts. The flows of movements and activities of citizens create a pattern described as "urban chi meridians". Meridians are considered a line of energy connecting the nodes that can revive cities as a complete entity. (Chan, July 31, 2017) By interlacing sustainability and urban design, Casagrande defined the post-industrialized city so-called 3rd generation city: a strategy to elaborate methods of the point-specific manipulation of urban energy flows to design an urban development that is environmentally sustainable. He further explains it as being a cross-over architectural manipulation of a city's sensual collective brain. The city is seen as a living ecosystem with several dimensions and sensitive energy. Urban acupuncture strives for a touch of this kind. Second, "Sensitivity to understand the energy flows of the

collective chi beneath the visual city and reacting on the hot-spots of this chi. Architecture is in the position to produce the acupuncture needles for the urban chi." He adds up by explaining how just like "A weed will root into the smallest crack in the asphalt and eventually break the city. Urban acupuncture is the weed and the acupuncture point is the crack." The impact is entirely possible and connects human nature to nature. The principles of acupuncture were applied by Casagrande: treat the places of blockage and let relief spread throughout the body. Large-scale urban regeneration interventions that are more immediate and responsive to community needs than conventional institutional forms, would not only address localized needs, but would also do so with an understanding of how city-wide processes functioned and converged at that particular node. Release pressure in key locations and thus throughout the entire city. At the moment, Casagrande's Ruin Academy and TamKang University in Taiwan are autonomous multidisciplinary research centers where the idea of urban acupuncture is now being further researched (Casagrande, 2013)

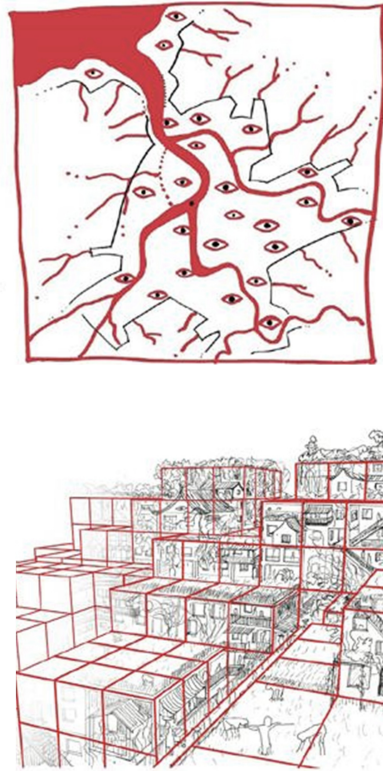
**“
A weed will root into
the smallest crack in
the asphalt and
eventually break the
city. Urban
acupuncture is the
weed and the
acupuncture point is
the crack.
”**

(Marco Casagrande –2013)



Figure 34 BRT Bus Rapid Transit - Urban acupuncture by Jaime Lerner in Curitiba, Brasil

Figure 35 Urban acupuncture theory as shown by Marco Casagrande and the Paracity project in Taipei. (Zagora, 2021)



3.1.4 Factors that led to the development of the subject and the problems of contemporary urban planning

With the continuation of the world's urbanization - based on the United Nations projections (2018), 68% of the world's population will be expected to live in cities by 2050. This increase resulted in an urgent need for cities to respond to the changing needs with higher speed and flexibility.

First, the political, economic, and environmental conditions are facing a big uncertainty. Second, the deindustrialization of urban cities led to empty parcels and structures. Third, the active labor force is searching for flexibility and adaptability. (Williams, 2012) Fourth, institutional bureaucracy and traditional planning procedures are showing inadequacy to being adaptive and responding to the urgency of citizens' needs. In parallel, there is an increase in social awareness and responsibility. This led active citizens - outside of the traditional institutional planning boards - to respond to all these intertwining factors, and to show their ability to address local problematics with time, resource, and risk efficiency. Punctual ephemeral interventions were born as the gateway to improve urban areas – and this is how Urban

acupuncture gained momentum (Chan, July 31, 2017). "We're so used to having the new version of the phone and the app and the software program, we kind of expect versioning in life, including in the city," Lydon says. (Garcia, 2015)

Urban acupuncture emerged from the citizens' resentment of the glacial pace of bureaucratic procedures and traditional urban development model. But there are more factors that kept urban acupuncture distinctively rising, mainly the costs of any potential improvement in cities that resulted as restrictive and forbidding due to:

- Unanticipated costs and their effects
- Shortage in budget assignment in municipal budgets
- Shortness of political will
- Strategical planning procedures possess a long-term execution agenda that makes it hard to:
 - answer local socio-economical changes
 - actively allow citizens to partake in the planning process

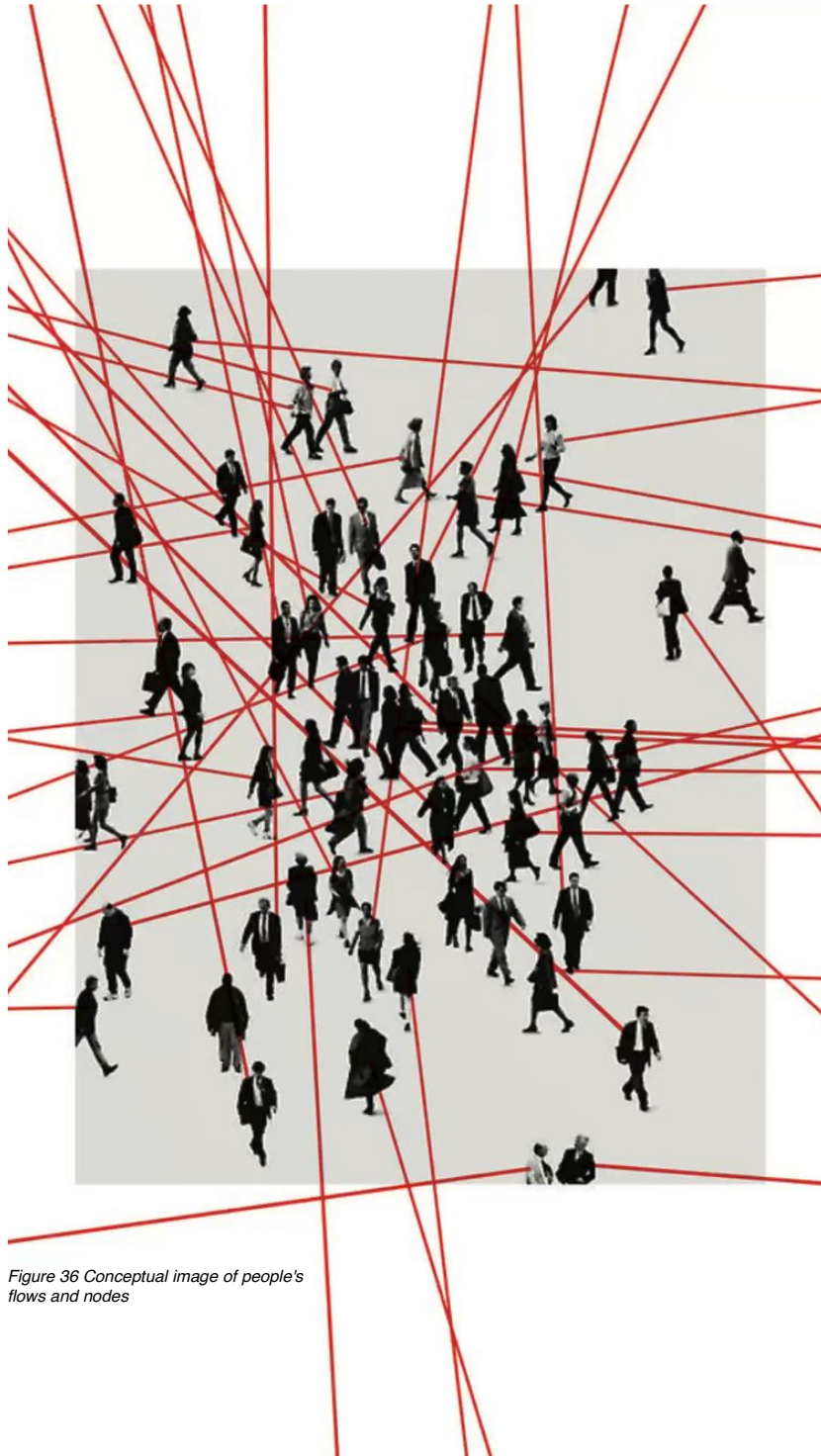


Figure 36 Conceptual image of people's flows and nodes

3.1.5 Potential, Importance and Role

With so many blocking aspects, urban acupuncture is changing the way users experience their surroundings. From its characteristics:

- A phased method
- Locally generated ideas
- Short term commitment
- Lower costs and risks with a potential high reward
- Political expediency and economic efficiency
- Growth of collaborations and partnerships.

As a base, urban acupuncture gives power for flexible and creative experimentations. And this freedom to be playful is giving an everlasting effect on what a community can be. Instead of citizens being passively frustrated facing the "syrup-slow pace and red tape" of the traditional processes, they are by-passing the bureaucratic administrative status quo and taking active responsibility in creating fast and low-cost urban ameliorations. (Matchar, 2015)

Urban acupuncture defies the presupposition that cities' development can happen only through costly, timely,

risky models and through tremendous amounts of paperwork and approvals. It gives power to citizens and officials to experiment with new ideas with low-cost low-risk models.

"Today there are many who believe that being on the margins of the greats flows of the economy and global cultures is no longer the problem from resolve, but the great opportunity not to be wasted " Alessandro Coppola

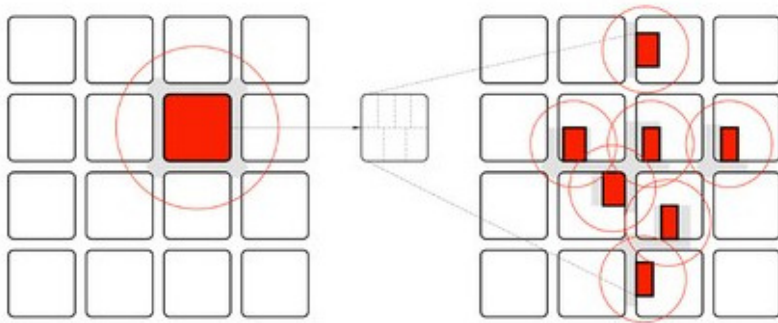


Figure 37 Diagram showing the effect of small initiatives

3.1.6. Critics and challenges:

Urban acupuncture's effectiveness and impacts, both in terms of theory and practice, have drawn criticism and discussion. The developing "urban acupuncture" movement has inspired numerous small-scale (yet scalable) innovative initiatives that have succeeded in fostering meaningful urban transformation, although the idea itself has limitations. How might this strategy develop going forward in order to produce inclusive, long-lasting, and significant social and political change at the local level?

1. Grey literature

Numerous urban acupuncture planning initiatives can be discovered in "grey literature" such as newspapers and blogs. Urban acupuncture is connected to physical planning and design initiatives like playgrounds, housing rehabilitation, "plug-in" housing, or the enhancement of pedestrian and bike networks within this grey literature. It is challenging to locate well-executed examples employing reliable sources and sound concepts of urban acupuncture implementation in peer-reviewed publications. However, the scant study evidence does indicate progress in using urban acupuncture. A participative method is frequently used in attempts to change the urban fabric

to address several urban issues. To further the idea, urban acupuncture must be used and described with greater specificity. Urban acupuncture involves more than just carrying out several minor interventions; the effects should be long-lasting and affect the neighborhood or the city "organism" as a whole. Additional study is needed to determine stakeholder configurations and to cause broad and long-lasting societal and physical transformation to increase the impact of urban acupuncture. To increase implementation and replicability, research on the effects of such interventions is required.

2. Limited impact

The limited influence of the urban acupuncture idea is one of its key objections. The small-scale character of initiatives, according to critics, may have a limited impact on more significant urban issues including poverty, inequality, and environmental deterioration. They argue that rather than replacing broad urban strategies, urban acupuncture may be more beneficial when used in conjunction with them. (Douglas, 2013)

3. Instrumentalize social problems

Another objection to the theory is that urban acupuncture initiatives may instrumentalize social problems like poverty, exclusion, or social inequity to

simple design problems that can be resolved with focused interventions. This method might ignore the structural and systemic elements that fuel urban issues. (Milstead, 2017)

4. Discriminatory impacts

On the other side, several criticisms of the use of urban acupuncture center on discriminatory behaviors. Urban acupuncture programs, according to some, may exclude particular social groups or neighborhoods, exacerbating already-existing disparities in the urban setting, and leading to gentrification in some cases by giving a specific socioeconomic—and occasionally racial—segment of the larger metropolitan population favorable outcomes. (Hurley, 2016)

5. Lack of systematic evaluation

Urban acupuncture interventions face some difficulties in their implementation. Another criticism of the application of urban acupuncture is the lack of systematic evaluation, since some contend that the strategy lacks a rigorous evaluation framework for evaluating the efficacy of interventions and their effects on various urban systems. First, factors should be defined to make sure that the actions have an impact. Additionally, it may be

challenging to implement targeted solutions due to cities' and residents' limited resources and budgets. Understanding the objectives and effects of the interventions is crucial for addressing these issues, as is involving the community in the planning and implementation process. (Hemingway & De Castro Mazarro, 2022)

To measure the impact, questions must be addressed: Who profits and who doesn't? What effect does it have on the neighborhood's real estate market, traffic flow, or surrounding commercial activity? What are the project's social and financial costs? Anecdotal evidence is insufficient to quantify the effects of tactical urbanism projects in today's data-rich culture. To assess a project's effectiveness and prominence, practitioners can use both quantitative and qualitative assessment tools, including bicycle and pedestrian counts, participant observations, survey intercepts, geotag metadata from social media, and mobile crowdsourcing. Studies that are thorough, data-driven, and evaluative can offer vital insights into how individuals react to such treatments.

While criticisms point out the need for improvements, the possible benefits suggest that Urban acupuncture can be

an effective method for generating incremental changes in urban environments. It is very important that designers, planners, and policymakers take these criticisms into account as well as any potential advantages when applying urban acupuncture as a tactic for urban transformation.

3.2. Comparative study on successful implementations around the world

3.2.1 Reasons for the case studies selection

The case study has been chosen to see how residents/community members, local bureaucrats and experts from different backgrounds have taken part in tactical and temporary projects, and will be analyzed to understand the tactics and subtlety of the potential strengths and weaknesses in urban acupuncture. The first case study from Taipei shows how urban acupuncture was opted as a main methodology in urban regeneration, and how an equilibrium between top-down and bottom-up approach was successful in regenerating many areas. The next examples illustrate how bottom-up approach was part of the design and implementation of famous architectural projects, taking MVRDV as a reference, where I had the opportunity to carry out a 6 months internship.

From East To West

3.2.2 Taipei, Taiwan:

In Taipei, Taiwan, the City Government created an apparatus called “Urban Regeneration Station (URS)”, and these sites are public to all citizens, to strengthen and prioritize local

participation in urban redevelopment. (Chan, July 31, 2017) They are defined as a “quiet urban revolution “and “soft urbanism with infinite possibilities” (Office, Taipei City Urban Regeneration, 2021). Even when Taipei uses urban acupuncture at a governmental level, its aspirations are completely consecrated and led by citizens. Taipei is a leading city using this concept, and this is because it acknowledges its planning apparatus limitations and put upfront these resources to encourage its residents to partake in planning. It was launched by Taipei’s Urban Regeneration Organization (URO), a sub-entity in Taipei’s City Government in 2010.

However, it was adopted by the government after the work of urban activists that fought the conventional development methods by embracing citizens-led rooted projects, particularly after the success of “Treasure Hill”. It was an illegal settlement on an acute steep hillside facing Taipei River, later converted into a unique artist village, now home to local artists and the long-term residents. Casagrande worked on this project, and it is considered as an “open-ended mission, an experiment”. This project helped advocate for pinpointed urban interventions rather than grandiose strategies for redevelopment. (Chan, July 31, 2017) The URO adopted urban acupuncture

by encouraging ideas that acknowledge the city’s history and in parallel to imagine its future.

There are a series of factors that led to the emergence of urban acupuncture in Taiwan. They are a mixture of sequential political and economic regimes in Taiwan, like the annulation of the martial law in 1987, the central state power diminishing facing global economic shifts and the middle class growing, and the increase of community mobilization and participatory planning and the re-introduction of elections. These series of factors have had a big role in the road to democratization in Taiwan – and thus created a door for urban designers and citizens to re-assess their built environment, paving the way to urban acupuncture. (Chan, July 31, 2017)

National identity is fundamental for a nation’s building and development. The particularity in Taiwan is that it witnessed various ruling regimes. But each of these regimes was dramatically different, bringing forth fundamentally different values of governance, economic models, and development aspirations. Each regime has carved a specific identity, thus a national identity - affecting a parallel shift between the State and the citizens’ relationship. Taiwan’s political identity presents an

issue in its history and still to the modern day. Its built environment was molded because of these disputes, as all development policies get affected. “As national identity questions are unlikely to be resolved in the near future, while social compromise is difficult to reach, Taipei’s landmarks and structures will continue to be targets for political image manipulation” (Urban Politics and Spatial Development: The Emergence of Participatory Planning, 2005).

Taipei’s share of the country’s resources was negatively affected because of these political identity conflicts between the central government and the city’s government (Democratic Progressive government vs Kuomintang). It caused resource wasting and administrative struggles. Policy scattering and disputes complicate decision-making systems between central and local government, resulting in a governance gridlock. (Chan, July 31, 2017) This has blocked the planning process, which led to the failure of hierarchical model of planning, thus giving birth to “grassroot participation” and “collaborative models” to respond to the citizens’ needs.

After the fall of the Martial law, the middle-class showed activism in self-organization and mobilization, and exposed the public to the inefficiency of

the government. In the 1900s the relationship between the government, planners and society started to get rebuilt, which created for that era better public services whilst creating a shared citizen identity. But with time it shaped into a formal routine model, thus lost its initial critical power to improve the environment. (Chan, July 31, 2017)

We can understand from this that the Taipei society has history in collaboration and mobilization, and this re-flourished recently with the URO (Taipei City Urban Regeneration Office), in an attempt to break the tedious routines. They introduced guiding principles for a new soft urbanism model, to solve issues in depressed neighborhoods, leaning on the concept of urban acupuncture. The office is encouraging “place-shaping and culture-led regeneration” rather than conventional framed methods.

The URS program was officially put into place in 2010 by the URO, explicitly basing their city governance model on urban acupuncture, to regenerate urban systems and flows. The curators did not put restrictions on regulations, technology or budgets. From the main characteristics of this program:

- Every URS site has its name following its street number

- All the sites are open to all citizens: a conceptually peaceful urban platform, to meet, share and discuss ideas and information – in hope to shape a better future.

- The implementation of budget and resources is not restricted, as well as the format of the projects, aligning with the theory of soft urbanism.

- URS partners are on hand to allocate resources and services to support the talent and vision of participants in urban development projects.

- “Chi” residues from the city’s history are converted into the new visions “for the people and by the people” (Chan, July 31, 2017)

A lot of projects have been developed, enriching the cityscape and urban fabric. The URS also supports thoughts on identities and urban values, reaching to various organizations in Taipei to run similar models for spatial regeneration, thus expanding the influence throughout Taiwan. Each of these URS site is managed independently but is the result of cross-disciplined expertise.

The project is rising in momentum, it is establishing a creative atmosphere as a driving force for the new vision and common goal of Taipei’s residents.

Participation is happening from owners of historic properties donating or leasing

their buildings to the government, to groups applying to operate the stations. An endless river of possibilities was opened once the management rights of various nodes were negotiated from the government. The URS then allocates the right resources to these pinpointed projects, and with the creative visions of participants, proves the meticulous execution of the framework, with an impact reaching the neighboring areas. (Chan, July 31, 2017)

The next examples will highlight the model of a participatory local phased approach in igniting change using temporary projects that show the potential of spaces to other actors.

URS44 Story House:

Located in Da Dao Cheng Region, this structure has more than 80 years of history: it was first erected during the King's dynasty, reconstructed under Japanese occupation, knew an era of prosperity due to shipping traffic to its river. But with the industrialization of Taipei, it witnessed an era of depression, the transportation infrastructure passed directly over the river, taking away the productive traffic and cutting the relationship of the residents with the river. A growth was witnessed around the area, but couldn't reach Da Dao area because of its old narrow streets that wouldn't fit pedestrian or vehicular traffic, so all business opportunities became obsolete. The government attempted to regenerate this area by putting a plan to widen its streets. However, this modification of a street that's centuries old forces the demolition of the historic houses giving the street its significant identity, creating an opposite defense from media and groups.

The URS44 Story House is located in the lively heart of the area, on Dihua street, facing the

market, and next to the triangular area of prime real estate. As soon as you enter the building and look out from the window, the life of the streets and its cultural identity fulfils you: bustling crowds, callings of the street vendors, visitors of the temple, drums being played during the temple fairs, all part of the life of Dihua street. These are prompting the already present value and potential that the building can create to regenerate the street if it was preserved.

It was the first case ever in Taiwan to conserve an old alley, thanks to the collective participation. The development rights were transferred leading to a new horizon in preserving assets of cultural value. This pin-pointed project later expanded to the preservation of historical streets in other areas (Three Gorges, Daxi...). As participatory planning showed the potential of this building, the Institute of Historical Resources Management applied to URS44 to advocate its care for cultural assets and further develop this once underserved area.



Figure 38 Dihua street Taipei before the intervention



Figure 39 Dihua street Taipei after the intervention



Figure 40 Dihua street Taipei after the intervention



Figure 41 Image of URS44 Story House; Image by URO

URS21 - Chung Shan Creative Hub:

This building also witnessed different eras in history, which often leads to neglect at the end of a certain era. During the Japanese colonial period, it was a factory for labeling tobacco and alcohol products. Then with the Nationalist Government after World War II, it was transformed to dormitories by the Taiwan tobacco and wine monopoly bureau. Thus, witnessing the development and abolishment of the tobacco and alcohol monopoly in Taiwan. With the privatization of this sector in 1999, the land was given to the National property administration. (Chan, July 31, 2017)

The building had three floors, boomerang shaped cement building, presenting two vast open squares. (Project UrbanCore : URS21 Chung Shan Creative Hub, 2018). URO saw the potential of this site with its context and reopened it. They invited different private art and culture organizations to envision the spatial use of this building, with the end goal to regenerate the whole urban area. (Project UrbanCore : URS21 Chung Shan Creative Hub, 2018). They selectively maintained some features of the exterior and

the interior structure to show the history of the building.

The Department of Architecture of Tamkang University was from the main actors, putting in place a workshop for its students and professors for the creative planning of the structure. These designers successfully convinced the district's chef to change his opinion, instead of rebuilding the whole site, they will transform URS21 into a "creative hub and incubation center", while also designing the adjacent empty parcel to connect the structure to a community park, creating a 3,931 square-meter urban green hub. (Chan, July 31, 2017)

The management was later transferred to JUT Foundation for Arts & Architecture (JFAA) in a selection process, organizing social and cultural events at the once abandoned structure, to start a fresh dialogue with the residents, vitalizing all kinds of networks and collaborations in a creative cultural environment. (Project UrbanCore : URS21 Chung Shan Creative Hub, 2018).

This project was designed with architecture and urban planning as a crucial pillar. From various artists contribution and their creative energy, the URS21 evoked the

memories of the site, and elicited the structure's potential. This isolated place not only reconnected with the city but redefined a new space for the resident's community limitations.

The building now contains an exhibition hall, auditorium, restaurant, a creative incubation center (affordable rental spaces for designers) – where some resident teams won international awards in the design industry – and marries the outdoor green space for more activities of all kinds. A nearby resident said that she felt worried about raising her child in this area before the opening of this project. However, after the transformation, she's not only not worried anymore, but also the project became an added value, as many of these cultural resources have spread in the community, presenting a constructive positive influence on her kid. (Chan, July 31, 2017)

"The hopes surrounding URS21 Chung Shan Creative Hub are implanted like seeds, with the anticipation of them to sprout at different locations at different times, creating hopes and visions for an effervescent life for the people of Chung Shan, Taipei, and beyond." (Chan, July 31, 2017).

This example proves to us how the usage of existing resources to leverage policies is possible to develop new ideas. It used urban acupuncture's characteristics of short-term commitment, realistic expectations, low-risk and with the potential of high-reward. It is a center designed for rebirth, initiating a dialogue with the community, and incorporating creative energies into the city corners.



Figure 42 URS21 Chung Shan Creative Hub
Facebook's page



Figure 43 URS21 Chung Shan Creative Hub
Facebook's page



Figure 44 URS21 Chung Shan Creative Hub
Facebook's page

Reflection:

Urban acupuncture shows that its needles can work in the capacity of short-term action materializing into long-term change, and eventually as a new celebrated planning practice free of formal conventions that come with institutionalized bureaucracy, as Taipei demonstrates the potential of urban acupuncture in allowing its citizens to take leadership in the facilitation of bottom-up planning. In order to blend thorough, long-term planning with the kind of quick-win, prototyping work that can get people enthused about changing their neighborhoods, as demonstrated in the URS examples, this practice derives its rigor from leveraging locals' skills, enthusiasm, and innovative foresight. It is acknowledged that acupuncture in urban settings is not a cure for all ills. However, the URS initiatives are implemented to create community sustainability, empower neighborhoods, and make improvements that are friendly to people. Building a community can result in new alliances, reproducible models, and measurable gains in quality of life (Garcia, 2015). This is the point at which the bottom-up empowerment methodology is put to use.

As seen in the instances, the idea behind urban acupuncture and URSs is socialized and pushed as a regional

strategy linked to identity constructions. This is clear from the ways in which each URS tries to re-connect residents with the new and old vestiges that each site contained. By recognizing each site's legacy, it allows locals to appreciate the area in a new way by appreciating the potential they have to participate in the URS's redevelopment and complements Taipei's architecture's cultural elements. However, URO understands the value of creative economies and environments to compete as a global metropolis.

Based on geographical and cultural traits, a city would continuously look for opportunities for innovative administration. To start the momentum and serve as the base upon which these initiatives can grow, a network of district coalitions that offer support and technical assistance to city officials, volunteer-based neighborhood associations, community groups, and individual citizen-activists must first be established. Therefore, the social structure of the neighborhood as a unit of urban community plays a significant role in the success of urban acupuncture in Taipei. Urban acupuncture can be practiced by anyone, but it may be through this kind of collaborative alliance that the advantages of both urban acupuncture

and bureaucrat-led planning can be combined to create communities that are both livable and functional. This analogy can serve us as a model to be applied to different cities to foster tangible urban development. It is undervalued how important allies can be found both inside and outside of the city employees. City officials are far more willing to advocate for and fight for the significant policy changes that can support what you are attempting to achieve if you bring these coalitions on board early in the process by showing successes, including community buy-in. Despite the optimistic intents of URO, the more institutionally it is administered, the less effective the "needles" of urban acupuncture may be. Urban acupuncture ceases to be a grassroots movement or a space for social opposition as soon as it is institutionalized. Instead, it becomes a state tactic or a fresh approach to handling the city in a bureaucratic fashion. People will continue to find creative methods to mobilize and shape the areas they care about as urban acupuncture becomes regarded in a more legitimate and promising regard where it is governed by its citizens for the citizens. These experiences are priceless and are translated with the intention of using them as a starting point for communication and exchange with other cities across the world and to

encourage a creative environment that is even more reflective of the lives of its residents.

3.2.4 Direct experience: MVRDV - Power to the People!

As part of my curricular internship, I was part of the international firm MVRDV as a design assistant for 6 months in their Paris office.

MVRDV was founded in 1993. They have a global focus and are based in Rotterdam, Shanghai, Paris, Berlin, and New York. They offer solutions to current architectural and urban issues in all parts of the world. Clients, stakeholders, and experts from a variety of fields are included from the very beginning of the creative process in their highly collaborative, research-based design methodology. The outcomes are outstanding projects with a strong voice that help our communities and landscapes advance toward a better future. The work of MVRDV is displayed, published, and recognized internationally with various prizes.

"We create happy & adventurous places".

I was highly influenced by their approach and methodology, and experienced hands on how big and remarkable architecture is further developed in real life.

MVRDV is increasingly providing opportunities for the people to design or take part in the design process. The public is given the opportunity to manage and influence the impending changes by being invited to participate fully and authentically in the process. This encourages involvement and enjoyment rather than opposition and resentment. The public can be included in a variety of ways, from straightforward informational seminars to ambitious plans that give residents complete responsibility over a DIY neighborhood and provide them with the resources they need to shape their own futures. MVRDV has experimented with public participation on all scales for the past 27 years and discovered that the more radical the public participation, the more extraordinary the outcome. (Knikker, 2020)

People in Europe have some control over their immediate surroundings. A right is the ability to oppose, halt, or at the very least postpone significant development projects. However, it can also be considered as a democratic right for people to have their say and demand revisions to projects that are insensitive to the area. While this might encourage nimbyism, which attempts to block required reforms, it can also - in the worst circumstances - bankrupt firms.

With the masterplan for New Leyden in 1993, Nathalie de Vries (founder) tested the waters for establishing a significant design liberty for the users. 670 homes were constructed over a ten-year period by private individuals working with independent architects inside of volumes that were limited in size by the city. The project combines top-down and bottom-up approaches, resulting in a highly regarded inner-city neighborhood where every single house was built by hand. This results in residents who are actively involved in their communities and who have made investments in their environment, thus would never want to leave their self-built dream homes. It is important to not undervalue the influence that homeowners have on their communities. This has been the subject of several scientific investigations, and the conclusion is unequivocal: **owners invest not only in their homes but also in the areas around them.** This effect is amplified by the ability to build a dream home, as when faced with significant change in circumstance, individuals choose to stay. Since the ideal home is seen as the ultimate goal, moving up the property ladder is no longer a goal, and as a result, people's surroundings are affected correspondingly.

While some initiatives are designed with a combination of top-down and bottom-up approaches from the beginning, others unintentionally kick off a participatory process. The neighborhood was extremely puzzled when MVRDV unveiled the open art depot for Rotterdam's Museum Boijmans Van Beuningen since the project was situated in a park next to the museum. The first public information events were dominated by indignation about this unwelcome incursion into the public domain, despite numerous features intended to lessen the impact of the building on the park. However, the city gradually regained ground thanks to a delicate effort in which the design was improved by taking into account public feedback. What began as an informational approach later evolved into a participatory process that improved the design's integration with the city. The park will expand rather than reduce because of the inclusion of the streets surrounding the new structure. Trees that had to be cut down to create room for the structure will be added to the building's roof. The reflecting building will have a matte patch on its front on the side facing a youth psychiatry ward, giving it the appearance of a sculpture in the park. All these improvements improved the project significantly, and at the same time, support for the building increased.

"Today, many proud voices praise the new object in the city." MVRDV used a participatory design process when creating the Market Hall in Rotterdam, incorporating market vendors and locals in the design process. The community's suggestions and feedback were gathered at open forums and workshops, which influenced the final design.

The Rotterdam neighborhood near the depot was well-organized and eager to attend the city-sponsored events. However, in other locations, designers must put in a bit more effort to obtain the required public input. The residents of a tiny working-class neighborhood did not respond to repeated events when MVRDV was chosen to work on a massive urban masterplan in Bordeaux. Winy Maas – founder - rode a bicycle in the neighborhood to meet the citizens rather than just trying to invite them to yet another event. He ended up having tea with residents who showed him old photos of the location. Following discussions of the new project, it became clear that the residents' overall aim was to avoid being dominated by this enormous new building, which includes 3,500 apartments and more than 100,000 square meters of services and public facilities. The parametric urban plan was modified in response to

this request to change the view lines from the neighborhood and reduce the building volumes so that the new project would be considerate to the neighbors and nearly undetectable from the region. In yet another project, the design modifications generated significant support.



Figure 46 Ilot de Queyries by MVRDV Architects - Bordeaux, France



Figure 45 Depot Boijmans Van Beuningen by MVRDV Architects – Rotterdam, Netherlands

3.2.5 Lessons Learned: Outcomes and Recommendations for Urban Acupuncture in Beirut

Studying case studies of urban acupuncture and a bottom-up approach provides valuable lessons on how to promote community engagement and activate underutilized urban spaces. The practice of urban acupuncture, as demonstrated in the case study of Taipei, allows citizens to take a leadership role in bottom-up planning. Urban acupuncture combines long-term planning with quick prototyping to create measurable gains in quality of life and community sustainability. However, the effectiveness of urban acupuncture depends on collaboration and alliances between city officials, neighborhood associations, community groups, and individual citizen-activists.

Institutionalization can dilute the grassroots nature of urban acupuncture, making it less effective as a tool for social opposition. Nonetheless, experiences with urban acupuncture can serve as a starting point for communication and exchange with other cities across the world, encouraging a creative environment that is reflective of the lives of its residents. Therefore, cities should foster a collaborative environment that allows for citizen participation and

promotes innovation in urban design and planning.

The participatory approach advocated by MVRDV in their design process also emphasizes the importance of public participation. However, it requires effort to obtain public input in some locations. Nevertheless, the participatory approach has resulted in successful projects, which indicates the importance of incorporating public input in urban design and planning. Therefore, cities should strive to involve their citizens in the urban planning process and create opportunities for participation that foster a sense of ownership and connection to their community.

From these lessons learnt, recommendations of urban acupuncture in Beirut, include:

1. Collaboration and alliances are crucial for the success of urban acupuncture: To promote community engagement and activate underutilized urban spaces in Beirut, it is important to foster collaboration between city officials, neighborhood associations, community groups, and citizen-activists. This can be done by establishing regular meetings, workshops, and events that bring different stakeholders together to exchange ideas and discuss potential projects.

2 .Emphasizing public participation in the design process can lead to better outcomes: In Beirut, engaging citizens in the design process of urban acupuncture projects can help ensure that the interventions meet the needs and desires of the local community. This can be done through participatory design workshops, community surveys, and other methods that encourage active involvement from residents.

3. Quick prototyping can create measurable gains in quality of life and community sustainability: In Beirut, there may be opportunities to quickly prototype urban acupuncture interventions in underutilized urban spaces, such as vacant lots or abandoned buildings. By testing out small-scale interventions and gathering feedback from the community, it may be possible to create tangible improvements in the quality of life and sustainability of the area.

4. Institutionalization can dilute the grassroots nature of urban acupuncture: To prevent the dilution of the grassroots nature of urban acupuncture, it is important to maintain a balance between top-down planning and bottom-up initiatives. This can be done by ensuring that community input is incorporated into official planning

documents and that city officials are receptive to citizen-led initiatives.

Overall, by following the principles of urban acupuncture and emphasizing collaboration, public participation, and quick prototyping, Beirut may be able to activate underutilized urban spaces and promote community sustainability in a way that reflects the needs and desires of its residents.

4.1 Why Urban Acupuncture is a key for community resilience and sustainable growth in Beirut

In recent years, Beirut has encountered several difficulties, such as political unrest, an economic downturn, and environmental degradation. Neighborhoods in the city have suffered from big neglect, a lack of investment, and social fragmentation as a result of these difficulties. On top of that, the government in Lebanon has been criticized for its inability or unwillingness to effectively address the various problems and challenges facing the country, often lacking the necessary skills, resources, and political will to do so. To address these challenges and promote community resilience and sustainable growth, urban acupuncture has emerged as a promising approach. By using small-scale, strategic interventions, urban acupuncture can activate underutilized urban spaces, promote community engagement, and allow citizens to take a leadership role in bottom-up planning. This approach has been successfully applied in various cities worldwide, including Taipei and Barcelona, and can be tailored to Beirut's specific needs and challenges. By leveraging the skills, enthusiasm, and innovative foresight of

locals, urban acupuncture can foster collaboration and alliances between city officials, neighborhood associations, community groups, and individual citizen-activists to create measurable gains in quality of life and community sustainability. A resilient community is characterized by its ability to effectively navigate and recover from various challenges, shocks, and stresses. Several factors contribute to the resilience of a community.

Urban acupuncture is viewed as a means of fostering sustainable growth that is egalitarian, inclusive, and environmentally responsible by putting a focus on community-centered development. Therefore, urban acupuncture is a key for community resilience and sustainable growth in Beirut.

Activists' Ideologies and Governance Gridlock

In Beirut, activists' ideologies often revolve around promoting democracy, social justice, and sustainable urban development. They seek to empower communities, enhance public participation in decision-making processes, and improve the quality of life for residents. However, these efforts are often hindered by governance gridlock, which refers to the political and institutional obstacles that prevent

effective policy-making and implementation. In Beirut, governance gridlock is characterized by corruption, bureaucratic inefficiencies, sectarianism, and a lack of political will to address the city's challenges. As a result, activists often resort to bottom-up approaches, to address pressing social and urban issues.

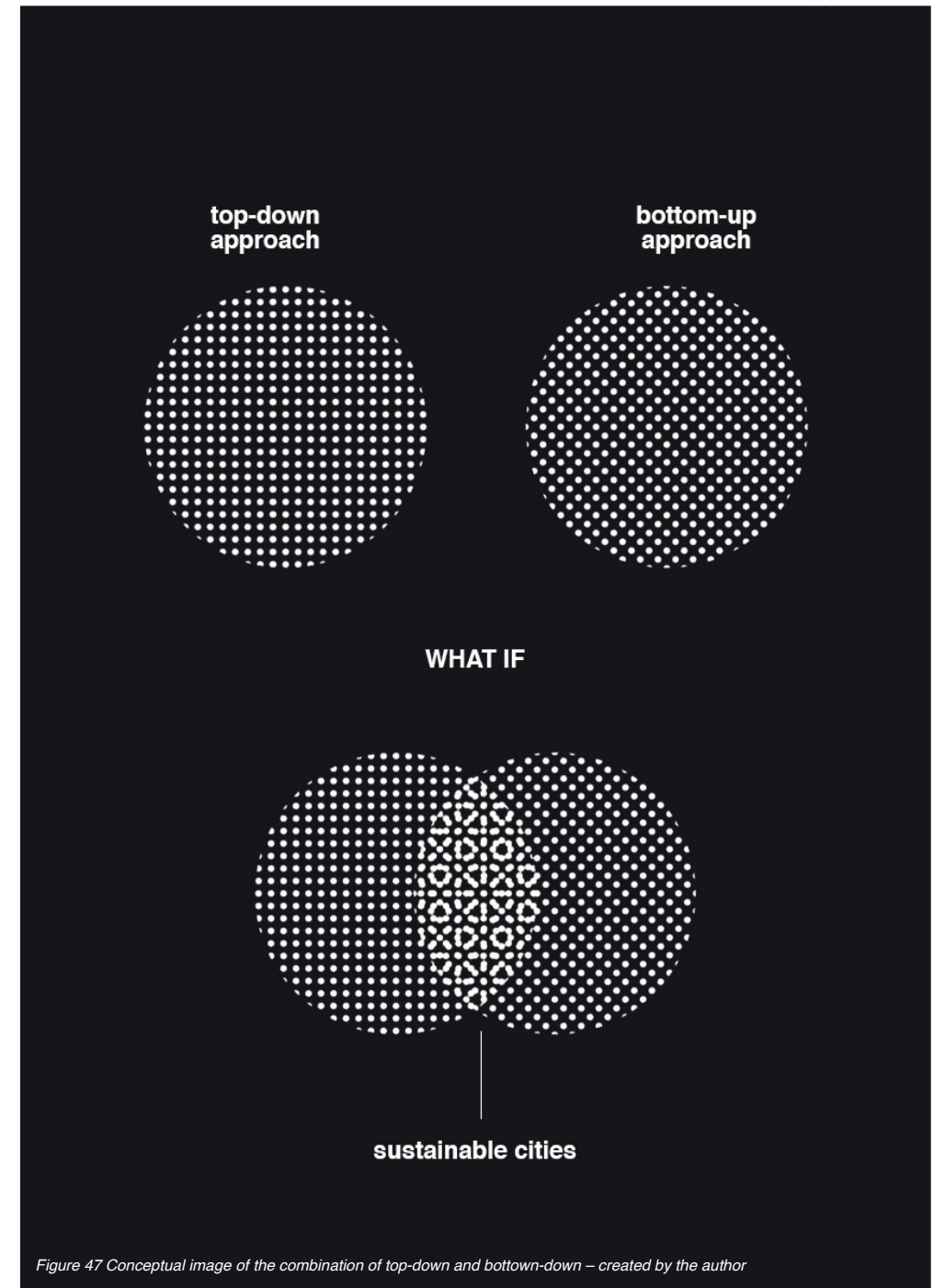


Figure 47 Conceptual image of the combination of top-down and bottom-down – created by the author

4.2 Successful implementations in Beirut

Mar Mikhael Piazza:

Mar Mikhael is an area in central Beirut, known as a buzzing space full of bars and an artist's hub. It is attractive for visitors from different cities in Lebanon as a meet-up space, and also as a residency place for visiting tourists or international students. The Mar-Mikhael piazza is a first of a kind execution of a public space in Beirut, started 2023. This initiative strives to provide green outdoor places for recreation, improved walkability, and relaxation in a metropolis that lacks them. BUL (Beirut Urban Lab), an interdisciplinary research center based in the American University of Beirut (AUB), developed this project. Public spaces in Lebanon never made it to the top of the politicians agendas, which comes as no surprise as the political class is suppressing freedoms – in tangible and intangible spaces. Mar Mikhael Piazza, however, has emerged as a ray of light in an effort to unite the people of Beirut amid sectarian and political tensions and ongoing economic and political unrest. With the "sudden disruption" following the 4th of August blast, BUL is adamant about supporting people-centered solutions, and the lab is hoping this piazza works as a pilot for other projects in streets in Lebanon. Long-term upgrades to the neighborhood's pedestrian infrastructure became

increasingly urgent as the nightlife scene returned after COVID-19 closures and the port blast, along with the traffic they generate. This is an example of a citizens-led bottom-up approach to urban regeneration. However, Mona Fawaz, co-founder of BUL and professor of Urban Design at AUB, spoke about the challenges they faced, the glacial speed of bureaucratic process being the main one, which resulted in longer timeframe than the one anticipated. She also added that another challenge was securing the funds in face of the ongoing recession.

They collaborated with the mukhtar, which has a mayor figure in Lebanon, and they had the permit to start work. However the work kept being postponed because of other municipal works – that were never implemented. So BUL had to re-submit another permit and start the bidding process again.

The project worked on installing and improving street lights using solar energy, urban furniture, greenery, and a drainage system for winter flooding. The solar lights were donated by the Lights of Lebanon initiative – “a collective of lighting designers whose work seeks to revive communities kept in the dark” - another sign of citizens led urban design development. In addition, the pedestrian road will be expanded in favor over the vehicular roads.

The Fondation de France, UN-Habitat, the Italian Corporation in Beirut (AICS), and Architects for Beirut after the blast provided the majority of the funds in the form of donations. (Najib, 2023)

The project is highly collaborative, The process started with interviews with the locals, and Fawaz asserted that the latter were transparent about their needs and worries. “We’re finally having an open discussion about how we will accomplish this and what type of space we want,” she said, adding, “this will be the first time in Beirut that we are sharing a public area of this kind.” The needs were directly translate into the design. The researchers went on site and engaged with the community, attentively capturing their perspectives and envisioning their aspirations for the space. The valuable input provided by the people greatly influenced the design process of the square, ultimately aimed at enriching the urban life experience within the neighborhood, as Bou Aoun - the coordinator of the Mar Mikhael Piazza project - explained. They are still on the ground today, explaining the square project to people and listening to their concerns as it is being executed. (Chamaa, 2023)

The BUL team thinks that such public spaces will build a sense of belonging and help communities advance because people will be able to interact and speak with one another without

being constrained by the consumerist constraints of malls that limit the possibility of human interactions. According to Fawaz, the encounters would be more diversified and less centered on the requirements of store owners.

“We're not simply implementing any public space, it's a disruption,” said Fawaz.

Fawaz pointed out that carrying out physical projects is typically not the responsibility of a research institution. The project, in her opinion, will act as a social experiment that demonstrates "how to get it [change] to happen." (Chamaa, 2023)



Figure 49 Perspective render of the Mar Mikhael Piazza intervention. (Courtesy of: Beirut Urban Lab)



Figure 48 Mar Mikhael Piazza intervention plan. (Courtesy of: Beirut Urban Lab)

UN Habitat and public space

UN-Habitat promotes the incorporation of inclusive and safe public spaces in cities and human settlements in accordance with Sustainable Development Goal 11, which calls for making cities and human settlements safe, resilient, and sustainable. The Global Public Space Programme of UN-Habitat assists cities in evaluating their public areas so that they may create policies and urban development frameworks that address the demands of the public spaces. The primary goal of the program is to advocate for public space as a means of ensuring that all locals have a high standard of living. UN-Habitat has carried out a number of public space initiatives, differing in size and type, throughout Lebanon. UN-Habitat has converted abandoned and deteriorated places into safe, inclusive, and accessible public spaces through a participatory community-led approach and in cooperation and partnership with local authorities.

UN-Habitat is concentrating on the improvement of a number of multipurpose public spaces in 2019 and 2020 utilizing a community-led approach. Redefining public spaces is a crucial part of the broader goal, which is to increase the wellbeing of host and refugee populations through improved environmental and hygienic conditions and greater access to social and basic

services in Lebanon's disadvantaged areas.

Through free access to the areas, healthier and happier spaces, and increased social cohesion among inhabitants, these public spaces have improved local communities' feelings of belonging.

Public spaces, participatory governance, and infrastructural restoration are the three integrated levels on which UN-Habitat's operations in Lebanon are based. These three levels have improved the quality of people's lives in their urban environments.

These initiatives include the Transformation of 5 alleyways in Maraach, Bourj Hammoud. The congested Maraach neighborhood in Lebanon's Bourj Hammoud town is receiving assistance from UN-Habitat in a number of locations.

About 6,000 people live in Maraach, one of the Middle East's most densely populated regions, with roughly 60% vulnerable Lebanese and 40% Syrian refugees and other nationalities. Poverty, restricted access to water and power, a lack of accessible, safe public places, exposed, dangerous electrical wiring, and dilapidated structures and common areas that were severely damaged by the explosion at the Beirut Port last year are just a few of the issues residents must deal with. The project

entails improving street traffic and safety, accessibility to essential urban services, and repair of building facades and public areas. It involved the installation of a solar energy system, which will recycle energy into the grid to power streetlights and give the neighborhood with cleaner, less expensive electricity.

(Nations, 2022)

Regional Technical Offices: a bridge between local authorities and communities

Regional Technical Offices (RTOs) act as a crucial link between local authorities and communities. RTOs employ individuals such as community mobilizers, who are responsible for visiting and meeting with people in the area to identify their needs, concerns, and demands. The RTOs' main goal is to ensure that municipal projects are implemented in a participatory manner, where vulnerable people's voices are heard and their needs are taken into account. These offices provide a platform for local communities to voice their opinions and receive support from the authorities. The work of RTOs, such as the one in Bourj Hammoud, is rewarding and impactful as it helps improve the lives of vulnerable people by ensuring their needs are met. The RTOs are motivated local technical and social experts that support and

enhance the planning and provision of municipal services. Their role is to act as a bridge between local authorities and their respective communities.

From the beginning of the project, says Nour – a community mobilizer – RTOs are meeting with committees that represent the neighbourhood, to understand their needs, demands and fears, making the design and planning of these 5 areas a participatory one.

The strategy suggests actions that respond to specific social, economic and urban challenges, phased in immediate, short-term, and mid & long term responses. The interventions require a combination of monetary and non-monetary resources for implementation and sustainability, which can be provided by local NGOs or municipal budgets, private sector organizations, national/international donors, and public sector budgets. The monetary resourcing requirements are indicative estimates, and costs may be open to value engineering.



Figure 50 Main strategies to mitigate vulnerabilities among Nabaa residents - UNHabitat

4.3 Contextual Spatial Data Analysis

Urban Tensions

The map indicates the most critical synapses in the Beirut nervous system. They were chosen based on an analysis of urban, architectural and social factors. The diseases consuming the area are mostly gentrification, illegal settlements, post-conflict alienation, vulnerable structures, unsafe alleys,

absence of public spaces. The project seeks to reinvigorate current points of interest to create a unified network. The so-called synapses, which are recognized as the stress nodes to catalyze the connections, are then stimulated by the interventions. This map depicts the existing state, which will be followed by the healing of the urban fabric and the anticipated growth.

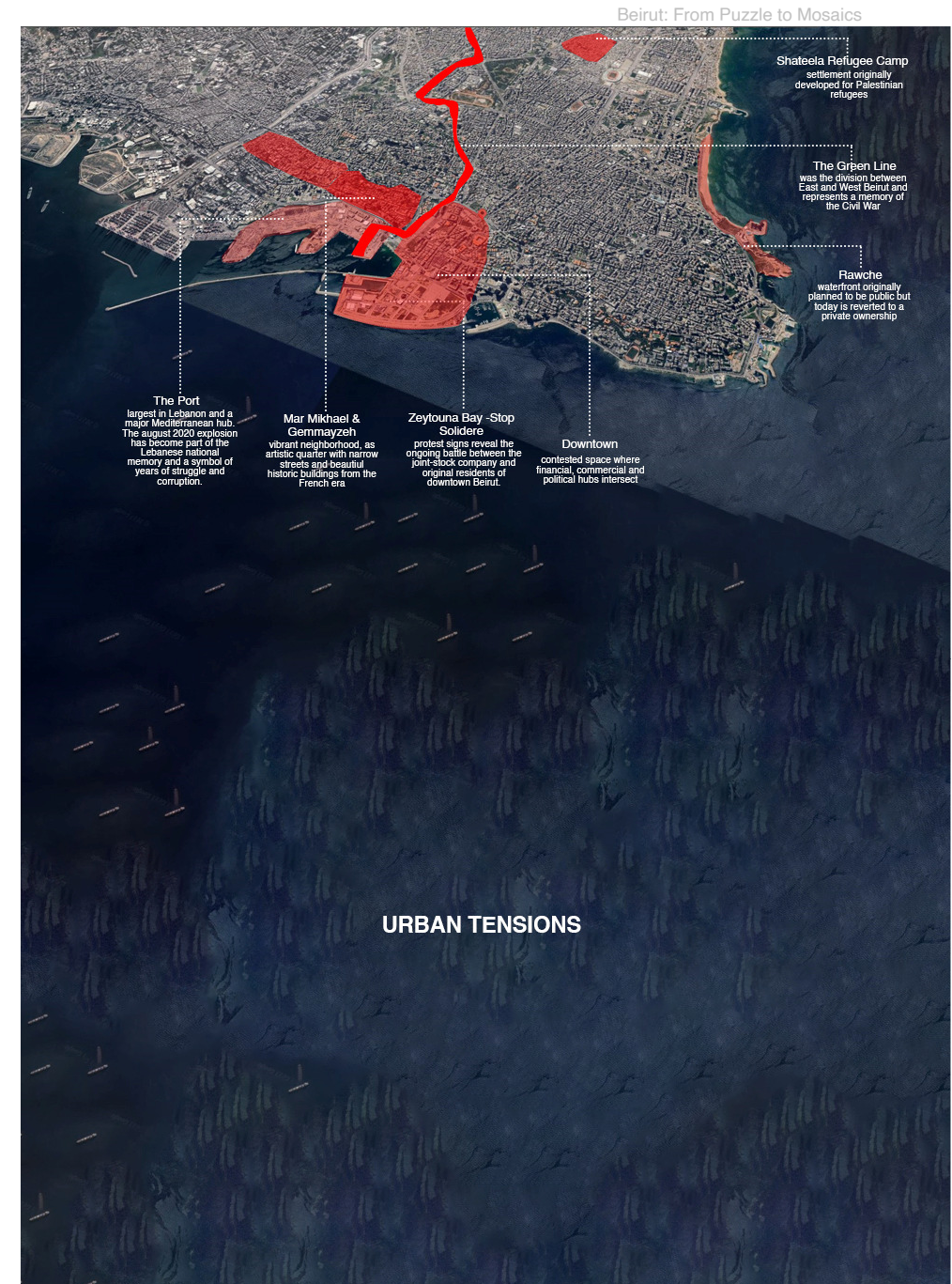


Fig 52 – Urban Tensions in Beirut – created by the author

Strategic Spatial Analysis

A. Current status of public spaces in Beirut

People get together in public spaces, especially in underserved neighborhoods, to transform them into vital areas that highlight local resources, promote revitalization, and meet shared needs. Additionally, public spaces are a key component of modern urban regeneration initiatives because they enable social interaction and the development of a visual representation of the city through fostering a public culture.

The importance of social connections is evident in Lebanon. Meeting locations, such as homes, restaurants, shopping centers, and beach resorts, remain private. This is mostly because Lebanon has a deficit of public places as a result of poor planning, poor laws, and a lack of understanding regarding the value of public spaces and the right to the city. Common practice has favored the use of land for real estate development over other uses, such as public and communal areas, particularly major cities because property costs are so high.

Malls began to appear in Lebanon in the late 1990s, and they have arguably served as an alternative to public areas. For some Lebanese, malls—with their abundance of food courts, restaurants, movie theaters, and play areas—have

become the new downtown to meet. The fact that they are regarded as safe is another crucial element. Less than 13% of Lebanon's land is considered to be green as of 2015. The WHO

recommends a minimum of 9m² of green space per person, however Beirut only has 0.8m² of green space per person (UN-HABITAT, 2016).

In a city like Beirut that depends heavily on cars, such balancing is necessary. According to research by Lebanese University urban planner Adib Haydar, Beirut has 627 cars per 1,000 residents in 2018.

According to a study published in the journal *Smart Cities*, street-side parking lots occupy 5.75 percent of Beirut's surface area, three times as much land as green spaces.

Beirut is a densely populated, highly urbanized city with few, inadequately planned, and badly managed open public areas. Neighborhoods have undergone a severe transformation as a result of the privatization of land, at the expense of public life. However, unoccupied sites in neighborhoods, whether they be constructed, unbuilt, unbuildable, public, or private, present important chances for rethinking urban public life. How might an active urban practice revitalize local public life and spatial practices in Beirut?

Today, there are hardly any public areas in the capital city of Beirut. They are not just rare, but frequently unavailable or privatized. They are made up of 21 public parks, squares, and waterfront that has been divided up by corporate interests. The Municipality of Beirut has not given the city's urgent need of public space adequate attention. As a result, there has been a rise in the number of activists fighting for urban and public space rights. As a result, numerous organizations came together to spread the word about the problem and engage the community and important stakeholders in conversation. The activism consists of both solitary and collective endeavors involving academics, environmentalists, and civic groups. These activists have undoubtedly contributed to molding the future of these threatened commons and increasing awareness of them by participating in activities centered around public spaces. Such public space activism activities in Beirut have depended on a variety of community organization techniques, such as discussion panels, open forums, artistic exhibitions, petitions, campaigns, protests, tactical litigation, and lobbying. (Nazza & Chinder, 2018)

However, the city still has examples of a vibrant public life, steeped in its urban

history, that can be observed through its markets and streets as well as through a variety of spatial practices that take place in open, more or less hidden public and private spaces, such as alleys, stairwells, building entrances, vacant lots, and other random locations. Some of these locations are also abundant in vegetation, which arouses the senses and influences how we feel about the city.

The first map shows the shortage of green areas in comparison with other cities.

The maps showing publicly-owned parcels and open parcels that are used by the public and unoccupied unbuildable parcels in municipal Beirut aims to emphasize the numerous chances that can still be grasped to revitalize public life in the city. In fact, Beirut contains a lot of unoccupied space, both constructed and unbuilt, both public and private, some of which are occasionally appropriated, frequently for personal purposes and less frequently for communal usage.

Public and private green areas in the Beirut



Figure 53 Diagram comparing the green area per person in different countries

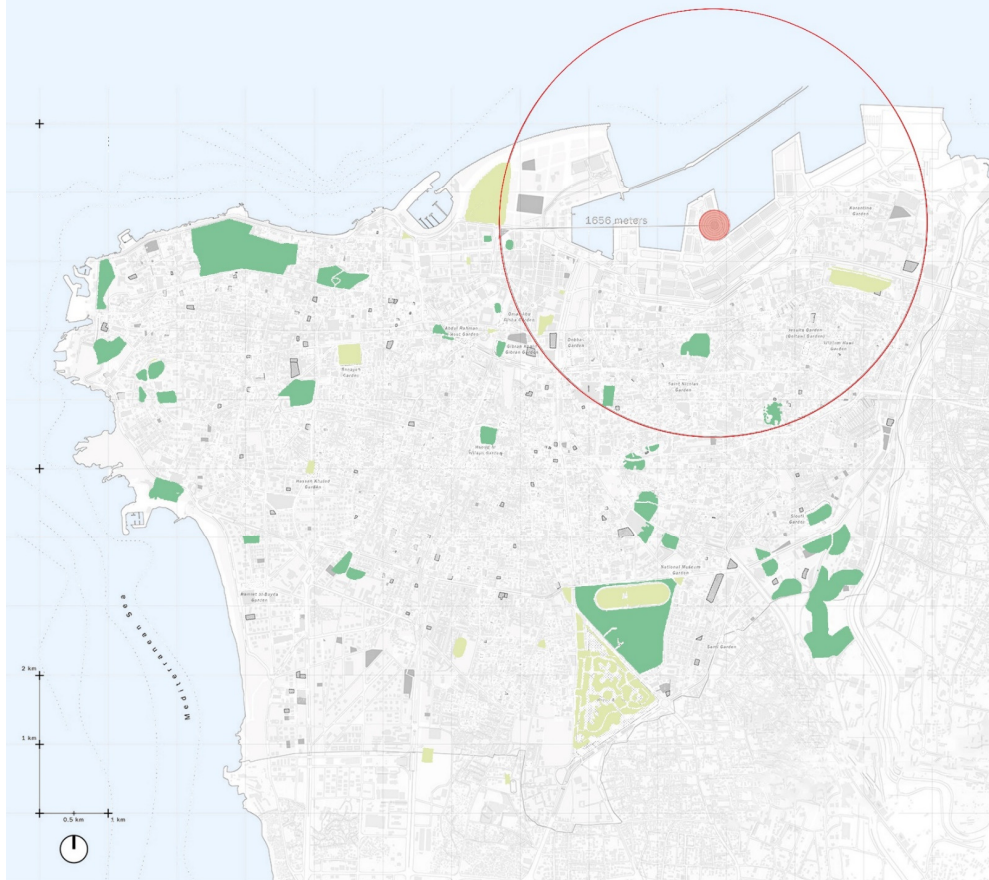


Figure 52 Map of private and public green areas - map created by the author

Urban voids are areas of the urban fabric that are empty or underused and lack significant activity or purpose. Marc Augé's idea of "non-places" is related to the idea of "urban voids" in urban planning and design. These voids can take many different shapes, including vacant lots, abandoned structures, neglected public areas, and places with subpar urban infrastructure and connectivity.

Augé's idea of non-places and their transient, anonymous, and standardized nature can be applied to understand certain urban voids. In the same way as non-places lack social and personal identity, urban voids frequently lack the lively social interactions and cultural importance seen in dynamic urban locations. They might end up being ignored or marginalized, which adds to the feeling of isolation, alienation, and anonymity in the setting. (Augé, 1995)

The relationship between non-places and urban voids lies in their shared characteristics of emptiness, lack of identity, and limited human engagement. Urban planners and designers might investigate solutions to turn urban gaps into more vibrant and meaningful places by recognizing the similarities between these notions. Interventions such as the adaptive reuse of buildings, the revival of public

areas, community involvement programs, or the promotion of links between voids and the surrounding urban fabric can all be used to achieve this. (Augé, 1995)

Publicly owned parcels and open sites by the municipality of Beirut

9% of the surface area of the municipality of Beirut is made up of publicly owned land and open spaces that are used by the general public.

- Explosion site
- Direct Impact Radius
- Vacant (932)
- Built (136)
- Coastal/recreational space
- Park / garden (21)

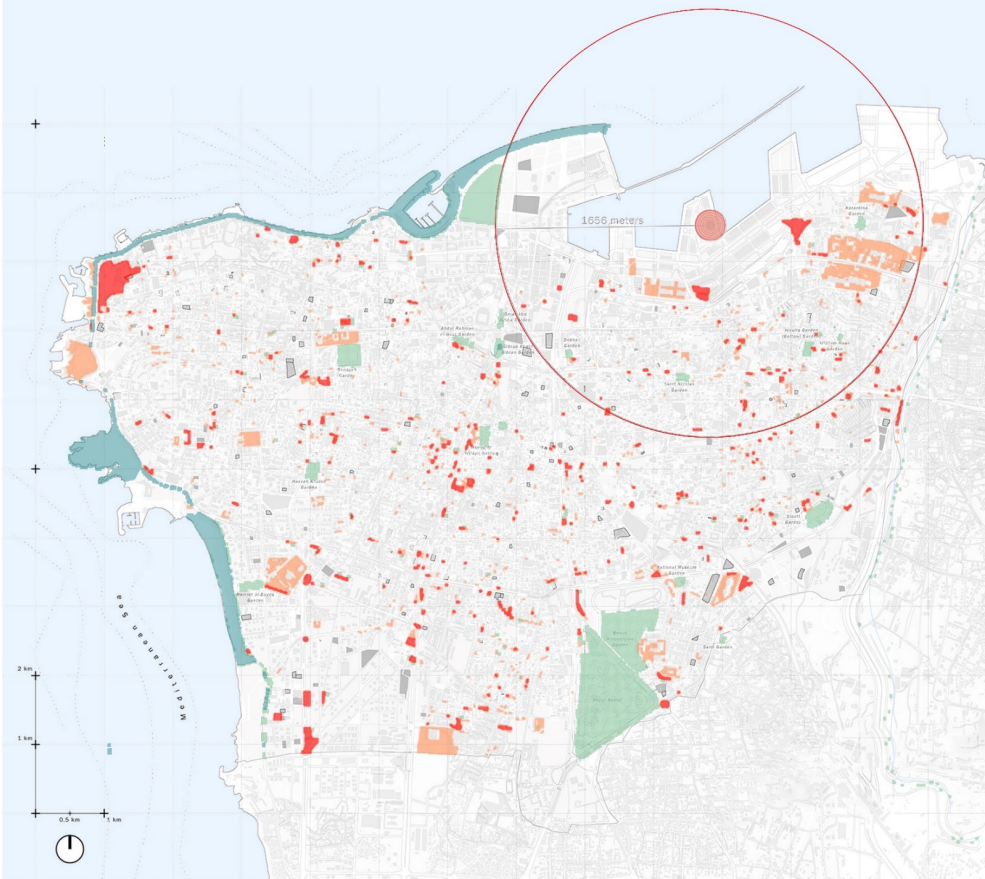


Figure 54 Map showing municipal Beirut's publicly owned land parcels and open spaces
Information obtained from: a list of public properties from 2004 (containing parcels owned by the municipality and by public institutions); a list of municipal parcels with a 2018 date obtained from the municipality of Beirut; and a list of parks and gardens obtained from CDR. The data was compiled by Beirut Urban Lab without fieldwork verification.

Vacant Unbuildable parcels in municipal Beirut

The number of unbuildable private and public parcels make up **1%** of the total number of parcels in municipal Beirut



Municipal Beirut's Urban Zones			
Zone	Constructible Parcel		
	min. surface	min. facade	min. depth
1	100 m ²	9 m	7 m
2	100 m ²	9 m	7 m
3	120 M ²	10 m	8 m
4	150 m ²	10 m	8 m
5	250 m ²	12 m	14 m
6	200 m ²	12 m	8 m
7	100 m ²	9 m	7 m
A1	800 m ²	25 m	25 m
A1-4	750 m ²	20 m	20 m
Spec.	1200 m ²	30 m	35 m
II a	1200 m ²	30 m	40 m
II b	1200 m ²	30 m	40 m
II c	1200 m ²	30 m	40 m
9	Forbidden Construction		
10	Subject to Subdivision or Forbidden Construction		

Extracted from Municipal Beirut's Cadastral Maps and Zoning Regulations (1954, and as amended in 1966)

- Explosion site
- Direct Impact Radius
- Public (492)
- Private (1148)
- Urban zones

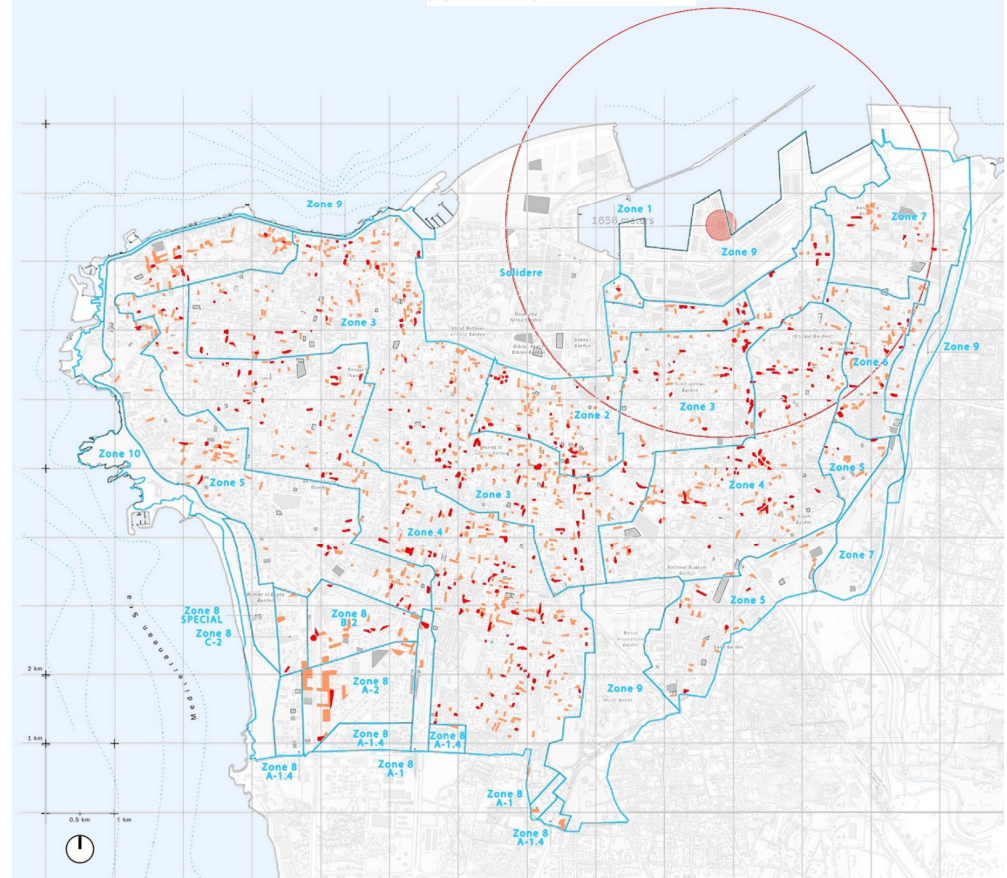


Figure 55 Map of Vacant unbuildable parcels in municipal Beirut

Based on zoning restrictions, parcels were chosen using the smallest constructible plot size permitted for each zone. To assess if a parcel is built or vacant, aerial photos were employed. To confirm the parcels' genuine vacancy, fieldwork is still required. The lots' surface areas have been slightly enlarged to improve legibility.

Gentrification causes and flows in Beirut:

The system of gentrification started with Solidere, turning the public downtown into an expensive space, in which the middle and poor class inhabitants cannot live. The young artists then had an impact on the gentrification in Gemmayzeh (started in 2000 and reached its peak in 2006) (Gerbal, Nicolas, Camille, & Marissa, 2016)

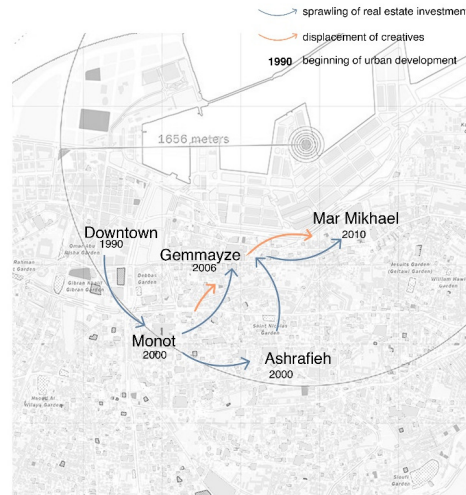


Figure 56 Diagram explaining the gentrification localizations – created by the author

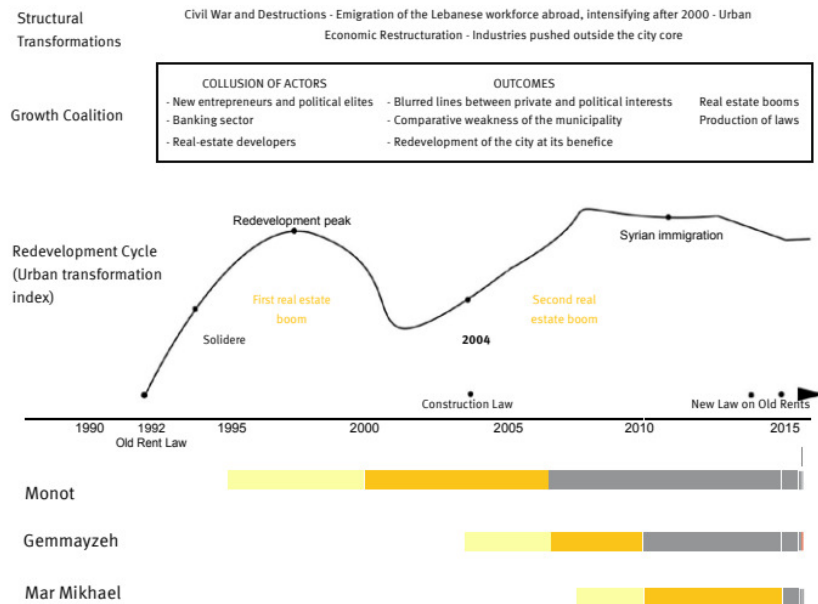


Figure 57 Urban Redevelopment and Gentrification Cycles in Beirut (1990-2015)

Forced Displacements Pre-Explosion

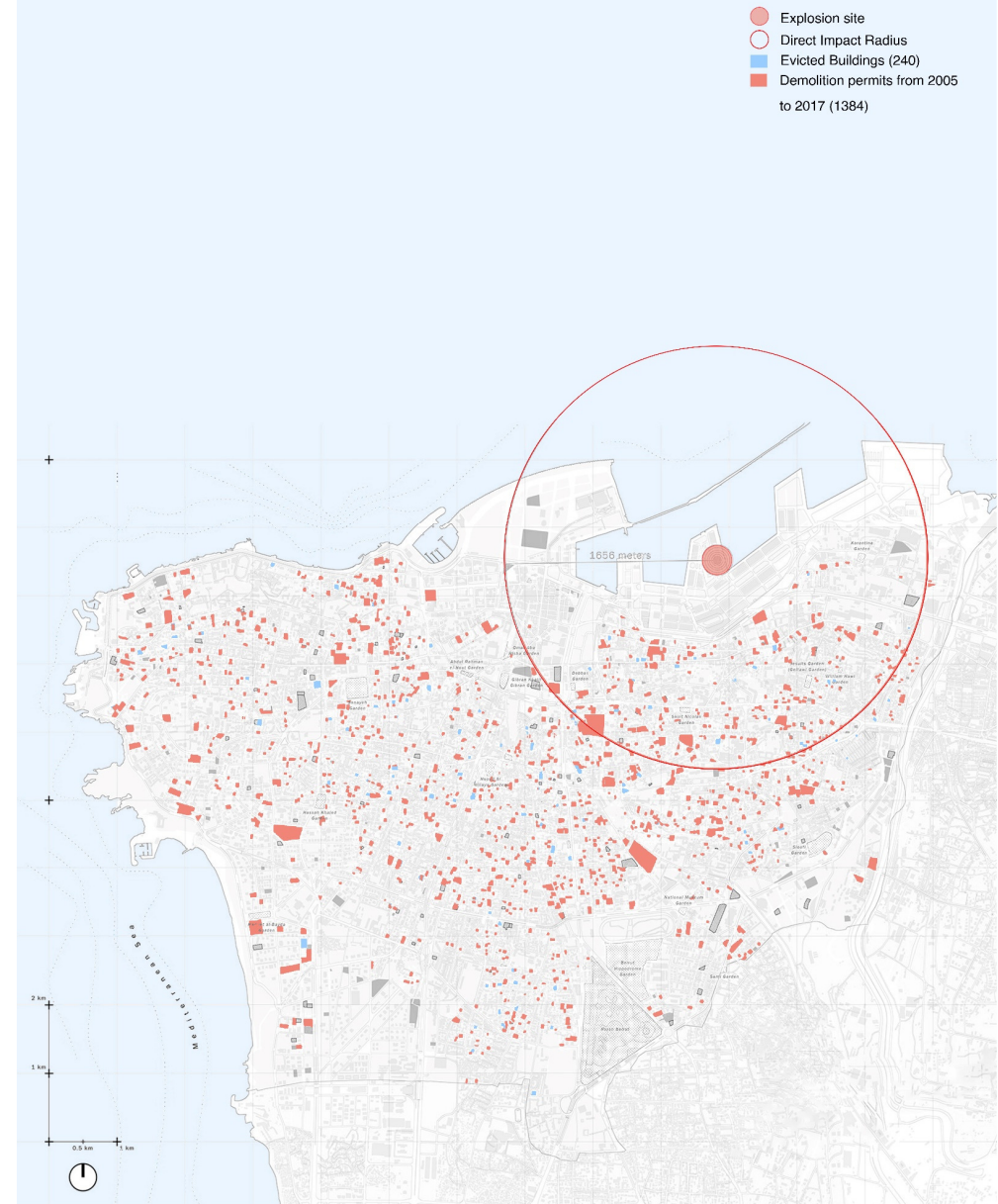


Figure 58 Map showing the pre-blast forced displacements in Municipal Beirut – source BUL – edited by the author

Based on the analysis of these maps, the area chosen is the one facing the port within the radius of destruction, and between the green line and the Beirut river, as it is a very vulnerable area, holds a heritage value, an icon next to the green line, and is a good connection between very low-income and high-income areas. Its is commonly known as Gemmayze and Mar Mikhael. We can further test the hypothesis, where we map in great detail the neighborhood's urban transformation, available vulnerable and vacant parcels, as well as public parcels and staircases. Through this work, we hope to demonstrate how, despite the odds against them, gaps in Beirut's urban fabric provide a multiple opportunities that we could seize in order to promote a thriving public life that is inclusive of people, memories, nature, and senses.

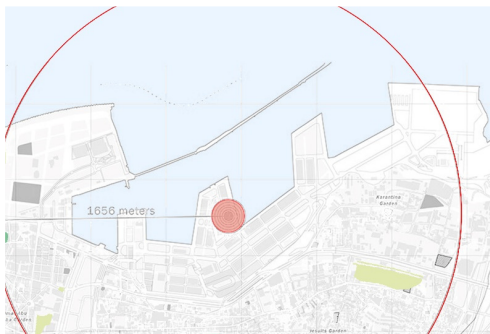


Figure 59 Zoom is to the pilot area

DO YOU FIND A FREE SPACE TO REST WHILE WALKING?

هل تجد مكاناً للجلوس والاستراحة مجاناً؟

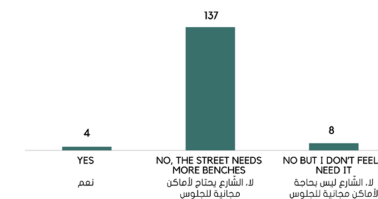


Figure 60 Statistical diagram showing the citizen's view on rest spaces in Beirut – based on RPPL surveys



Figure 62 Kids reclaiming the streets as public spaces



Figure 63 Chairs on sidewalk for social gatherings



Figure 61 gatherings in front of a shop



Figure 64 Absence of accessibility and the use of stairs for resting

4.4 Socio-cultural Analysis and Stakeholders Mapping

Stakeholders in a fragmented social and political environment

In a culturally divided city like Beirut, the development of a cultural landscape within urban acupuncture is an important pillar to think of, in parallel to the other sustainable agendas. This is particularly important vis-à-vis the complex history of Beirut, and the search for a common identity. The scars of the civil war are omnipresent, but the recent urgent thirst for a change ignited a flame of unity, in a soil that was in dire need to be unified. This was shown in the midst of the revolution where people started getting together, but then was slowly dimmed because of the acute economic crisis. This is why the next step in regenerating Beirut's vulnerable spaces presents a big potential but is also of a big danger, it can either light up the flame of unity, or the flame of division. It should be a very meticulous approach taking into account the mosaic of ethnic and religious communities all together in a fragmented social and political environment.

During the post-war reconstruction of Beirut, the challenge of expressing the cultural character of the country in a

convincing and collective manner became apparent when planning the rebuilding and rehabilitation of important sites that had been severely damaged. This process often led to a widening of civil strife over issues of identity and cultural ideology, particularly after civil wars. The restoration operations and planning stages of the reconstruction created an additional type of conflict between various factions over issues of identity and cultural ideology, as the mosaic ethnic and religious community structure of Beirut's history inherently contested cultural identities. This conflict over issues of cultural ideology and identity among the factions highlights the importance of considering the cultural context and involving stakeholders in urban planning and design processes to create more meaningful and sustainable interventions.

The need for more meaningful and sustainable interventions in urban planning and design processes highlights the importance of considering the cultural context and involving stakeholders. However, the manipulation of consolidated political influence and wealth power over decision-making has faced steadfast opposition. The phases of rehabilitation have been marked by a preoccupation with finding politically correct solutions

to identity-related concerns, with decision-makers, national intellectuals, and impacted groups all seeking answers. In this context, emphasizing the contributions of all stakeholders becomes crucial to establishing the values and ethos of Lebanese cultural identity and creating more inclusive and equitable urban interventions.

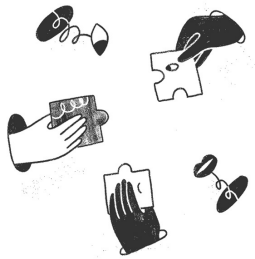


Figure 65 Diagram showing results of stakeholders collaborations

The stakeholders in Beirut:

City officials and government agencies responsible for urban planning and development which are: The Council for Development and Reconstruction (CDR) and the Directorate General for Urban Planning (DGU) have served as Lebanon's primary government stakeholders in the field of urban and land-use planning. The primary method of territorial planning in the past has been through master plans. They must be authorized by a ministerial order or a decision of the DGU's Higher Council of Urban Planning in order to be put into effect. The master plans have never had a wide geographic scope. A growth has coupled with a streamlining of the approval process: prior to 1998, 85% of plans were decree-based, but since then, just 9% of them have been. More often than not, municipalities rather than the DGU have taken the initiative to create these strategies. The assertion of the municipalities' role in urbanism has led to this evolution. The opportunities to publish decrees have really been constrained since 2005 as a result of the ongoing political difficulties. The introduction of new regulatory procedures is also reflected in this trend. If there are any appeals or exclusions with regard to master plans that are up for consideration or review, the Higher

Council retains some privileges. This creates room for negotiation and enables agreements that take the complexity of the user's interests into account. The DGU is transitioning from its technical and regulatory role as a plan producer to its role as a negotiator. Furthermore, the country's weak and fractured governments, which were brought on by the political problems that have beset it since 2005, have rarely been able to grow their capacity for innovation and cooperation. However, the CDR continues to play a significant role due to its technical capabilities, connection to the Council of Ministers Presidency, and relationships it has developed over the previous 25 years with the largest foreign financial donors. Thus, the CDR has been used for the majority of significant projects getting international funding. (Farah, Ghoch, & Achkarian, 2010)

- Private developers and construction companies involved in building and renovating structures in the city.
- Urban designers and architects who are involved in creating the physical infrastructure of the city.
- Community groups and non-governmental organizations (NGOs)

that advocate for specific urban issues or represent the interests of particular neighborhoods or demographics.

- Business owners and local merchants who may be impacted by changes to the built environment and urban landscape.
- Residents of the city who live, work, and play in the urban environment and who may have unique perspectives on the challenges and opportunities facing the city.
- Tourists and visitors who may have an interest in the city's urban attractions and amenities.
- Academic and research institutions that study urbanism and contribute to knowledge and understanding of urban development in Beirut.

Bottom-up approach: are the people willing?

In the absence of efficient government organizations and a well-coordinated state effort, post-disaster recovery must place a high value on people. It is important to give neighborhood residents, business owners, employees (such as teachers and hospital staff), and visitors the tools they need to rebuild their environment.

After the 4th of august explosion, and looking ahead, the urgent need is to enable neighborhood residents to return and to bring about some kind of normalcy in the areas. This will be necessary for the city to go back to life and prevent more of its areas from being taken over by real estate interests, as many of the individuals feared. Disaster scenarios that would repeat previous post-war reconstruction unsuccessful outcomes in Lebanon, particularly the experience of the real estate firm Solidere in Beirut's historic district after the end of the civil war (1990), are fueling residents' anxiety.

Mona Fawaz, activist urban planner, argues that Beirut urgently needs a people-centered recovery. Although she understands the necessity to protect historic structures, the preservation and safety measures must involve the locals, gain their support, and give top priority to the lifelines that will allow the residents to move back.

She continues to explain how it is essential to remove any legal obstacles as soon as possible. Additionally, it is important to fight the urge to create "future plans" and to freeze areas that are still being researched. Instead, landlords that have properties that can be renovated first need to be offered incentives to agree to fair rental terms and give pre-disaster residents priority. Professionals can actively participate on the scene, offering advice, encouragement, and direction; but, they should - as many are currently doing - work with prompt, specific guidance and assistance.

Reigniting the neighborhood's economic vitality will be equally crucial. Owners of businesses were in pain, and the pandemic of covid 19 did not help. Many will find it simpler to operate remotely if we don't invite them back and offer them incentives to move here.

There will come a time to implement long-term planning, reevaluate the connection with the port, the city, the location of the Electricity Du Liban building and the enormous footprint it possesses, the design of a memorial, and many other wonderful suggestions made by architects and urbanists. However, these are only going to be feasible if we keep the districts' distinctive features. Residents will lose out if planners, surveyors, and other

professionals threaten to freeze areas until thorough evaluations and a clear vision are in place.

Many people do not have the luxury of time, thus they will relocate permanently. Developers and realtors who were interested in these neighborhoods before the blast will purchase the property from landlords who are on the verge of bankruptcy at a bargain. While this is going on, individuals looking to profit by destroying neighborhoods are unassailably enticed by property controls, building incentives, zoning regulations, and amended building laws. What was already in place would have been hastened by the blast.

People make up cities. Their significance is rooted in the various ways in which they are inhabited, as well as in the customs, fantasies, and interpersonal and social connections. Buildings, streets, parks, and backyards all have significant social significance since they serve as the settings in which people interact and live. Many of these venues acquire significant heritage value via the accumulation of their activities; they become personifications of memories and eventually represent shared communal histories and identities, which have the power to unite people. The people of Beirut are its heart, so we must start there.



Figure 66 Citizens volunteers to clean after the explosion - but can only rest on the sidewalk

SWOT analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • Cultural Heritage: Beirut has a rich cultural heritage, and its public spaces can showcase and celebrate the city's history, traditions, and diversity. • Vibrant Urban Life: Beirut is known for its lively urban atmosphere • Community Engagement: There is a growing interest among residents, community groups, and NGOs to actively participate in urban development initiatives, fostering a sense of ownership and empowerment. • Location and Connectivity: Beirut's central location and well-connected transportation infrastructure make it accessible for residents and visitors, enhancing the potential impact of urban acupuncture interventions. 	<ul style="list-style-type: none"> • Lack of public recreational and green spaces • Infrastructure and Maintenance: The existing public spaces in Beirut may suffer from inadequate infrastructure and maintenance, including issues such as cleanliness, accessibility, and facilities for visitors. • Traffic and Congestion: The city's high population density and traffic congestion can negatively impact the quality and accessibility of public spaces, discouraging their use and enjoyment. • Excess of city noise because of the nightlife and the high traffic
Opportunities	Threats
<ul style="list-style-type: none"> • Urban Regeneration: Urban acupuncture can be employed as a strategic approach to transform and revitalize specific areas of Beirut, injecting new life into underutilized spaces and enhancing their functionality and aesthetic appeal. • Leftover spaces: There is an opportunity to create more green spaces and sustainable public areas, promoting environmental awareness, improving air quality, and providing recreational opportunities for residents. • Collaborative Networks: Building partnerships and collaborations among government bodies, community organizations, and private entities can leverage resources and expertise to implement effective urban acupuncture initiatives. 	<ul style="list-style-type: none"> • Political and Socioeconomic Instability: Beirut's volatile political and socioeconomic climate can pose challenges to the consistent development and maintenance of public spaces. • Limited Funding: Adequate funding for the creation and maintenance of public spaces may be a challenge, requiring innovative financing models and sustainable funding sources. • Land Use Pressures: Competition for land use and development projects may reduce the availability of space for public areas, leading to the loss or fragmentation of existing public spaces. <p>Dominant sense of sectarian belonging</p>

Qualitative Interviews Plan Report

Prior to conducting the interviews for this thesis project, the social research process will be approached in a systematic manner, following the sequence of steps summarized by the keywords: Plan, Collect, Analyse, and Communicate. The qualitative approach will be particularly emphasized, allowing for a fluid and iterative process that will continuously evolve before reaching a definitive conclusion. The purpose of the interviews will not solely be to gather information but to understand the participants' perspectives, perceptions, and the construction of meanings. Before conducting the interviews, several key considerations will be taken into account. Firstly, the research question is be clearly defined, outlining the cognitive goals to be achieved through the interviews. I seek to understand the perceptions, experiences, and attitudes of stakeholders towards urban acupuncture and bottom-up projects in Beirut, and explore the factors influencing the success or challenges of implementing urban acupuncture interventions in specific neighborhoods.

Secondly, the target population and sample will be identified, along with the specific characteristics and profiles of

the individuals to be interviewed. The selection process will include techniques such as snowball sampling, where interviewees will be asked to recommend others with similar characteristics. This will include community leaders, urban planners, architects, local government officials, and founders/participants in bottom-up projects initiatives. The chosen profiles are based factors such as age, gender, occupation, level of involvement in urban development, knowledge about urban acupuncture, or prior experiences with public spaces in Beirut. This is to ensure that the sample includes a range of relevant characteristics and profiles to capture a comprehensive understanding of the research topic.

The chosen form of interview will be discursive semi-structured, with a focus on the content and guided by an interview outline. Prior to initiating the interviews, introductions will be made, and the purpose of the research, as well as the value of the interviewees' contributions, will be explained. The estimated duration of the interviews and any potential follow-up actions will also be communicated. In terms of reporting, the output will include a section on the "Qualitative Interviews Plan," which will cover the reasons and cognitive goals of the interviews, the target population, and the design of the interview outline.

A. The reasons and cognitive goals of the interviews

The reasons and cognitive goals of conducting these interviews in the research study on urban acupuncture in Beirut are as follows:

1. Exploration of Perspectives: One of the key reasons for conducting interviews is to explore and understand the diverse perspectives of stakeholders involved in urban acupuncture in Beirut. The interviews aim to capture the unique insights, opinions, and experiences of individuals who have firsthand knowledge of urban development, public spaces, and the implementation of urban acupuncture interventions in the city.

2. Identification of Opportunities and Limitations: Through the interviews, the research aims to identify both the opportunities and limitations associated with urban acupuncture in Beirut. The cognitive goals include uncovering potential strategies, approaches, and areas for improvement, as well as understanding the challenges and constraints faced by

stakeholders in implementing and sustaining urban acupuncture initiatives.

3. Recommendations and Policy Implications: The interviews aim to generate insights and recommendations that can inform future policy-making and decision-making processes related to urban development and public spaces in Beirut. The cognitive goals involve gathering information and perspectives that can contribute to the development of practical recommendations for the successful implementation and long-term impact of urban acupuncture interventions.

By addressing these reasons and cognitive goals through the interviews, the research study aims to provide a comprehensive understanding of urban acupuncture in Beirut and its implications for urban development, public spaces, and the overall well-being of the city.

B. The target population

- Public figures:

- Engineer -The Directorate General for Urban Planning (DGU) *main official actors in the field of urban and land-use planning in Lebanon.*

-Semi public

- Nahnoo: Executive Director
- Catalytic action : Co-founders
- **Private figures**
- AUB neighbourhood initiative: - Director
- Public Works Studio: k – Co-founder
- RPPL initiative (Reviving public spaces in Lebanon): – The Founders

C. The design of the interview outline.

The interview outline has been carefully crafted to ensure that key aspects related to the research question are explored. It includes open-ended questions that allow interviewees to share their insights, experiences, and recommendations. The design of the interview outline also incorporates flexibility, allowing for additional probing and follow-up questions to delve deeper into specific themes or areas of interest. By adhering to this qualitative interviews plan, the research aims to gather rich

and diverse perspectives that will contribute to a comprehensive analysis of urban acupuncture in Beirut.

Introduction:

This research aims to explore the process of implementation and impact of urban acupuncture in Beirut, with a specific focus on understanding the perspectives and experiences of various stakeholders involved. By conducting interviews with key individuals, including residents, community leaders, urban planners, architects, and local government officials, this study seeks to uncover valuable insights into the effectiveness of bottom-up interventions in revitalizing public spaces and addressing urban challenges in Beirut. The contributions of the interviewees are invaluable, as their firsthand knowledge, experiences, and perspectives will provide a deeper understanding of the complex dynamics, opportunities, and limitations associated with urban acupuncture. Their input will not only enrich the research findings but also contribute to the development of practical recommendations for implementing sustainable and community-oriented urban interventions in Beirut. The research recognizes and appreciates the interviewees' time, expertise, and willingness to share their insights, as their contributions will significantly

contribute to advancing knowledge in the field of urban acupuncture in the context of Beirut.

Semi-structured interview outline:

1. Semi-public and private

How did the organization start, and what kind of projects you do?

What are your targets?

Who are the stakeholders in your projects? And how do you reach out to them?

Was it hard to collaborate with the governmental figures for this project?

What do you think about the urban planning development's importance on their agenda?

What do you think are the most challenging problems in urban development in Lebanon?

The project is based on a bottom-up approach, how did you do it and what was your experience in this participatory approach?

How do you choose the area of intervention?

2. Public figures:

Do urban development projects have a priority in the general policy making?

What do you think are the most challenging problems in urban development in Lebanon?

When policies and plans are being studied, how do you take into account the citizens needs?

Have you had an experience of urban projects that were community-led projects? If yes, what kind of projects they did? How did they ask for assistance?

Have you had an experience of local urban projects that had a small budget and short-term results, or in neglected areas? If yes, how was the outcome?

Do you have any suggestions to strengthen the collaboration process between private and public sectors for future projects?

The detailed interviews are attached in the Annex 1 at the end of the book.

Outcome:

Through a series of in-depth interviews conducted with various stakeholders, a clearer understanding emerged regarding the potential for urban acupuncture in Beirut. These interviews revealed a notable gap in collaboration between citizens and authorities when it

comes to urban projects, particularly in public spaces. The interviews highlighted that both parties expressed a willingness to collaborate, but encountered challenges in their interaction. Interestingly, issues such as funding, citizen engagement, and design ideas were not major obstacles. Instead, the primary challenge lay in establishing effective collaboration mechanisms. Additionally, the scarcity of available spaces and the difficulty of transforming them into public spaces were identified as significant hurdles by the authorities. Notably, successful projects showcased the importance of allowing time for people to develop a sense of ownership and familiarity with public spaces, as this was initially unfamiliar to them. However, citizens readily offered assistance when they witnessed small-scale projects being implemented. Establishing a network of allies within the community was identified as crucial for project maintenance and implementation. Acquiring permits and accessing data from the Directorate General of Urban Planning (DGU) proved challenging, requiring personal connections for obtaining necessary information. In contrast, municipalities were generally more accessible, although their focus was primarily on implementing large-scale projects for the benefit of contractors and politicians. The lack of

vision and leadership within the municipality hindered effective urban development. The overall dysfunction of the Lebanese system, exacerbated by the sectarian regime and the current crisis, further reflected in the urban structure. While a major political change is necessary at the national level, the interviews emphasized the importance of small-scale initiatives in sparking a transformative dialogue and catalyzing a radical shift in mentality at the local level. Although broader change is essential, progress on a smaller scale can contribute to and support wider societal transformations. In conclusion, an important observation is the lack of comprehensive spatial data for Beirut, which serves as a prerequisite for effective urban interventions. This data gap hinders the ability to plan and implement projects efficiently. To facilitate interventions, it is crucial to gather and share accurate spatial information. Another challenge lies in the localization of suitable spaces for intervention. Identifying appropriate locations for projects proved to be a complex task due to various factors such as limited available spaces and competing interests. Addressing this challenge requires a collaborative effort among stakeholders to collectively identify and allocate spaces for interventions. Remarkably, in approximately 80% of the initiatives

undertaken, the outcomes were highly successful and had a significant positive impact on the social livability of the urban fabric. These initiatives exemplified the potential for transformative change through small-scale interventions and underscored the importance of community engagement and empowerment in shaping the urban environment.



Figure 67 The public living room in Badaro by RPPL

Main research questions

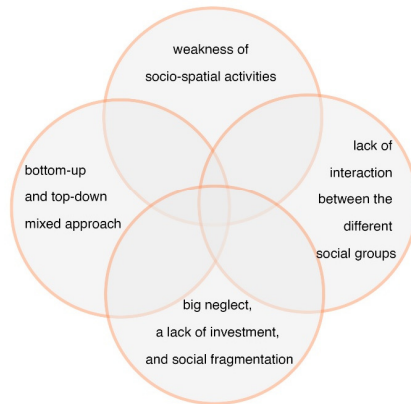


Figure 68 Main research questions - created by the author

5.1 Pilot Area and neighborhood scale mapping

The thesis proposes a pilot project as its conclusion. The chosen location is 200 meters from Ground Zero of the explosion of 2020 on a portion of Gemmayze Street in the Mar Mikhael neighbourhood. There is a great deal of damage. This area was home to long-term senior inhabitants and young people involved in business, the arts, and other forms of cultural output. Its structure is made up of a mixture of heritage structures and contemporary construction. The ground levels were occupied by a variety of commercial uses. Gemmayze sprang to popularity in recent years, before the sequence of events discussed in part II.

Even if the structures in which residents were housed are repairable, the departure of so many people and businesses from the areas around the port will seriously jeopardize efforts to rebuild the city and its neighborhoods. The rehabilitation faces difficulties when most citizens and company owners are indigent due to months of lockdown that coincided with a worldwide economic crisis and an unheard-of national financial meltdown. However, one must position the impacts of the blast within the recent histories and trajectories of

the areas surrounding the port in order to accurately estimate the risk that this quick evacuation would result in a permanent displacement. For at least ten years, the historic neighborhoods surrounding the port, including Mar Mikhael, Gemmayzeh, and Geitawi, (Remeil) had their long-term residents already being evicted. During a 2018 survey of Beirut, the Beirut Urban Lab found more than 250 vacant lots as seen in Part III, many of which had already been home to structures that had since been demolished, and another 120 fully evacuated buildings. These areas fell within the delineated perimeter of severe damage highlighted by the National Higher Relief Commission. (Fawaz, 2020)

Over the previous 15 years, at least 350 demolition licenses had also been submitted in the same district. This makes nearly 1 in 9 of the area's buildings. According to BUL research team's findings, these investments were the result of overlapping public policies that encouraged the flow of financial capital in the built environment by providing financial firms with several exemptions and incentives, as explained in part II law of exceptions. More broadly, parts of the communities had been neglected, with infrastructure dating back to the 1940s, leaving them in bad shape and forcing those who

could afford it to go away. Following the explosion, the displacements were quasi-forced with a chance of no going back. There is true danger. (Fawaz, To Pre-empt Disaster Capitalism, Beirut Urgently Needs a People-centered Recovery, 2020)

Looking ahead, the urgent need is to bring back some kind of normalcy in these affected areas and enable neighborhood residents to return. For the city to come back to life, this will be essential. Disaster scenarios that would be a repeat of Lebanon's previous post-war reconstruction experiences have residents in a state of angst, as seen in part II post-war profit-based construction explanation.

In times of crisis, architecture is crucial for providing fast and effective answers. Finding housing solutions takes priority in these unfortunate circumstances (2020-2023), but after the emergency is under control, focus gradually switches to gathering areas like public spaces (2023-2025), to achieve a decrease in positive entropy like discussed in part II the entropic timeline of the history in Lebanon.

Since the explosion at the Beirut Port on August 4, 2020, life in much of Beirut has been halted. Numerous buildings in the neighborhood's surrounding the port have been completely evacuated. The occupants have left. The

introduction of long-term planning, a reevaluation of the relationship between the port and the city, the creation of a memorial, and many more brilliant ideas will all have their time. However, these are only going to be feasible if we keep the districts' distinctive features and its residents.

The goal is to fill urban voids with lively and interesting public areas. Designers have an awareness of what makes a good place, as Nan Ellin underlines in her book "Good Urbanism: Six Steps to Creating Prosperous Places" and there is agreement among urban planners and designers regarding the fundamental components of healthy and prosperous communities. However, putting these ideals into practice is where the difficulty resides. (Ellin, 2012)

We want to remove the barriers that prevent the creation of flourishing settings by using Ellin's six-step process of prospect, polish, propose, prototype, promote, and presentation. We understand the need to move beyond traditional planning strategies and promote an innovative culture where ideas are nurtured, and resources are properly used. (Ellin, 2012).

Ellin promotes co-planning as a strategy for bridging the gap between experts and the community and fostering a sense of shared investment in the planning process. Co-planning guarantees that various perspectives are heard, local expertise is recognized, and the resulting urban spaces really reflect the objectives and needs of the people who live in them by actively involving all stakeholders. (Ellin, 2012)

The suggested interventions serve as a form of urban acupuncture in response to the main thesis question. The bottom-up, anti-entropic framework of the Public Space methods encourages varied NGOs and community members to get involved in the rehabilitation effort. The major goal of this research is to open new channels for communication by putting forth a wider variety of Beirut development topics.

Intervention Phasing

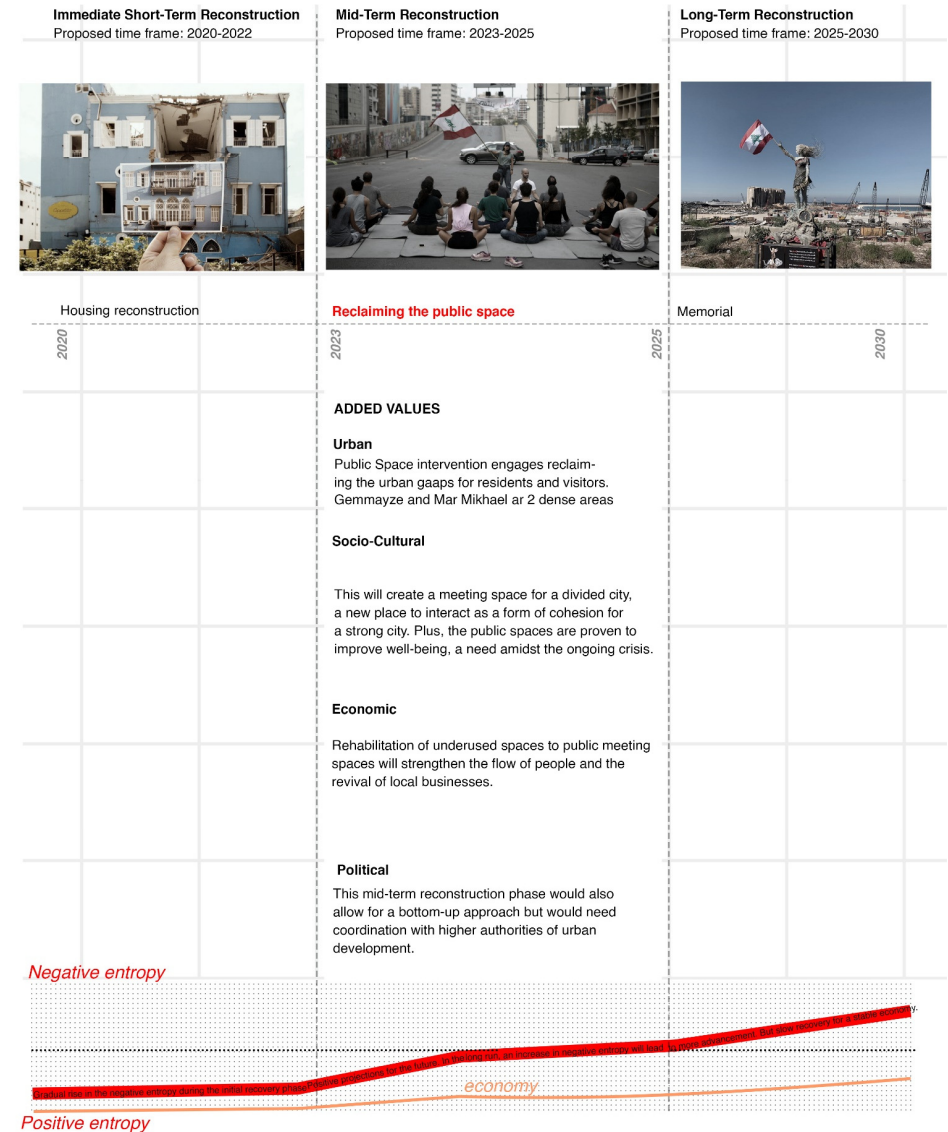
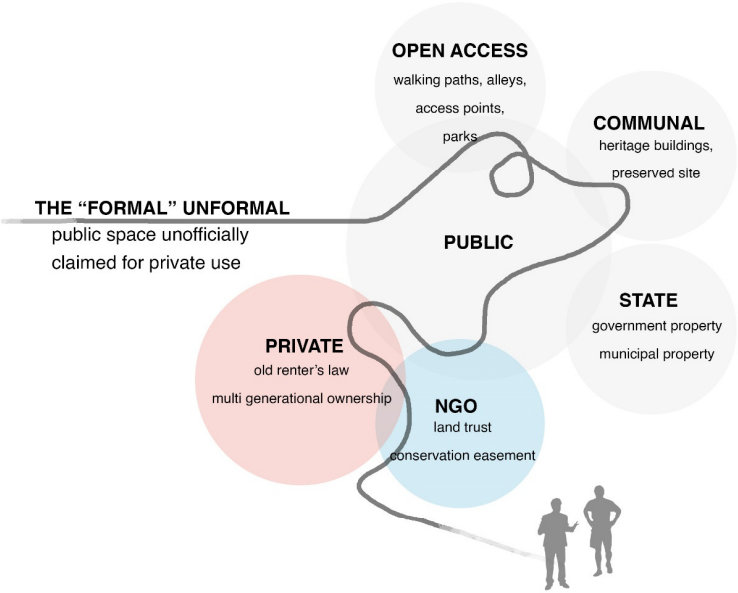


Figure 70 Beirut Entropic timeline - created by the author

Modes of operation

In order to give local power in the Puzzle to Mosaic Beirut concept, it is crucial to identify the hierarchy of project initiation and potential alliances. Projects can come from a diverse range of parties, from the public to the private sphere. According to the bottom-up planning logic in the urban acupuncture approach, it is necessary to link the nonprofit, public, and commercial groups that are already operating there, possibly through Public Private Partnerships that serve the general welfare. Modes of operation that help citizens and landowners in supplying necessary infrastructure services—including financial resources from the government, private investors, or donors—are suggested. The operational flow would start with community stakeholders identifying intervention sites, then source local labor and materials while putting up the project phasing plans. The development of public space is where public private partnerships have the most potential. Private partners would contribute to the construction costs and technical expertise for each project while also profiting from management, marketing, and management for a predetermined period before turning the project over to the public.

Modes of Operation

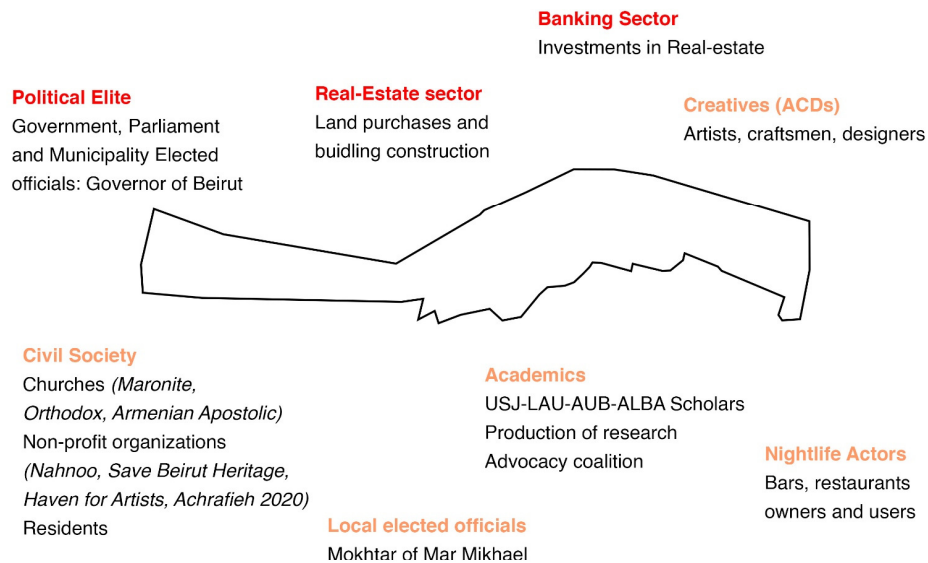


Proposed modes of Partnership

Private Public Partnerships						
		Design	Financing	Construction	Operation	Maintenance
DBFO	Design, build, finance, operate					
BOO	Build, operate, transfer					
BT	Market-led proposal					
OM	Operation & Maintenance contract					

Figure 71 Diagram showing the modes of operation and Table showing the proposed modes of partnership – edited by the author

Stakeholders Mapping the actors and stakeholders implied in Mar Mikhael and Gemmayzeh

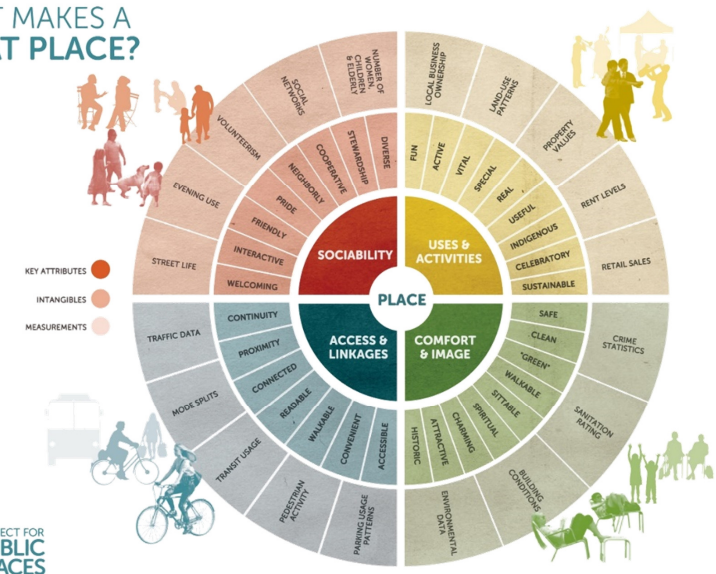


Placemaking

A collaborative effort



WHAT MAKES A GREAT PLACE?



(Project for Public Spaces, 2018)

Figure 73 Placemaking diagram (source: Project for Public Spaces)

Figure 72 Diagram showing the stakeholders and the collaborative effort in placemaking - created by the author

5.4.2 The approach

The architectural project ideas outlined in this work suggest that a methodical and "bottom up" approach is required to meet the most urgent demands of the Lebanese people during this difficult period. Thus, identifying community stakeholders has been essential to developing an efficient design process, and then suggesting local institutional groups. Identifying and analyzing suitable sites and establishing physical spatial factors which can guide the reconstruction process have been essential as well. A vital phase is the design prototyping of intervention components, with careful consideration given to the availability of local resources, contractors, and community partners. Many of these project initiatives are expected to require the assistance of regional non-governmental organizations (NGOs) for construction. Another important factor is the simplicity of assembly and construction. Given the "bottom-up" nature of these projects, participation from the community or volunteers is also anticipated.

The incorporation of social communication technology has helped to further this work by giving the communities greater control.

Technology in the public interest provides programming

flexibility in the future while appealing multigenerational community members.



Figure 74 The strategies

Spatial data:

These interstitial spaces required a very detailed analysis, using many references and overlapping them together. All plots were analyzed, to understand the function of the void spaces.

The unbuilt parcels are defined based on the size of the plot, and in comparison, with the urban zone regulations. These are residual spaces where nothing can be built, and often overseen therefore they present a huge potential for our project.

Then they were analyzed with the municipality's plots, as these serve for the common goods and the community.

The combination of all these residual spaces creates a complex yet full of potential network, that can be taken advantage of in the anthropological means to create the urban spaces Beirut's citizens longed for. Thus, we have analyzed the vulnerable areas, and after the analysis of the flows, we pinpointed the areas with the potential of a mix of citizens-led and officials' interventions. Based on this interstitial space analysis, they are organized in matrix catalogue, to create interventions based on each type of interstitial space. This would create a design guideline for the stakeholders that are interested in a certain area.

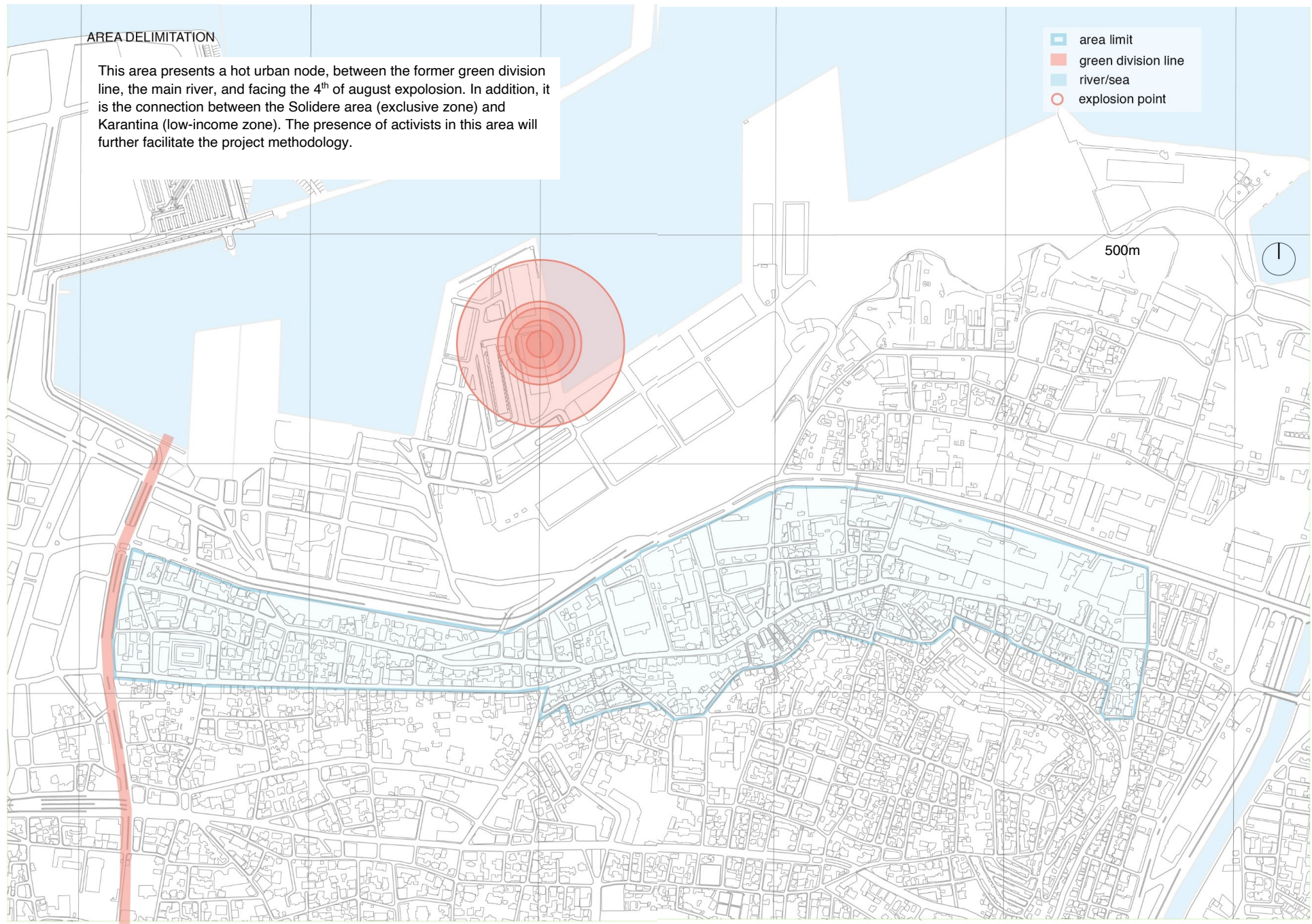


Figure 75 Map of the Area Delimitation

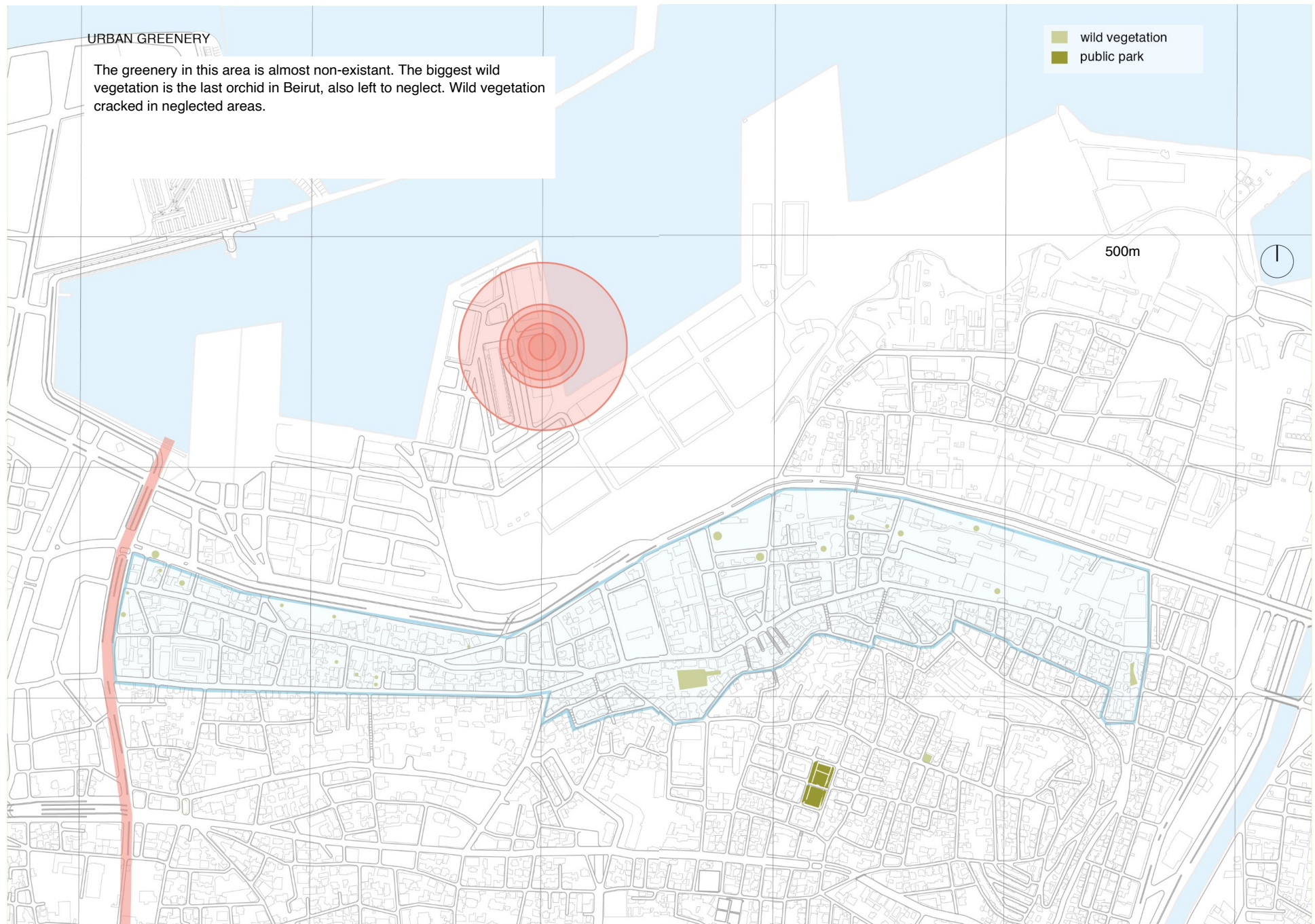


Figure 76 Map of the greenery - created by the author

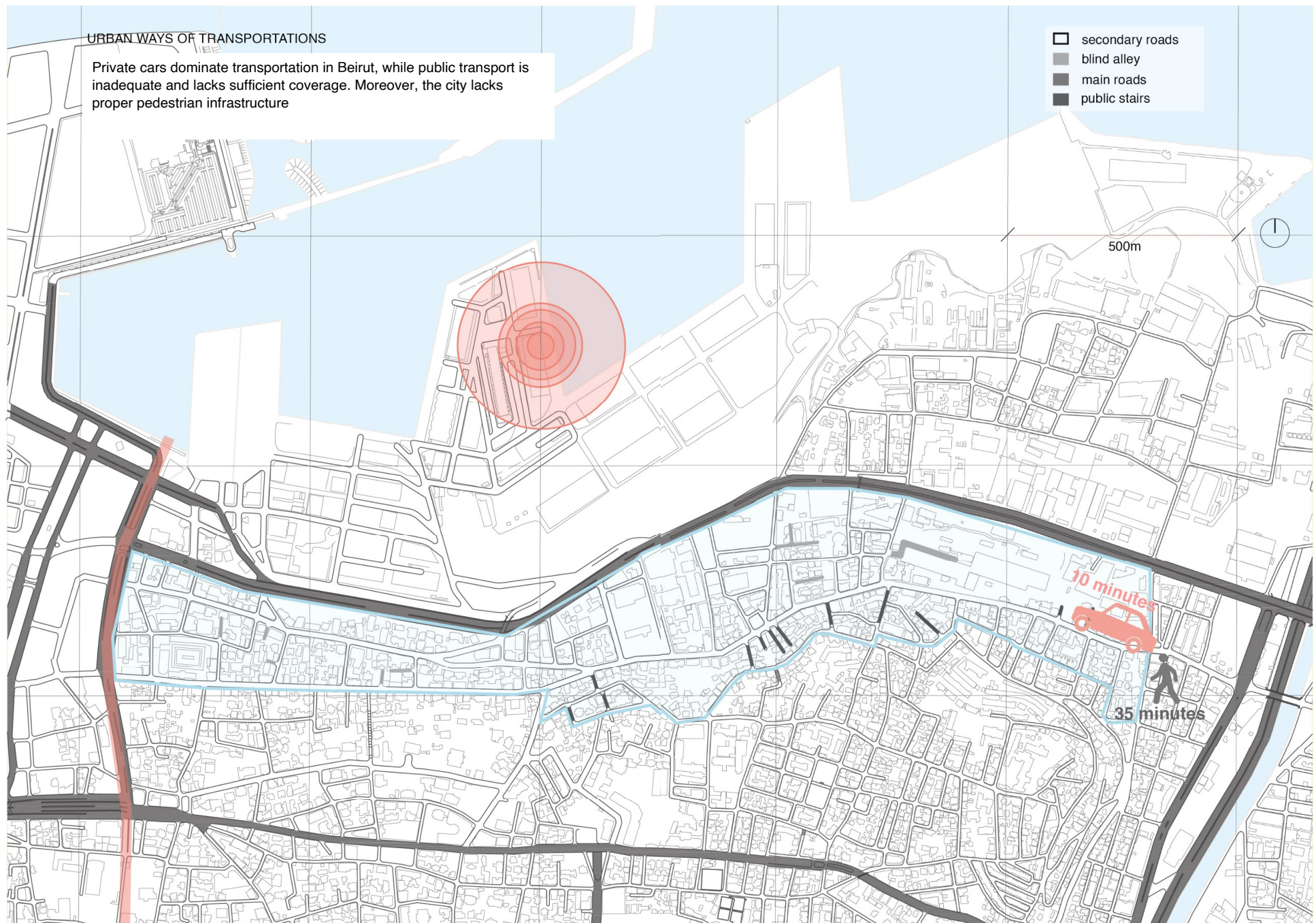


Figure 77 Map of transportation - created by the author

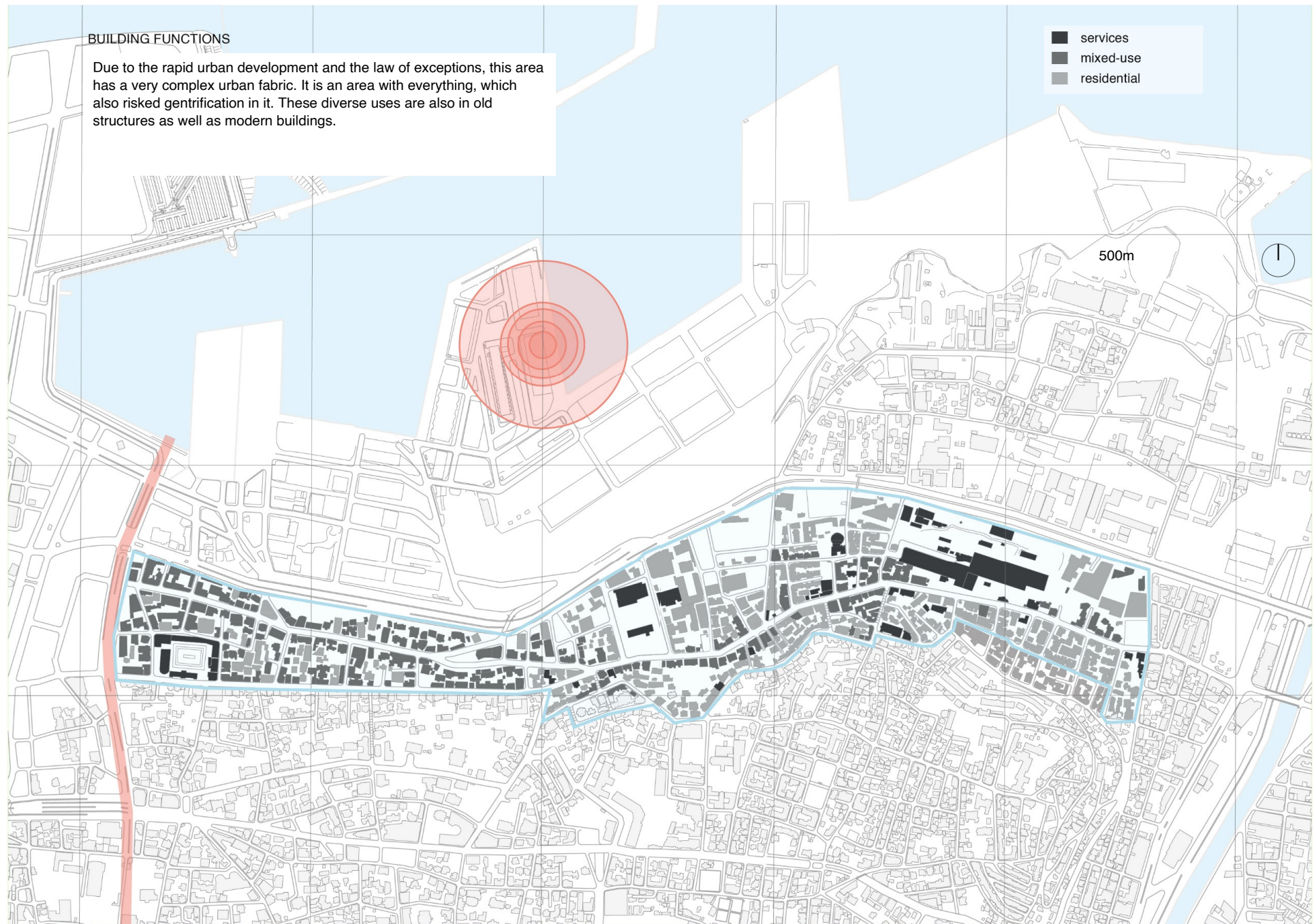


Figure 78 Map of the building functions - created by the author

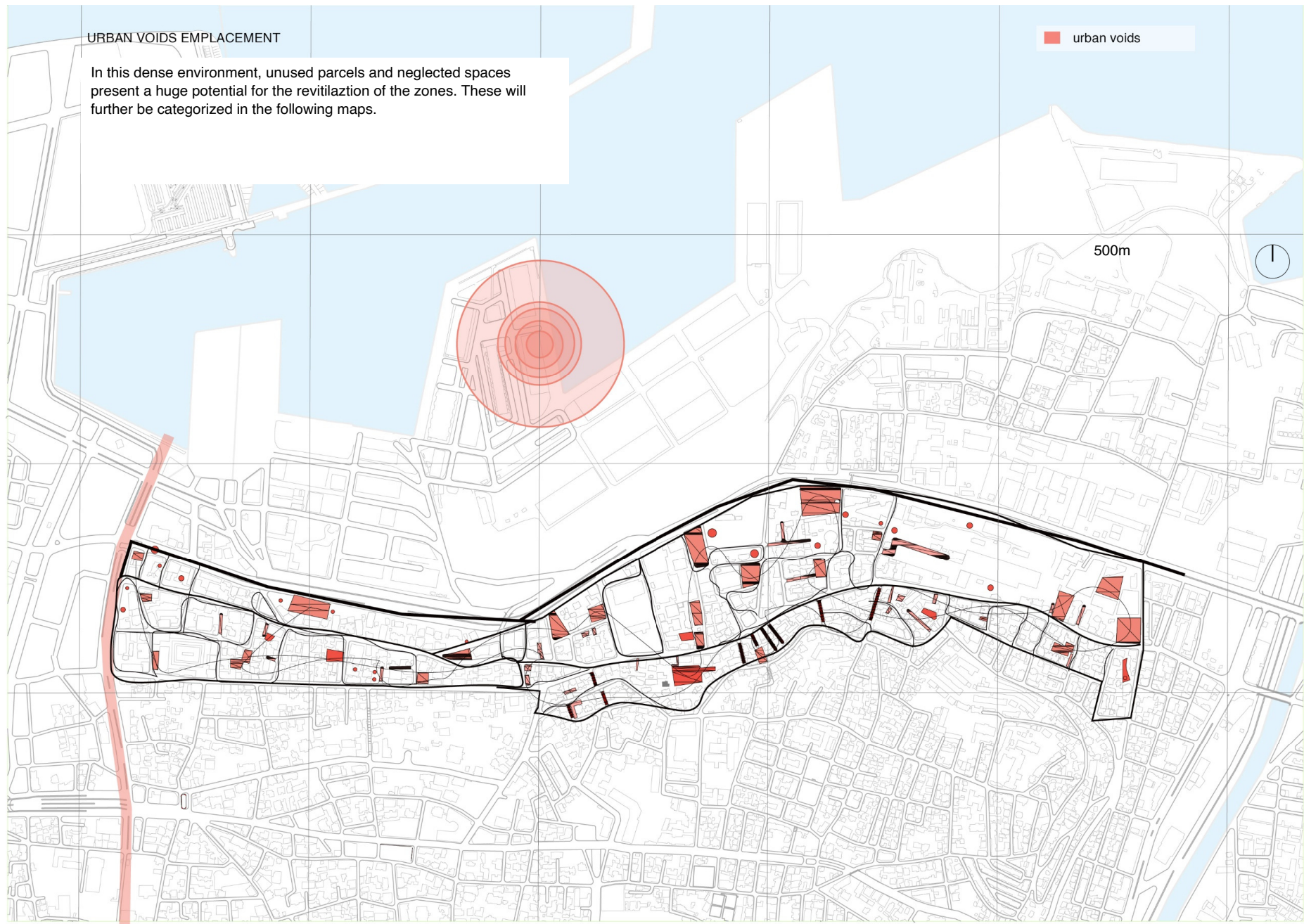


Figure 79 Map highlighting the urban voids - created by the author

Nervous System:

The critical synapses in Beirut's nervous system are mostly gentrification, post-conflict alienation, vulnerable structures, unsafe alleys, forced displacements, poverty of urban infrastructure and lack of public spaces. Urban aches are also caused by places of unused potential spaces in the indicated plots.

Identifying the pain:

Acupuncture is a healing practice of traditional ancient Chinese medicine. By inserting special thin needles at specific points of the body, it relieves the pain and thus heals health conditions. It works by releasing and boosting the flow of vital energy.

Urban context:

In an urban setting, acupuncture is a complex form of therapy intended to relieve stress in the built environment. The approach is based on small-scale interventions at several different locations that, because of their synergistic reaction, produce a network of positive changes.

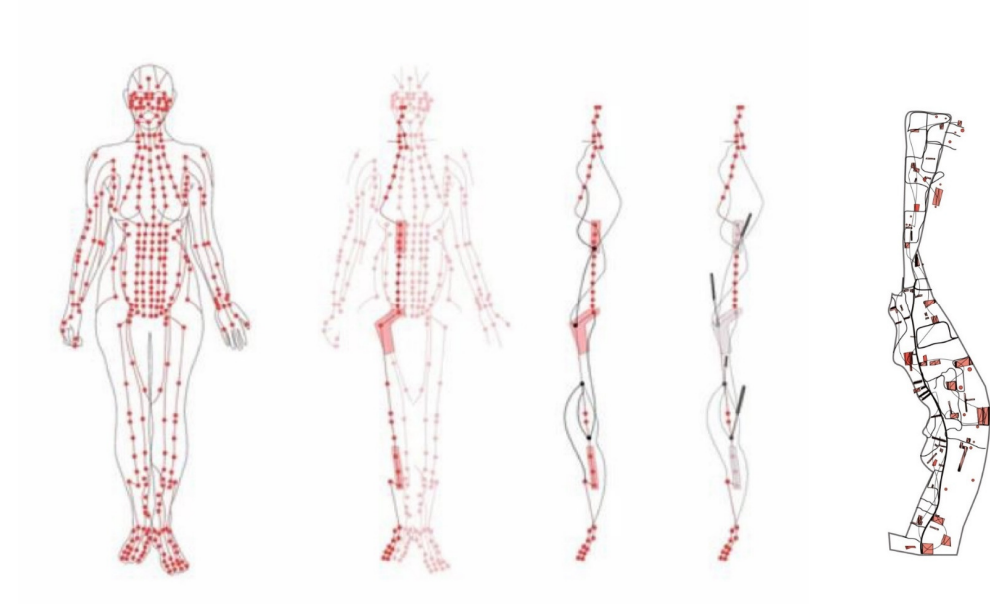
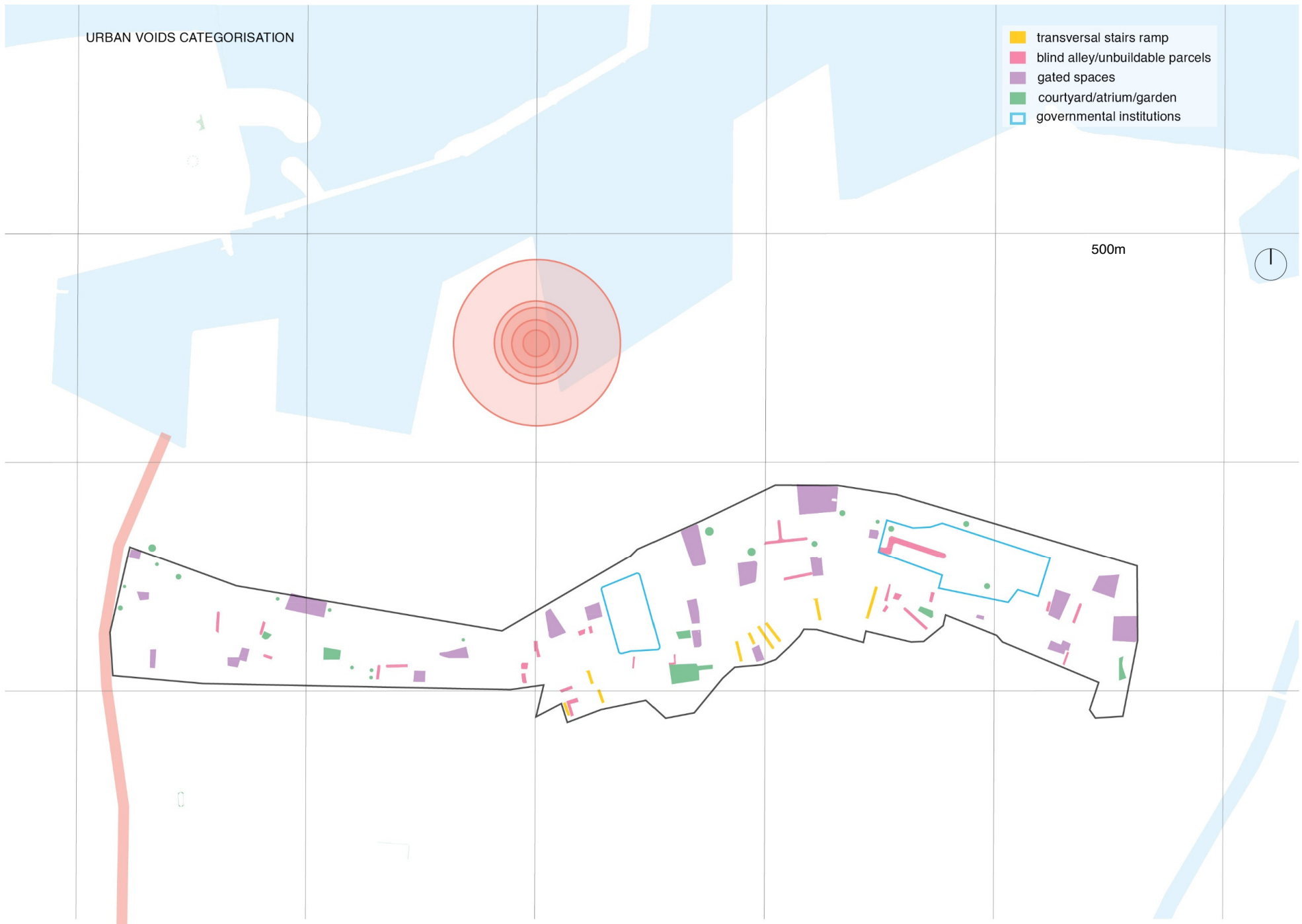


Figure 80 Diagram showing the urban context as a living organism following the Urban Acupuncture theory



Figure 81 Exploded perspective of urban voids - created by the author



5.1. Interstitial Space Catalogue (matrix)

In increasingly denser environments, there is a renewed interest in underutilized spaces as potential sites for additional development. These 4 types of voids are one of the most intriguing spatial resources as they make up around 15% of the land of the chosen area. This makes us think of the possibility of building a multi-layered city through the activation of blind alleys, unbuildable parcels, courtyards, atriums, gated spaces and transversal stairs and ramps, from sustainable infrastructure and urban farming to social spaces and cultural venues. By using non-places, the goal is to understand the implications of these spaces on social relations, personal identity, and the overall human experience in this vulnerable setting.

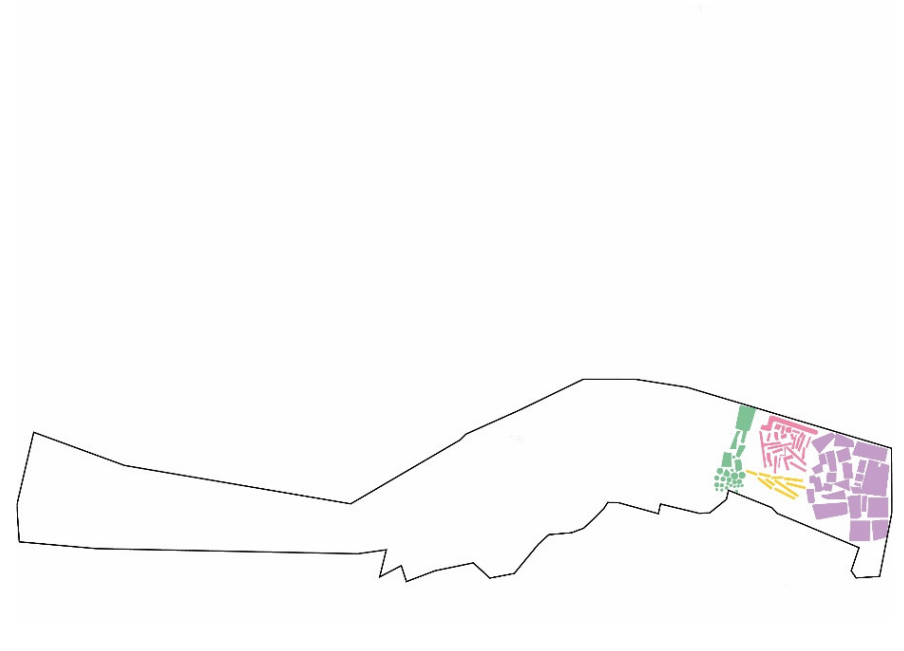


Fig 83 - Diagram of the agglomeration of urban voids – created by the author

Intervention Proposals

Revitalizing Access Streets: Fostering Social Connections and Safe Public Spaces

In our intervention, we concentrate on access streets with the goal of transforming them into active social centres that improve the city's urban fabric. Incorporating both the value of contemporary urban improvements and the significance of social infrastructure, our design concept aims to produce a warm environment that unites the diverse local population for both formal and informal gatherings. This intervention's central component is a single steel tube with painted graphic surfaces. By making this uncomplicated but significant gesture, we help visitors and residents interact and establish relationships while also offering a flexible platform for a variety of programming options and activities. The alley's zig-zagging linear structure and engaging graphics divide the area into a number of smaller, more private "urban rooms," giving it a distinct, homey feel. The architecture facilitates different programmatic opportunities and activities in addition to physically bridging tourists and neighborhood tenants. It's significant that the project, despite having a precise design tailored to the special features of the alley, remains open to functional

interpretation. The intervention offers a wide range of potential uses due to its geometry and relationships with nearby structures and pedestrian access points, including informal lounging places, mini-stages, movie screenings, and festivals, among others. Due to its adaptability, the alley can be interpreted and used in a variety of ways by users, tenants, and program administrators, accommodating the changing requirements and interests of the neighborhood throughout time. This project demonstrates the possibilities of modest, cost-effective urban interventions that are planned with input from the local population, creative thinking, and an emphasis on high-impact design cues. By adhering to these guidelines, we design an area that encourages social interaction, safety, and a sense of community in addition to being visually appealing. We hope to improve urban life in Beirut and create safe, inclusive, energetic, and people-centered public places with this intervention in access streets.

	TYPE A Blind alley, unbuildable parcels (90-370m ²)	TYPE B Courtyard, atrium, garden (150-4,600m ²)	TYPE C Gated space (300-8000m ²)	TYPE D Transversal Stair, Ramp (140-400m ²)
typology				
modules				
added-value	safe blind alleys gathering places modular	urban gardening sponge areas modular	cultural get-together modular	accessibility of transversal stairs children playground modular

Figure 84 Interstitial spaces catalog - created by the author



Figure 85 Images of blind and access streets

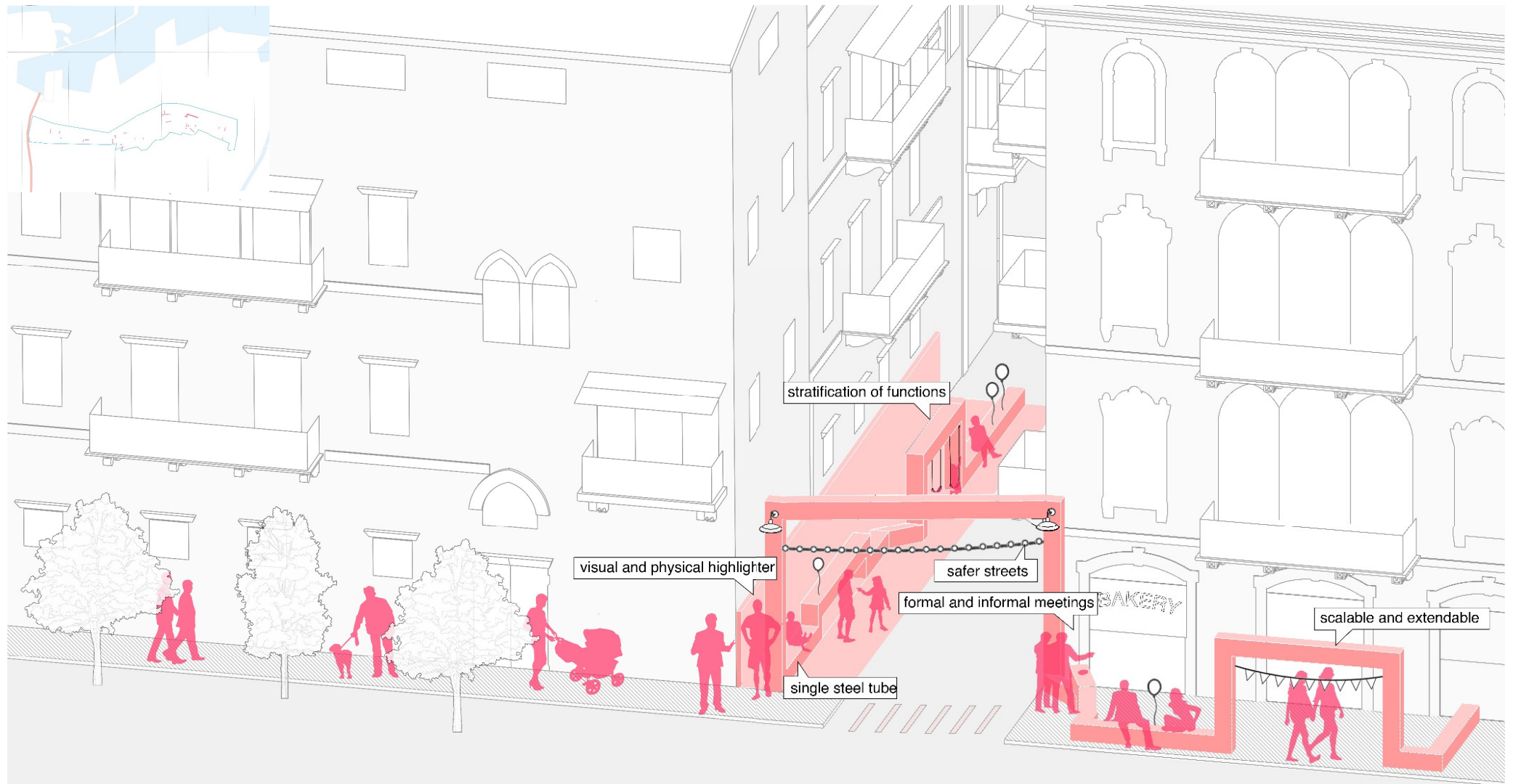


Figure 86 Isometry of a blind access street transformation – created by the author

Revitalizing Leftover Spaces: Cultivating Urban Gardens in Courtyards, Atriums, and Gardens

As urban populations continue to soar, it becomes increasingly vital to explore avenues for food production within cities themselves. By doing so, cities can reduce their reliance on rural areas, traditionally responsible for feeding the world's population. Urban gardens, whether nurtured at home or in community-managed public spaces, exemplify small-scale initiatives that have the potential to trigger profound transformations. These gardens not only signify a longing to reconnect with our roots and embrace a slower pace of life but also hold the promise of larger-scale impact. We will take advantage of the possibilities of courtyards, atriums, and gardens, which frequently sit idle between buildings, in our intervention. We will rethink these unused areas as flourishing urban gardens using wooden pallets as a crucial component. This project is timely since the COVID-19 pandemic has highlighted the importance of living a healthier, more active, and community-focused lifestyle. Beyond merely improving these areas, our concept seeks to radically alter the neighborhood by modifying pedestrian experiences and enacting zoning amendments that encourage landowners to open up their inner courtyards for public/private usage. In

exchange, they can be granted air rights or tax breaks, encouraging a cooperative strategy for urban revitalization. Urban agriculture is receiving a lot of attention from the public and policymakers alike as a result of rising awareness of the adverse environmental impacts of food production and transportation as well as concerns about the source and security of the food we consume. By bringing food production closer to urban residents, we not only support sustainability but also make educational possibilities more accessible. Urban farming is used as a pedagogical tool to educate communities about food systems, encourage practical gardening, and foster closer links to the natural world. Our intervention promotes a community-based approach to urban farming, encouraging locals to actively participate in the maintenance and production of these urban gardens. We want to build thriving, effective, and welcoming environments that not only offer fresh food but also encourage a sense of community and shared responsibility. We want to pave the path for a healthier, more sustainable, and community-driven urban future by embracing the potential of these unused places and recreating them as flourishing urban gardens.



Figure 87 Figure 84 Images of inner courtyards and gardens

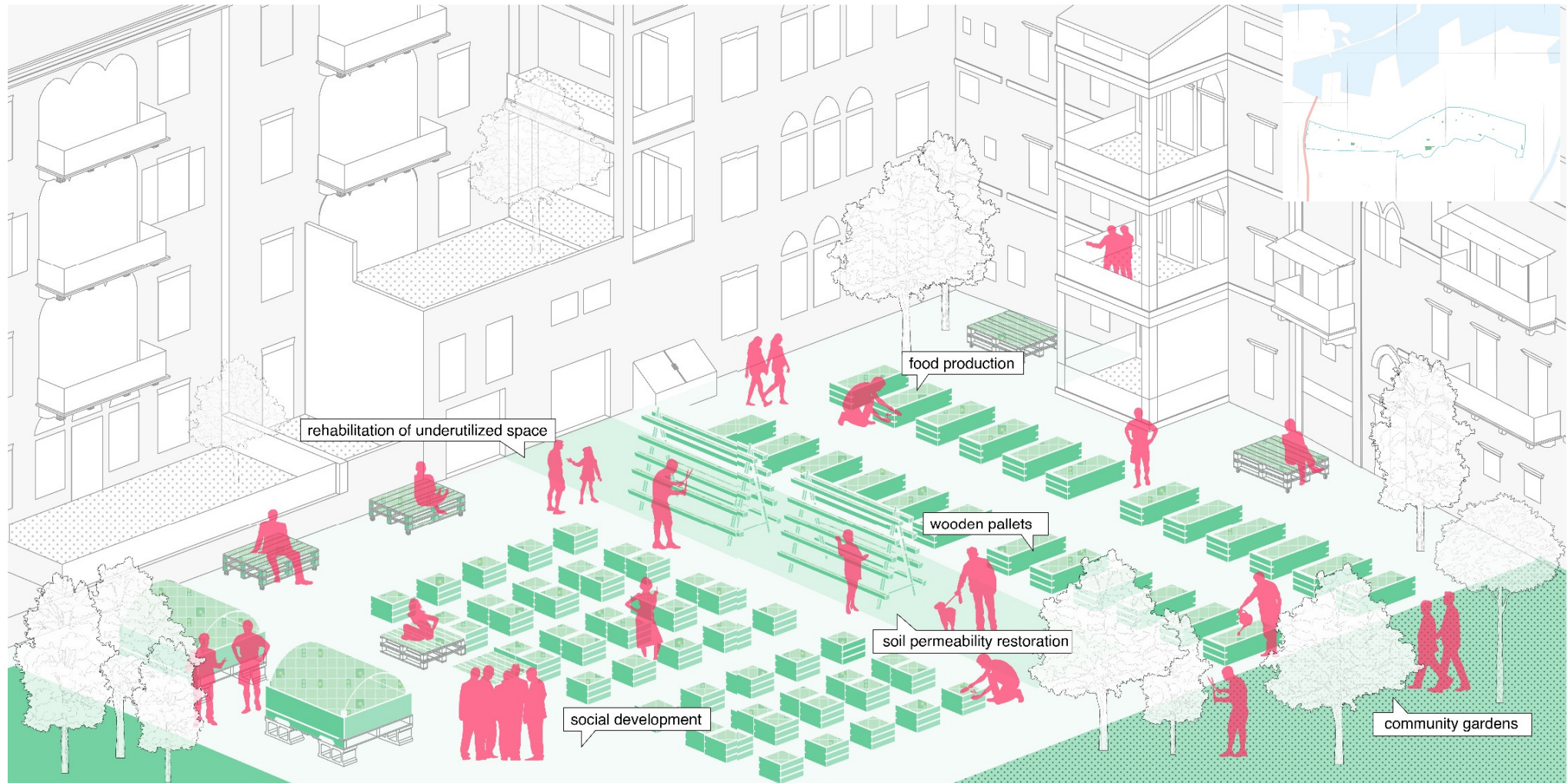


Figure 88 Isometry of Urban Gardens in Courtyards, Atriums, and Gardens - created by the author

Transforming Transversal Stairs: Revitalizing Public Space and Fostering Social Interaction:

We want to revitalize Beirut's transversal stairs, which are a special urban transportation characteristic because of the city's hilly geography. By repurposing these underutilized areas, we aim to add another layer of public space that encourages engagement and social interaction. Our design solutions thoughtfully include imaginative seating options along the steps to promote social interaction. These seating choices provide warm places for individuals to congregate, rest, and converse. The addition of handrails also improves accessibility by making sure that everyone, including seniors, can safely use the stairs. To infuse a sense of vibrancy and playfulness, we introduce interactive sensory play objects such as speaking pipes, and a slide. These elements not only add a touch of joy to the stairs but also create opportunities for spontaneous interactions and shared experiences among users. The scope of our project extends beyond aesthetics and creative design. It expresses a desire to reuse underused areas and turn them into warm, social spaces. We want to show the potential of public staircases as citizen-centric locations that serve the social and practical

requirements of nearby communities by redesigning these underutilized areas of the city. Our interventions are modest but impactful since they are inspired by the idea of "microinstallations." We tackle the project using simple, low-cost solutions and minimalist design concepts. For example, we propose "half-chairs" or "half-sunbeds" that invite individuals to sit, unwind, and enjoy the views. This demonstrates our dedication to reviving underutilized areas while working on a tight budget and demonstrates how change is possible even with small resources.



Figure 89 Images of different transversal stairs

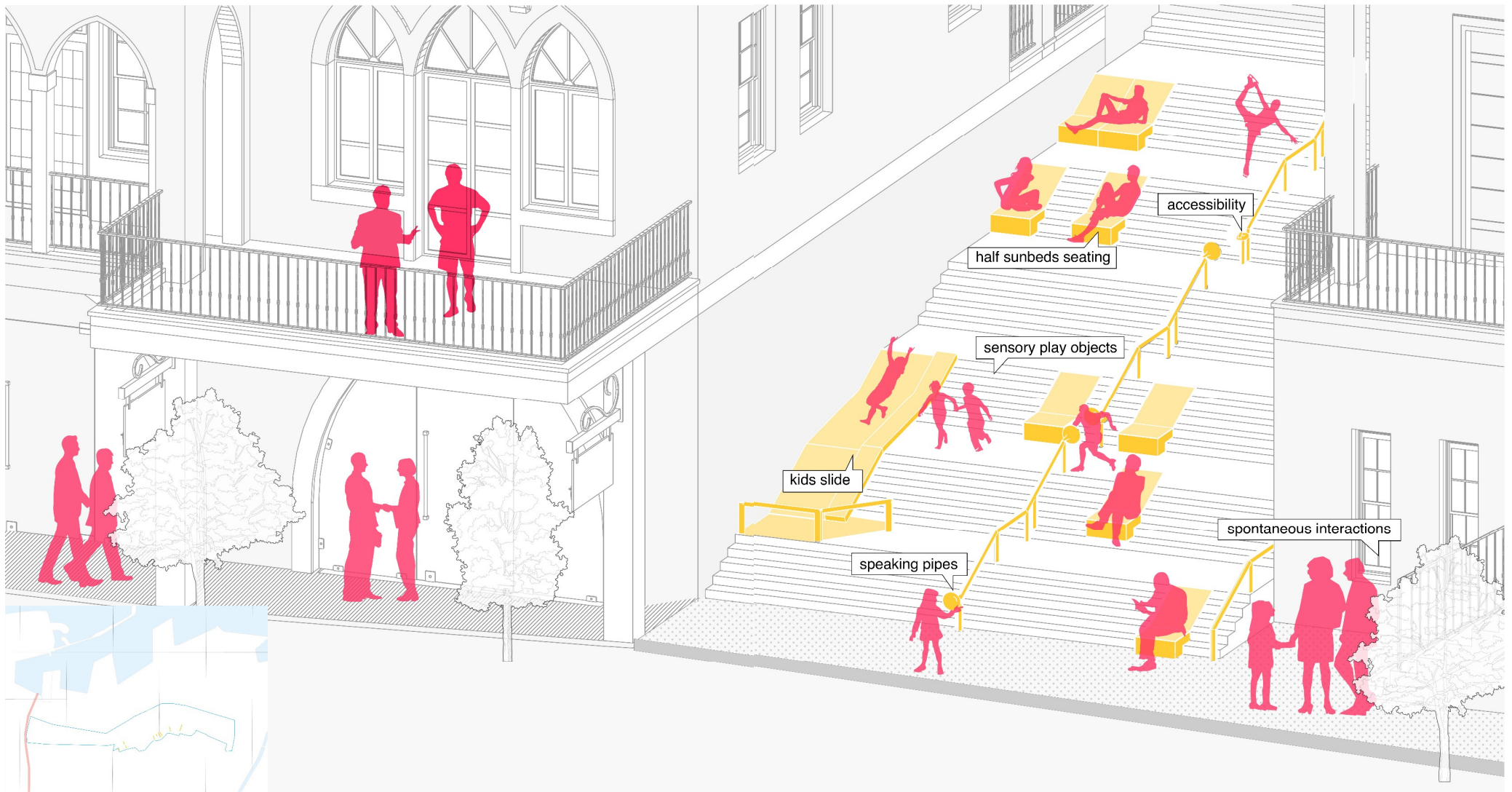


Figure 90 Isometry of transversal Stairs revitalizing as a public space - created by the author

Gated spaces: Public Spaces with Scaffolding: An Alternative in Emergency Situations:

A Different Approach in Emergency Situations

Architecture is essential in delivering quick and efficient solutions in times of crisis, including pandemics, conflict, and natural disasters. In these tragic situations, finding solutions to housing issues takes precedence; nevertheless, once the emergency is under control, attention gradually shifts to gathering places like community centers, neighborhood councils, and public spaces.

Due to its quick construction and low cost, scaffolding becomes a viable option in these emergency scenarios. Scaffolding has the advantage of quickly generating dynamic spaces through the interaction of horizontal, vertical, and diagonal lines, complemented by a variety of materials such as fabrics, wood, polycarbonate, and metal. Scaffolding is frequently used as temporary structures. Scaffolding, which is made up of prefabricated metal components, enables the construction of spaces with various ratios, sizes, and heights. It effortlessly adapts to various surfaces, whether they are independent constructions or are placed next to a facade. In particular, scaffolding uses cold joints, permits the use of various

platform materials, and makes construction, disassembly, and transportation simple.

For our intervention, we'll create an urban gallery space using scaffolding, wood, and textile components. The proposal celebrates the idea of ephemeral urbanization, glorifying impermanence and urging people to consider the transitory nature of both things and places. By creating a modular system that is in line with the requirements of the available scaffolding resources, we can quickly build the scaffold gallery and integrate it into the city's public space without disrupting the surrounding area. This method emphasizes simplicity, cost, durability, and convenience of building while combining both rented and recyclable resources. The main framework is composed of a simple scaffolding system.

As a result, reusable building scaffolding can be used in a low-tech, economical, and modular way. Despite the structure's transience, our goal with this intervention is to promote a sense of location, civic involvement, and aesthetic appreciation. This novel strategy embraces the transformative potential of urban architecture, even in difficult settings, and provides a special area for gathering that can change to meet changing need.



Figure 91 Images of gated spaces

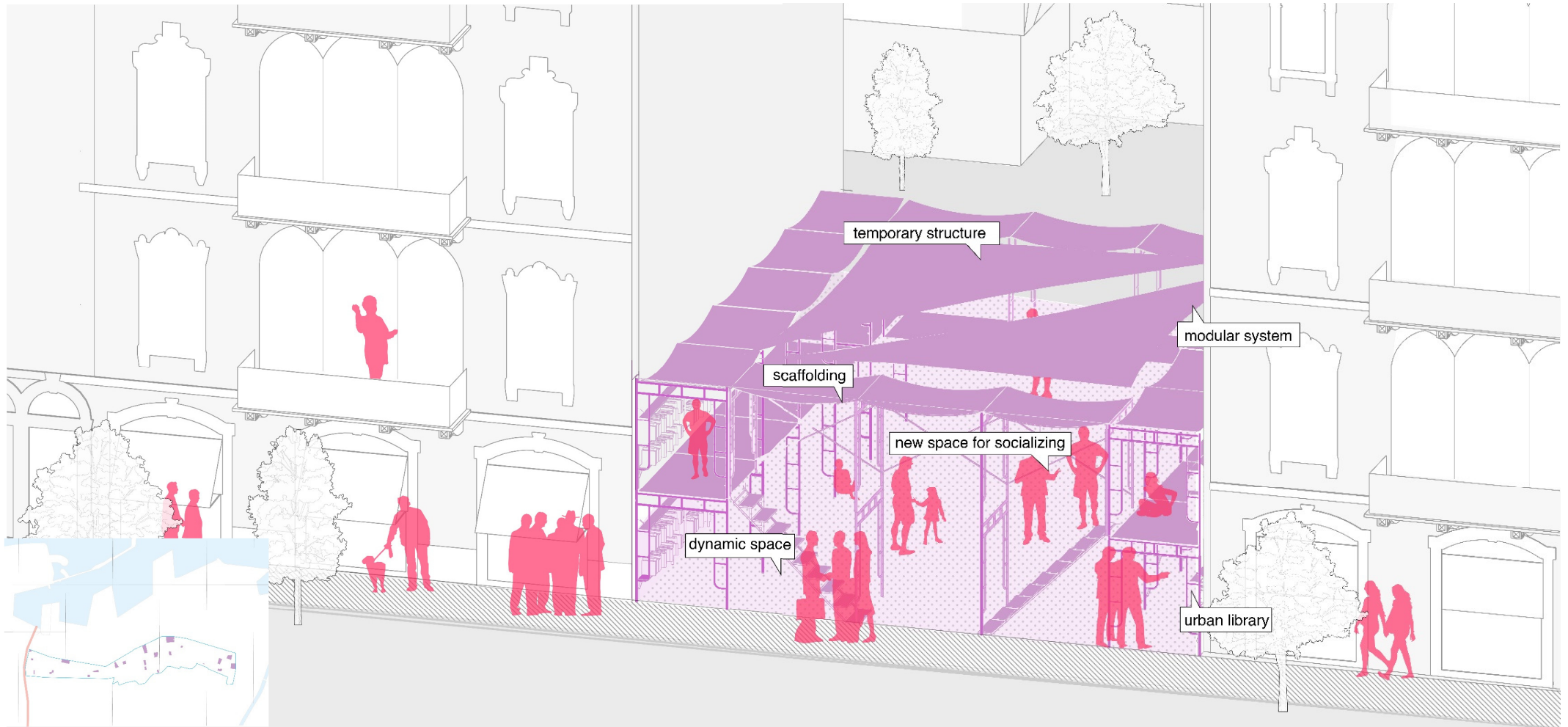


Figure 92 Isometry of Gated spaces as Public Spaces with Scaffolding - created by the author

5.3. Digital Network – Public interest technology website

The suggested Digital Platform would make it easier to implement the suggested model, preserve connectivity and transparency between the participants, and guarantee that the public's interests are taken into consideration during decision-making.

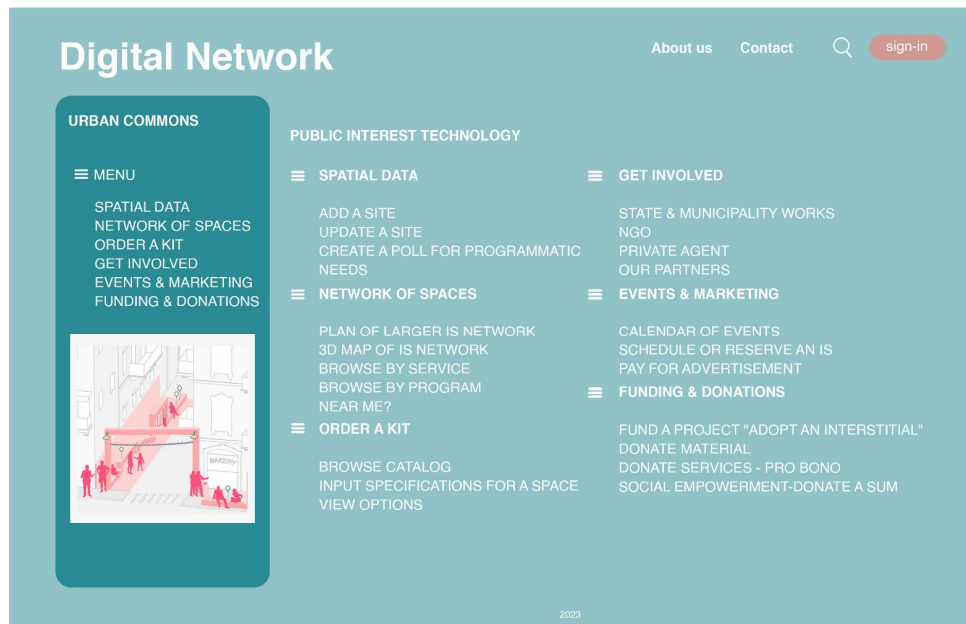


Figure 93 Homepage Toolbar of the public interest technology website

Enhancing Sociological Dynamics: The Sociological Advantages of Proposed Interventions

In addition to the previously mentioned benefits, urban acupuncture initiatives that improve public areas have considerable sociological advantages in a city like Beirut that is socially divided.

By creating inclusive and accessible spaces that cater to the needs of diverse communities, urban acupuncture has the potential to bridge social divisions and foster social cohesion.

These interventions have the power to unite people of various ages, socioeconomic classes, and backgrounds while also acting as catalysts for community participation. Urban acupuncture encourages the establishment of social ties and a sense of belonging among residents by offering shared areas for leisure, entertainment, and socializing. These tactical measures can have a broad impact. Urban acupuncture projects help to the improvement of everyday interactions of divided citizens by regenerating underused and abandoned locations. These interventions provide opportunities for

spontaneous encounters, and the cultivation of a vibrant street life. By activating residual spaces, whether through community gardens, or other gathering areas, urban acupuncture fosters a sense of belonging and pride among residents, encouraging them to actively participate in shaping their built environment. Additionally, combining different urban acupuncture therapies over a wide region can have a cumulative effect that amplifies the effects of the impact. The overall urban fabric is renewed when a variety of residual spaces are regenerated and transformed into useful and attractive areas. This connected system of enhanced public places makes the city more dynamic and livable, with a stronger feeling of place and identity.

Questions Inputs

WHO? Public, private and the community sectors Shared responsibilities and gains

WHAT? Urban voids

WHEN? Continuously and in real-time; Temporary projects

WHERE? Instable, passive and sensitive locations in the city

WHY? Healing the micro zones and their local community

HOW? Small-scale interventions (i.e. urban acupuncture)

Collaborative approach: topdown strategy in sync with bottom-up activism (i.e. tactical urbanism)

Locally sensitive techniques (i.e. place making) Outputs

Urban rooms

Uninterrupted process of urban regeneration

Improved quality of public life through continuous activity

Interconnected wider urban areas

Recovery of the city and society

Large-scale impact

Economic, social and cultural benefits of the participatory approach

Recreating identity of the place

Reflections

This thesis delved into the dynamic process of transforming the current urban landscape of Beirut from a fragmented puzzle into a vibrant mosaic, by examining the city's unique socio-cultural fabric, historical context, and urban planning practices.

Faced with the challenges of social divisions, historical conflicts, economic inflation, and after the 2020 explosion as explored in part II, this study offered a multi-faceted lens to understand the city's dynamic character, serving as a constructive mirror.

How to foster social cohesion in a fragmented city?

Beirut is a dense, quickly urbanising city with few, poorly maintained formal public spaces. In fact, public spaces play a vital role in cities, they foster social engagement, encourage economic growth, and help create inclusive urban citizenship in addition to enhancing physical and mental health.

The thesis emphasizes the potential of urban acupuncture as an effective strategy for tackling the issues encountered by socially divided cities like Beirut. It highlights the significance of taking into account the interconnection of various locations and

interventions when evaluating the city as a whole. Urban acupuncture interventions give sociological benefits through fostering social cohesion, bridging differences, and a sense of community in socially divided cities like Beirut. Through the provision of inclusive and accessible areas for recreation, interaction, and socializing, these tactical spaces play a significant role in enhancing everyday interactions.

This thesis uses urban research and design tools to reactivate abandoned areas and preserve the neighborhood's socio-cultural heritage as an effort to close gaps between different social groups in Beirut. The thesis seeks to empower the local community and transform its residents into active decision-makers who actively participate in the livability of their area by relying on tactical urbanism tactics that disrupt the divisions. This method aims to make these areas catalysts for beneficial and long-lasting social and spatial change by allowing for acupunctural repairs, manipulations, and progressive alterations of space. A transformative effect on the urban fabric, improving the city's overall livability and identity.

Results of the Individual Chapters:

In Part II, the examination of Beirut's entropic history, urban fabric and urban context highlighted the importance of

public spaces and the challenges faced in their development.

Public space has gradually decreased during the war years (1975–1990). Public spaces that had been overrun by fighting were associated with hostilities, risks, and consequently fear. Downtown Beirut was the scene of intense fighting in the early stages of the conflict before turning into a no-man's land that was divided for 15 years by the demarcation line. These worries about a hostile public environment persist today. (Lakrouf, 2020)

Since that time, no national policy has attempted to restore the connection between the people and their urban surroundings. Public space is monopolized by unlawful occupations and privatizations, making roadways the only “public” space today. According to The Legal Agenda, a nonprofit research and advocacy organization based in Beirut, public space projects are not present in Lebanese cities and towns because of post-civil war planning regulations that failed to include public areas as part of their plans. The 2019 Lebanese Uprising was one such attempt to reclaim public areas. In the context of our study, the entropic timeline is increasingly producing a positive entropy or a growing decline into disorder when the nation is in a condition of instability. Therefore, the use of time as a healing

therapy is indisputable. The suggested timeline depicts a more optimistic future for Beirut and a declining entropy level. It has been difficult for stakeholders to take significant actions to revitalize Beirut because of the challenging political and economic problems the nation is going through. As a response, the suggested interventions serve as a form of urban acupuncture.

Its framework proved to be successful in contexts like Beirut as seen in Part III, the research identified key interventions and strategies that can enhance the city's livability and cohesion. The chapters of the thesis provided a comprehensive understanding of urban acupuncture, its theoretical foundations with the respective school of thoughts, the critics of urban acupuncture and weak points in order to mitigate them and use them to our advantage, and its practical application in various contexts. The case studies, including Taipei and MVRDV's projects, showcased successful implementations and valuable lessons for Beirut.

This study explores the potential of community engagement and collaboration as catalysts to actively participate in the revitalization of public spaces as explained in part IV. This was also further analyzed with qualitative interviews with various stakeholders from public representatives to citizens'

led project representatives to understand the challenges in developing such projects.

Through case studies, analyses, interviews and recommendations, the thesis concluded with a pilot project. This research provides insights into how Beirut thesis uncovers the intricate puzzle pieces that shape Beirut's urban fabric and proposes strategies to piece them together into a cohesive and vibrant mosaic, where diverse communities and cultures coexist, thrive, and contribute to the city's sustainable future.

Discussion Tips and Critical Analysis:

Beyond the Individual Spaces: Urban Acupuncture as a Tool for Addressing the City as a Whole

“As cities change, their approaches can change,” Lydon - author of the book tactical urbanism - says. “Tactical urbanism isn’t a silver bullet for everything, but it’s a great tool.” (Matchar, 2015)

Based on the findings and discussions, several proposals and critical analyses can be made to enhance the practice of urban acupuncture in Beirut:

- Small scale urbanism: We can evaluate critically the relationship between architecture and urbanization that Koolhaas developed under the S, M, L, and XL categories. The XS: the additional tiny category indicated by tactical urbanism is missing from Koolhaas' formulation, according to architect Andres Duany. This branch of everyday urbanism, known as tactical urbanism, represents one of the most social and inclusive methods for improving the city's public places. According to Lydon and Garcia (2015), it is also the new vernacular of the creative city, as residents start producing their own space rather than just using it for consumption.

- Stakeholders and governance: The involvement of various stakeholders, including citizens, community groups, and local authorities, is crucial in the successful implementation of urban acupuncture interventions. Collaborative governance models were established to facilitate effective decision-making and ensure the inclusivity of all voices. It's crucial to strike a balance between bottom-up and top-down strategies. While bottom-up projects empower communities and encourage their active participation, long-term sustainability and scalability demand top-down assistance and coordination.

- Lack of spatial data: There has been a substantial lack in spatial data regarding Beirut, hindering the efficiency of project proposals. That is why at the end of the thesis, a shared numeric platform was suggested as part of the project, as a website for public interest. This can facilitate and engage various stakeholders, a platform where spatial data can be added and shared, for the development of the area.

- The urban voids consideration: The maps showing publicly-owned parcels and open parcels that are used by the public and unoccupied unbuildable parcels in municipal Beirut aims to emphasize the numerous chances that can still be grasped to revitalize public

life in the city. In fact, Beirut contains a lot of unoccupied space, both constructed and unbuilt, both public and private, some of which are occasionally appropriated, frequently for personal purposes and less frequently for communal usage. However, the city still has examples of a vibrant public life, steeped in its urban history, that can be observed through its markets and streets as well as through a variety of spatial practices that take place in open, more or less hidden public and private spaces, such as alleys, stairwells, building entrances, vacant lots, and other random locations. Some of these locations are also abundant in vegetation, which arouses the senses and influences how we feel about the city.

Personal Reflections:

Considering Beirut's socioeconomic and political challenges, grand initiatives and schemes cannot be carried out. As planners, we understand the vitality of open, and welcoming public places in cities, that's why we must advocate their existence and work with what is now available rather than what should be.

Vacant lots and abandoned buildings have demonstrated a crucial role in community cohesion following the 2019 revolution and the Beirut blast by

serving as locations for the distribution of aid, mobilization, and gathering.

In anthropologically complex cities like Beirut, the research investigated the potential of urban acupuncture as a tool for community cohesion and sustainable growth. Urban acupuncture showed to be effective in regenerating cities with social tensions and a limited resource as seen in part III of this book.

Although tactical urbanism, which includes urban acupuncture, may not offer a fix for all city's problems, it is a useful tool for reshaping cities and meeting their changing demands. Urban acupuncture's potential can be fully realized by placing demonstration projects in the right places and addressing systemic issues. It provides the chance to redesign urban areas, making them livelier, more welcoming, and receptive to community needs and goals.

Urban acupuncture has an important socio-economic potential for Beirut's urban growth. Beirut can reinvigorate its public spaces, promote community cohesiveness, and build a more inclusive and sustainable urban environment by applying its guiding principles and the lessons learned from successful case studies. But to accomplish these objectives, stakeholders must be actively involved, collaborative governance structures

must be established, and a balanced strategy that takes both bottom-up and top-down perspectives into account must be used.

Beirut can pave the path for a more vibrant and integrated cityscape that satisfies the needs and aspirations of its varied population by putting these suggestions into practice and critically evaluating the results.

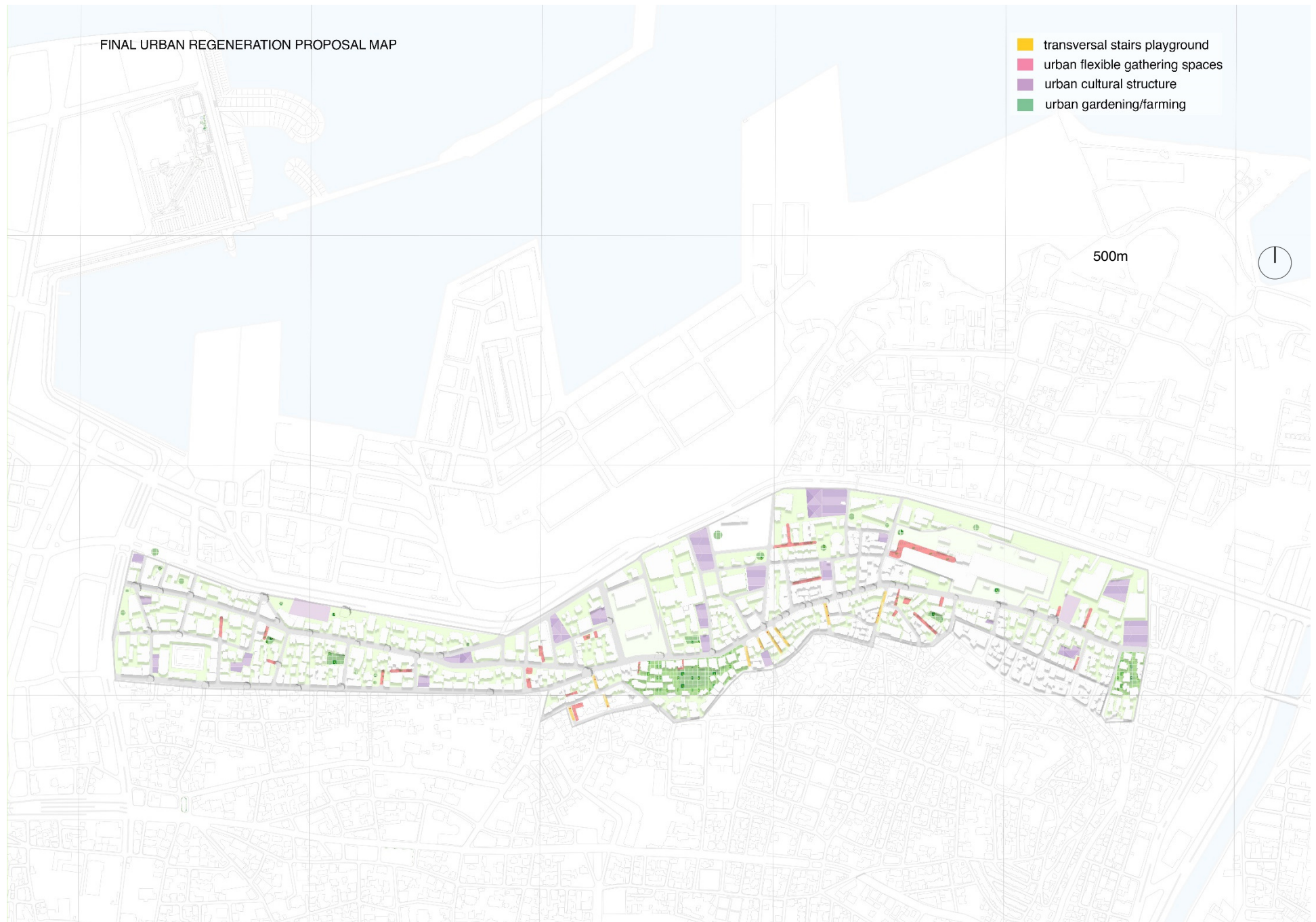


Figure 94 Final Urban Regeneration map - created by the author

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ANNEX 1

STAKEHOLDERS INTERVIEWS

Qualitative interviews to understand the process of bottom-up participatory experiences

INTERVIEW WITH AN ENGINEER IN DIRECTORATE GENERAL OF URBAN PLANNING– THE OFFICIAL URBAN PLANNING AUTHORITY IN LEBANON

What do you think are the most challenging problems in urban development in Lebanon?

There is this concept of “Valeur refuge” (safe investment). Traditionally safe havens are expressed through gold or real estate investments which have always been synonymous with stability. Lebanese citizens are unconsciously raised based on this idea, differently than Europeans and other Arabs. The land acquisition for them is a form of investment, they say “I buy a land to provide education for my kids”. You would say how are those related. In example there is a project now being worked on from the government in the protection of heritage buildings, even if it's not directly related to public spaces, it's a subject that serves common goods. They have been speaking of this subject for years, and trying to do legislation in the chamber of ministers. The idea is that if you have a heritage building how would preserve it, as a public value. What is the solution for this? The regulation is that if the

government wants to take care of it, the government should compensate for the owner of the house. However the government can not pay at the moment, which means that the registration will block you from intervening to your house and you can't have compensation.[So they arrived to this solution, instead of us paying you the compensation to take the house, you keep it in your name, but you sell the “air” of your plot for other owners in other buildings] This is to show you how hard it is for Lebanese to give up their lands, and not even only their lands but also the investment ratio in their lands. Why? Because we are linking the land with the investment, and the investment means the added-value, and for the Lebanese mentality you are not allowed to ban him from this investment, because for them it's an investment for his future and their kids. And this mentality was heightened after the current crisis as you know. So imagine saying he would give up his land for free for a public space. This is something to understand for further understanding the whole idea of urban planning.

Who plays a role in the urban planning projects?

Keep in mind that there is something called “Wa'ef”. Lebanese are selfish with their lands, no one will give up his

land. But there are plots that are semi-publicly owned, so you can try to see if the “wa’ef” would collaborate with you, because they have a socio-political power that can cancel out your plans even as a government. In example in an urban project that had to draw a new highline road, it was cancelled because of a religious figure because it passes by their land. So you have to convince them of the need, and translate it into something commercial, of future benefits.

Have you had an experience of urban projects that were community-led projects? If yes, what kind of projects they did? And how was the procedure?

In reality there a lot of ideas, a lot of NGOs working on really nice projects. But it is not passing by the government. For example, 2 days ago we had a meeting for a committee to study environmental sensitive areas in Lebanon, with the European Union, and suggest solutions. We asked them to do statistics to show the importance. But at the end, it should pass by the legislature. If you did all the work and an amazing job, but you didn’t pass it by the government, all this work is going to trash. There are a lot of projects, a lot of interventions that are citizen-led, but in conclusion is that if I didn’t do a certain type of legislation

that is imposed on people, it doesn’t work.

What is the difference between a citizens-led project that reached results, and the ones that didn’t? What are the reasons some projects might fail and do you have any suggestions to improve that?

You should know the regulations for the procedure, you should read of urbanism code. It’s not enough to do a study of the needs, you should do a study of the process. First it should be signed from the DGU, then its showed to the conseil superieur de l’urbanisme, and the municipality should agree. The study would go to waste if authorities did not take part of it.

Is this procedure for only big urban-scales, or does it also apply to smaller projects?

If it was a neighborhood or one space, you should go to this process. You might be doing an amazing idea, but if it’s not legislated, someone can come and tell you no I have the right to invest here and stop it. If you want a public space you need a legislation. There is a big power for municipalities, and the project should combine the vision of the authorities and the local needs, and this is how it would get approval.

What can a citizen do alone, as a citizen-led initiative?

As I told you, there is a big role for the “Wa’ef”, because they have a form of reserve fonciere. In example in 2012-2014 when the land price doubled and triple, citizens were renting lands from “wa’ef” as a win-win situation, for a long term. Second, if the municipality wants to do a project, they either directly work on the urban plan, or they do a directory plan and then pass it by the government. Second, for individual initiatives. There is a regulation in the urban code that allows it. In example in Faqra, Faraya, private investors did an urban plan and suggested it, they had public spaces. In this project they put a directory plan with regulations that was even more strict than the normal ones, and then they agree with the DGU to implement it. They had the budget and they had the study, their project had a common-goods plans. The important thing is to find the common benefits for all the parties. Studies alone would not be enough. Understand the local politics, the needs and fears of the citizens. And then convince the people of this with a powerful figure. There are many examples of that, especially with organizations that are religious and so on. Also its very important to take the “mshee” in consideration, which is the land that is for the neighbourhood, usually in villages, these are also leftover spaces.

INTERVIEW WITH A TECHNICIAN FROM THE MUNICIPALITY OF BEIRUT

Do urban development projects have a priority in the general policy making? And what kind of projects?

We always try to see how we can do things. There is a rapid urbanization and a lot of challenges come with that. The focus tends to be more on immediate concerns such as traffic control or zoning regulations rather than long-term strategies for urban regeneration.

What do you think are the most challenging problems in urban development in Lebanon?

I think the very long bureaucratic procedures to implement any project. Because of the nature of how Lebanon is sectarian slows down all projects, because each side wants to take benefit from it. So usually even when there is a project idea, it takes so long at the end it is not implemented, it just “gets lost in the paperwork” or “hidden in the drawer”. Also with everything going on now we have a very limited budget, so our planning is very limited now.

When policies and plans are being studied, how do you take into account the citizens' needs?

Since we're in the municipality, usually people working in the municipality are from the area so they kind of know what is needed. In Lebanon municipalities are very open and so ideas can spread easily.

Have you had an experience of urban projects that were community-led projects? If yes, what kind of projects did they do? How did they ask for assistance?

Yes there have been a lot of ideas coming our way, especially for recycling and cleaning. Also there was once the idea to close the street and have a festival. They usually ask for permission from the municipality, and most of the time also assistance in organizing, so with the police and so. Community groups typically rely on their own resources and networks to initiate and sustain these projects. However, due to limited access to financial and technical assistance, community-led projects often face challenges in fully realizing their potential and expanding their impact.

Have you had an experience of local urban projects that had a small budget and short-term results or

were in neglected areas? If yes, how was the outcome?

These kind of projects usually come from bigger stakeholders like UNHabitat, or even NGOs that collaborate with international stakeholders before addressing us. So they usually have a plan and then they ask us for permission. The outcome was good, I mean in Beirut there is a lot of potential, especially with everything going on...

Do you have any suggestions to strengthen the collaboration process between the private and public sectors for future projects?

Strengthening collaboration between the private and public sectors is essential for the success of future urban development projects. To improve effective collaboration we should improve communication, transparent decision-making processes, and mutually beneficial partnerships. Public-private partnerships can be encouraged through incentives, streamlined regulations, and clear frameworks for cooperation. Engaging the private sector in urban development initiatives can bring innovative solutions, additional resources, and expertise.

INTERVIEW WITH MONA HALLAK DIRECTOR OF AUB NEIGHBORHOOD INITIATIVE

Courtesy of Beirut Urban Initiatives

How did the AUB Neighborhood initiative start?

10 years ago, Dr. Cynthia Myntti, the previous director and a former professor at AUB, wanted to work on a project that links AUB to its surroundings. She was inspired by previous work in Philadelphia USA, where universities are part of the neighborhood, since the campuses are not usually fenced.

First, they started with different ideas. One of them was to connect with the elderly neighbors that have no kids or activities and don't have the option of staying home. They wanted to explore what the university could offer for them. |

They established a connection with Dr. Abla Sibai, an expert in aging, and together they suggested the creation of "University for Seniors". It was one of the first programs where seniors came to study in the university at the same time of sharing their life experience with the younger generations, by giving talks for examples. It was an

opportunity to engage and activate the seniors.



Figure 95 AUB Neighbourhood Initiative

Another idea was to treat the neighborhood as an experimentation lab for the university, where students can practice what they are learning at AUB, implement and start working directly to benefit the neighborhood.

What is this relationship between a university and its neighborhood?

The goal was not to start a charity or a community service project but establish a strong partnership between the university and the neighborhood with common benefits. The neighborhood would benefit from the expertise and the assets of the university, its faculty, students, and staff. It would also provide a space for critical citizenship, a space where actors feel the responsibility to act and do something for their neighborhood.

The university would benefit by employing its expertise to the neighborhood and by establishing an experimental lab. The impact

would also produce a good will for the university.

From what lens are you seeing the neighborhood?

What's interesting here is that we are looking at the neighborhood from all lenses, as AUB - an academic and health institution - has all of them. We look at the neighborhood from the social, the anthropological, the medical, the urban, and the architectural lenses.

What's also important to us is that we try to do everything from an interdisciplinary perspective which is beneficial to both sides. Usually, things are done in silos at AUB, each faculty functions on its own with no affiliations with one to the other. So this is an opportunity to work all together.

Our approach is to follow a multidisciplinary research process, connecting different departments of the university around a problem that could be solved in the neighborhood. At the same time, we do outreach activities to produce goodwill for the university. Because unfortunately, with the positive benefits that AUB brought to the neighborhood, it also contributed to more issues such as gentrification and traffic congestion.

AUB has a lot to do with all the gentrification that happened on Bliss Street and around

Ras Beirut. The neighborhood became a very sought-after place to live in because of AUB's reputation, the greenery, and the sea view. In addition, AUB brings 8,000 people every day to the neighborhood. We are one of the biggest employers in Lebanon, but this is also causing traffic congestion and pollution in the neighborhood. With all these issues that we bring, we have to do something positive on the side.

What type of projects do you do?

We start by identifying a problem or an issue to highlight and focus on. Then we map the stakeholders, whether from the university or the neighborhood, that are implicated in the solution. We provide a space for everyone to come together, work, and brainstorm. Then we look for seed funding.

Everything is funded externally, never from the university, only the rent and salaries for the staff are by the university. Currently, we are funded by the Ford Foundation since we started and now we are looking for new funds.

Once the problem is defined, we get a consensus that the stakeholders are interested to solve this problem. We then ask more questions about the stakeholders, the funding, and the permits.

Our main role in this partnership is to deal with all sorts of governmental institutions and local authorities like the municipality and/or the ministries, to get permits for example. Our relationship with the municipality is key because any implementation in the public realm in Beirut needs permission from the municipality.

Geographically, where is this neighborhood?

Ideally, our scope is Ras Beirut. However, we have the freedom to redefine Ras Beirut in the way we like to see it. We stretched it beyond the area that people are used to, reaching Sanayeh, Raouche, and the edge of Downtown. This is our playground. But geographically we are definitely limited, however, it is a big area.

Regarding what we do, the sky is the limit. It all depends on the problem identified at the start of our process. If we look back at the projects that we have done before or what we are doing now, they cover a wide array of issues, including noise pollution, and recycling. We work around all these issues and more, and we tackle it from a multidisciplinary approach.

One example of a project is "Sawt w Samet" (Sound and Silence); it involved a group of students of the faculty of health sciences,

public health, and engineering. Together, they measured the sound with the support of an audiology doctor, a legal personnel to check what are the laws regarding the sound in Beirut, a graphic designer to visualize the sound, interventions by the architecture department, and a theatre initiative by the art department.

Regarding the traffic congestion, students from the transportation department worked on urban design, others from the computer science department worked on an app, we talked to the municipality, and we started contacting companies that work in transportation design. We try to connect external consultants and local authorities with AUB people to solve problems.

Who are your stakeholders in the community (other than the public authority, municipality, and the university)?

The community is our first stakeholder. When we started with the street-market on Jean d'Arc Street, the idea was to create a community space and to meet with the locals on a weekly basis. If people are not interested, we are not doing anything.

People are interested in having a better public space. If they are not interested we try to spark their interest.

How do you outreach? What kind of tools do you use to validate that the people are indeed interested?

What we actually do is talk to people. We have our network and from one person to another we validate if they are interested or not. We try to extend our network as much as possible.

One example where we consciously wanted to extend our network, was the recycling project. We needed to connect to every building we could reach in the neighborhood. We were able to reach all the buildings, their occupants and we built a strong connection with the concierges. It was a great way to get to know almost everyone in the neighborhood. Afterward, information comes in automatically from this network, as people call in to tell us about any problems.

Another strategy is organizing public events. Events are always a way to interact with the locals. These events include workshops, concerts, performances, and installations like the ones we did for Beirut Design Week. When people see us on the street they start believing us. That's why one of our main strategies is to put interventions that are as permanent as possible.

Jean d'Arc Street was the biggest project done yet, when I started leading the initiative,

the study was already achieved and it only needed implementation. The study was fully done following a participatory approach, we interviewed the residents and the shop owners in the street. That's how we approach our projects.

When we did the "Semaine du Son" intervention on the stairway, we went door to door in all the buildings on the stairway. We talked to the residents about what we wanted to do and asked them if they had any problem, and how they could help us. They are part of it. They believed it belongs to them. We couldn't have done most of the work if the people were not on board.

I take walks and talk to the shop owners on a weekly basis. We also talk to the "makhteer".

Now we are seeking to find the elderly that are disadvantaged in the community, maybe some people are in need in the current situation (referring to the economic crisis in early 2020). So we are trying to highlight who these people are and try to provide some psycho-social support. We connect them to each other and connect them to students who help them in their daily errands, like taking them to the supermarket or to the hospital.

Any problem we tackle, we start by finding who in the community can benefit from solving it and we take it from there. When we did the cigarettes project Butt Bollard: Urban Cigarette-Waste Receptacle, we went around to see who might be interested. Several shops and businesses thought they could benefit from it and accepted that we place one there.



Figure 96 Urban Cigarette-Waste initiative
Do you have an idea of how many people know that this initiative exists?

People definitely didn't know before the interventions, only those who were directly involved in one of the researches/interviews did, but also it doesn't always stick, many forget about it after the interview.

Definitely, now more people know about us because we are on the street every week, which is very important. And then there are the installations that they see on a daily basis, like the backgammon table, the chair, and the mural.

Nowadays, we are also more present on social media. We have 3,500 followers, but we don't have a staff member responsible for that, so it is challenging.

Branching to Ain el Mreisseh was very important, now all the fishermen know us. We talk to them on a 1 to 1 basis, in addition, we talk to their families.

We are using the media extensively, and they are being interested because there is not much being done on that level. We launched the first paddleboard, with Recycle Lebanon, made of cigarette butts, there was good media coverage.



Figure 97 Urban Cigarette-Waste initiative

What's interesting is that the community can see the progression of the projects in all the steps. For example, they heard that AUB was going tobacco-free, then they saw the neighborhood initiative starting the cigarette butts collection and people had doubts, even

though we had doubts about this project. But we said we are going to recycle the butts and we did it. Eventually, we launched the paddleboard and it was used to clean the sea. Witnessing the progress of the project and being part of the progress is very important and they can feel the impact is tangible.

The Wall of Kindness is 3 years old now, and we still see people using it and benefiting from it.



Figure 98 The wall of kindness Initiative

Organic interventions like these, that we don't need to control, are the most successful ones because they don't need much maintenance. Someone from the community would appropriate them in the neighborhood. For example, the chair library "Red Reading Hood", with District D, is still being taken care of by a man from the community that is always sitting on the corner, he contacts us whenever someone tries to sabotage anything in Jean d'Arc Street. Having

someone from the community appropriating the intervention is very important.



Figure 99 The Red Reading Hood

Do you also engage other academic institutions in the neighborhood? What steps do you take to work with them?

We work with five different public schools in the neighborhood. This means we engage with the students, their parents, and the school administration.

One of the projects that were needed in schools is the one about vertical agriculture because in most cases schools lack gardens and green spaces.

We first approach the school and propose to organize a vertical agriculture workshop. Then we work closely with a few people from the school assigned to work with us. We collaborated with the greenhouse at AUB in order to provide the technical expertise and the students from the landscape department volunteered to work with us as well.

We put the group together consisting of faculty students, the external partners, and us.

The neighborhood initiative would fund the project, the fund for such projects is very low around 200 USD. We start the planning phase and we see what classes would be interested in the workshop. We implement the workshop and we follow-up after we finish it. We design with the students the stands and we prepare all the materials. It is a yearly activity now.

Students, later on, organize a community event where they harvest their vegetables and make a salad to share together. On one occasion, we were able to bring students from IC and the public school together to harvest the vegetables and share a meal. This was a good opportunity to bring the community together despite the stratification.

The success of the initiative and the interventions is how to make the people interested, and how you can make them see something good for them beyond just doing it for us, it is for them.

If you have to do an intervention with the public, on the street, how is the relationship with the local authorities established?

The first party to think of is the municipality, we need to take the green light for the idea at least, before planning anything. I go in person for every project and present an

extensive brief. That the only way we can guarantee it would work. We present for both the governor and the municipality. The actual permission is granted by the governor but we have to meet both of them and present the project. They will never say no if it's a good project, and it has always been the case.

We always had to find diplomatic ways to get what we want. We never schedule a meeting with the Governor, the best way to do it is to go on Friday, during the open meeting, when he is obliged to meet with you. At the same time, after we finish this meeting, we catch the head of the municipality when he is about to leave his office to attend Friday's prayer. Sometimes you have to abuse your knowledge of their schedules to get what you need.

In other projects, we have to work with ministries like the Ministry of Education when we want to work with schools, the ministry of Communication for "La Semaine du Son" because we needed a radio channel and the ministry of Environment for the recycling project. It's never easy to reach them, but because AUB has contacts it is easier for us.

If a normal citizen wants to do a project, is it easy to reach out to the ministries and municipalities?

They can start by making an appointment and going through the process, but it's not as easy as it appears.

You were running against them in the last municipal elections, did this affect your relationship with them?

No, because these are two different things. I still fight for what I believe in. I sign against different projects. By the work we are doing here, we are giving them a good image because this is a work the municipality should be doing. And every project is inaugurated by the head of the municipality Jamal Itani.

Now we are seeing many initiatives emerging, are these initiatives doing the work of the local authorities?

All the work should be oriented to be pilot projects for the municipality to adapt and continue them. When we did the "Urban Hives" we told them this is an example of how the municipality can create gardens within parking lots. When we assembled the Red Reading Hood chair we told them that this could be implemented in any public place.

Jean d'Arc Street project was an example of how to create a pedestrian-friendly street, without a big budget. We are doing the recycling project to show the municipality that they can sort the waste from the source, it just needs to be strict. When you create a clear system, the people will abide by it.

So the goal for the project is always to be a pilot for the city. It's not our responsibility to do the municipality's work, but it is our job to give them success stories to build on and defend our work.

I heard that the Jean d'Arc Street project took a lot of time, is this true? And Why?

The street has many infrastructures including electricity, phone lines, sewage, water, sidewalks, vegetation. The initial maps from the municipality had no levels on them, so we did the design without levels. The contractor (Khatib & Alamy) should have made the execution drawings based on the as-built, however, they did them based on our design maps without surveying the site.

There was a lack of access to data along with the lack of coordination between the municipality and the ministries who provided the maps. The municipality does not update its infrastructure maps after they do any work.

How were you able to measure the impact of the Jean d'Arc project on the community level?

On the economical level, there were two problems. The first was the fact that it took too long to be finished, the whole street was shut down for 7-8 months. The second problem was the timing of the project, due to the bad economical conditions on the macro level in Hamra street. There were no people coming to Hamra and to Jean d'Arc to shop because of that situation. So, we ended up not having a big direct impact on the businesses there.

However, on the usability level, many people say that they go to Jean d'Arc because it provides a pleasant pedestrian experience, unlike other streets. The transportation department at AUB did a technical post-assessment after a year, and it showed that the users were satisfied.

For sure, we need to measure the impact. We learned that maintenance and follow-up are key to any project's success. Maintenance is still a challenge and that's the price of interventions. Unfortunately, vandalism comes from the municipality itself. When they were doing infrastructural work on Bliss Street, the contractor removed all the cigarette butts collectors and broke them. When we talked to them later, they re-

assembled them but were already heavily vandalized. The project cost us around 6,000\$. Our role should not end after implementation, this is still a challenge.

How much do you think this approach in doing small interventions in Beirut helps on a bigger level, in solving large problems on a policy level?

Working on policy-level is a long term approach. I believe we have to work in parallel. There is a public policy institute working as much as they can. In the short term, I think this is what makes people hopeful that they can do change on a smaller scale until the bigger change comes, which is very difficult in Lebanon.

For example, Public Works Studios are working on a policy level on the housing project, they know it's for the long term and it might take ages. So in parallel, they are making targeted interventions, like the Housing Monitor, in order to fill the gaps until a bigger change happens. *If you really only want to wait for a bigger chance, I don't know if we will live to see it.*

We should mention that research is a very important part of what we do. We work with other entities like Public Works Studio, UCL London, and RELIEF in Hamra.

In 2011, a study was conducted on Hamra Street to collect data about the residents, their lifestyle, their education, the gender balance, their ages, the housing, and their health situation. In 2019, this was repeated again and basically to map what changed after the arrival of the Syrian refugees to Hamra.

We will be hosting a town hall meeting to share the findings of the study and to propose new interventions with the residents.

What are your next projects?

We are working with IC students on a community service project to help refugee children in need of educational support. We got the confirmation from an NGO called Nasma to use their space, so we are able to do it sustainably.

Students from the faculty of Health Sciences are doing awareness campaigns in the schools about the environment and recycling. They host presentations and focus groups with the students, their parents, and the teachers.

Other AUB students that have scholarships work on community service projects. We are encouraging them to work with the elderly. We are trying to create a community of the elderly in Ras Beirut, a community that is not

privileged. The privileged ones are already coming to AUB for seniors. This will be with intergenerational activities, we talked with a kindergarten, so we can bring the seniors together with the children, in order to make activities together. This could evolve to become a project for the elderly in Ras Beirut.

We are also working on making future policies implementable. Let's say a law for waste sorting and management comes up soon. We are working on making that infrastructure and process ready.

The waste sorting project - *راس بيروت بتفرز* - is going on with 70 buildings now, we are trying to expand, we add a building every couple of weeks.

We are working on recycling plastic from the food businesses in Ras Beirut starting from Bliss Street. It is very important to establish partnerships to be able to implement such projects.



INTERVIEW WITH JOANA DABAJ CO-FOUNDER OF CATALYTIC ACTION

Design/Architecture practice:

Catalytic Action is a nonprofit organization and design company that uses thoughtful and creative spatial interventions to strengthen communities. The history of Catalytic Action began in 2014 when they provided safe and engaging educational spaces for refugee children in Lebanon. In order to enhance and shape jointly the quality of these communities' built environments, Catalytic Action is continuing working with the most vulnerable communities in the MENA area and throughout Europe.

Catalytic Action concentrates on the process rather than just the outcome with the goal of reducing inequality and poverty and igniting progress.

Could you tell me about the logic behind catalytic action and how it started?

It started as an idea that I and Riccardo, the co-founder, had when we finished our master's program, we learned about many case studies around the world where architecture is used as a tool to work with the

local communities. We wanted to see how it can be used to empower communities, specifically in Lebanon because we didn't know about any case here where architecture was a tool to advocate for people's needs and to empower them.

Initially, due to the refugee crisis, we saw changes happening in Lebanon, and we knew there were many people in need. We started by doing some research about what the actual needs are. In the beginning, we spoke to the center in AUB that was doing schools for refugees. We tried to see who was already trying to do something related to building for refugees. And we went on with the research, we also did some field work.

One thing that really struck us on the field at that time was the fact that children are not part of the conversation when it comes to having safe spaces, and something basic which is a safe place to play. That's how we came up with the idea of doing a playground inside the school's courtyard.

We did fundraising, we wanted to do under our name, that was when we came up with the name "Catalytic Action". The idea was to create projects that would catalyze the community impact. So, we do **believe that small interventions can create a larger impact**. We believe in ideas or actions

concerned with engagement, so it's more like a charity than an NGO.

How can small actions actually create an impact in very complex contexts?

In the field of architecture specifically, I was in a talk last month in India, I was asked why we aren't doing big projects. I told them I actually don't imagine the charity would do big projects. We would rather do a hundred small projects because this way it would really proceed in a way that involves different stakeholders in each specific project

Rather than doing a big project where you cannot reach the people and the local authorities, and engage them in the process, which is very important. It is possible to engage them, but as the project gets bigger (for example a big building) it becomes much harder.

For example a playground, it doesn't only have the impact in providing play space for the children, it actually impacts much more: within the school, kids will be more happy and energetic, which affects their level of attention and grades, and of course their house environment, all positively.

It's important to show the community how important it is for children to play and have the appropriate space for it. The impact is appearing as we see more playgrounds

being built by many other organizations and people.

One organization did two of the same playground in Syria after our project. We see people adapting to what we created in 2015, and sometimes even copying it fully.

Do you have specific countries you work in, or just in Lebanon?

When we started it was only Lebanon, then most of the projects started happening there, and this has a lot to do with knowing the context and being known locally. But the charity is registered to work in the region of the Middle East and North Africa, also few locations in Europe. We are registered in the UK.

Was there a reason why you didn't want to register in Lebanon?

At the time when we just started, we did the fundraising, then the first project started, we said we wanted to make it a legal entity, and we were based in London at that time.

We were to get pro-bono support to be able to register in the UK. And I think that helped a lot to be able to make it here as a charity, we had the law firm to help us with the applications for free. We did follow up and meet with them to provide the information they needed.

Now we work a lot in Lebanon and we don't find it important to register there. Even if we want to, there's a lot of question marks around NGOs in Lebanon, because the system is not fully transparent - whereas in the UK everything is clear and transparent - so we are not sure we would want that, and so far it's working for us the way it is, so there's no need.

In terms of the process, what are the steps that you follow to implement a project?

For most projects, other organizations reach out to us, so that's how it starts because they need someone to create a child-friendly space for them. We explain to them that it is very important to us to always start by doing an initial assessment to study the location they chose, also for engaging the local community. We did for example participatory assessment not just with the children - even though it's a child-friendly space - we did it also with the youth and their caregivers. Because it's a public park and the children would be coming with their families, we wanted the spaces to be inclusive to all age groups, also for children with special needs. We use this information to come up with an idea, preliminary design, or zoning. Then we go back to the municipality to present the project and explain what we're doing, even though they already have the okay from the

municipality. Regarding the permits, it's the responsibility of the local partner. But, we need to make sure that the vision behind the design got the approval, before jumping into real design. We have a conversation first and then we show the design.

An example of public spaces design, they gave us a certain zone in "Ersal", and we didn't agree with them about the location, so when we met with them, we convinced them that the other zone of the public space is better - before we started the real design. So, we showed them functions and what people want, and then we got it approved, moving finally to the real design. We also show the preliminary design to both the partner and the municipality, we get them to sign on the final design. After that, we do a more detailed design.

With the recent project, we also did a tender and procurement document, so we did an open call for contractors because 3 projects were happening at the same time. We chose the contractor, of course taking into consideration our local partner's opinion, but we got to make the decision.

When the work started, we were supervising every week at the construction site. That's why it's important to have local staff, and the aim is to have more when we can hire. For the play items, no contractor knew how to do

it, so we created another open call for that, where we also taught them how to create these items, and we hired one contractor that did them for all the sites. The process with the contractor was very different from how usually NGOs work with contractors - they just get the project done - but during our project, even the contractor benefited from it because they acquired new skills, and how to create new items. They were shocked at how picky we were on the quality of the final product, and that was new to them. Also, UNICEF was surprised at how much you can achieve by following such processes and using local material to create the space, which was also cost-efficient. It was strange to see what they were able to do just by partnering with us, and us following our principles toward doing this project.

Once the project is built, what happens next? How do you assess the impact of the project?

Since we started doing projects five years ago, we have been doing that just to learn from our experiences. Sometimes the local partner becomes in charge of maintenance and follow-up. We always keep follow up just to make sure everything is okay, and to see how it's running, and if there's anything we can do if possible.

**INTERVIEW WITH MOHAMMAD AYOUB
EXECUTIVE DIRECTOR NAHNOO**

Large organization:

An inclusive society is the goal of NAHNOO, a youth-led non-governmental organization that mobilizes volunteers across Lebanon through advocacy campaigns that support good governance, public spaces, and cultural heritage.

They offer a platform for both youth and professionals to engage in development activities and learn and foster the skills necessary to have an impact on policy-making at local and national levels through multidisciplinary and participatory research, capacity-building seminars, and grassroots initiatives.

How did Nahnoo begin? What was the rationale?

Nahnoo's vision was always towards inclusive societies. The Lebanese system is not functioning because of the sectarian regime, so there is social disintegration that you can see through the urban structure and now in the current crisis. The reason we started in 2009 was to work towards inclusive societies for everyone. Our areas of intervention are the form of the city (urban planning), the soul of the city (heritage), and the management of the city (municipalities).

These are the areas of interventions where we have the capacities.

Why did you choose the city?

We live in cities, and mainly two third of the Lebanese population live in cities. You can see that the protests are happening in the city. It is where the decision-making takes place.

Do you think inclusivity is related to the structure of the city?

By the city, we mean the local authority. We work in local management, producing research, and as an advocacy platform. We can't do advocacy without research.

To pick a cause, you have to ask why is it a cause? Is it a need? We start with a study, then we decide on the intervention.

We started by working on Horsh Beirut - an example of segregation between Lebanese and Palestinians, between Sunnis and Shias, between Muslims and Christians, between rich and poor. We did the SWOT Analysis to understand the case. After the success of Horsh Beirut, we started with the second pilot project on Ramlet Baida. We start with an analysis - our research studies are being done throughout the whole process. We study the social perception, the governance, the legal side, the

management. We look at different perspectives, for example, we have mapped all the agriculture and plants. And based on all the research you do, you come up with a policy.

The goal of the advocacy is to change policies or leave an influence on certain policies at least. We decide the cause, we decide the goals on both the short and long term (general and specific goals), we pick the target groups, we select the best message to create action, and what tools to use to carry the message. Of course, research takes place all the time because it is a learning process.

We put an action plan then try to get funding. We need a budget to operate. We keep on monitoring and evaluation. It is not a fixed circle - the cause also might change, you might reach it, you might have had wrong assumptions.

Is there a certain model for this cycle?

We call it the Advocacy Cycle where research happens all the way. You need to research the target, decide on the message, then test the message, etc... Any work with no research doesn't get you anywhere.

What are the tools you use to reach people?

Our tools include individual interviews, focus groups, surveys, and workshops.

How is your relationship with the municipalities?

The municipality is one of the stakeholders, we interview them and we try to understand them, understand their system so we don't fall into prejudgments. Most municipalities don't know how to do the work - we cannot assume they are not good.

Based on your experience at NAHNOO, what is the difference between the municipality in Beirut and other cities?

The municipality in Beirut is like a group of employees, they are there by elections, but in the end, they are just employees. **Their role is to implement mega projects, so contractors can make money and then give it to politicians to cover their costs.**

You can do that and still benefit your city, however, even if they wanted to, they don't know how to do it. They have no vision, they are just tools [for corruption]. There are no skills nor vision. The leadership is missing. Some employees have capacities but the absence of proper leadership prevents them from working.

In other municipalities, you can find lots of ideas but they don't have enough resources (financial or human resources). They end up begging for money just like the state.

There are always visible and invisible actors, attacking the municipality is sometimes just a tactic.

Were you the ones who organized the town hall initiative with the Municipality of Beirut? How did this happen?

We requested from the municipality to invite people and discuss with them transparently. This showed their lack of ability to make these discussions. People got angry at them.

Was the municipality collaborative?

The governor (Ziad Chbib) - is now negotiating with us. He wants to avoid Nahnoo's campaign because they are hurting them. We are trusted and we know how to reach our targets. The governor opened Horsh Beirut and even during the crisis kept the doors open.

Did your donors change over time?

Our campaigns are not related to the donors, we always have different donors. Donors can be the community around a specific issue. Our campaigns are not projects. When you have a vision, you see what opportunities

exist for funding. When we didn't have a fund, we asked people around the Horsh to participate in crowdfunding.

Did the people around the Horsh want it to be opened for the public?

People there wanted to keep it there so they keep their views - they are influential when it comes to not building on the Horsh - not to reopen it. The target of each campaign changes.

How much do you feel the research or advocacy can help reach a tangible impact? How do you turn research into impact?

Every year we have different results - some things take several years - but we make sure to appoint SMART GOALS. We asked municipalities to publish their data and it was eventually done within no time. Read more about the project Municipalities under the spotlight: <http://nahnoo.org/our-causes/municipalities-under-the-spotlight/>

Can you tell me about the project you did in Tarik Jdide?

During the time of Najj Assi, we did a study on Tarik Jdide — we wanted to connect Horsh Beirut and Tarik Jdide. We designed an intervention "a green line between the two areas. However, we faced opposition from

the previous mayor, he brought a contractor to remove our work. There was a conflict between the mayor and the governor, so they were fighting and we were in the middle of it.

What was his argument?

His argument was that you need a permit from the municipal council in case of a donation. We got the permit from the governor without taking the acceptance of the municipality. So the dissimulation happened from the governor's side and the municipality itself because they had no right to remove the intervention. The municipality should have sued the governor. Everything was kept except for the benches. What was left was planted trees and trash cans. The conflict was political — the governor is assigned by Motran Audi and the mayor is affiliated with Hariri. Even if they are allies - there is a power conflict.

How do you measure your impact? What tools do you use?

We follow a monitoring and evaluation methodology. We manage a system of outputs, inputs, outcomes — there are M&E (Monitoring and Evaluation) people at Nahnoo.

What challenges are faced in such initiatives?

Lack of transparency, corruption due to the absence of the government, the state in general — if someone commits a violation, there is no one to stop him. We also face violent risks — they could become violent if they don't like you.

Do you think people are more aware now about urban issues?

People talked more about public space during the revolution because of our campaigns, we worked on the causes and files which made the people ready to tackle such issues. We have been hosted on TV programs. We did the protests in Zaituna Bay. People found the studies ready to empower their cases.

INTERVIEW WITH ABIR SAKSOUK CO-FOUNDER PUBLIC WORKS STUDIO

Design/Architecture practice:

Public Works is a research-based studio that addresses many urban and societal problems in Lebanon in a critical and innovative manner. By adopting a right to the city perspective, it seeks to actively address the fundamental causes of spatial inequality as well as the persistent problems that just cities and equitable development face. The studio launches multidisciplinary initiatives

that investigate, develop, and put into practice alternative approaches to Lebanon's urban planning and policymaking.

Abir Saksouk, an architect and urbanist, and Nadine Bekdache, a designer and urbanist, established Public Works in 2012. It strikes a balance between contracted work and self-initiated projects, providing an independent framework that enables the emergence of new opportunities for discourse, interchange, and involvement.

Could you tell me more about how Public Works Studio started?

I started with Nadine (a graphic designer). We both did our masters in urbanism, we always had an interest in urban research due to our training in comprehensive-thinking based design, leading to our ideas about the city and it's the policies governing urban settlements.

We both are passionate researchers but did not have an interest in academia, giving more importance to the research that has a direct impact, adding to that, the political stance we are adopting. We are influenced by Arturo Escobar's writings about action research, and how communities can produce their own research, emphasizing their policies.

We did not want to lose our design skills with our focus on research, thus our goal was to maintain both sides by creating a studio where we produce research/data and simultaneously practice our profession and evolve in it.

Being a design and research entity, a discussion arose regarding the studio registration, as we wanted to be involved in public affairs but at the same time be practitioners, thus we couldn't be registered as an NGO.

Since there are no Legal affiliations in the Lebanese law for collectives or social initiatives, we ended up registering as a civil company, which is allowing us to provide services. We also receive funding for our other work

The studio needed to grow, with Monica joining the team, we were able to be more productive and we grew to become an eight-member team now.

With time, we created a specific methodology for our work. We always start with action research: engagement with the

community is the base of this type of research. It includes interviews, fieldwork, identifying active groups, understanding the social structure, focus groups, public seminars, and presenting the final research in the area.

The dissemination phase comes next. It could have several forms eg: publishing articles in Arabic and producing visuals that could disseminate the research.

We go through the direct intervention phase, which could have several outcomes such as competitions - as they promote discussions leading to several alternatives that could be implemented or used to pressure/influence the public opinion.

We also engage in mapping activities and data collection for the purpose of generating direct impact. The Housing Monitor is one such example. It's an innovative tool to map evictions and monitor housing conditions, while offering legal and social support to cases in need.

Another example of the direct implementation phase is pushing for policy changes through multiple levels of advocacy and in diverse urban issues.

Our main focus for this year includes three units:

The Right to Housing

Justice in Planning

We are exploring the idea of a magazine. We want to experiment with different media tools. It could include articles and media, focusing on urbanism.

If we want to look at the process and the different issues you tackle, who are the main stakeholders? Other than the community?

Our stakeholders include municipalities, unions of municipalities such as the Al-Zahrani union of municipalities, and the Koura union of municipalities. We consider public entities like the public corporation for housing when we work on housing competitions. We also consider activist groups that are working on the same issues that we are working on. During the revolution, we formed corporations with the local spaces for public discussions to organize talks. The

legal agenda for example is one of our main partners.

Regarding municipalities and public institutions, how are you getting access? What are the challenges?

In general, municipalities are very accessible.

Does that include Beirut municipality?

No, we haven't worked with them, we did not even try to. They usually provide us with data - maps, masterplans, interviews with the mayor or a council member - in general they cooperate well. However, in some cases, they do not provide anything.

Another relationship we have with some municipalities is in the form of partnerships. Specifically during the Koura competition, since the issue is also adopted by the Koura union of municipalities. On the contrary, the Zahrani union of municipalities was not helpful. When we wanted to work on agriculture and development related issues in the area, they did not have any idea about what we wanted to do and how they should cooperate, due to the political facade of the

union and the area in general. They did, however, provide many maps but that was it, they made it very hard to go any further.

Did you work with any ministries?

No, we worked with the public corporation for housing, because the general director was open-minded. There was a lot of cooperation, we launched the competition together.

We asked for a meeting with the Ministry of Environment for research purposes, and it was granted. So whenever there is research, there is easy access. *Whenever there is a need for permits or interventions, we have to go to the Directorate General of Urban Planning (DGU), where it's hard to access any data, thus having to obtain the leaking data needed through people we know inside.*

To be fair, there are two things we need from them, master plans from their old archives - they always provide us with them - but the more important thing is the decisions taken by The higher council for urban planning CSU, which should be published in the official journal, however they don't. Several times our request to have specific data is

denied. This is when we started leaking what we needed.

What's your objective from working with the community directly?

If we don't have the community support in what we are recommending, then they will not be implemented. We care about the group that is concerned with the issue, to carry on with it in the future for implementation. For example in the Koura competition, we ended up with suggestions, but who will do the pressure for implementation?

For us it is important to build a network of allies in the area, they will be in charge of the second part. And we were able to establish this in Koura, with the help of activist groups, environmental associations, and others. We built a network.

To conclude, first we need to make sure it's a need and to shed light on it. Second, it's a way that Public Works hands over the project to the community.

It's not "to end the project" but to give it a purpose and for its completion and

implementation, otherwise, what we do won't have any value. We will remain the experts that are demanding something, however, this is not enough to be only us.

Do you have any experience with on-site implementation and interventions?

Yes, there was an attempt that failed. In 2014 we did a mapping for where the children play in Beirut, then focused on where they play football *اللعب في المخيم* (playing in the camp). We mapped Beirut and its suburbs, we identified the playgrounds. We tried to implement a pilot project in one of the playgrounds, in Mar Elias. We did workshops with the parents. Our goal was to have a physical intervention to restore the playground since it's in a very bad condition. We were faced by the private property owners since there are no playgrounds or gardens that are publicly owned by the municipality. Young children are claiming leftover spaces that are private properties. We could not reach a way to implement the intervention without the approval of the owner, in some cases we could not even reach the owners. Recently, we were surprised that the owner came and excavated the whole property. We do not know what he is planning to do.

What would the approach be if it was a public property?

We would face the same struggle as we would be dealing with the municipality of Beirut, they wouldn't allow us to intervene.

We can see there are a lot of initiatives in Beirut focusing on advocacy and shedding light on the challenges, rather than being able to implement. Do you think this is due to the existing political system?

Yes, in Beirut. That's why our strategy, at least in the housing project, became focused on the vulnerable in the neighborhoods to organize themselves and demand their rights, rather than us putting pressure on the public authorities. The tools we are using - like monitoring evictions and monitoring housing conditions - are part of the reaction loop between the local communities.

Do you think civil society doing the government's job is the better strategy in Lebanon?

Since the government is not doing anything, we need initiatives and society to create such projects. I think we should not adopt the

government's role, however, we should always put pressure on it. Also, we don't only have the 30 - 40 years accumulated problems, we also have a gap in planning practices on different scales.

In all countries, there are housing movements, activists, and neighborhood committees. These are very important community-based tools that people should build to express their demands and concerns.

Urban planning projects like the one we did in Koura, can create coalitions in the areas regarding a specific issue. You are using these issues to create regulatory frameworks within the community.

There are many urban planning related problems in Lebanon, Beirut specifically. There is the whole issue of local authorities not doing their job, and how hard it is to hack the governance system. What do you think of the argument claiming that small initiatives won't affect the macro level?

Honestly, small initiatives aren't enough on their own. Before the 17th of October, we were feeling the crisis, there is definitely a

need for a major political change. This doesn't mean we should stop working on small initiatives, as they are very important to start a serious debate in a radical mentality shift on the local scale. Of course, a change at the wider national scale is more important, however, **the change on one scale feeds into the other.**

I don't claim that what we do is going to solve life's problems, but we can't tackle political change or wait for it to happen. All the fieldwork we are doing might increase public awareness in the future, which could lead to a political change. And when situations like what's happening now occur (the revolution) where discussions erupted, our work at the local scale is beneficial.

With the movements that happened in 2015 and 17th of October, do you see a change in the way people are looking at urban issues?

More than ever, the awareness increase is related to the economical aspect. But what we've tried to tackle is the relation of urban planning with the economical fissure, this was the main topic in the discussions we made in different areas. I also did a podcast with Legal Agenda, tackling this issue.

Also concerning the housing topic, we tried to push forward the idea that the urban plan is a direct product of the economical model we are living in. So we need to change the economical model to be able to make a change at the urban level.

Public awareness has never adopted city-related issues as a priority. But in the cases of the public beach and housing, which are definitely urban-related issues, have prevailed during this revolution. Also, the agriculture topic was opened since we don't have a productive economy and to know more about land-use practices in Lebanon.

What are your methods to reach out to the communities?

Through fieldwork, this is where we benefit from our architectural and urbanism backgrounds, as we are used to being on the ground and talking to people. Such skills make it easier to communicate with people, to build contacts, and reach more community groups.

Can you tell me about the project with Al Sabeel Association?

Regarding the سبيل (public drinking water point) project with Al Sabeel Association, The residents took creative workshops, which widens their horizons on what they want to do later on. Then, they have to propose critical projects for their neighborhood. It is Sabeel's project, we just design how the workshops should be. They did it last year but it failed, most of the outcome projects were graffiti for example. They want the results to be more beneficial for the neighborhoods.

Public works give the workshops, one of them is project management, how to create a project, and how to study its feasibility. Sabeel will bring in a jury that will choose what projects are going to be implemented, and later the team will implement the proposals.

What are the creative workshops?

There are two workshops for the participants to choose from. The first is on how to map their streets through photography. The second is on how to create an animated story on one of the neighborhood's stories.

The project was first postponed due to Corona and then canceled due to the blast because they needed to reallocate the funding available to renovate the libraries.

**INTERVIEW WITH THE FOUNDERS
MYRIAM BECHARA, CELINE SAAD, &
MONA GHAZALI – RPPL INITIATIVE**
(Reviving public spaces in Lebanon)
Grassroot initiatives and collectives:

RPPL initiative is a group of young urbanists and architects. Three ALBA alumni who studied architecture started it. The program works with young designers and artists to improve various public spaces throughout Lebanon with the goal of promoting the use of public space.

Tell me about the start of the initiative and how did you gather?

We were fresh graduates from ALBA, we started to get tired from our day-to-day job, we wanted to do something we enjoy and that is useful and has a purpose. We were always aware of the lack of public spaces, so we started thinking about how we can make a change.

We made our assessment based on our personal experience in the city and compared to the experiences we have when we travel as we spend most of our time in

public spaces, but here, this option is not possible. Here we experience the city mostly from the car, we don't walk a lot, we don't meet strangers, we meet only the people we are meant to meet. There is not much social engagement due to the lack of means.

All of us worked on urban projects for our senior projects, we also participated in a workshop in Spain where we planned an intervention for public spaces and built the installations in the village we were staying at. The aim was basically to learn construction methods, it was not about public spaces. But, the fact that the installations stayed there was an inspiration to us, it triggered us to think about this participatory approach of how people learn about something, build it, and benefit from it.

When Beirut Design Week (BDW) came, we were faced by the time challenge, if we wanted to proceed with the project, this was our chance, since also the theme of BDW was Design and the City. We thought doing it during BDW would be a good start/push for the initiative.

From the start, we did not want to create the space ourselves. We wanted to be an intermediate between different actors (who gives the order to build a public space, the designers, the material/tools providers), we wanted to organize the whole thing.

We wanted to involve people from different backgrounds, we think of the involvement as important as the result. Young architects/designers could also learn some skills in return, and not only serve the project, making the project a learning opportunity as well.

As the idea of what we wanted to do became clear, we started scouting for locations. The options covered some of the main streets like Mar Mikhael and Badaro, Gemmayze, Achrafieh, or Bourj Hammoud. We wanted to work in a populated area. It needed to be an area where people can walk, and not drive to reach it. The public place should be a bit exposed but at the same time have some privacy.

What were your expectations from doing it during BDW?

Because it was a new initiative, we wanted their name to help by giving us exposure and gaining credibility. We were hoping that the BDW would facilitate the legal work and the relationship with the municipality. Badaro was the chosen area and they were very cooperative.

Why did you choose the area of Badaro?

Our options were Badaro and Bourj Hammoud. Since Badaro was one of the main areas for Beirut Design Week, we

decided to go with Badaro. We did contact Bourj Hammoud municipality and kept it as a plan B.

We met with the person leading the union of business owners of Badaro, he represents the local actors in the street. He is basically in charge of Badaro Street. He was the intermediate between us and the municipality, which was very helpful. He liked the idea and was supportive. He made sure we had the needed permission to intervene.

He also offered to participate in the Badaro street festival, which coincided with BDW. He insisted on that since he wanted NGOs and initiatives to be part of it, not only people selling products.

What support did you need, and what did he help with?

Firstly, he offered the permits we needed to proceed. At first, he was on board but a bit skeptical about the idea of setting the workshop there, so he asked for more details about the project. Second, we had to somehow prove ourselves but design something familiar for him to understand our approach and the material we are going to use, and in general what it will look like. Several other processes were moving in parallel, before presenting the design for the local actor, we were looking for sponsors,

funding, tutors, and how we should market the project to find participants.

We did not want to rely a lot on funds, since our approach was participation-based, where participants pay to be part of the workshop, and the tutors help teach them the skills needed.

We wanted to be sponsored by union of business owners of Badaro. They ended up supporting us with few things such as food and logistics for the workshops (they provided tents for example). They also provided an empty shop for us to start the design phase, which was a 3-day workshop.

To be sponsored, we picked up a well-exposed space. Only one sponsor gave us money, others provided materials and tools. We involved local suppliers, giving them more exposure. The overall cost was around 6000 USD. We were meeting with him weekly, we got the okay at first but he needed a follow-up, and the written permission came in a later stage. He asked us to write a letter for Beirut Municipality explaining what the project was about. This was done right after we got the okay from BDW.

**Did you talk with anyone from the street?
What was the perception of the residents?**

Around a month before the project, we did a mapping event, where participants came to the street, we passed by the shops during the "scene festival" and did a survey - a questionnaire that we provided - along with other activities and information about the project.

There was some urban furniture exhibited in the booth as well, made from recycled material like used tires, which we later used during BDW to expose our work. We did a map for Badaro based on the mapping we produced and it was supposed to be shown in space.

What type of mapping you did before the project?

We were 12 people, divided into teams, each working on one of the 3 zones on Badaro. The goal was to map the type of shops there, the number of floors, explore alleyways, try to find whether there is anything unexpected to find.

Getting to know the stories of the residents and small business owners, for example, a cafe owner told us his story about the place and what it was like before the war. Mainly the purpose of the mapping was to get to

know more about what's around and who are the possible users of the place. And to produce the map which was more of a visual product to be incorporated within the space later on.

Being in contact with the residents came later with the questionnaire we did during the festival. The map was finished but never presented due to several factors.

The end product was designed with Lara Abi Saber. It's like a mind map vs informative map. The map was divided into 15x15cm squares, and people passing by the street festival got to color them. Another goal behind this map was to attract more people to the space, being big and colorful, also to provide info for the street visitors.

When did you do the survey, and what was the goal, and what did you achieve from this event?

It was done during the street festival, which was 2 days ahead of the BDW. We wanted to get exposure. Getting to know more about how people think. We did see a need for such public spaces, and we wanted to see if the locals also thought about this need.

We were able to gather useful information related to public spaces and Badaro street in general, we were asking questions like: why do you come to Badaro? Do you feel safe

walking down the street here? Etc.. We also provided a board for people to give their suggestions, making it a participatory interactive experience.



Figure 100 Badaro public space - bottom-up

Could you tell me more about the outcomes?

People mainly asked for more greenery, Cleaner roads, and public spaces (since the garbage crisis was happening at that time). In general, people feel safe in Badaro during the day, however, there are some safety concerns during the night. Some people suggested adding parking spaces. In the survey, we were asking participants whether they are Badaro residents or just visiting the area, most of them were visitors. However, we were able to get enough information from the residents later on.

What happened next – how did the participation happen?

After gathering the information, the event time came. The first day was the design

phase, we gave the students and tutors guidelines to follow. We provided a design brief that included the aim of the project, the materials to be used (we did the brief). Then each tutor gave their own brief (including the material they wanted to use and the technical stuff). Each group did a design and presented their ideas. There were 11 participants. The ideas were combined and ended up with the final design.

A physical model was made, followed by execution drawings, detailing, and calculating the quantities needed of each material. We were constrained by the quantities and dimensions of the materials provided by our sponsors. The participants started building one of the elements during the first day (the grid).

During the building process, how was the interaction with the locals?

We think this was the best part of the project. People were coming around and asking us questions. We did attract a lot of attention. **Many people wanted to help** (one person offered to provide his cutting disc after one of ours was broken).

Most of them thought we were opening a restaurant, and when they knew it was a public space, most reactions were positive. Some were surprised and asked about the

motive behind the project. It was clear that **many people were unfamiliar with the concept of a public space that is available to everyone**. (One lady was surprised asking us about the reason for building such places, arguing that most people have their own private balconies to sit on, and to why would a person want to sit on the street).

What happened after finishing the space?

We were always trying to pass by and check whether people are using it or not. There were frequent users, however less than what we predicted. Many passers stopped to take a look, and then continue to walk away. It was clear that they were surprised by discovering such space, and not understanding the actual function of it. Maybe **some thought they did not have the right to use it**.

We had a sign that said: Have a seat, its free / **تفضلو، القعدة ببلاش** / . The sign did impact the perception of the people, as it made the purpose of the place clear, and that it's not private property, people can sit in it freely.

During the workshop, we were documenting all the phases so we can display them in the space once completed. We noticed that it attracted users from different backgrounds and with different purposes (people waiting for their takeaway food, some having a

birthday party, elderlies taking a rest, people having a smoke break...)

We started organizing weekly events to give the space more exposure, highlighting its aim and thus activating it furthermore. We wanted to convince the local authority that this space is beneficial to the area, so they keep it permanently and thus attracting more users.

Initially, it was planned to be kept for 2 months only, then they were allowed to keep it till the end of summer, after that they got used to it and agreed on keeping it permanently.

The local authority is not providing the needed maintenance, other than the regular cleaning of the sidewalk, there is a broken bench that hasn't been fixed, due to the lack of communication regarding the ownership of the space. However, considering it's already 2 years old, it is still in good condition. We were not able to make it clear to the main local actor that the space is theirs and not ours. Whenever anything gets broken he contacts us.

He did little maintenance once, he asked us to come, take some decisions, and communicate with the workers. This was done because there was an event in the street, thus they wanted it to be well

maintained and ready. The problem is that he wanted us to be involved every time, due to a miscommunication between us, and because it was supposed to be a temporary installation that ended up being permanent.

The events we did were well received and attracted a lot of users, which was our goal, but later on, we became aware that this is a public space and not a park, there's no need to be always fully occupied. It should be available for whoever wants to use it even if it was only one person smoking a cigarette. It was like a resting stop.

At some point, there was a scouts group using it frequently, and some people were organizing workshops in the space like Rony Jalkh - he was organizing placemaking workshops, Yara Ayoub organizing philosophy nights... These people were contacting us to ask for permission to use the space for their events, thinking that we own it.

It was tricky to pass on the responsibility and define the roles of everyone involved, including us, once the project was completed.

Who do you think would have done this phase? You (initiative) or him (local actor)?

It should have been a collaboration and communication between both sides, and to assign a committee or a municipality employee to be responsible for it.

What kind of challenges have you faced as an organizing team?

- The most important challenge was to convince people to donate for this project since they didn't think the cause was a priority and the product was too small. Also, the fact that it was our first time doing such things was challenging in itself. Another challenge to be taken seriously is time management
- We made some mistakes, we learned from them like we can't ask for sponsorships at random times, it has to be at the beginning of the financial year to be taken into consideration (when companies plan their yearly budget).
- Regarding logistics, anything can go wrong, and managing this was a big challenge as well.

- Having to work overtime to finish the installation on time, which was tight (2 days).

You did the branding for yourself at some point. When was that, and why did you need this?

Before pitching to BDW, we wanted to seem legitimate by having a brand name and a logo, so we can gain more exposure.

What kind of exposure?

We were planning to start this initiative not only for this specific site but for many more in the future. Badaro was a start. We created a plan and consulted a lawyer about registering as an NGO.

Why didn't you register it then?

After we finished this project, we pitched other proposals, the first was in the Masaken neighborhood in Mina Tripoli, in collaboration with Rony Jalkh who was working on a major intervention there. But, the funding for the project ran out and we couldn't get enough to proceed with our intervention.

Another proposal was in Batroun, in collaboration with a French company. We wanted the locals to make their windmill, which can power a house, but we wanted to power a public space. The idea was to help the participants learn how to build their own

windmills and to pass on the knowledge. We did not even get the permission, as it turned out in Lebanese law it is illegal to produce your own energy.

We pitched several proposals, but it was very difficult to find sponsors and we ended up self funding some of the expenses. This was discouraging, as it turns out that paying for the workshop wasn't a priority.

Did you try to reach out to universities or other big organizations?

We established connections with AUB Neighborhood Initiative and UNHABITAT during the "Ideas for the City forum" by Architects for Change at Antwork. There were talks about possible collaborations, but later on, it faded away due to many things.

Did you use your personal connections at some point?

Yes, we needed a connection to meet with the Mayor of Batroun. In the Badaro project, we used some of our connections to reach out for sponsors (through family and friends).

The outcome was very satisfying, but we were discouraged due to the many obstacles we faced, and the fact that it's very hard to provide fundings for the projects. We did not

want to end up paying from our pockets. It also wasn't a good time to reach out to sponsors, due to the bad economical conditions in Lebanon.

When did you stop working on it?

About a year after the Badaro project. It was when it started to fade away. We were 3 people working on it, it was taking a lot of our time and energy, but we did not have any other projects.

What would you do differently next time?

We would do a better budget study, we would start planning extensively ahead of time. We would have clearer communication with the local authorities. Have a better understanding of the role of everyone involved in the project. Better communication and organization within the team. Thinking of what is gonna/should happen next to the end-product after the workshop is done, and planning accordingly.

