

Urban Acupuncture as Recovery Approach to Improving the Liveability of Neighbourhoods Affected by Beirut Port Explosion

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Abstract

Following the port explosion in 2020, Beirut witnessed an unprecedented crisis, revealing the incompetence of its development plans and promoting the emergence of new approaches to improve liveability in damaged areas. Currently, urban planning has shifted from the traditional focus on large-scale interventions to the focus on flexible and adaptive small-scale interventions, especially in financially weak areas. Inspired by traditional Chinese medicine, urban acupuncture (UA) exemplifies this shift through localized interventions aimed at revitalizing cities by simulating their energy. This paper aims to investigate the potential of implementing UA as a recovery approach in Rmeil neighbourhood, heavily impacted by the explosion, to improve its liveability. By analysing and comparing two international examples, the paper highlights the interventions used to activate the urban context. It finally proposes six strategic interventions and ten key actions tailored to achieve social, economic, and environmental results in Rmeil with less effort. This paper represents the foundation for implementing urban acupuncture on a broader level in Beirut and other spots in Lebanon.

Introduction

Lebanon has undergone multiple crises over the past years. One major crisis was the devastating explosion on August 4, 2020, which left the country in general, and particularly the municipality of Beirut, in a critical condition [1]. This explosion caused damage in the port's neighbourhoods, and several other surrounding areas (Fig. 1).

The Lebanese government relied on the private sector and non-governmental organizations (NGOs) in dealing with this occasion to draw up the damages caused by the explosion and respond to its aftermath [2]. This scenario revealed the current unstable management: the already shattered city lacking local planning, infrastructure, and uncontrolled urbanization burdened with unforeseen future planning. However, the reconstruction and renovation of the port explosion areas are offering opportunities for adopting new recovery approaches and for improving the liveability of damaged

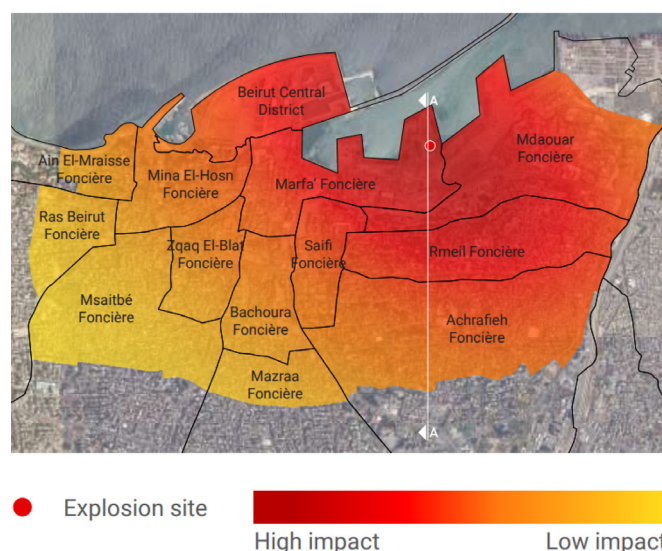


Fig. 1. Radius of the impact of the explosion [1].

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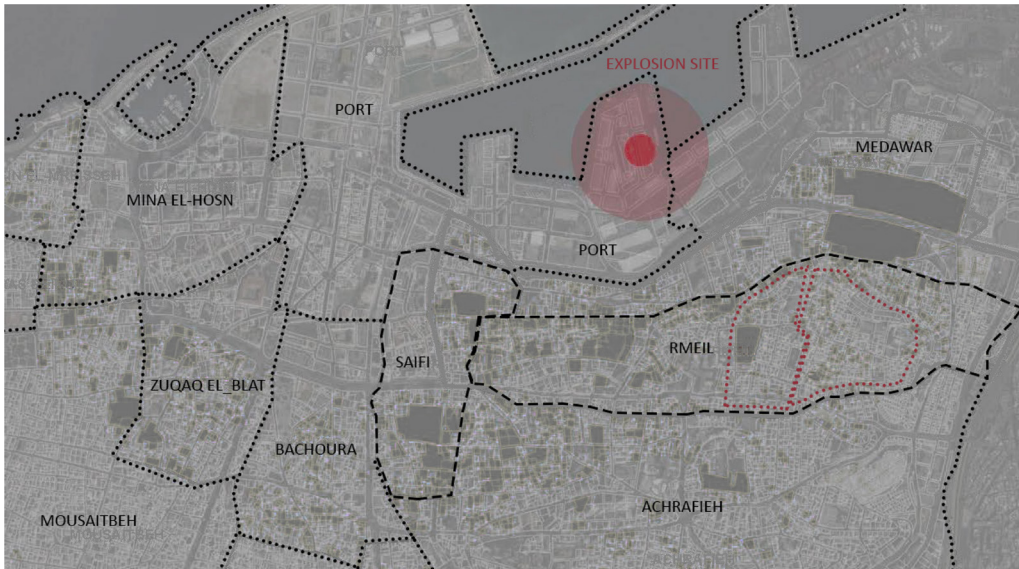


Fig. 2. Rmeil neighborhood location [2], [modified by A. Dikmak].

neighbourhoods. This situation is paving the way for a crucial shift in Lebanon's urban development, knowing that districts and neighbourhoods hold powerful potential to contribute to the country's growth at economic, social, and environmental levels.

Considering the above, there is now an insisting demand for a faster recovery approach. Instead of following the traditional planning systems where projects take forever, cost too much, and are never finished. This paper aims to investigate the potential implementation of UA as a recovery approach in the Rmeil neighbourhood (Fig. 2), one of the most affected neighbourhoods by the port explosion at the social, economic, and environmental levels, to improve its liveability.

Rmeil, one of the nearest neighbourhoods to Beirut Port, was damaged drastically [1] by the explosion, which renders a necessary intervention in this area. The neighbourhood is well known for its healthcare institutions, churches, and

schools that have been severely affected. These institutions are located at the Rmeil main street: Orthodox Hospital Street (Fig. 3). This street, connecting Geitawi and Roum Hospitals, used to be a commercial spin. During the pre-Lebanese Civil War period, it was a target for new businesses and commercial establishments. Today, with the shift in shopping habits, the recent economic crisis, and the catastrophic explosion, many stores closed. The commercial spin is occupied now by day-to-day needs shops. Still, it represents the centre of development of the neighbourhood.

A. Neighbourhood Urban Development

Beirut, in general, underwent a dynamic development where old buildings were demolished along the main roads and replaced with high-rise towers. While inner streets maintained their old character built between 1960–1970



Fig. 3. Rmeil commercial spin [created by A. Dikmak, 2023].



Fig. 4. Buildings from 1960–1970 at Orthodox Hospital Street [photo by A. Dikmak, 2023].



Fig. 5. Closed shops and sidewalks [photo by A. Dikmak, 2023].

[3] (Fig. 4). Those buildings are deteriorating with time and lack maintenance. Rmeil neighbourhood maintained its old urban character. Most of its buildings are mixed-use with commercial space on the ground floor (Fig. 5). Most of Rmeil's streets and passageways have sidewalks (Fig. 5), and it is easy to walk around the neighbourhood during the daytime. It became unsafe during the night due to electricity shortage. A network of public spaces and parks are found all around the neighbourhood, with accessibility for everyone during the day.

B. Damage Assessment

The damage caused by the Beirut-port explosion had a profound impact on the livability of Beirut. Physical damages were divided into sections. In new construction, the damage consists of finishing (glass and facades), and in older construction, the damage is more structural. Roum Hospital and Geitawi Hospital were severely damaged [1]. Several organizations were simultaneously active in the reconstruction process along with the municipality of

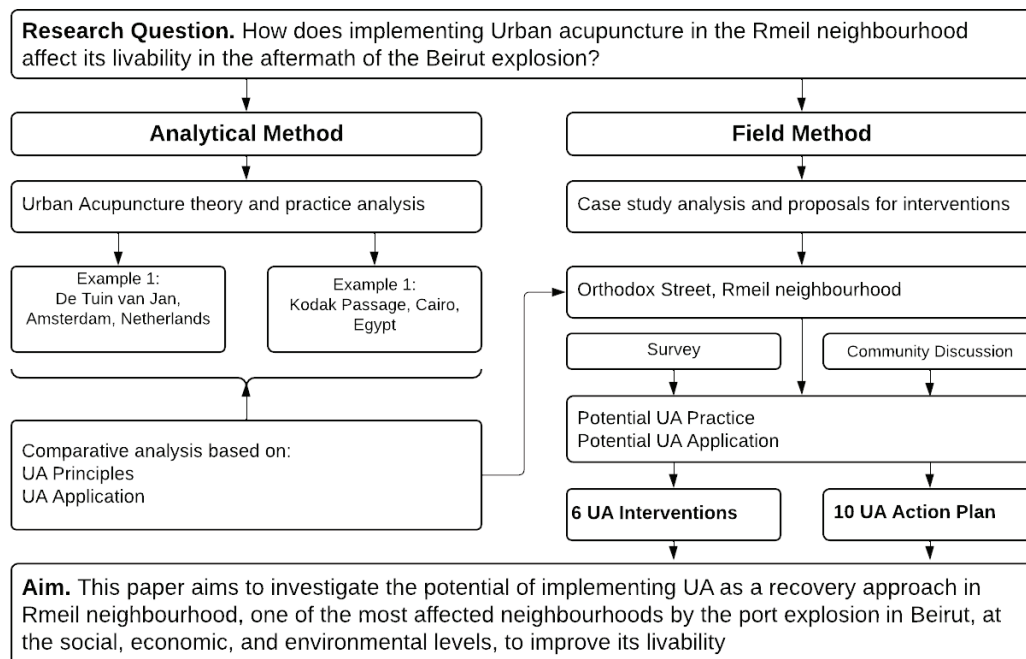


Fig. 6. Research Structure [created by A. Dikmak].

Beirut, the Lebanese armed forces, and other organizations and NGOs. This physical damage was one aspect of the crisis. The social, economic, and environmental catastrophes that followed were equally significant.

This paper hypothesizes that implementing UA in the Rmeil neighbourhood can significantly improve its liveability in the aftermath of the Beirut explosion. To defend this hypothesis, the paper focuses on two main objectives: first, to deepen the understanding of UA through a review of literature and analysis of successful examples; second, to apply UA strategies in the context of Rmeil by adapting them to the community needs.

The research methodology combines analytical and field study (Fig. 6). Data analysis relies on collecting data and reviewing academic and non-academic research regarding UA and references available about the Rmeil neighbourhood. Field study observes the built environment and the social activity using community discussion and survey.

I. Analytical Method

The research flows the qualitative methods adopted to analyse UA principles which aim to improve the liveability of Rmeil district. The analysis of two international examples is used as a method to understand UA principles and to apply this new planning approach in the context of Beirut. The methods adopted are a field study including site visits, discussion with residents, survey, and data analysis to observe the social activity.

C. Understanding UA

Urban acupuncture is an innovative applied solution for revitalizing urban fabric. In the urban acupuncture approach, the targeted area is the key point within the urban environment. This point is not energetic enough due to some reasons, but it is important to its surroundings. A low-cost and low-effort intervention makes this area work better and last longer. According to Casagrande, cities represent a complex of overlapping layers of energy that determine community behaviour [4]. Urban acupuncture, by using small-scale simulation, pushes relief into the small site and transforms the energy from it to the larger context. Urban acupuncture, as described by Morales, is an idealistic approach for the current limited economic era, it is “an idealistic approach for the current economic era”. Lerner demonstrated the necessity of community involvement in the practice of urban acupuncture: “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.

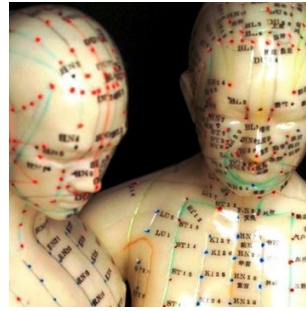


Fig. 7. Acupuncture analogy [6].

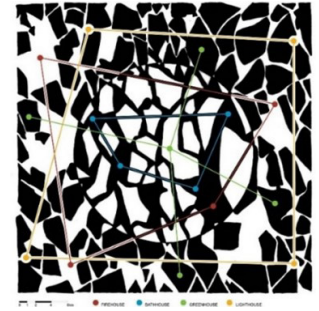


Fig. 8. Urban acupuncture analogy [6].

Intervention is all about revitalization, an indispensable way of making an organism function and change” [5]. In other words, urban acupuncture focuses on healing urban diseases by directing the community energy on the right path (Figs. 7–8).

Most UA studies indicate eight principles of applying UA (Fig. 9). The first step is to determine the flow of the built environment. Then define the sick points where there is low energy or energy blockage. The final step is to formulate a scenario for each sick point. This scenario must be small but effective and act immediately with the involvement of citizens just like the acupuncture needle [7], [8], [9].

i. Sensitive Spot Selection. Definition of Sick Points.

Morales, in his book “A Matter of Things”, mentioned the urban acupuncture theory by describing that the city

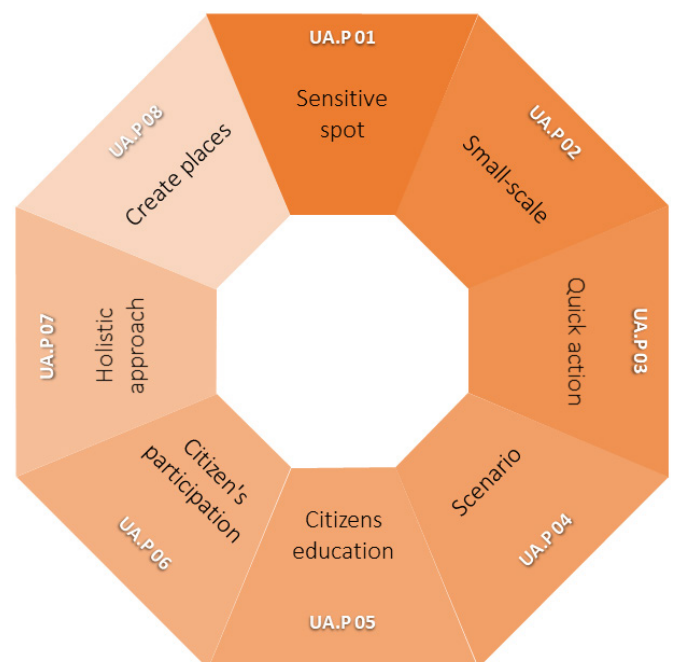


Fig. 9. Principles of UA [created by A. Dikmak].

possesses skin; any operation on the skin of the city must be precisely chosen at a point that gives energy to the city. In other words, *"the location of the sensitive point is the first step in the strategic treatment of the urban skin"*. It involves discovering diseased points or points of urban blockage after considering the analysis of the built environment [10].

ii. Small-scale intervention.

UA aims for big impacts through little interventions. Morales stated that "small" does not refer to the size only: it reflects other factors, including funding, cost, and investment. Lerner also stated that *"sometimes, urban planning is just too slow and laborious,"* acupuncture is, therefore, *"a way of supplying the city with a quick dose of energy, using few resources"* [11].

iii. Quick action plan. Immediate act.

As opposed to the traditional strategies that might take time, urban acupuncture requires a quick act, quick actions, and immediate response [5].

iv. Screenplay. Having a scenario.

According to Lerner, to achieve good practice, there is a need for a scenario and design *"that appeals to the majority and creates a commitment"*. The principle of the need for a scenario is closely related to the degree of citizens' participation [5].

v. Citizen education.

People must be educated to understand the nature of their society and environment. This understanding of urban intervention accelerates the possibility of success [5].

vi. Citizen participation and involvement.

Nowadays, people have their useful points of view, so they must be involved in the decision-making process of their community. Lerner says: *"We cannot be so prepotent on having all the answers. It is important to start and have the contribution of people; they could teach you if you are not on the right track"*. Citizen participation leads the experts to a whole new vision of development, as they do not have the right answers for every problem [5].

vii. Holistic approach.

To solve the problems, all the urban aspects must be included in the interventions integrating economic, environmental, infrastructure, historical, and political elements [7].

viii. Space into place. Creating places.

Urban acupuncture works where there is energy blockage. These places might, therefore, not be appreciated by some. After an intervention, the energy flow changed into a positive flow [7].



Fig. 10. Jan's Garden process from design to execution [13].



Fig. 11. Kodak passage process from design to execution [14].

D. Urban Acupuncture Practice

Traces of UA applications are all over the world. It is a theory that is being practised nowadays in several countries to overcome accumulated crises with the least effort. The following international examples provide a concrete presentation of the recovery practice of UA in two different damaged areas.

ix. De Tuin van Jan, Amsterdam, Netherlands (Fig. 10).

The Garden of Jan location is in the densely populated neighbourhood of De Baarsjes in Amsterdam-West. The school in the neighbourhood moved, and the former schoolyard, later a neglected unsafe courtyard, was transformed into an open public space. The initial concept and ideas of space were collected from citizens by experts. The project succeeded as a public space for citizens and a rain garden to collect water using the minimum equipment and the existing materials on site [12].

x. Kodak Passage, Cairo, Egypt (Fig. 11).

Kodak Passage is a neglected dead-end service alleyway between buildings. It is in the middle of art, film, and design spaces and galleries; the alley was considered an opportunity to create a pop-up gallery space as a catalyst for urban development.

Eventually, it is transformed by CLUSTER into a pedestrian path named “Green Oasis” with vegetation and lighting systems that modify the passage into an in-between pedestrian park [8].

xi. Comparative Analysis.

The comparative Tables I and II provide a clear presentation of both cases, unified by the themes of principles and applications, showing the similarities and differences between them.

Urban acupuncture can be used as a recovery plan for damaged areas. Either physical, mental, social, or spiritual.

TABLE I

Principles of Urban Acupuncture – Comparison of Jan’s Garden and Kodak Passage [by authors of this article based on [8] and [12]]

Principle	Jan's Garden [12]	Kodak passageway [8]
Definition of sick points	Energy flow was disrupted after the school was replaced, and the square lost social control. Sick point: The school's backside garden.	Energy flow: Unique empty space in a prime location for commerce and art; dangerous and underutilized. Sick point: The surrounding emerging art, film, and design spaces.
Screenplay	Revitalizing an old school block into a small water-resistant park.	Potential catalyst for urban redevelopment; revitalizes surrounding buildings, shops, and passageways.
Citizen education	Educative programs on plantation diversity for children and adults.	Participatory planning to enhance public spaces.
Citizen participation	Divided working groups of citizens and experts determined the sensitive points.	A 5-day workshop and a design competition selected ideas for the alley re-design.
Small-scale intervention	Small intervention with a small budget.	Transformed a 9.5 m wide passageway with a small intervention and budget.
Quick action plan	Design selection with residents over 3 weekends, followed by months of expert decisions and tests.	Implementation took several months, driven by CLUSTER's plan.
Holistic approach	Recycled materials, rainwater collectors, and expert consultation for sustainability.	Used workshops and competitions to incorporate citizen thoughts.
Creating places	Initially a neglected location that became a public space through citizen involvement.	“Green Oasis” transformed Kodak Passage into a pedestrian park.

TABLE II

Applications of Urban Acupuncture – Comparison of Jan's Garden and Kodak Passage [by authors of this article based on [8] and [12]]

Application	Jan's Garden [12]	Kodak passageway [8]
Aim of development	Solve urban problems (social insecurity from neglected space).	Promote diverse, inclusive, and accessible public space.
Responsibility	Housing association, with approval from the owner and residents.	Engaged private and creative sectors, including local shopkeepers.
Target	Carefully selected sensitive points via analysis by residents/experts.	Sensitive point selected by CLUSTER after analysis of passageways.
Strategy	Step-by-step, bottom-up approach.	Bottom-up approach, starting with citizen workshops.
Cost	Low-cost.	Low-cost.
Funding	Local funds.	Local stakeholders and private companies.
Application flexibility	Changes with time based on users' needs.	Adapts to users' needs and requirements over time.
Level of improvement	Step 1: Citizen workshops Step 2: Experts' study Step 3: Approval Step 4: Implementation Step 5: Observation	Step 1: Citizen workshops Step 2: Design competition Step 3: Implementation Step 4: Observation.
Benefits	High sustainable value.	A sustainable ecology of coexistence.
Duration	Short-term project.	Short-term project.

Projected on the hypothesis, the examples analysed above show how UA practice indirectly changes urban flow in damaged areas through small actions.

The first step to take in applying UA is to define sick points. The example of Jan's Garden shows that the intervention was entirely bottom-up. People noticed the negative energy and talked it into acting. In the Kodak passageway, the process was different, CLUSTER noticed the negative energy and acted.

The need for a scenario was clear in the Kodak passageway; it was needed to get the participants engaged. While in Jan's Garden, it was hard to trace the exact scenario because the participants were the initiators themselves.

Participation in both examples led to citizen education, and the design of both interventions brought much more knowledge to residents about the topic. This participation took place in many ways. A high level of participation was in Jan's Garden because the initiators are the residents; they have a lot of knowledge about the situation. In the Kodak passageway, participation was a later step of the process after the determination of the problem by CLUSTER.

The smaller the intervention is, the better the results are. Kodak passageway needed a scenario, while Jan's Garden needed a quick action.

Intervention in both examples was done to change a place. Jan's Garden changed from a damaged place after neglect into a place with positive energy. Kodak passageway changes a damaged place after blockage of energy flow.

III. Field Method

Beirut's public spaces are extremely neglected realms; open spaces in Beirut are seen as ornamental additions instead of communal necessities. An urban acupuncture project in Rmeil began with engaging people and residents to define the sick points and treat them. This happened through (1) selected site analysis, (2) community discussion and interviews, as done in Jan's Garden example, and (3) a prepared survey.

xii. Selected Site Analysis



Fig. 12. Orthodox Hospital Street showing landmark and proposed site of intervention [created by A.Dikmak, 2023].

xiii. Community Discussion

A field discussion with residents of Rmeil took place during the site visits to Orthodox Street. This discussion involved spontaneous and informal conversations with residents and passers-by in the area. The effort was made to engage a diverse group of people, including different age

groups, in expressing their preferences and requirements for public spaces.

xiv. Survey

A prepared survey was distributed to find the residents' attitudes toward public spaces in their neighbourhood and their preferences for needed interventions. The survey contained three sections. The first section comprised residents' demographic characteristics and current place of residence to ensure the respondents were local people. The second section included the residents' thoughts about the current state of public spaces in their neighbourhood. The third section included residents' suggestions and willingness to be involved in future interventions.

IV. Results and Discussion

E. Potential UA Practice

The port explosion left huge physical damage in the Rmeil neighbourhood, but it also caused potential long-term emotional and spiritual damage to residents, which is why the activation of public spaces helps in the recovery process. The conducted field study uses SWOT analysis to exploit the opportunities in the Rmeil neighbourhood and minimize the threats by revealing the strengths of its existing public spaces and planning to overcome its weaknesses in the selected sensitive spots (Fig. 13).

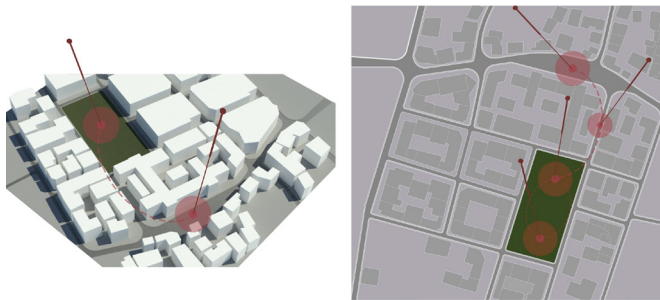


Fig. 13. Acupuncture needles [created by A. Dikmak].

TABLE IV

Correlation between residents' willingness to participate in the development of the neighbourhood and the percentage of their weekly use of public spaces [created by the authors, 2023].

Participation willingness	How often do you use public space per week?								Total participants
	0	1	2	3	4	5	6	7	
Very interested	8.2 %	4.7 %	7.1 %	3.5 %	2.4 %	3.5 %	2.4 %	3.5 %	35.3 %
Somewhat interested	8.2 %	9.4 %	3.5 %	7.1 %	1.2 %	2.4 %	1.2 %	1.2 %	34.2 %
Difficult to say	3.5 %	1.2 %	2.4 %	1.2 %	1.2 %	1.2 %	1.2 %	1.2 %	13.1 %
Not interested	3.5 %	3.5 %	1.2 %	3.5 %	1.2 %	1.2 %	2.4 %	1.2 %	17.7 %
Total	23.3 %	18.8 %	14.2 %	15.3 %	6 %	8.3 %	7.2 %	7.1 %	100 %

TABLE III

SWOT Analysis – Rmeil neighbourhood
[created by the authors].

Strengths	Opportunities
Heritage and urban character intact	Network of public spaces and open spaces
Good walkability during the day	Location of many institutions
Network of public spaces: parks and gardens	Enclosed street level is an opportunity for the local economy to lift
Weaknesses	Threats
Middle-class appearance while the area is poor	Degrading and abandoned buildings are at risk of demolition
Closed businesses due to the economic crisis	Struggling businesses were strongly hit after the blast
High vacancy level in most of the newly constructed buildings	Deteriorated old buildings lack maintenance due to economic reasons
No lights – unsafe neighbourhoods at night	Open spaces as sites of tension because of the diversity of residents
Street-parking	The government is currently not sponsoring such projects

F. SWOT Analysis

Threats and weaknesses in the SWOT analysis (Table III) provide various factors affecting the Rmeil neighbourhood. The Rmeil neighbourhood retains a strong cultural heritage with good infrastructure for daytime walkability and public spaces, offering opportunities for economic and social activities. However, it faces economic challenges reflected in the struggling local businesses and the physical decay of buildings. The disparity between the area's appearance and economic reality, along with the lack of support for development projects, pose significant threats to its revitalization. Addressing these weaknesses and threats while capitalizing on the strengths and opportunities could be pivotal in the neighbourhood's recovery and improvement of liveability.

The principle of citizen participation and involvement in UA has a strong relationship with the principle of

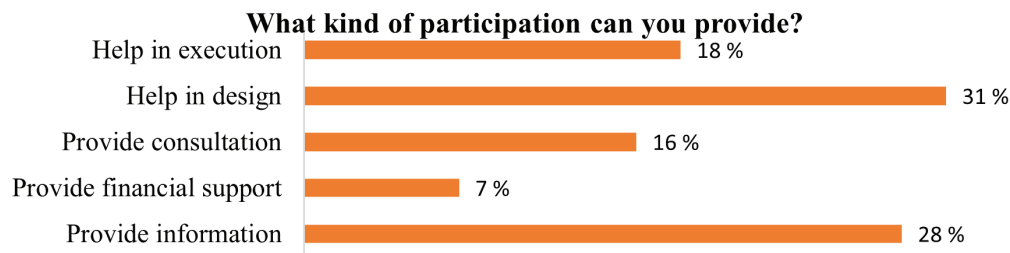


Fig. 14. Percentage distribution of the participation types that citizens are willing to provide [created by A. Dikmak, 2023].

determination of sensitive points. The discussion with some residents in Orthodox Street (the main street in Rmeil) shows how much they are concerned with this place and how much they need changes at the street level.

Based on the data collected from the conducted survey, Table IV showcases the correlation between citizens' willingness to participate in urban development and their weekly public space usage. For example, out of the 35.3 % of participants who were "very interested" in participation, 8.2 % never used public spaces, and 3.5 % used them every day. This data shows that frequent public space usage does not strongly predict a high-level participation interest. This highlights the importance of citizen involvement in determining sensitive points even if they are not regular users of public spaces.

The survey shows that approximately 70 % of residents are willing to be involved in changing their community, both youth and adults. The types of citizen participation suggested were as follows (Fig. 14): 31 % would help in

design, 28 % are willing to provide information, 18 % would help in execution, 16 % are willing to provide consultation, and only 7 % can provide financial support.

G. Potential UA Application

The proposed interventions that residents most frequently requested were green areas, parks, and gardens, accounting for 35 % of responses. Residents seek these spaces for connecting with nature (9 %), walking (6 %), and leisure with children (4 %). This indicates that the natural environment and green spaces are the most essential to their daily life, more than other spaces, such as economic areas, and calm areas (Fig. 15).

Jesuits Park, located at the bystreet of Orthodox Hospital Street, is one of the biggest parks in the area. People from different backgrounds gather here. The park is a place for children to play (Fig. 16) and for adults to interact and walk, and it is also a cultural place; it houses an archaeological site of an ancient temple (Fig. 17).

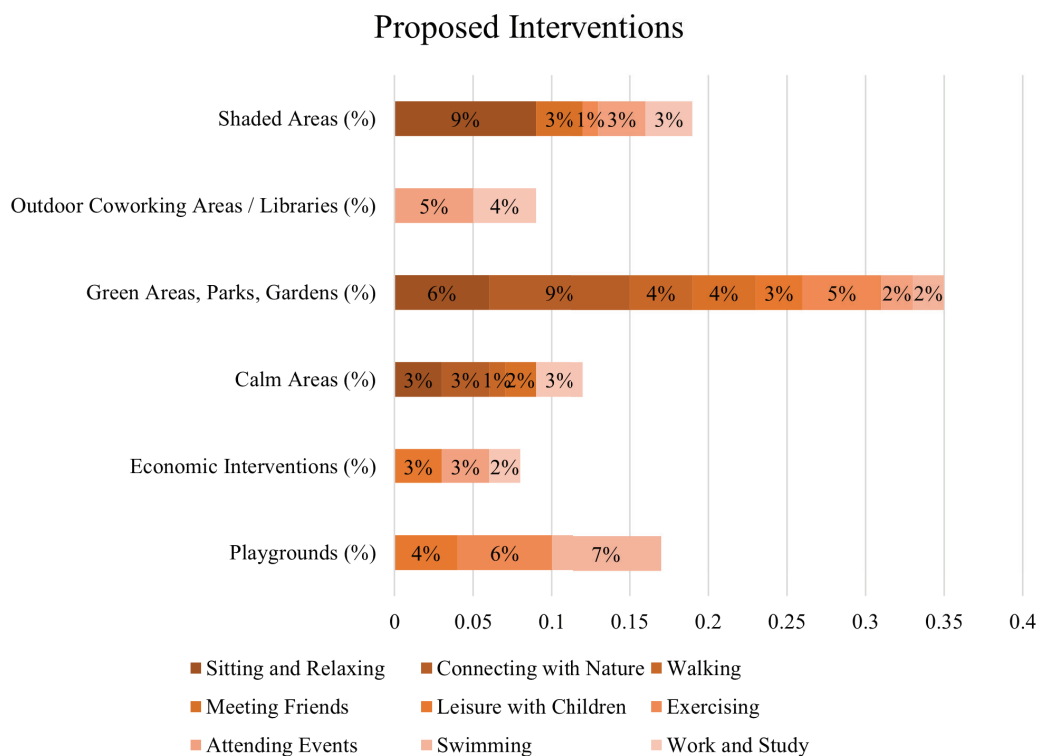


Fig. 15. Percentage distribution of residents' desired activities across proposed interventions in public spaces [created by A. Dikmak, 2024].



Fig. 16. Playground [15].



Fig. 17. Archaeological site [16].

Based on the field study and discussion, more than 50 % of residents rated the play zone as dirty and dangerous for children, with the majority assigning scores of 1, 2, and 3 on a 5-point scale, to indicate dissatisfaction with safety and cleanliness of the area (Fig. 18).

The area needs significant maintenance and renovation. Although the municipality of Beirut attempted to close the park several times due to consecutive tensions between residents, the community

gathered to protect the space. Despite the diverse population leading to occasional conflicts, there is a strong sense of belonging among the residents, and they express willingness to engage in efforts to improve the neighbourhood.

Orthodox Hospital Street is a two-lane street (Fig. 19), but it becomes suddenly wider and almost like a plaza at the intersection. This intersection connects Orthodox Street with Moscow Street, leading to Jesuits Park.

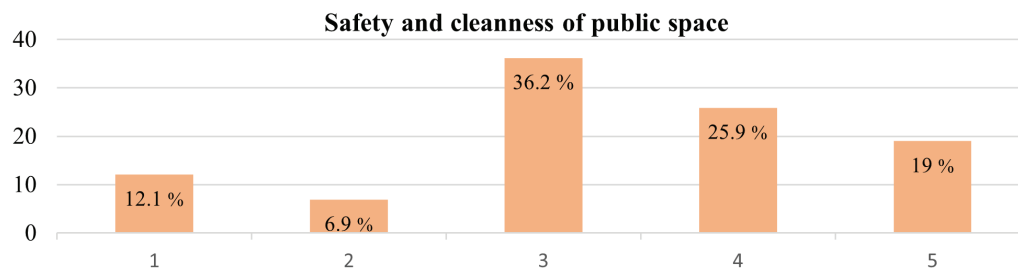


Fig. 18. Percentage ratings of safety and cleanness of public spaces according to the residents [created by A. Dikmak, 2023].

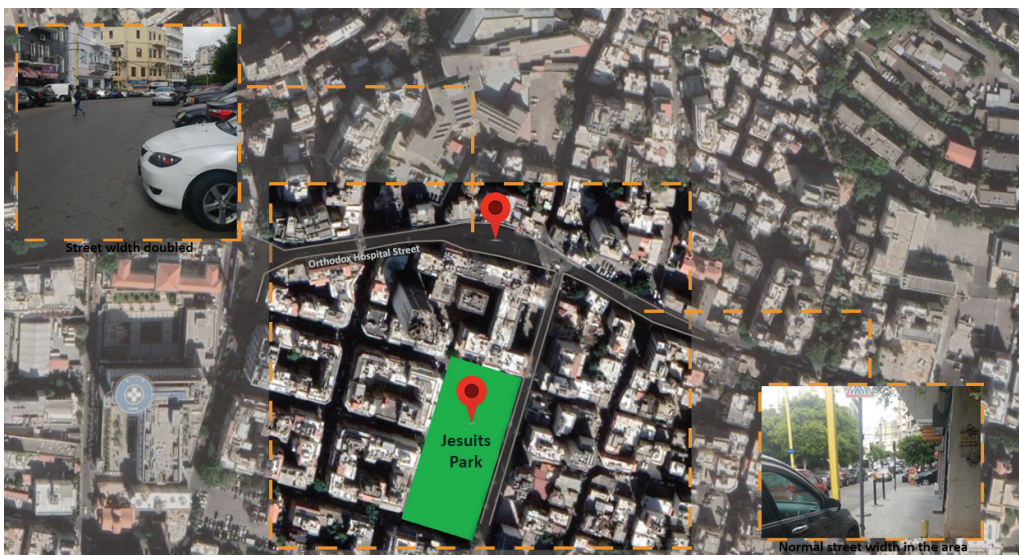


Fig. 19. Site of intervention showing the width of the street [created by A. Dikmak, 2023].



Fig. 20. UA scenarios [created by A. Dikmak, 2023].

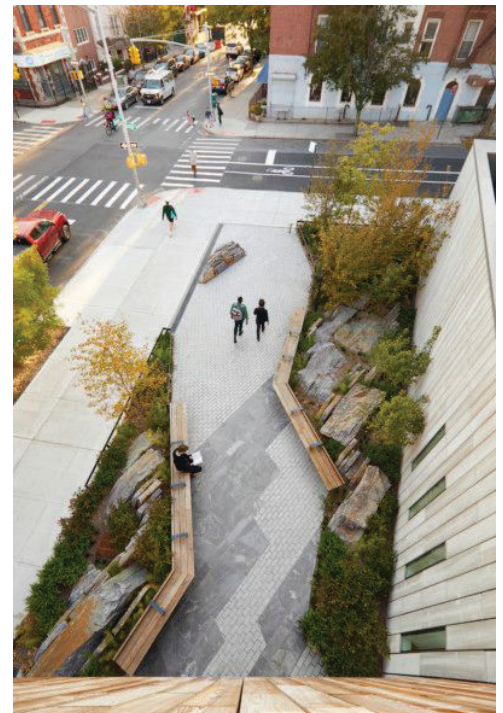


Fig. 21. Proposed pedestrian space [17].

H. Urban Acupuncture Interventions

After the selection of sick points according to community discussion, scenarios for a quick recovery approach to solve the problems at all urban aspects integrating economic, social, and environmental elements were developed (Fig. 20). Tables V and VI show the principles of applying urban acupuncture in Orthodox Street and the application of the proposed strategy.

xv. Green Infrastructure

This intervention aims to incorporate natural elements like creating shaded areas and making neighbourhoods more walkable into the neighbourhood area. These strategic interventions have an environmental and social focus on improving the overall aesthetic of the neighbourhood, enhancing the air quality, and providing pleasant communal spaces for social interaction.

xvi. Social Landscape and Community Gathering

Interventions 2 and 3 consist of the creation of a public space at the corner of the street. It requires narrowing the street at the point of intervention to become of the same width as the main street. Thus, it forms a wider pedestrian zone (Fig. 21) to be used as a public space.

From a social point of view, the pedestrian space is used as a social catalyst for people to communicate, rest, and enjoy the street. From an environmental point of view,

the pedestrian space hosts either green spaces or self-producing vegetables for daily use.

xvii. Re-thinking Passageways.

Re-thinking passageways and sidewalks present the activation of the deactivated street that links Orthodox Street with Jesuits Park as a way of attraction to the garden. The aim of UA, in this case, is to widen the energy flow by creating linear aesthetic elements alongside the street. The usage of movable planters of any material (wooden, plastic, metallic, or concrete) distributed on the street or pinned up on the facades of the buildings is one simple method to enhance the appearance of the street (Fig. 23).



Fig. 22. UA example [18]

TABLE V

Principles of UA – Orthodox Street [by authors of this article]

Principle	
Definition of sick points	Energy flow: Beirut's public spaces are extremely neglected. Sick point: The main commercial part of the street is significantly wider than the rest of the street.
Screenplay	The potential of integrating Orthodox Street and Jesuits Park and re-thinking the connection between these public spaces.
Citizen education	People are interested in urban topics nowadays, and they are open to learning more about their city and how they can participate in improving it.
Citizen participation & involvement	People are engaged through discussions and a survey.
Small-scale intervention	In the current economic, social, and financial situation, the intervention is minimal to avoid unrecoverable mistakes.
Quick action plan	Interventions are to be quick. Actions are to be clear, easy, and applicable.
Holistic approach	The interaction and discussion are between experts and citizens. The first takes ideas from the community, refining them, and applying them to practice.
Creating places	The aim of the UA application is to activate public spaces as a part of recovery. This idea contributes to a larger urban recovery.

TABLE VI

Application of UA – Orthodox Street [by authors of this article]

Strategy	Urban acupuncture	
Aim of development	Solve different urban problems	The project aims to promote a more diverse, inclusive, and accessible public space. Create connections between public spaces to test the potential of UA.
Responsibility	Governments, local stakeholders, developers, residents	The project engages the private sector and residents to catalyse economic and social development.
Target	Carefully selected	The sensitive point is selected after an analysis of the neighbourhood and residents' daily activities.
Strategy	Step by step / bottom-up	Bottom-up
Cost	Low-cost	Low-cost
Funding	Various funds	Local stakeholders: including local shopkeepers as well as private companies and some residents willing to participate financially.
Application	Flexible	The application is a flexible and soft intervention that can change with users' needs and wants.
Level of improvement	Step-by-step improvement	Step-by-step
Benefits	High economic High sustainability	A link between an ignored public zone and a neglected public park.
Duration	Short-term	Short-term

This intervention focuses on improving the paths people take through the neighbourhood area. These changes affect the social and environmental aspects by promoting community gatherings and potentially creating food production spaces.

xviii. Playground Maintenance

The local citizens are the focus of the UA intervention, thus engaging them generates an audience and pressure on the city government to improve the local park, especially the quality of the kid's playground, from an aesthetic and safety point of view. This refers to the upkeep and improvement of play areas, which can include renovation efforts. The maintenance of playgrounds is a social



Fig. 23. El Qalaa intervention [19].

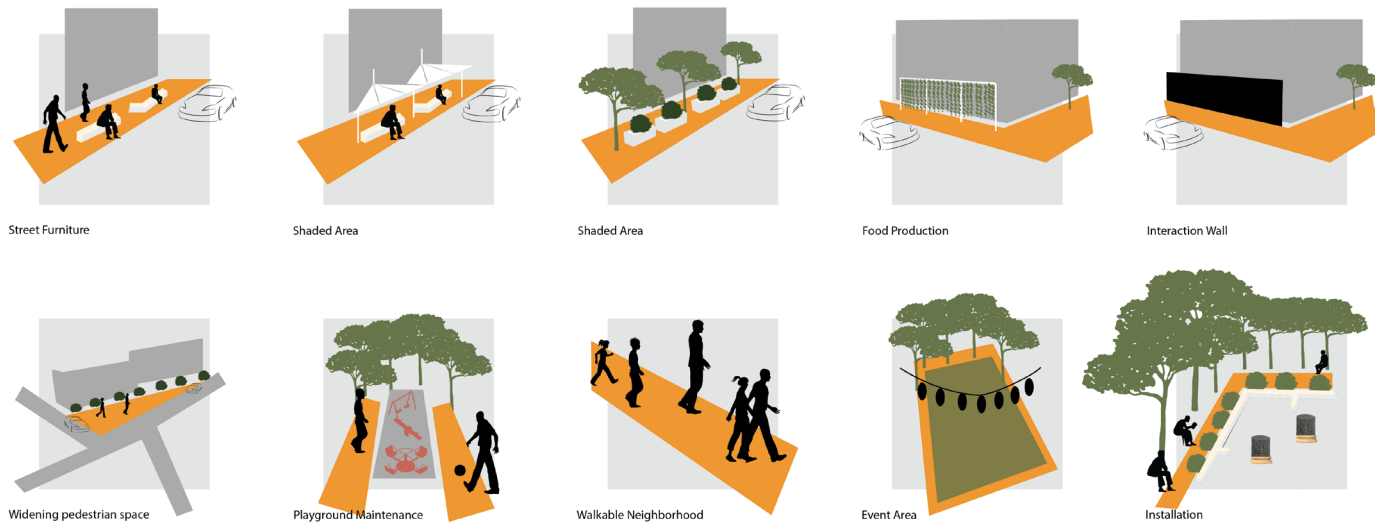


Fig. 24. Keys for UA action plan [created by A. Dikmak].

investment, providing safe and engaging areas for children and community members to interact.

xix. Soft Intervention in Historical Site

The archaeological site in Jesuits Park lacks the attractiveness. A soft cultural intervention with the purpose of better presenting and enhancing the public appreciation of the site and attracting more visitors will impact the neighbourhood. This kind of soft cultural intervention was made at Deir El Qalaa archaeological site in Beit Mire, Lebanon (Fig. 24). The intervention was part of Silat organization's ongoing experimental project to physically explain and present ruins in Deir El Qalaa. They

used wire mesh to interpret the lost Byzantine columns. This small intervention helps visitors read the layout of the Basilica. The economic benefit of this intervention is connected to the possibility of attracting visitors to the neighbourhood. This type of intervention is more focused on the community or cultural aspects. It includes installations and event areas.

I. Urban Acupuncture Action Plan

The UA action plan (Fig. 24) consists of all the potential key actions (Table VII) that constitute the implementation of the 6 interventions. These interventions are designed to

TABLE VII

UA Key Actions [created by A. Dikmak]

Street furniture	Street furniture helps to create more quality spaces that foster community interaction and contribute to the overall vibrancy of urban life.
Shaded area	Shaded areas in urban environments are crucial for enhancing the comfort and usability of outdoor spaces.
Trees along the streets	Placing trees along urban streets is an important environmental and social improvement.
Food production zone	Implementing food production zones on sidewalks and building facades is an innovative concept that aligns well with sustainable urban development practices.
Interaction wall	Creating interaction walls on sidewalks and building facades is a unique and innovative way to enhance urban spaces and foster community engagement. These walls can serve as art displays and interactive installations that encourage social interaction and community involvement.
Widening pedestrian space	Widening pedestrian spaces is a significant urban development strategy aimed at enhancing walkability, promoting sustainability, and improving the overall quality of life in urban areas.
Playground maintenance	Maintaining playgrounds is crucial for ensuring they remain safe, functional, and enjoyable for children and the community.
Walkable neighbourhood	Creating a walkable city with shaded areas involves several strategic steps that focus on enhancing the comfort, safety, and attractiveness of walking routes.
Event area	Creating an event area in a historical space for cultural and educational purposes involves careful planning and design to preserve historical integrity while providing a functional, modern space for events.
Installation in historical site	Installing a new structure or feature within a historical site requires a sensitive and well-considered approach that balances the need for modern functionality with the preservation of historical integrity.

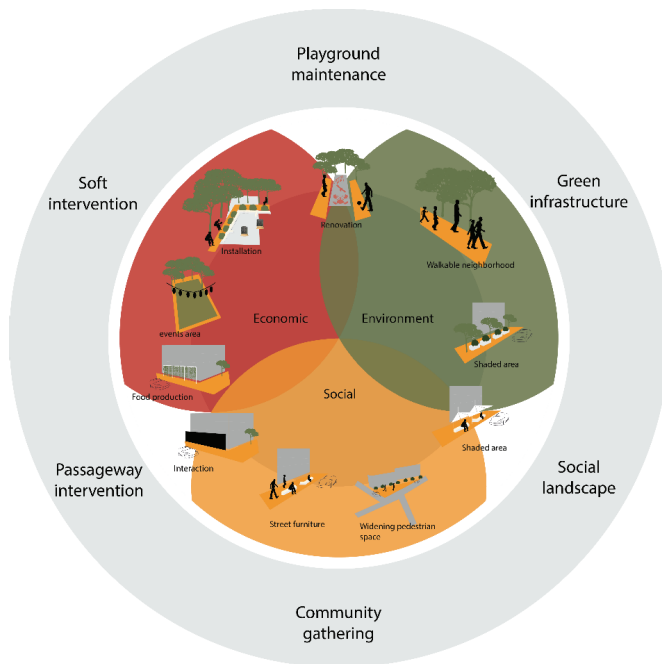


Fig. 25. Recovery approach [created by A. Dikmak, 2024].

enhance the economic and social aspects of a community without significant construction.

The recovery approach to improving liveability in Orthodox Hospital Street is based on the potential existing in the area. The Venn diagram (Fig. 25) represents the overlap between the different urban acupuncture interventions proposed and their associated areas of impact. It is divided into six main interventions and consists of ten key actions that lead to a sustainable recovery approach.

J. Benefits and Challenges

Each urban acupuncture intervention contributes to the reviving of the Rmeil neighbourhood differently, but together they create a holistic approach to urban acupuncture. Several benefits and multiple challenges can be noted.

- **Benefits**
 - Allow for the creation of a social catalyst by creating a space of socialization for residents.
 - Allow for the maximum results using small efforts. Given the current economic condition, creating a string of connected spaces on Orthodox Street intensifies commercial activity in the area.
 - Allow citizen engagement and participation in the planning, which augment the acceptance rate of any taken decision.

- **Challenges**
 - Application, at any level, cannot be realized without government approval or municipality intervention. Knowing that the administration process can be uncooperative.
 - Tension between residents can halt the process. Cohesion in society is a key to generating successful effects.

Conclusions and Recommendations

Urban Acupuncture (UA) provides a recovery approach for neighbourhoods affected by sudden disasters by focusing on targeted small-scale interventions to enhance social, economic, and environmental needs. This paper highlights the potential of UA to revitalize neglected areas, such as Orthodox Street, by reactivating underutilized spaces and reconnecting them to the broader urban fabric. The six proposed interventions aim to enhance the street's function as a hub for social interaction, economic activity, and environmental improvement. The study underscores the importance of community involvement in urban recovery. While the paper outlines both the practical benefits and challenges of applying UA in post-disaster contexts, it also underscores the need for further investigation into its adaptability and long-term outcomes. UA offers a practical, sustainable path to improving urban liveability and recovery.

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