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01 RESEARCH PLAN

01.00 ABSTRACT

A lack of public space for leisure activities hinders the development of social cohesion and leads to a further dilution of Beirut's social and cultural quality, as well as to fragmentation. The research, mainly by literature study and research by design, will seek to gain a better understanding of how to design a sports facility in Beirut's city centre, where sport and leisure will serve as a social connector for the city's residents. This study also seeks to provide and expand knowledge on how to integrate public space into and around sports facilities. The end goal is to provide a solid foundation for the entire design process. As a result, a better understanding of designing a sports facility can play an important role in resolving sociospatial fragmentation and contributing to a more cohesive society and city in Beirut.

Keywords Urban public space, socio- spatial development, sports and leisure, social cohesion, (de-)fragmentation

01.01 INTRODUCTION

Lebanon is a country full of contrast. It was once known as the "Paris of the East," and it is now attempting to recover from another crisis. On August 4, 2020, Lebanon's capital Beirut, suffered yet another setback.

The contrast can be found at various urban lavers. Beirut's political, social, and economic conditions are tumultuous at the moment. The contrast between day and night life is an example of this. The city comes alive in the evening. The city blooms at the moment the sun sets. People gather around market streets, cafes, and nightclubs. During the day, the aftermath of Lebanon's setbacks can still be seen. In the centre, there are barricaded army posts and tanks, as well as buildings that have been destroyed by the war and recent explosions. People gathering and enjoying leisure activities, as in the days of "Paris of the East", is difficult to imagine today. Aside from the negative consequences, the explosion opened up possibilities for positive developments. Today, in the aftermath of the explosion and pandemic, sense of community and leisure might be more significant.

01.02 PROBLEM STATEMENT

Beirut, particularly the densely built-up city centre, has little to no public space. This area is mostly occupied of building blocks, streets, and parking lots. The city appears to be oriented toward car users. Massive roads split into several side roads, with large empty concrete parking spaces scattered about. In this paved world, there is little space for people to gather and to use public space. According to Nazzal and Chinder (2018) the World Health Organisation recommends a minimum of 9 square metres of green space per capita. However, the city of Beirut only has 0.8 square metres of green space per capita. Beirut has nearly one-tenth of the recommended amount of green space per capita. That figure is even more striking when compared to neighbouring capitals like Amman (48.2 m2 per capita) and Tel Aviv (28.3 m2 per capita) (Husqvarna Urban Green Space Index, 2020).

Since the civil war, Beirut has been building on public spaces, arguing that this could contribute to "the vibrancy of economic liberalism and a booming real estate market" (Karizat, 2019). Public space, according to Sawalha (2010), gradually became "forbidden space" in Beirut. As a result of the civil war and various urban renewal projects, urban places that were originally 'public' became 'private'. As an outcome, once-accessible spaces have become inaccessible to the majority of city residents. Haugbolle (2006) commented on Lebanon's spatial transformation that "[...] a public space dedicated to reconnecting a divided population through expensive franchises offer a vision of pacification and conflicts, not one of solutions" (p. 63).

The United Nations defines public space as promoting social cohesion and diversity by serving as spaces where a diverse group of people can come together and interact (Karizat, 2019). The aftermath of the civil war presented an opportunity to bring Lebanon's diverse communities together; instead, the government focused on exclusivity and fragmentation. Instead of promoting social cohesion in society, Beirut's development has created exclusive spaces from those that were accessible to a majority of the population before the civil war in the scarce public spaces that are left.

Not only is there a severe lack of green and public space in the city, but Beirut is also a fragmented city. According to Jihad and Jacques (2012), Beirut is a city known for its division. To break down the physical barriers that divided Beirut into different sectors during the civil war, the government devised a road infrastructure strategy to promote mobility and connect the various war territories. Nonetheless, this attempt did not produce the desired results. The postwar communal division of the population was similar to that of the war. The government's attempt may even intensified fragmentation and barriers.

The lack of public space and fragmentation is clearly visible in the city centre of Beirut. In order to reconstruct today's Beirut, social cohesion in society needs to be prioritized. Social cohesion can play a role in defragmentation of the city. Interpersonal dynamics and a sense of connection among people are important components of social cohesion. Increased social cohesion has also been linked to a number of physical and psychological health benefits. The presence of urban public spaces can promote positive social interactions that promote social cohesion and improve health and well-being (Jennings & Bamkole, 2019). Understanding the relationship between social cohesion and urban public space is critical for informing health and wellness approaches. Leisure and public spaces go hand in hand. Therefore, leisure can be seen as a social connector in itself and can be stated that the city of Beirut lacks sufficient space for leisure activities.

In summary, a lack of public space for leisure activities impedes the development of social cohesion and leads to further dilution of Beirut's social and cultural quality as well as fragmentation. As a result, a leisure facility can play an important role in resolving sociospatial fragmentation and contributing to a more cohesive society and city in Beirut.

01.03 RESEARCH QUESTION

Planners and urban theorists have increasingly questioned the capitalist model of the "free market", which turns urban space into a platform for market-driven economic growth and elitist consumption practices, stripping the public domain of its social and political dimensions (Larkin, 2010). This failure to provide accessible and dynamic meeting places for a diverse range of ideas, memories and experiences may well be the most serious shortcoming of the rebuilt of Beirut.

Sports and leisure can be used as a key value towards creating the missing open spaces for all communities. Multiple studies have shown that sports and leisure have a positive effect on political, economic, and social situations. According to Spaaij (2013), sport has the unique ability to transcend race, religion, gender, and belief. Spaaij (2013) also stated that "there is a popular perception which refers to sport as either the 'glue' holding communities together, or the 'social cement' [...] that 'helps build the social cohesion that binds families, communities, regions and the nation'." (p. 110). In other words, sports and leisure have a beneficial impact on urban socio-spatial development. Urban sociospatial development cluster focuses on the making of cities and the interactions with and transitions within them (Institute for Housing and Urban Development Studies, n.d.).

The research aims to answer the following main research question:

"How can a sports facility influence the sociospatial development of Beirut's city centre?"

In order to try to understand how to build a sports facility in the centre of Beirut that is at the same time a place for leisure and a part of the city, embedded in the density and a connector at different scales, the research question is divided into sub-questions. In this way, a more focused and targeted research approach can be followed. The sub-questions are as followed:

"What types of sports can be used as social connectors in Beirut?"

To use sports as a social connector and by designing a sports facility, it is necessary to first determine which sports can serve as a unifying factor for the Beirut population. This will be useful for programming.

"How can public spaces be integrated in and around the building?"

Public spaces where people can meet and interact are an important consideration when designing a sports facility as a social stimulus. The relationship between programming and integration of public spaces within the building is required to design such an accommodation. "How are sports and leisure experienced and influenced by culture in Beirut?"

Leisure is perceived differently around the world. In the case of Beirut, culture is extremely important. The most popular sports in Beirut, as well as the use of other sports, will be investigated in order to influence the design of the sports facility.

"What are the relevant aspects of density to the different scales of Beirut's city centre?"

When designing a sports facility for the centre of Beirut, it is important to get a grip on the relevant aspects within this highly dense area. Since constructible sites are a scarcity in the city centre, it is important to get a clear picture of how the site's FSI (Floor Space Index) can be made as efficient as possible. Spatial dimensions of the site have a great impact here as well.

"What is the role of leisure within urban sociospatial development?"

Understanding the role of leisure in urban sociospatial development requires an understanding of urban societies, the interaction of various stakeholder groups, gender, political economies, and the dynamics of social interactions across space and time.

01.04 THEORETICAL FRAMEWORK

Cities' development strategies rely on sports facilities (Austrian, 2002). Cities have recently seized on sports facilities as a means of revitalizing specific neighbourhoods in city centres. New sports facilities have the potential to revitalize run-down urban areas (Barghchi, Omar, and Aman, 2009). Sports facilities are often found in locations that offer sufficient space for outdoor sports. Within the centre of Beirut, these open spaces are not available, yet the centre is a location with great potential for a sports facility.

According to a study by Roberts and Kovacheva (2017), there is a high demand for sports and leisure activities among Lebanese between the ages of 15 and 29. Among this group, 47% indicated that they engage in some form of formal leisure activity at least once or twice a week. Formal leisure activities in this survey are classified as going to a tearoom or café, going to a club or bar, or participating in sports. 53% of respondents indicated that they engaged in a form of leisure activity more than three times a week (Roberts & Kovacheva, 2017). In addition, almost a third of all leisure activities of this group are done in the form of sports.

Designing a sports facility that deals with integrated public spaces in and around the building, brings challenges. Restaurants, viewing platforms and sky gardens are common space typologies. The incorporation of publicly accessible facilities in buildings is a desirable approach to extending the use of a building to larger segments of the surrounding urban space (Viñoly, Blomberg, & Blanes, 2015). The challenge here is to foster a sense of community around the public facility while removing the impression that the building is only for the privileged few.

01.05 METHODOLOGY

In order to be able to fill in the gap between the current-state level and the desired futurestate level of knowledge, two types of research methods will be conducted. On the one hand, research will be based on literature study. The literature study focuses on the following (combination of) keywords: urban public space, socio- spatial development, sports and leisure, social cohesion, (de-) fragmentation. The aim of the literature study is to develop insight into the factors that play a role in the design for a sports and leisure facility that is part of the city and embedded in a densely populated area with different scales. By this research method, a design brief will be conducted.

On the other hand, research will be done via research-by-design. Analysing different case studies, will play an important role in order to understand how make certain design choices. Exploring the different materials by which a design is carried out —sketches, mapping, typologies, spatial programs, ambitions and even materialization – will provide new insights for design decisions and form the foundation in which design options are evaluated against explicit criteria from the design brief.

A third research method has a more objective nature but can be contributing too. Interviews with (former) residents, Beirut students, professors, and other experts can provide a different insight. After all, they are the most capable of indicating ways of thinking, cultural perceptions, and reflections during the research and design process.

01.06 GOALS

The goal of the research is to provide useful information for the design so that conceptual and plausible design choices can be made. The goal is to create products and knowledge that will help to meet the challenges of programming, spatial organizations, spatial ambitions, and location challenges. Not only are strategies for designing with sport and leisure in conjunction with public space important outcomes, but so is the incorporation of public space within the building.

The research methods of desk study and case study analysis will be related to the overall design goal. The desk study will primarily provide information on the challenges of programming and spatial organization at the start of the design process. This will help to develop reasoned concepts. In addition to the knowledge gained from the literature, the analysis of the site and ambitions, as well as the analysis of the case studies, will aid in the further development of the concepts. It will also support in the creation of spatial ambitions, the creation of desired images, and even the materialization.

In essence, the research will seek to gain a better understanding of how to design a sports facility in Beirut's city center, where sport and leisure will serve as a social connector for the city's residents. This study also aims to provide and develop knowledge on how to integrate public space within and around the sports facility. The ultimate goal is to establish a solid foundation for the entire design process. From concept to structure to final materialization.

01.07 LITERATURE

Annotated bibliography:

Haugbolle, S. (2006). Spatial Transformations in the Lebanese" Independence Intifada". *The Arab Studies Journal, 14*(2), 60-77.

This article by Haugbolle, Professor of Middle Eastern Studies at St. Antony's College, looks at a detailed analysis of Lebanese spatial practices in downtown Beirut. The article argues that public space is essential for public contestation, validation, and consensus.

Karizat, N. (2019). The Story of Public Space in Beirut's Geography of Power.

Nadia Karizat, dual Master in Health Informatics and Master in Urban and Regional Planning, examines the three most noticeable divisions in Beirut in her article. The article demonstrates how development and reconstruction since the civil war have transformed Beirut's minimal public space into "forbidden space".

Roberts, K., & Kovacheva, S. (2017). Use of free time by young people, and social inclusion and exclusion in Lebanon. *in South and East Mediterranean Countries*, 87.

Ken Roberts and Siyka Kovacheva conducted research on the leisure participation of Lebanese youth. Their methods, main findings, and conclusions about the differences between Western and Lebanese leisure research are explained in this study.

Spaaij, R. (2013). Sport, social cohesion and community building: Managing the nexus. In *Managing social issues*. Edward Elgar Publishing.

Ramón Spaaij, professor of sports sociology at the University of Amsterdam, addresses the question of what perceptions various organisations and actors in the field of sport and community development have about the respective responsibilities and relationships between the public, voluntary and private sectors.

Viñoly, R., Blomberg, C., & Blanes, M. (2015). Challenges and Benefits of Integrating Public Space into Tall Buildings. *Global Interchanges: Resurgence of the Skyscraper,* 282-287.

Architect Rafael Viñoly elaborates in this article, together with his partner Charles Blomberg and director Marcos Blanes, on the theme of integrating public space into tall buildings with the use of three worldwide examples. The article uses these case studies to explain the philosophy of tall buildings as public assets.

Other literature:

Austrian, Z., & Rosentraub, M. S. (2002). Cities, sports, and economic change: A retrospective assessment. *Journal of urban affairs*, *24*(5), 549-563.

Barghchi, M., Omar, D. B., & Aman, M. S. (2009). Sports facilities development and urban generation. *Journal of Social Sciences*, *5*(4), 460-465.

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Institute for Housing and Urban Development Studies. (n.d.). Urban Socio- Spatial Development. Retrieved from IHS: https:// www.ihs.nl/en/themes-0/urban-socio-spatialdevelopment

Jennings, V., & Bamkole, O. (2019). The relationship between social cohesion and urban green space: An avenue for health promotion. *International journal of environmental research and public health, 16*(3), 452.

Jihad, F., & Jacques, T. (2012). Bricolage planning: understanding planning in a fragmented city. Urban development. Rijeka, Croatia: *Intech Publications*, 93-126.

Johnson, A. T., & Sack, A. (1996). Assessing the value of sports facilities: The importance of noneconomic factors. *Economic Development Quarterly, 10*(4), 369-381.

Larkin, C. (2010). Remaking Beirut: Contesting memory, space, and the urban imaginary of Lebanese youth. *City & Community, 9*(4), 414-442.

Levermore, R. (2008). Sport: a new engine of development?. *Progress in development studies, 8*(2), 183-190.

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Nassif, N. (2009). Sport policy in Lebanon, 1975 to 2004.

Nassif, N., & Amara, M. (2015). Sport, policy and politics in Lebanon. *International journal of sport policy and politics*, 7(3), 443-455.

Nazzal, M., & Chinder, S. (2018). Lebanon cities' public spaces. International Journal for Crime, Justice and Social Democracy, 3(1), 119-152.

Sawalha, A. (2010). *Reconstructing Beirut: memory and space in a postwar Arab city.* University of Texas Press.

Smith, A. (2010). The development of "sportscity" zones and their potential value as tourism resources for urban areas. *European Planning Studies, 18*(3), 385-410.

Valle, D., & Kompier, V. (2013). Sport in the city. Research on the relation between sport and urban design. *Rotterdam: Creative Industries Fund. Research Paper.*



Figure 01: Collage wk1.4 (own illustration, 2021) A sports and leisure centre that can act as a stimulus for Beirut

02 DESIGN BRIEF

02.01 INTRODUCTION

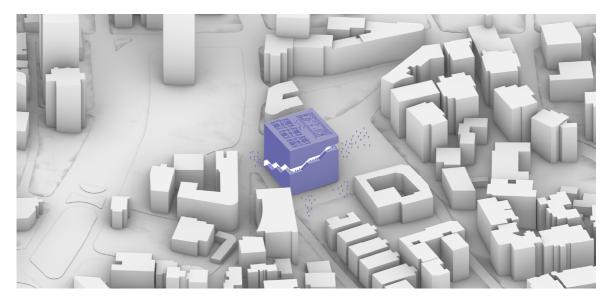
As stated in the research plan, Lebanese are needs of public gathering spaces. Not only is there a serious lack of quantity of public space in Beirut, but also the quality of the public spaces is extremely poor. Larkin (2010) mentions in in his research Remaking Beirut that "the limitations of Beirut's spectacle city centre are further underscored by residents who criticised the new downtown for providing little 'neutral' space for people to meet, socialise or engage with each other." (p. 430). Public gathering spaces are important for Beiruti in order to enjoy leisure time. Right now, Beiruti do not have enough of public gathering spaces. A consequence is that there is no possibility to interact with each other and this creates social fragmentation. Not only is there a lack of public gathering space, the city also started to socially fragmentate during the civil war. Since social cohesion is a key factor of defragmenting the city, the focus of the city centre should be laying on increasing social cohesion.

02.02 AMBITION

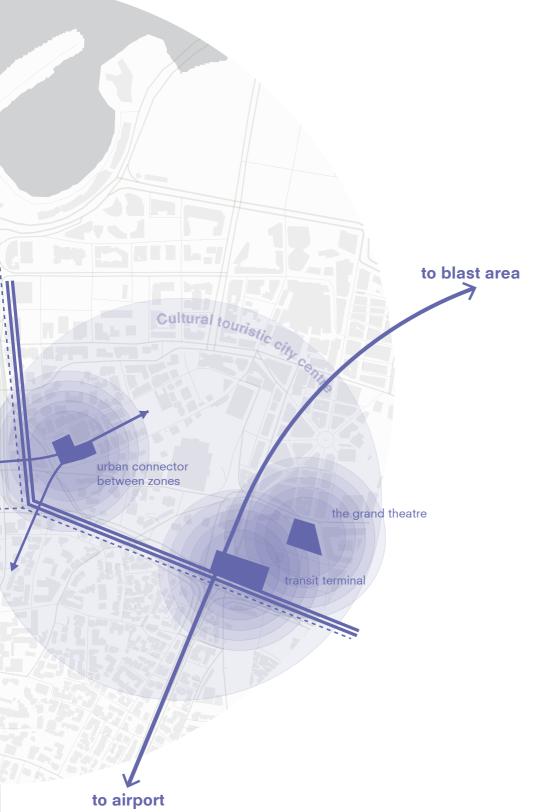
Leisure is not just a sense of enjoyment, but also as time spent not working or sleeping. Sports are the most effective leisure activity for building bridges for Beiruti. According to Spaaij (2013) can sports be seen as the 'social cement' that helps build the social cohesion that binds families, communities and neighbourhoods." (p. 110). From the research and the usage of sports a social binder the concept of building bridges via sports and public gathering is born. More specifically, the project's goal is to create a sports centre where people can join together to regain their Beiruti identity.

On a larger scale is the aim of the project to attract people towards the culture city centre. Within the culture city centre the projects of Beirut Social Hub, Transit Terminal and The Grand Theatre are working together. Where The Grand Theatre functions as a hotspot to give people a reason to go to the Solidere area, the Transit Terminal will connect different areas like the airport and the blast area on a larger scale. The Social Hub will function as a hinge on a more local scale and has the ambition to connect the surrounding neighbourhoods with Solidere.

On the scale of the city the project will increase the desired amount of public gathering spaces within a network of already existing gathering spaces like Zaitunay Bay, Sanayeh Park and the Martyrs' Square. The Social Hub situates itself in the middle of the three other public spaces and within has the goal to, with its close proximity, to connect the already existing public spaces in and around Solidere.



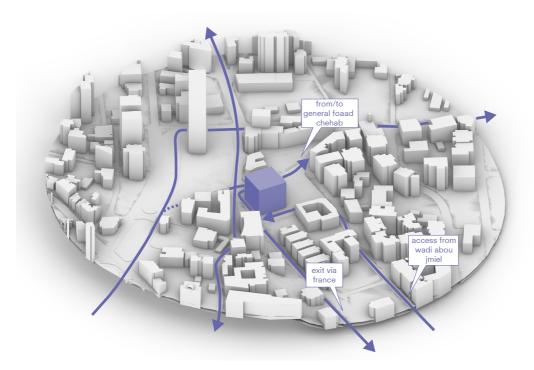


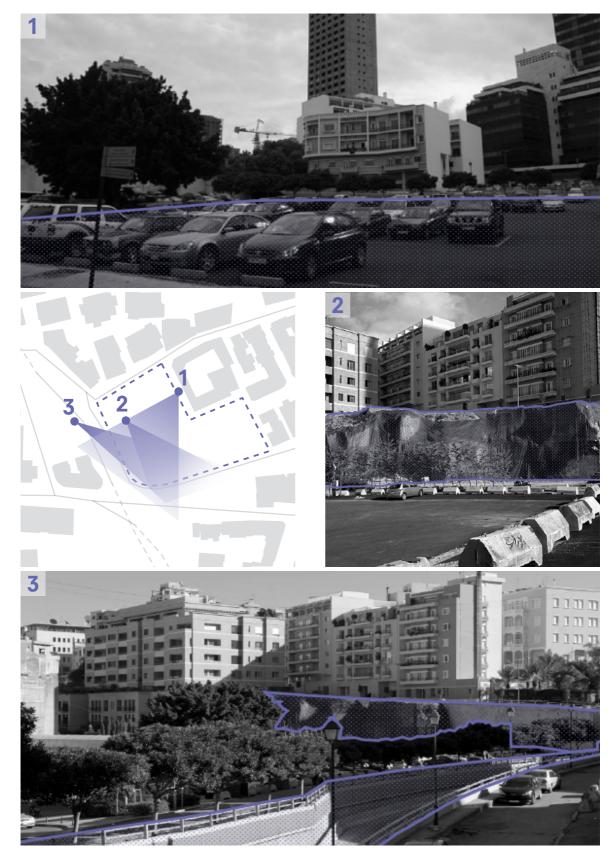


02.03 SITE

The site itself is not only strategically located on the periphery of various neighbourhoods, it also has great values within the site and with its immediate surroundings. The photos on the right depict three important aspects of the site that can be viewed as both challenges and strengths. The first photograph depicts the terrain's nearly flat surface. In the hilly surroundings of Beirut, this flatness comes as something of a surprise. This parking lot will be obsolete as the Bidhara'l Beirut gradually reduces the need for automobiles and improves pedestrian-friendly systems. As a result, the parking lot can easily be repurposed. The second photo depicts the rather dramatic height difference on the site's southern side. This vertical barrier is the primary reason for the lack of pedestrian movement to and from adjacent areas. There is a small staircase connecting the lower and upper areas, but it leads from a rather empty car park to an area at the top of the stairs that is far from pedestrian-friendly. The third photo also shows the difference in height in the background, but the focus is on the tunnel's lowered open section. This tunnel connects the highway that leads from the transit terminal to the highway that leads to Zaytuna Bay. This infrastructural execution establishes a significant physical barrier between the site and its immediate surroundings. There are no pedestrian crossings, nor are there efficient car connections from the city's eastern neighbourhoods to the Solidere site.

There are two ways to approach the site in its current form for cars and three ways for pedestrians. The main infrastructural circulation around the site is depicted in the axonometric 3-dimensional model below. The site is primarily accessed via the oneway Wadi Abou Jmiel road and exited from France. The General Foaad Chebab Highway can be used to get to the site, but this is a very limited option because cars must drive around the lower tunnel before crossing it. The earlier mentioned staircase is an extra option to get to and from the site, but is rarely in use because of the bad circulation around this staircase.





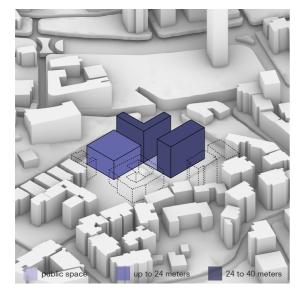
Despite the fact that circulation is not optimal in the current situation, the height difference presents an opportunity for the project. The right-hand cross sections show the relatively flat terrain, the height difference, the tunnel, and the heights of the surrounding buildings. Because there are no buildings on the southern side of the site, the building has a good chance of being seen from here. This is advantageous for the project's goal of constructing a visible leisure center. Cross section BB' also show that the adjacent buildings are relatively low. This has a positive impact on the project's visibility.

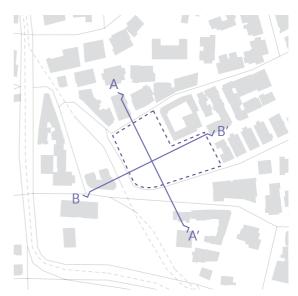
Section AA' show the limited green space around the area. These areas can be used in order to expand in and around the building and therefore create new ways of using the public space on site. With all the building being relatively low and with the fact that the southern side lacks buildings in general, the site itself has little to no shading from its surroundings.

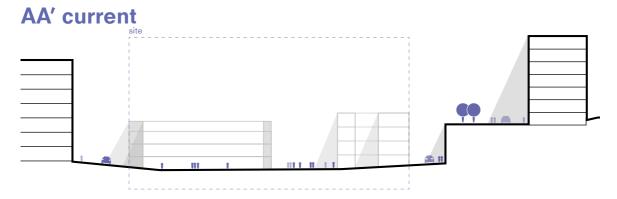
The lowered tunnel in section BB' show that the highway tunnel also has the possibility to be used as a logistical access point for the site. Since the highway is relatively wide, some room can be created in order to get and go underneath the site. If possible, this creates more room for pedestrian circulation on the levels above.

Since the site is located in the Solidere area, it is expected to look at the current regulations of the Solidere Masterplan. The drawing on the bottom left shows the current infill according to the Solidere Masterplan. This masterplan shows a division of public space, building volumes with a maximum height up to 24 meters, and building volumes up to 40 meters on the site. When respecting these regulations, the highest part of Beirut Social Hub will be a maximum of 40 meters heigh. This maximum height will be sufficient for the building to arise over the surrounding buildings on the east and west. This way the building will be visible from deep into the Solidere area, but also from the vibrant neighbourhoods around Hamra.

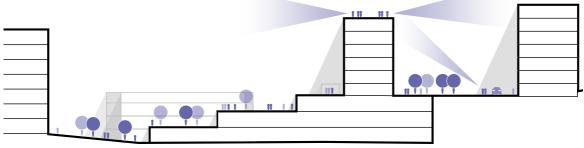
However, the current organisation according to the Solidere Masterplan will not have the maximum potential of the site. Therefore, a reorganisation of the regulated infill is proposed. Chapter 3 will go more in detail about the new propossed program of the plot.



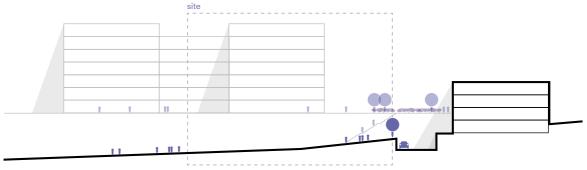




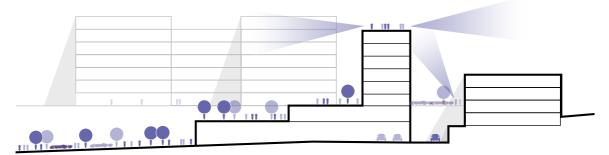
AA' potential



BB' current



BB' potential

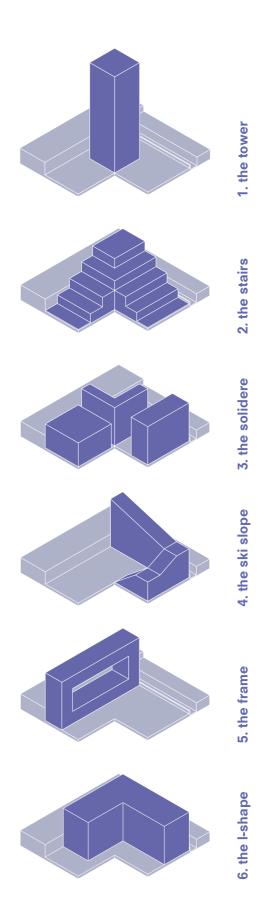


02.04 PROGRAM

A preliminary mass study is carried out in order to determine what types of volumes can be placed on site. A program bar was created by analysing and measuring several characteristics such as sports facilities, open areas, and circulation. Understanding what programs are required for sporting facilities, for example, led to an understanding of the many relationships and dimensions required. Understanding which sports are appropriate for Beirut's city centre is also important. Sports that are easy to apply in a densely populated area and are not expensive came out on top. Urban sports have a tendency to have a strong community. Urban sports such as skateboarding and roller skating not only provide needed sports opportunities in the city centre, but they also have a significant positive impact on social cohesion.

With the ambition of attracting people towards Solidere, the building on site should at least 1 have visibility, 2 a smooth height transition and 3 create experience. The diagrams on the right side show different options on how to tackle the site fill in. The first option is to build a tower which can be functioning as a landmark and therefore have great visibility. The second option is to create a staircase in order to have a comfortable height transition. The third option is to fill in the site according to the masterplan of Solidere. Option 4 creates an experience by looking like a ski slope and therefore create an association with a sports building. The 'frame' is a way to create experience and visibility for the people on the higher part of the city. And the last option uses the building to block the highway and uses the volume for a better height transition.

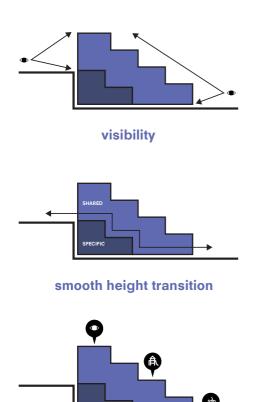
With these first mass studies, preliminary ideas of how to place the volume on site have been created. However, in order to have a better understanding of the different programs and their relations, different programme studies will play an important role.



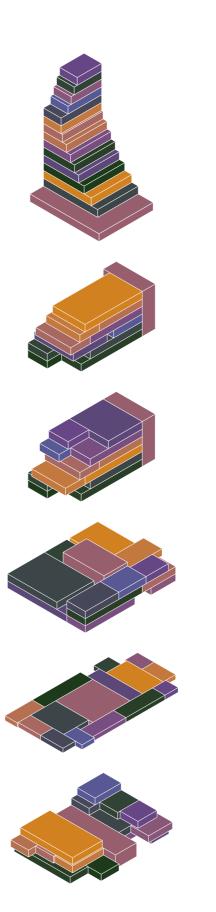
10%	1100 M2	ROOFTOP			
4%	400 M2	PLAYGROUND			
5%	507 M2	CAFE	PUBLIC PROGRAM	3445 M ²	34%
4%	414 M2	WORKSHOP			
20%	2048 M2	CIRCULATION			
3%	300 M ²	OFFICE			
6%	610 M ²	CONFERENCE HALL			
2,5%	254 M ²	SHOP			
8%	792 M ²	URBAN SPORT	SEMI-PUBLIC PROGRAM	5215 M ²	51%
3%	330 M²	CLIMBING WALL			
4%	414 M²	CHANGING ROOM			
12%	1215 M ²	MULTIPURPOSE HALL			
2,5%	276 M ²	SEATING			
7%	$707 M^2$	LOGISTICS			
9%	873 M²	TECHNICAL	PRIVATE PROGRAM	1580 M ²	15%

By making different combinations of the programmes different outcomes will be created. The combinations on the right show different outcomes of different priorities made from the programme. For example, what will happen when all the programme is stacked or should hospitality be on top instead of sports facilities? Should all programmes be situated around the third central circulation? Should the programme all be placed on one level or shoot the two different programmes of sports facilities and more relaxing leisure activities be separated?

Taking into account the three most important aspects shown below, it was concluded that the hospitality should be at the top. As hospitality can be transparent and open and sports halls are more often closed, the transparent top will be more visible and recognisable for visitors around the location. Also, the roof creates a great opportunity to enjoy spectacular views around the city and gives an excellent experience.



experience



ROOFTOP

PLAYGROUND

CAFE

WORKSHOP

CIRCULATION

OFFICE

CONFERENCE HALL

SHOP

SPORT

CLIMBING WALL

CHANGING ROOM

MULTIPURPOSE HALL

SEATING

LOGISTICS

TECHNICAL

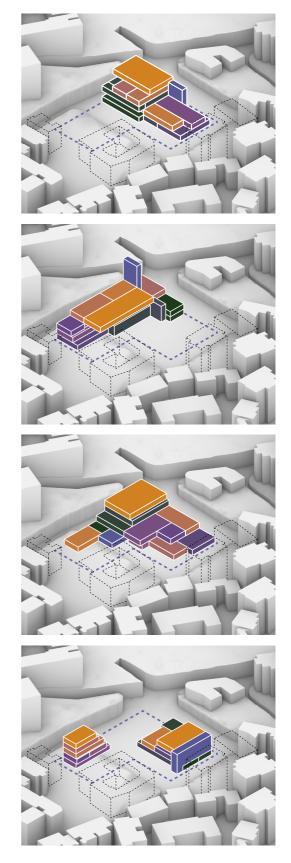
Four options are shown here with on-site programmes in which hospitality is always paramount. The first option uses the building for a better height transition and is situated along the highway, creating an open area that can be used as a public park. The second option also uses the building for a better height transition and includes the visibility ambition by placing a climbing wall at the edge of the site that will be visible from deep within the city.

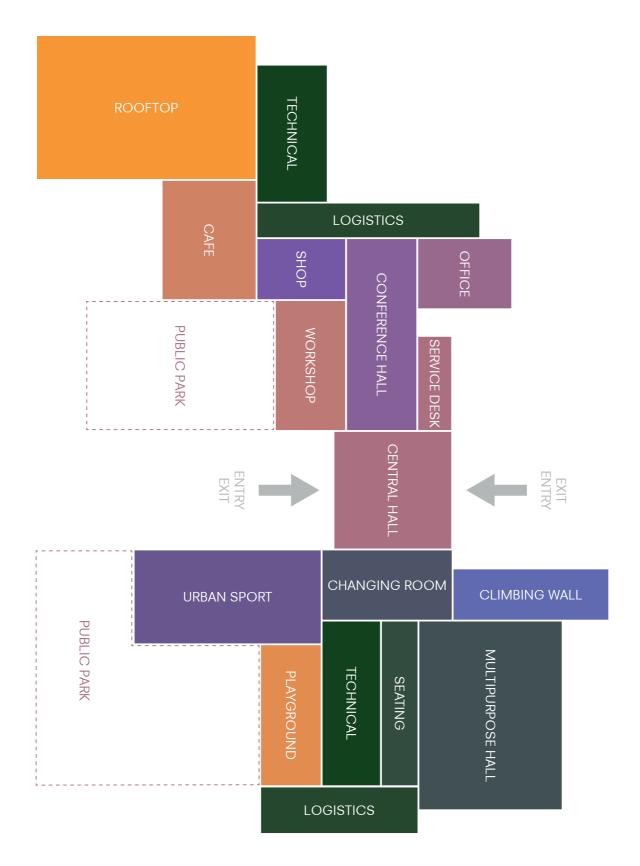
The third option also takes into account a high transition and visibility, but adds experience by creating multiple slabs with different functions. The last option takes visibility and perception into account in a different way, radically splitting active leisure activities and more relaxing leisure activities into two volumes. This option does not take height transitions into account. By making these different mass studies with their programmes on site and taking into account the three main ambitions of the project, a provisional volume was determined. This volume creates visibility through the catering facilities at the top in combination with the climbing wall as a landmark. It also creates different experiences at different places in the building. And finally, the slapping makes multiple routes possible from Solidere to the higher parts of the city.

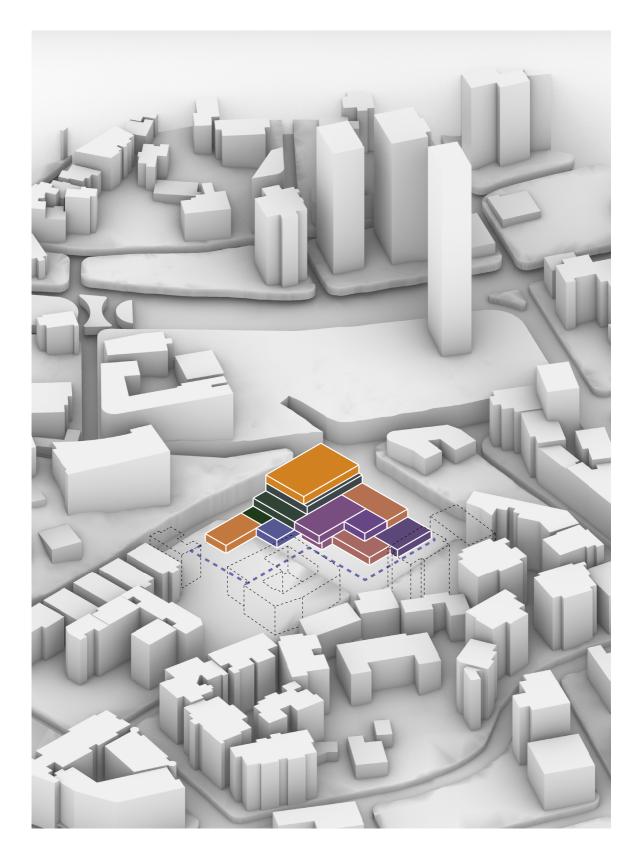
02.05 CONCLUSION

"How can a sports facility influence toe sociospatial development of Beirut's city centre?"

The building answers this question on three different scales. On the larger scale of the city Beirut Social Hub increases the desired amount of public gathering spaces in Beirut. On the neighbourhood scale the building will attract people towards the cultural city centre which is part of the group strategy. And on the building level this Beirut Social Hub facilitates sports facilities for Beiruti where sports play a key role in rebuilding identity for Beiruti.







03 DESIGN DESCRIPTION

03.01 CONCEPT EXPLANATION

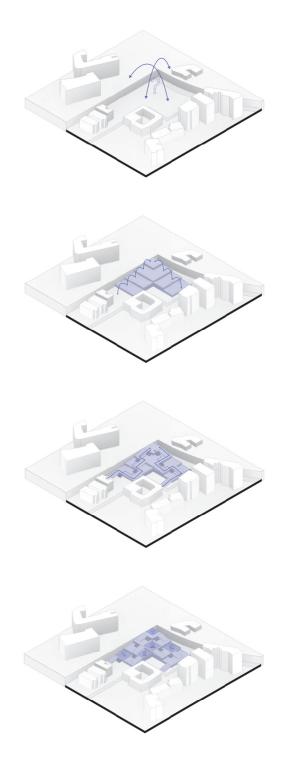
Looking back on the design brief, most of it remains in place. There is a great need for public space in Beirut, as stated in this design brief. There are no areas where people can meet, socialise, or interact in a neutral environment. Moreover, sport can still be seen as a neutral factor to bring people together. As a result, the project's goal remains to build a sports centre with sufficient of public gathering space.

The site has also kept the same; the primary elements, such as the drastic height difference and the lack of buildings to the south, allow the project to take advantage of the geographical aspects.

The idea of a terraced building progressively descending towards Solidere continues to remain alive and well. A few adjustments have been made to the programme. In summary, the conference room did not fit in with the rest of the programme, and it has been concluded that it would be removed.

The overall space for accessible rooftops (platforms) has been increased by removing the conference hall from the programme. In addition, the playground's dimensions have increased. Extra space is dedicated to the building's identity: public areas coupled with sport facilities, by making more room for the playground and using the existing cliff for bouldering.

The application of platforms and plateaus has evolved from the terraced construction concept. In and amongst the many areas of the project, these platforms and plateaus play an intriguing game of hovering, covered, visible and secret interaction. Where a route between these platforms connects the various layers and creates a path not only from platform to platform but also from neighbourhood to neighbourhood on a larger scale.



03.02 PROJECT DESCRIPTION

Looking at the urban implementation of the project, the steep cliff in the south, the highway tunnel in the west, and the open facades in the north and east, the project is situated in the site's corner where 'lower Beirut' and 'upper Beirut' meet. The terraces act as a system of gradually climbs connecting the historic city centre with the higher part of Beirut.

The layout of the building can be divided into three main areas. The main volume contains the workshop spaces, the café, the changing rooms, the indoor sports hall, and on top of the sports hall the large public semi-covered plaza. The 'Urban Sports Zone' in the east and the 'Playground' in the north make up the other two zones. The 'Urban Sports Zone,' which is close to the locker rooms, contains a 400-square-meter skate park and exploits the existing cliff for bouldering. The 'Playground' is a multi-levelled semi-covered area with an obstacle course, a children's playground, and outdoor 3x3 basketball courts. A series of stairs and ramps can be seen as the glue brings the three zones together.

The routing consists of an outside and an inside route. While the outer route is open to the public 24 hours a day, the internal route will close at closing time to ensure a safe atmosphere at night. With the idea of creating meeting places on different platforms in mind, there is not one clearly defined route through the building. There are various "sub-routes" that lead from one platform to the next. These sub-routes allow visitors to establish their own preferred route without having to pass through undesirable places. The inner route will likewise connect all the programs internally, with the option of taking a preferred path from point A to point B.

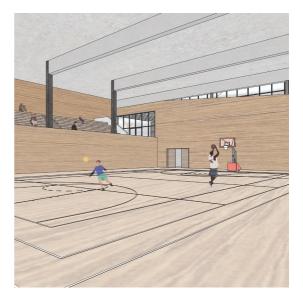
One of the main themes of the concept is to provide visitors with a variety of experiences across several platforms. The interaction between the many functions both inside and outside plays a significant role in ensuring that the project is seen as one cohesive building. The platforms and staircases are placed in such a way that the dialogue between the different zones is maintained. The interaction between the inside and the outside is also crucial in the design. This dialogue between within and outside can be seen in the images below and on the previous page. The image on the previous page depicts a perspective from which a stair user can get a glimpse into the sports hall. The image below looks from the sports hall to the staircase user in the upper corner. From the sports hall, the same dialogue between inside and outside can be seen. Not only does the sports hall have a visible interaction with the outside route, the inside route also shows a visible relationship with the sports hall.











04 REFLECTION

04.01 THE RELATIONSHIP BETWEEN RESEARCH AND DESIGN

Looking back at the start of this graduation year, dedicating the first half of the year to research was critical to the design's original inspiration and conclusion. During this phase, it was critical to provide helpful information for the design to develop conceptual and feasible design judgments. It would have been extremely difficult to find solutions and techniques to overcome the project's complexity within its socio-spatial setting without this concentrated time for research. I initially thought the research portion was too long based on the timeline. But now I'm grateful for the time we were given to break down the intricacy into smaller pieces. The design process proved to be just as crucial as the initial research. The research progressed over time as a result of examining various variations and making judgments from them. In other words, the intricacy was broken down into smaller and more manageable bits by first gathering helpful knowledge through study. When designing began, the interaction between research and design evolved from being one-sided to being circular, with design decisions being examined and adjusted as needed.

04.02 THE RELATIONSHIP BETWEEN GRADUATION TOPIC AND STUDIO TOPIC

The graduation topic and the studio theme, in my opinion, are strongly intertwined. The subjects were inevitably pushed to work together because the Complex Projects Beirut Graduation Studio was very well organised and separated into three groups. Within a category, the three groups, 'City Centre,' 'Port,' and 'Suburbs,' all had to deal with the same graduating subjects. The topic 'Leisure' was the driving force for my graduation topic. I selected urban sports as a form of leisure. Because urban sports have strong social ties, they can be an excellent leisure activity for bringing people together. We all acknowledged in the Bidhara'l Beirut group's (City Centre) strategy that the people of Beirut have an enormous need for public space where they may come together

and connect. Within the three 'Leisure' groups, urban sport seemed to be the most natural choice in the city centre, while a sailing school in the harbour and a dance theatre on the beach were possibly the best possibilities for the other 'Leisure' graduation topics. Additionally, the Complex Projects Beirut Graduation Studio focussed on finding strategies to redevelop Beirut after the explosion in 2020. Within the different groups, but also as a total, different strategies where created, with similarities and differences that all focused on the redevelopment of Beirut.

04.03 THE RELATIONSHIP BETWEEN CHOSEN AND STUDIO RESEARCH METHOD

As mentioned earlier, the Complex Projects Beirut Graduation Studio was well organised. Not only in the division of groups and topics in order to get the best results possible, but also the way the studio was structurally build. The studio has a clear timeline with informal, formal and hard deadlines. Personally, I really appreciated the five-week structure. By having these five-week intervals. I had the feeling to be productive and efficient throughout the whole year. Also, by interacting with the tutors every week in presentation format, you are really pushed into showing and discussing the concrete elements of that moment of the graduation. I mostly used the research by design method, which I paired with design thinking and the application of a common body of knowledge. The five-week presentations helped me organise my views on the project. When I work on a project for a year, I sometimes feel like I am not producing enough. When I examined the presentations, I discovered that the work was frequently much more. I have never worked on one project continuously for a year. I believe the Complex Projects Beirut Graduation Studio's structural and straightforward organisation aided me greatly in navigating the complexities of the graduation project.

04.04 THE RELATIONSHIP BETWEEN PROJECT AND THE WIDER SOCIAL. **PROFESSIONAL, SCIENTIFIC RELEVANCE** The complexity of Complex Projects Beirut Graduation Studio lies not necessarily within the design of the project itself. The complexity is more evident in the multitude of social, economic and political layers of the city. Beirut has a rich but also complex history with many stakeholders. The questions that where apparent for all the graduation topics could be; How to steer urban development in Beirut? How can Beirut flourish again? How to create an inclusive and thriving city? For myself, I had to really tell myself that the project will not solve all socio- spatial problems in Beirut. The project can be seen as an example of an attempt to give answers to a part of the complexity. One remark that must be made is that the project tries to give an answer to a social but also architectural question I had to remind myself that the project will not fix all of Beirut's socio-spatial issues. It's worth noting that the project is attempting to answer both a social and an architectural challenge. Architecture and social studies are inextricably intertwined when creating a sports centre with the goal of bringing people together. Because we work in the architecture field, the design emphasises that aspect. As a result, not all decisions made during the graduation process can be based solely on architectural input. Several principles based on a social component are also included in the project.

04.05 ETHICAL ISSUES AND DILEMMAS ENCOUNTERED DURING GRADUATION

Looking back on the previous year, I must acknowledge that I experienced personal and professional difficulties. To begin, I'd want to emphasise how well the tutors communicated with me. The tutoring relationship is precisely what I expected it to be. Their responses were usually direct and helpful. The weekly meetings with them were a lot of fun. These (and possibly all) graduation sessions, however, are mentally demanding. Especially in the period during P2 and P4. Because

of the pressure of passing or failing, I was stressed throughout those times. If you fail, you will face a significant setback (six and three months respectively). Working on a single project for a year was also unfamiliar territory for me, and I felt like I was losing the grip at times. It was reassuring to speak with the tutors regarding the project as well as the mental challenge. Although there were some challenging moments, the graduation program was an enjoyable experience overall. The graduation structure was put up to look and feel like a real-life design competition. This helped us prepare for the world of architecture following graduation. I'm happy for the opportunity to ride this graduation rollercoaster, and I can look back on this time after graduation with pride.

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