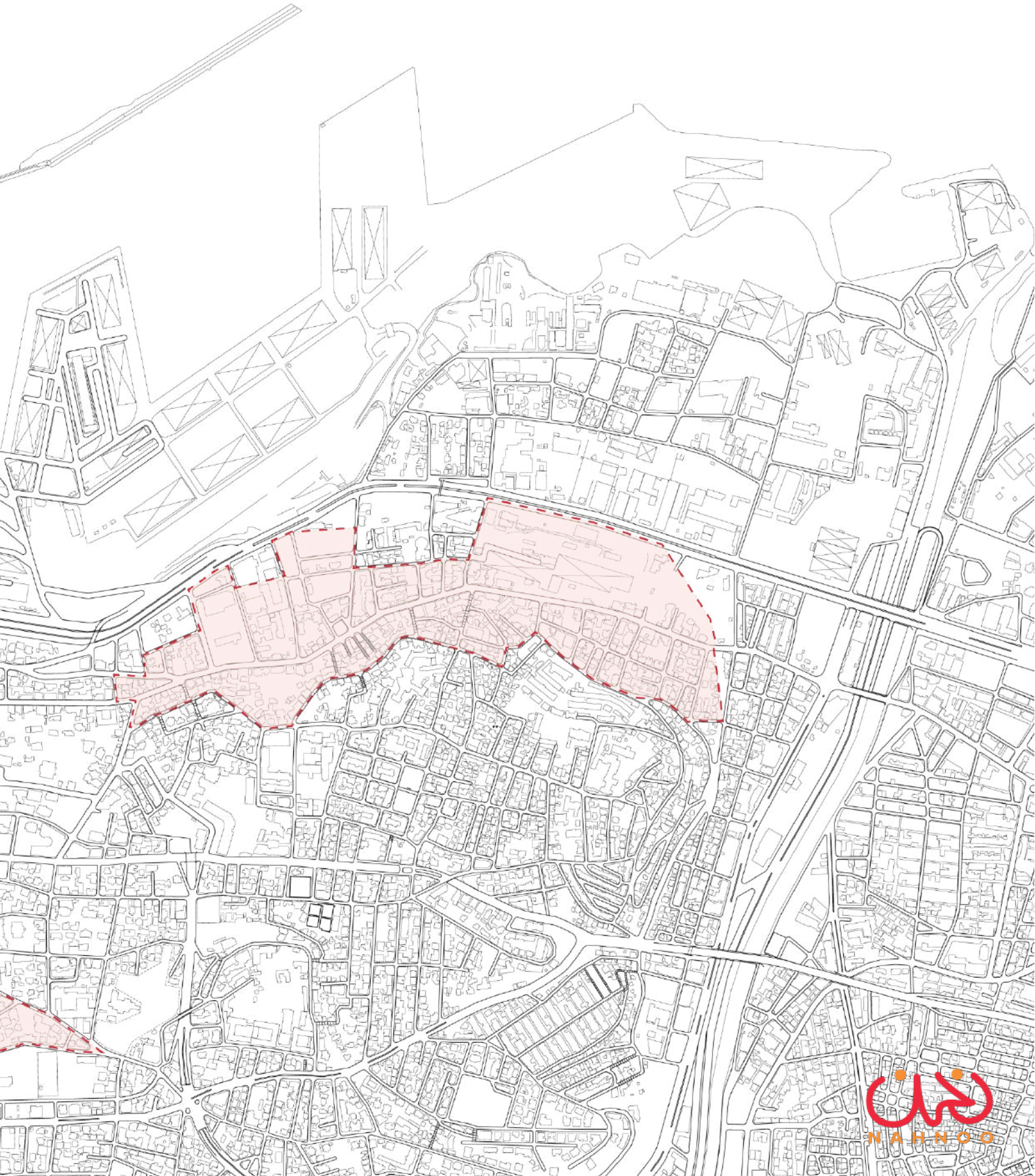
ACHRAFIEH AND MAR MIKHAEL

Youth-led Architectural Heritage Mapping In Beirut



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Introduction

During the second half of the nineteenth century, Beirut witnessed a rapid urban transformation, driven by an economical growth due to the expansion of its port that was located strategically on the Mediterranean, serving as a transition between Europe and Syrian hinterland. The city was designated as a provincial capital of the Ottoman Empire and benefited from the *Tanzimat (1839 – 1876)*, a series of governmental reforms meant to modernize the empire and consolidate its social and political foundations. It was then that extra mural expansion began: Merchants, bankers, catholic and protestant missionaries moved outside the medieval city walls and on the hills surrounding the old city (Salam, 1998; Fischfisch, 2011). The nearby outskirts were the first to be colonized: Mazra'at al Sayfî towards the East, Ghalghoûl/'Ayn al Bâchoûrah, Mazra'at al Qantârî, Santiyyah or Zaytoûnî, towards the South and West. In parallel, the arrival of immigrants taking residence in the old city and along access roads accelerated the densification of the urban fabric, with empty spaces being built up. Consequently, in the remote countryside, localities of more or less significant size appeared timidly then densified and organized themselves: Rmeil, Râs al Nabaa, Moussaytbeh, Jimmayzat al Yammîn, Ras Beirut, Mina al Hosn or Dâr al Mraysah. In the late 1850s, the urbanization of the outskirts had increased significantly that it justified the construction of places of worship which, in turn, stimulated further constructions in what was considered remote areas of the city. For example, the construction of Mar Mikhael church in Rmeil accentuated the urbanization of the eponymous neighborhood (Davie, 1996).

As the city was getting too crowded, a second expansion happened towards the east, as the rich bourgeoisie sought to build large mansions on the nearby hill, **Achrafieh** *(Mar Mitr hill).* It was made possible by the continuous progressist planning and modernization works of the city, the most important of which was the completion of Damascus street in 1863.

Around the end of the Ottoman Empire, outside the walls of the medieval city, large houses surrounded by orchards and gardens reflected an Occidentalized socio-cultural lifestyle of rich merchants influenced by their multiples travels to Europe and by the presence of foreign missionaries, consulates and merchants in Beirut. Later, during the French Mandate, the westernization of Beirut was reinforced and the city played the role of a regional metropole of 300,000 people; Neighborhoods along Damascus street quickly became urbanized, rich in red-roof houses and art deco buildings (Fischfisch, 2011). Street alignments, building heights and typologies were defined by the land legislation established by the mandate authorities (1930). It generated a harmonious urban fabric in relation to architectural style, integration and street perception.

Starting 1940, the adoption of a new building law allowing higher land exploitation and building heights modified consistently the morphology of the neighborhoods. In 1954, under the pressure of an intense building boom, Beirut Master Plan divided the city in 10 zones and established a regulation based on densities. The central areas that include the old districts where most of the built heritage is concentrated were affected with the highest exploitation ratios leading to growing land pressure on heritage, mostly consisting of a maximum of 3-floors buildings. In fact, the current ratios for total built-up area (B.U.A) in these sectors allowed an increase in land prices, resulting in a higher risk of demolition for heritage buildings and in a major mutation of the urban fabric.

A direct consequence of these rapid transformations materialized in a bigger consumption of city space and in a radical change of people's lifestyle, driving a flow of diverse activities into historical centers and traditional neighborhoods, and consequently a densification of their built environment. The need of more space for residents, businesses and activities let to a systematic loading of existing buildings: heightening, addition of staircases, new floors and subdivisions as well as the transformation of gardens and courtyards into garages or workshops. Adaptation to the needs of the modern lifestyle combined with the urban regulation generated an increase in land prices due to their rarity, attracting speculators who replaced old buildings, considered unprofitable due to their rigid stone structure and small dimensions, with high-rise constructions. In all modern buildings, a densification of the ground floor footprint is sought for a maximum profitability of the works done. Consequently, the spontaneous unity of the old historical neighborhoods was broken by the construction of heterogeneous building groups: massive structures interrupting the harmony of the existing urban silhouette. The development of these neighborhoods caused also an influx of traffic which justifies, in turn, the projection of new roads, enlargement of streets and creation of parkings, leading to more destruction of heritage buildings. (Fischfisch, 2011).

On the other hand, the morphological changes in the urban fabric of old neighborhoods resulted in the destruction of the existing social equilibrium, leading most of the time to the eviction of people who can't afford the new living costs and rents, and the arrival of a new, wealthier population. This phenomenon, referred to as "Gentrification", is not particular to Beirut.

Gentrification is a term meaning the reoccupation of the town centers by the upper classes (Brunet, 1993). We also refer to gentrification as a consequence of the rehabilitation of older neighborhoods near downtown. (Theys & Emelianoff, 2001). Neil Smith (2002) signals an outward diffusion of gentrification, where the process spreads to areas outside the urban center within a sectored generalization: it spreads from housing to the spheres of recreation, production and consumption. It also involves a social, physical and economic change that manifests itself differently among different contexts. In every context, these changes need to be explained: where does it take place, where does it not take place, why in those areas, who is involved, and when does it happen, when does it not happen (Hamnett, 1991)?

The city of Beirut has experienced its own variant of this process: many leisure activities have become high-income directed and more exclusive: shopping malls, restaurants and hypermarkets. Areas outside the city center are becoming more expensive, especially the pericentral areas. A study[1] published by MAJAL[2] proposes to use the following definition, adapted to research in Beirut but still representing the core ideas behind the concept:

"Gentrification is a process during which high-income dwellers move into low-income neighborhoods, economically and physically displacing the original residents and economic activities. In Beirut, real estate developers move in first, acquiring and demolishing low-rise, low-income properties and replacing them with luxury residential skyscrapers, thus economically and physically displacing low and middle-income residents. Moreover, an increase in prices surrounding new developments lead to physical and exclusionary

[1] Urban Observation: Zokak el Blat, Beirut – Lebanon, MAJAL, IUA, ALBA, October 2012.

[2] Academic Urban Observatory - Institute of Urban Planning at the Académie Libanaise des Beaux-Arts – University of Balamand.

displacement as well. Government agents support these developments by not acting or by enacting legislation in favor of high-rise development".

In this context, our study focuses on 2 major sectors, characterized by a concentration of heritage buildings and subject to gentrification: the sector of **Mar Mikhael**, in continuity with Gemmayze and extending along Armenia street, and the areas around Furn el Hayek and Nasra in Achrafieh, particularly along the streets **Abdel Wahab Al Inglisi, Monot and Petro Trad**. In both study areas, space is changing continuously. The district's traditional architecture appeals to small entrepreneurs and artists who establish their business in these streets, mostly restaurants, bars and cafés but also designer's shops, art galleries and small boutiques. The shift in the character of the area, from strictly residential to hosting leisure activities, attracts real estate developers, encouraged by the proximity to Beirut Central District and by an urban regulation that favours them, who start to buy the neighborhood's old houses in order to replace them with high-rise buildings. This phenomenon is mostly seen on Armenia street and Abdel Wahab Al Inglizi street. An iconic example of this transformation is the construction of "Sama Beirut", a 195m-high, 52-floors tower on Petro Trad street, in a neighborhood rich with low-rise buildings and preserved mandate architecture.

In order to build awareness on the importance of heritage and consequently a campaign for the protection of these neighborhoods, we need to understand their urban morphology, the composition and complexity of their fabric and their insertion in the city-scape. To this end, NAHNOO mobilized a group of volunteers to map the neighborhoods in a participative approach, of built lots around the following streets:

- Armenia Street (Mar Mikhael)
- Petro Trad
- Abdel Wahab Al Inglizi
- Monot

This report summarizes the method adopted and the findings of the mapping project in order to better understand the neighborhoods and the transformations they are witnessing, and in turn, come up with recommendations that would serve for the conservation of their built and cultural heritage.

Method

The two areas – Mar Mikhael and Achrafieh – were mapped by a team of volunteers following a close-ended survey (multiple choice, yes/no, etc.) to gather morphological information on the buildings constituting the urban fabric. Limited by the number and availability of the volunteers, the survey tackled the blocks bordering the chosen streets without considering the official administrative limits of the concerned sectors (Furn el Hayek and Nasra in Achrafieh; Rmeil, Medawar and Saifi in Mar Mikhael). Even though mapping street perspectives rather than districts has its limitations, it offers a comprehensible understanding of the character of the area. The streets to be mapped were chosen based on a significant presence of heritage buildings, threatened in both areas by new high-rise constructions and

by a road project: The Fouad Boutros highway in Mar Mikhael and the Petro Trad junction in Achrafieh.

The survey (Annex 1) gathered general information about the buildings (age, function, area, pictures…), their status (occupied, abandoned…), condition (renovated / damaged) as well as architectural indicators of their typology and classification (material, ornamentation, urban typology…). Another questionnaire was also designed to survey characteristic open spaces in the neighborhood such as stairs and gardens (Annex 2).

However, the survey had considerable limitations, especially being conducted by volunteers rather than professional surveyors. Most flaws were revealed in the data entry and map production phase, given that each volunteer had his/her own terminology. Also, time and volunteers' availability represented another main limitation resulting in not producing all the maps and statistical graphs that were planned. Some buildings were not surveyed, the socio economical aspects were not tackled and the survey related to urban open spaces wasn't conducted. Volunteers were able to map 255 buildings in Achrafieh and 427 in Mar Mikhael.

Figure 15: General map showing the 2 study areas.

I. Achrafieh

Historical overview

Starting 1896, the two hills of Mar Mitr and Nazareth surrounding the old city center started to be colonized by the rich bourgeoisie who fled the dense neighborhood inside the medieval walls to build large houses surrounded by orchards and gardens. Achrafieh landscape began to take shape and the typology of the "central hall house" with the famous triple arcades and a red brick-tiled roof was born, cutting with the ottoman residential architecture characterized by flat roofs and an internal central courtyard around which the rooms were distributed, like the examples of traditional houses found in Aleppo and Damascus. The new residential architecture was meant to reflect a modern westernized lifestyle of the society, driven by the arrival of new building materials such as glass, brick tiles and wrought iron. Interiors were richly decorated with Carrara marble, mural paintings and European style furniture. The construction outside the city walls on the nearby hills was facilitated by 2 factors:

- The administrative and governmental reforms launched by the Ottoman authorities in 1839 allowed the expansion outside the city walls, until then forbidden, with the objective of modernizing the city, embellishing it and making it more hygienic.
- The impulse of the Christian missionaries, specifically the Jesuits, who established their institutions outside the walls (Fischfisch, 2011; Davie, 2001).

The construction of the Jesuits' seminary-college in 1870, which became 5 years later the Saint Joseph University campus, and the foundation of the Faculty of law in 1913, accelerated the development of residential neighborhoods around it in the sectors of Furn el Hayek and Nasra.

The new neighborhoods were characterized by a harmonious urban silhouette, generated by the Ottoman urban regulation[3] (1896) and that was perpetuated and reinforced during the French mandate. Street alignment was mandatory as setbacks were not allowed, clearly defining street perspectives. The street was defined as the space stretching between the limits of 2 buildings. This alignment can still be seen today along Abdel Wahab Al Inglizi street, and on Petro Trad street, even though the latter was developed at a much later stage, between the 1950s and the 1970s. Besides alignments, the first building code enunciated measures regulating the façade facing the street in relation to width, height, corbels and cantilevers. Through these regulations, the municipality's aim was to control urban and architectural forms mainly in the pericentral neighborhoods and in the city center by defining strict alignments and building heights (a maximum of 4 floors on principal and secondary roads, and 3 floors on tertiary roads). Only the construction material and finishes weren't clearly specified because, at that time, the choices were limited to either stone or wood (Fischfisch, 2011).

With the French Mandate, even though expropriation rules and the strict alignment regulations were sufficient to ensure a proper functioning of the real estate market, the

[3] Qanoun al Abniah Wa Qarar al Istimlak (*Building law and expropriation order*) compiled in 1896 by Abdelnour Amin, an engineer at the municipality of Beirut. For an exhaustive summary of these regulations, refer to (Fischfisch, 2011).

French authorities established a new land tenure that has been effective since 1920. The Cadastre was born, and parcels were clearly defined, annihilating any conflictual situation between neighbors; allotments and land transaction were made easier and the city witnessed a division of the big lots into smaller parcels, either by inheritance or by selling. This process transformed once again the landscape of the neighborhoods and the typology of smaller constructions started to shape the streets' perspectives. In parallel, the introduction of reinforced concrete in 1924 and its generalization as a local and affordable product in 1930 allowed a vertical extension of the buildings and the decline of brick-tiled roofs.

In 1931, the Danger Plan, based on the geographical, demographic and climatic components of the site, proposed to direct the development of the city based on the model of garden cities, planning 3 major axes of circulation linking Beirut to Tripoli, Damascus and Saida (Davie, 2001). Danger was very attentive to the quality of the urban site with its 2 hills, hoping to spare belvederes and viewing points in different parts of the city. In this respect, Achrafieh was planned to become a garden city (Fischfisch, 2011). However, the Danger plan was never approved and, therefore, never put into effect.

On the other hand, it is another Master Plan that allowed a radical transformation in Beirut's urban fabric, and more specifically, on the patrimonial built environment of Achrafieh: the Master Plan of Michel Ecochard, that planned the Petro Trad road junction.

The Petro Trad road plan

The Petro Trad road plan was created by Ecochard in the 1950s. It is a penetrating street expected to link the Georges Haddad street located on the eastern border of Beirut Central District to Damascus street. It extends from the Adlieh intersection Pierre Gemayel – Elias El Hraoui, joining Habib Bacha El Saad street, cutting through Nasra behind Sodeco square joining Petro Trad, cutting through a cluster of houses to create an intersection with Dahdah street, crosses again through a cluster to intersect with Huvelin street, and continues from there all the way to Georges Haddad street (Aridi, 2013). The plan was partially implemented and only the middle part cutting through patrimonial districts around USJ campuses haven't been executed yet (*Figure 2*). This plan would have catastrophic consequences on Achrafieh if it was reactivated, because it will cut the district in two, disconnecting Yassouhiyeh from Furn El Hayek and leading to the demolition of at least 12 heritage houses, as listed in the Khatib & Alami plan (1998), the APSAD survey (1997) and the maps produced within NAHNOO's project. Furthermore, the road plan cuts through the multiple cemeteries around Sodeco, meaning that its implementation would deprive the city of a major green space. Even though it hasn't been entirely implemented, the Petro Trad road plan has a negative impact on the urban fabric of our focus area and it can be clearly seen today. In fact, the presence of the projected road allowed the construction of high-rise buildings disfiguring the harmonious alignments and silhouettes around Abdel Wahab, Monot and Sodeco. The construction of Sama Beirut and other towers in the area is a perfect example, as they were granted permits based on the existence of the road plan, wider than the existing streets, and hence allowing higher buildings based on the gabarit regulation, without conforming to the current setbacks. In other words, these towers were made possible using the gabarit of a road that is not there and that will replace someday the traditional houses in the middle. This is how Sama Beirut tower was built in the place of several demolished heritage houses, rupturing the alignment on Petro Trad street and oppressing the perspective of "Rue du Liban" behind the iconic Albergo hotel (*Figure 3*). An interview with former Beirut Mayor Bilal Hamad in 2012, who was in favor of the implementation of the road plan, revealed that the municipality's argument was that the plan would release the area from the weight of traffic and their alibi was that the houses stand in the way while the towers are already there (Aridi, 2013). On the other hand, the existence of this road plan project contributed, ironically, to the conservation

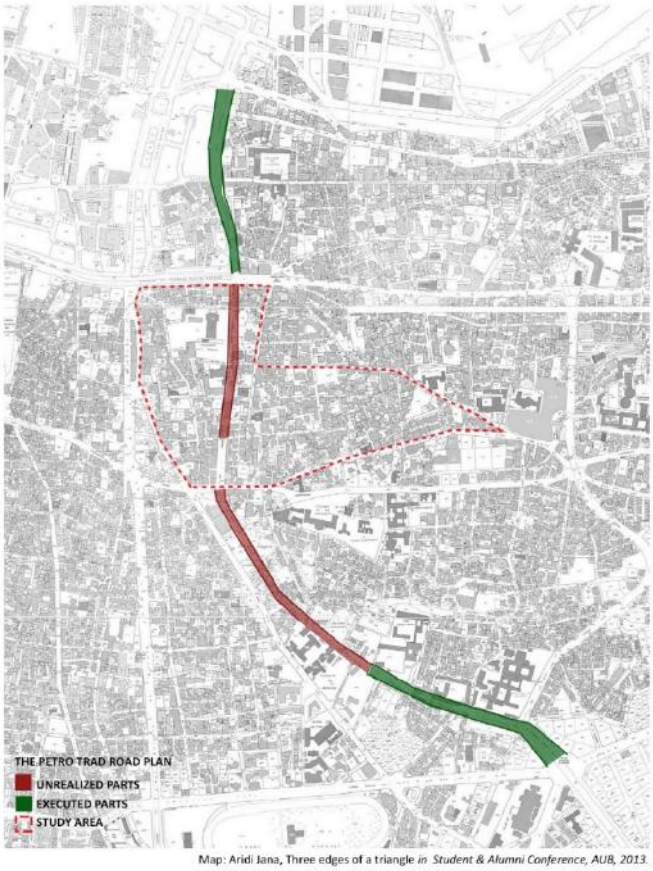


Figure 16: The Petro Trad road plan (Source: Aridi Jana, AUB, 2013).

of the houses that it crosses through, because any construction permit has been blocked on these lots since they would impede the implementation of the road (Tarraf, 2014).

Figure 3: Albergo Hotel on Abdel Wahab Al Inglizi street with Sama Beirut tower in the background

Figure 4:The Petro Trad road plan allowed the construction of high-rise buildings in a traditional neighborhood

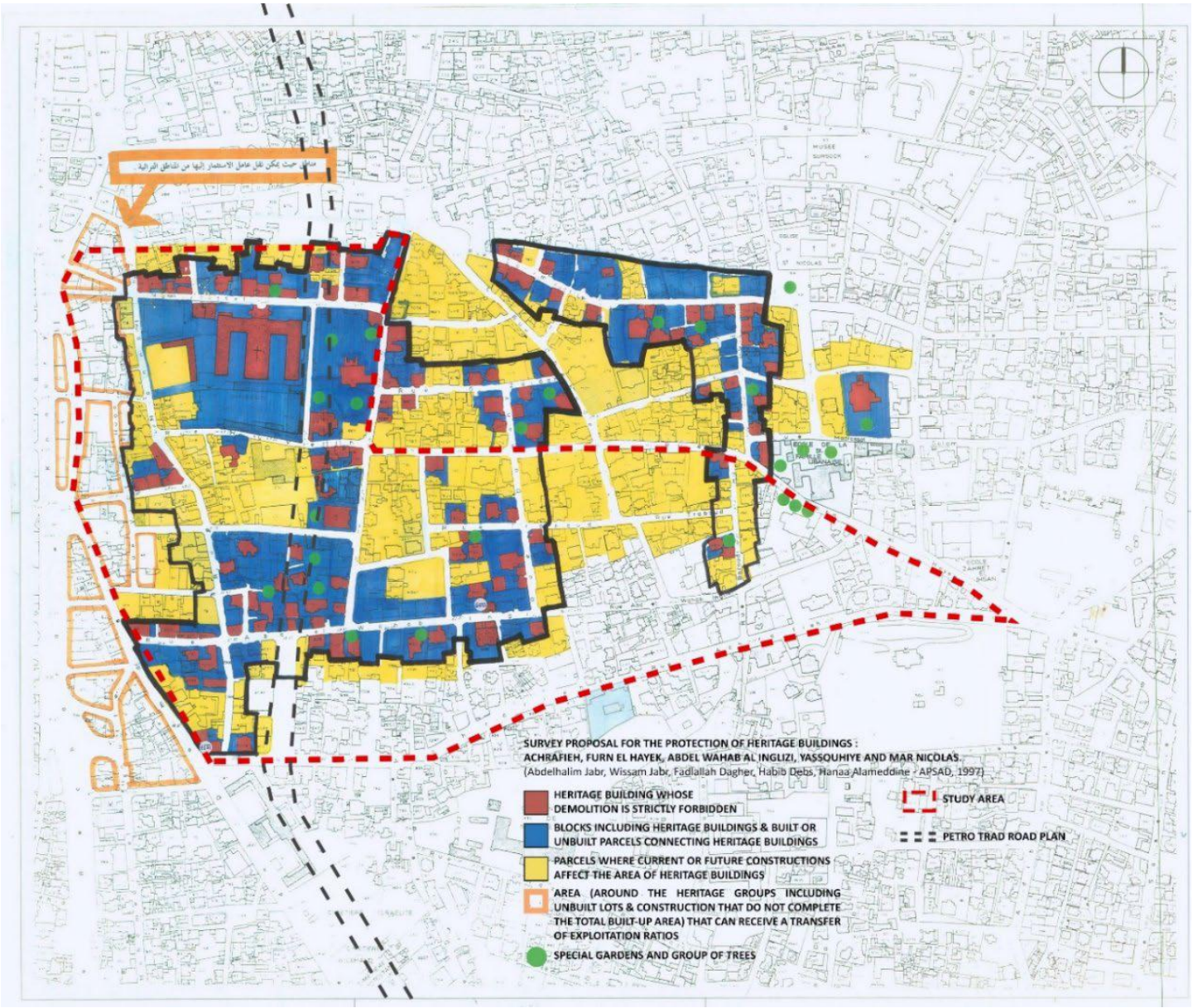


Figure 5: Survey and proposal for the protection of heritage buildings and sites – APSAD, 1997

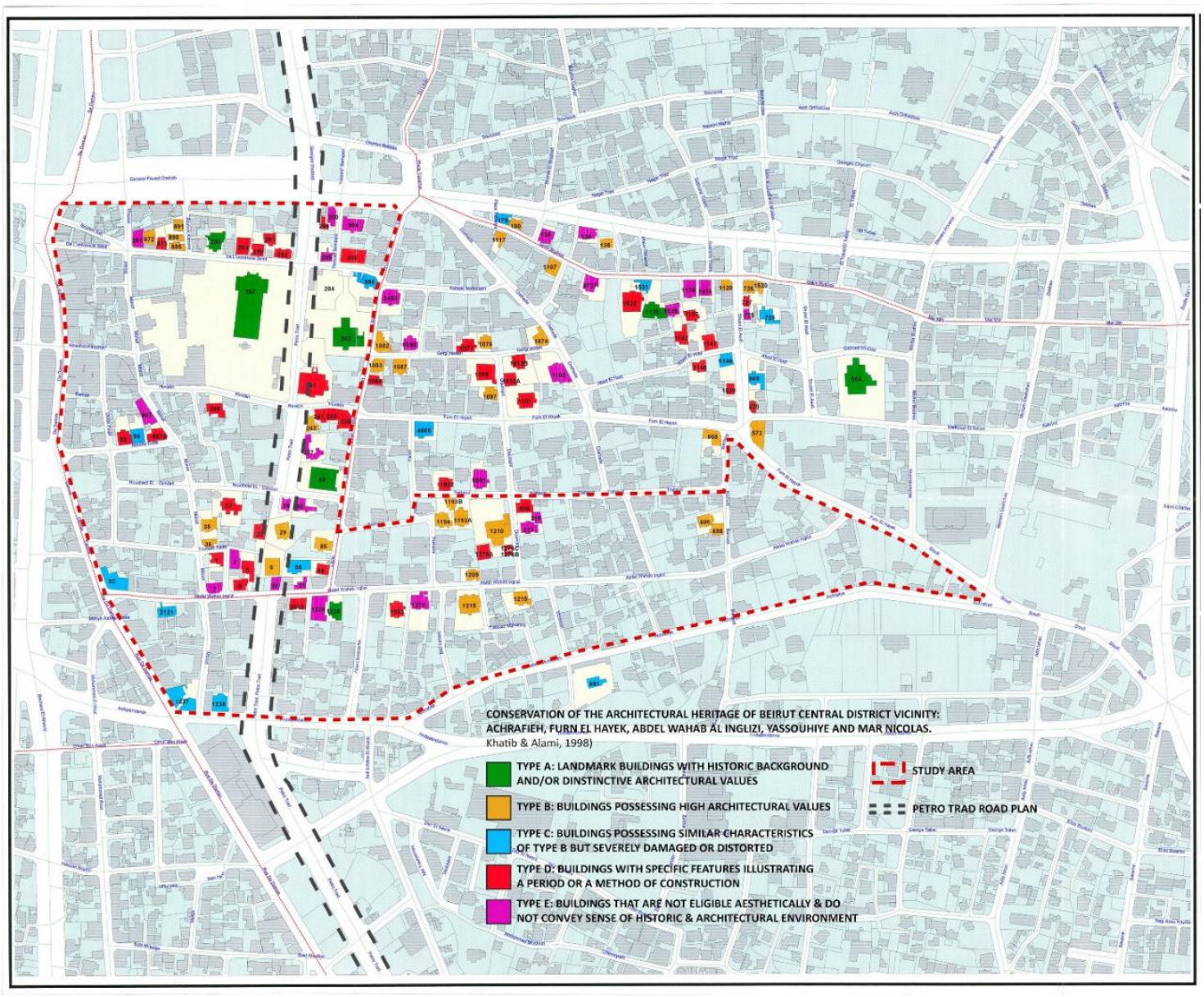


Figure 6: Survey of the architectural heritage – Khatib & Alami, 1998

Listings of heritage buildings: APSAD and Khatib & Alami survey plans.

In 1995, the Minister of Culture commissioned the APSAD[4] of surveying the buildings constructed before 1945 in the pericentral areas of Beirut, from Mina el Hosn until Medawar, including also parts of Achrafieh and Rmeil. Based on the submitted survey mapping 1016 buildings, the Minister of Culture promulgates order no. 1879 dated 7 March 1996 forbidding the demolition of the listed buildings (Figure 5). A year later, a new commission of architects and urban planners is formed by the prime minister and recommends in their report the conservation of historical groups forming a street or a neighborhood. As a result, of the 1016

[4] Association pour la protection des sites et anciennes demeures, a nongovernmental organization founded in 1960 with the objective of protecting Lebanese architectural heritage.

buildings listed by the APSAD team, 531 buildings were unlisted because they were isolated entities, meaning they could be demolished. Under real estate pressure and following the government's request, Khatib and Alami established a new inventory of heritage buildings in Beirut, classified into 5 types, based on their condition (good, repairable or damaged), their architectural value, the year of their construction and their typology (figure 6):

- Type A (Green): landmark buildings with historic background and/or distinctive architectural values, contributing to the cultural heritage of Lebanon. It includes in total 34 buildings.
- Type B (Yellow): Buildings possessing high architectural values, illustrating a type, period or method of construction, requiring financial support for upgrading. It includes 127 buildings.
- Type C (Blue): Buildings with similar characteristics of type B but severely damaged or distorted, requiring financial support for upgrading. It includes 48 buildings.
- Type D (Red): Buildings with specific features, illustrating a period and method of construction, requiring financial support for upgrading. It includes 161 buildings.
- Type E (Violet): Buildings that are not eligible aesthetically and do not convey a sense of historic and architectural environment. It includes 89 buildings.

Following the landlords' requests, desiring to unfreeze their lots that were put under study and that were affected by the demolition ban, in 2010, the government decides to forbid the demolition of the buildings listed in categories A, B and C only[5](Lamy & BouAoun, 2018).

The urban morphology shaping 3 streets in Achrafieh: Petro Trad, Monot and Abdel Wahab Al Inglizi

1. Zoning

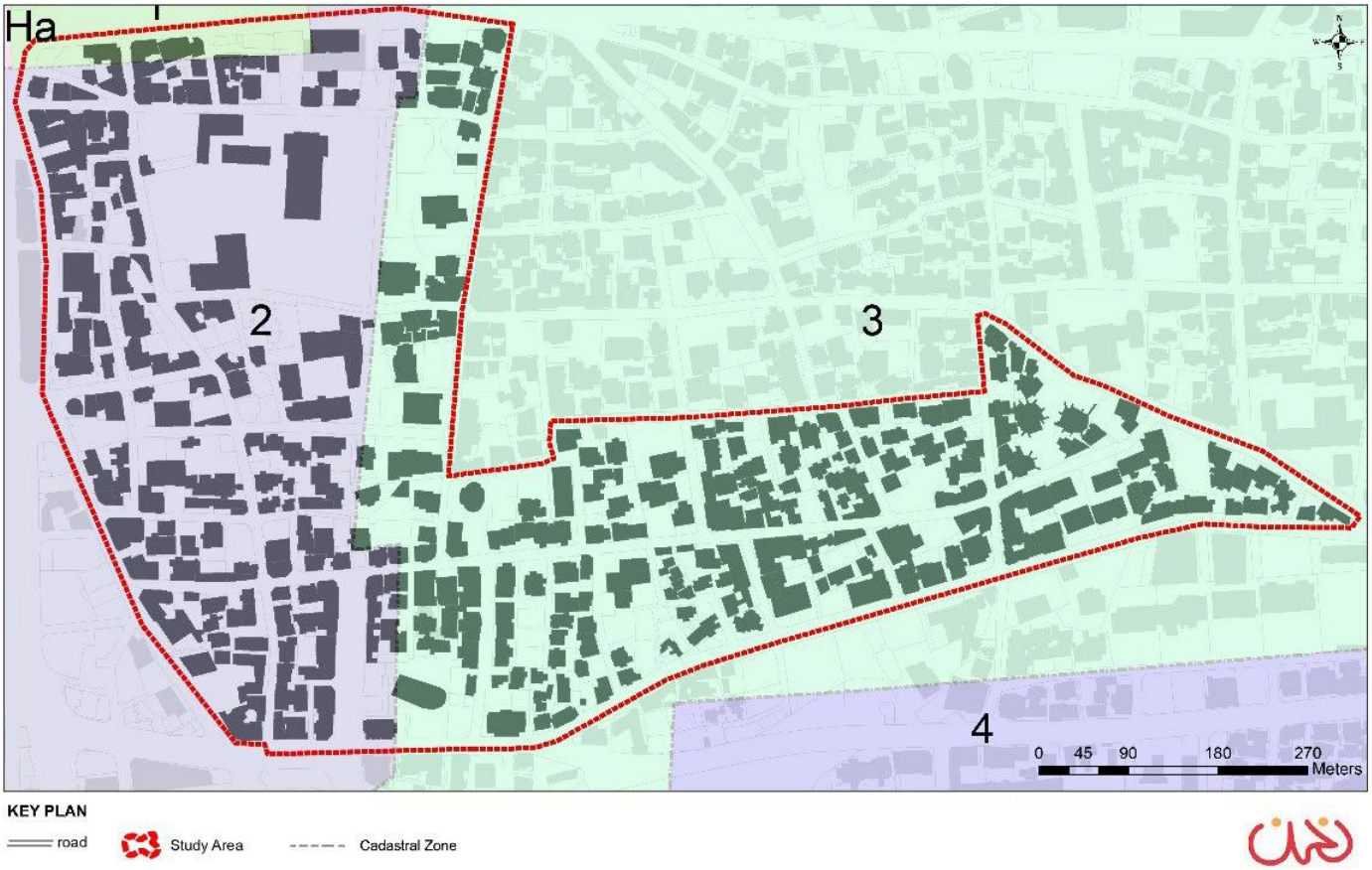
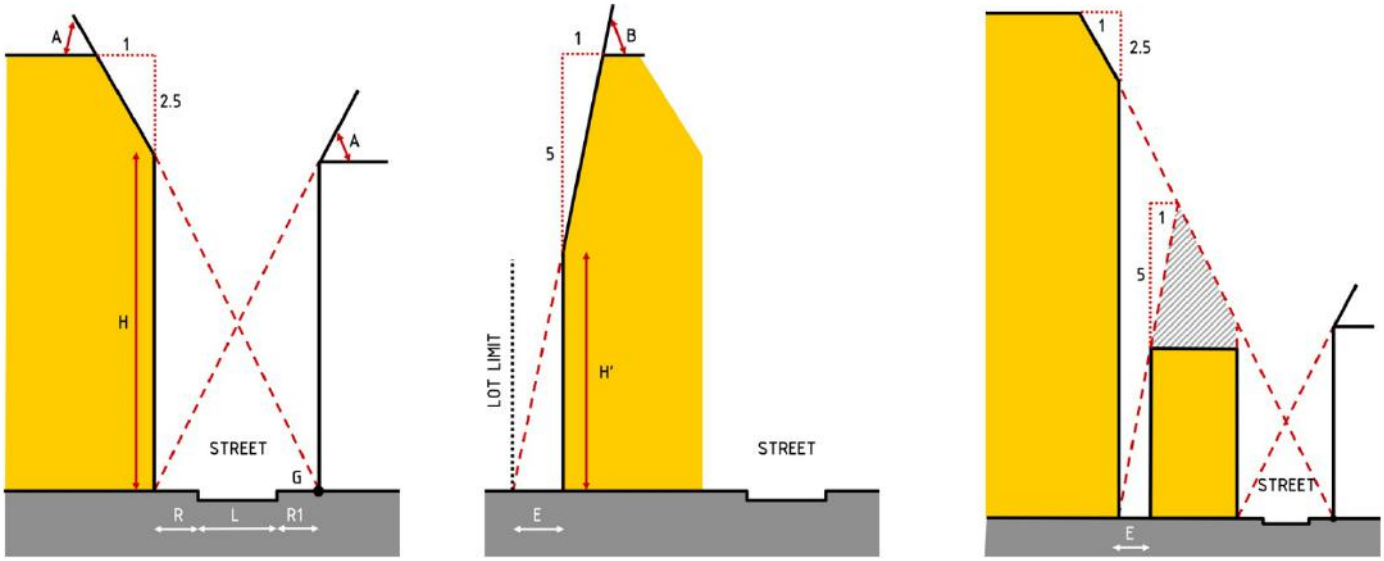


Figure 7: Zoning map

ZONES	PARCEL SUBDIVISION			CONSTRUCTIBLE PARCEL			SETBACKS		FLOOR -TO-AREA RATIO (FAR)	TOTAL EXPLOITATION RATIO (TER)	BUILDING HEIGHT
	min. surface	min. facade	min. depth	min. surface	min. facade	min. depth	Road centerline	Lot limits			
2	250 m^2	10 m	10 m	100 m^2	9 m	7 m	4.5m	–	GF 100% TF 70%	5	–
3	300 m^2	12 m	12 m	120 m^2	10 m	8 m	4.5m 6m (4.5<L<9)	–	60 %	4	–

The focus area corresponds to 2 high-density zones of the Beirut Masterplan, with a floor-to-area ratio ranging between 60%, 70% and 100% for the ground-floor area of zone 2 (*Figure 7*). The zones have a total exploitation ratio of 4 for zone 2 (Monot and Yassouhiye) and 5 for Zone 3 (Furn el Hayek and Abdel Wahab), and an unspecified maximum building height which means constructions can follow the "gabarit" law (*Figure 8*) that defines the size of the building and extend vertically until they fill up the entire allowed built-up area. Hence, it is the current zoning regulation that allowed the emergence of towers and higher buildings disrupting an old urban fabric characterized by the presence of heritage blocks and buildings.



STREET ENVELOPE

- L: street width
- R, R1: setbacks
- G: gabarit of the street
- H: = height of the vertical façade facing the street

  2.5 x (L+R+R1) with a min. of 15m.
- The bottom alignment is to be taken at sidewalk's level or at street level if there is no sidewalk
- TG.A = 2.5/1 . A = 68 deg.

COURTYARD ENVELOPE

- E: required distance between 2 buildings. Min = 4.5m.
- H': height of the vertical façade facing the courtyard= 5 x E
- The bottom alignment is to be taken at the lowest point of intersection between the building's façade and the courtyard
- Tg. B = 5/1 . b = 79 deg.

REAR BUILDINGS

- 2 buildings on the same lot
- E: width of the courtyard. Min 4.5m
- A second building built behind
- Any building built behind the foremost building can benefit from the limits set by the street's gabarit, if the frontmost building respects both the street and courtyard gabarit.

Figure 8: The law of the Gabarit (2005) defines the envelope in which the buildings should be inscribed.

2. Road network and lot subdivision

The area is organized around 3 main streets:

1. Abdel Wahab Al Inglizi, a long stretch linking Furn el Hayek area to Damascus street
2. Monot, a penetrating street connecting the area to Fouad Chehab avenue
3. Petro Trad, a short wide street linking Abdel Wahab Al Inglizi to Independence street and Sodeco.

The road network follows a loop system defining big blocks around Abdel Wahab Al Inglizi and on the right side of Monot street, towards Yassouhieh. The blocks in this area include medium to large size parcels, with a street alignment of lots having approximately similar surfaces. A system of dead-end streets connected to the main streets gives access to smaller lots located at the heart of the block. On the other hand, the blocks located between Monot street and Damascus street are smaller, with a diversity of sizes and shapes. Towards the end of Monot street, multiple small parcels are clustered around narrow pedestrian dead-end streets

On both sides of Petro Trad street, lots are very narrow in depth and present a long street façade, whereas the heart of the block includes a different proportion of parcel, nearly squarish and accessible through dead-end streets. Field visits reveal that 2 dead-end streets penetrating the block at the intersection of Petro Trad street and Independence street were canceled (*Figure 9*). We can therefore deduce that the construction of Sama Beirut Tower at that corner was possible after a lot consolidation operation that combined several small lots as well as a portion of the public domain that served them.

Figure 9: Road network map

3. Built environment

The diversity of the lot configurations and sizes generates varied typologies of buildings: On both sides of Abdel Wahab Al Inglizi, the buildings, constructed on parcels having approximately similar areas, have almost the same size and typology, all aligned along the street (*figure 10*), whereas around Monot street, constructions are rather clustered, different in size and following different setbacks. Petro Trad street is on the other hand characterized by the strict alignment of buildings having the same sizes and proportions. The street's alignment is however interrupted at the intersection with Independent street by the presence of an oversized tower in comparison to the surrounding buildings' sizes, implemented in large setbacks from the roads. The Sama Beirut tower was in fact built after the demolition of several small sized buildings and the regrouping of approximately 10 lots. Benefiting from the gabarit regulations, the wide setbacks allowed the building to rise at a height of 195m corresponding to 52 floors, breaking with the medium-rise silhouette of Petro Trad street and with the entire urban fabric of the focus area (*Figure 11*). Sama Beirut is not the only tower that has been constructed in the neighborhood. In the past 10 years, several high-rise buildings emerged disrupting the harmonious skyline of the area, all benefitting from the absence of a regulated maximum building height and applying the laws of the gabarit after regrouping several lots in order to recreate a large parcel which means a bigger built-up area. For example, L'Armonial, a 19-floors tower (72m) was built on a group of 3 parcels (1268 – 1266 – 1571) after keeping the classical façade of the existing foremost building and connecting it to the new development (*Figure 12 & 13*); Zero Tower (13 floors) was also built after merging 4 plots (648 – 649 – 650 – 720).

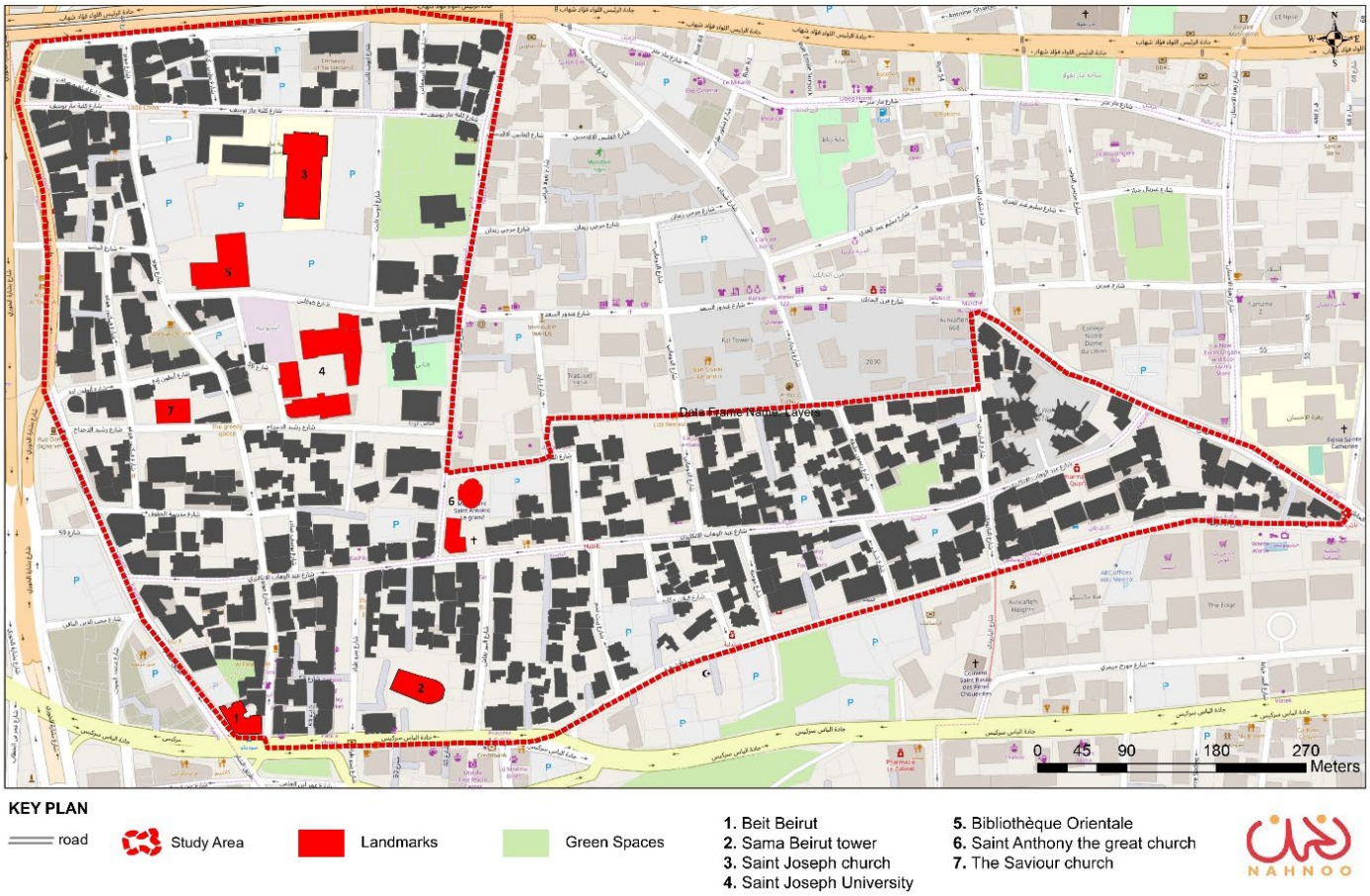


Figure 10: Figure ground and landmarks map

The urban fabric is denser around Abdel Wahab Al Inglizi, with a dominant typology of apartment buildings, whereas the density is lower around Monot with the presence of individual houses, isolated or clustered, even though Monot neighborhood corresponds to zone 2 where exploitation ratios are higher than zone 3 (*Figure 7*). The difference of the density is due to the concentration of large parcels belonging to the Jesuits congregation (*Waqf properties*) in Monot area, where Saint Joseph church, USJ campus and the library (*Bibliothèque Orientale*) are built. The urban fabric in Monot is hence much more aerated, with empty spaces used as parkings or large gardens surrounding individual houses.

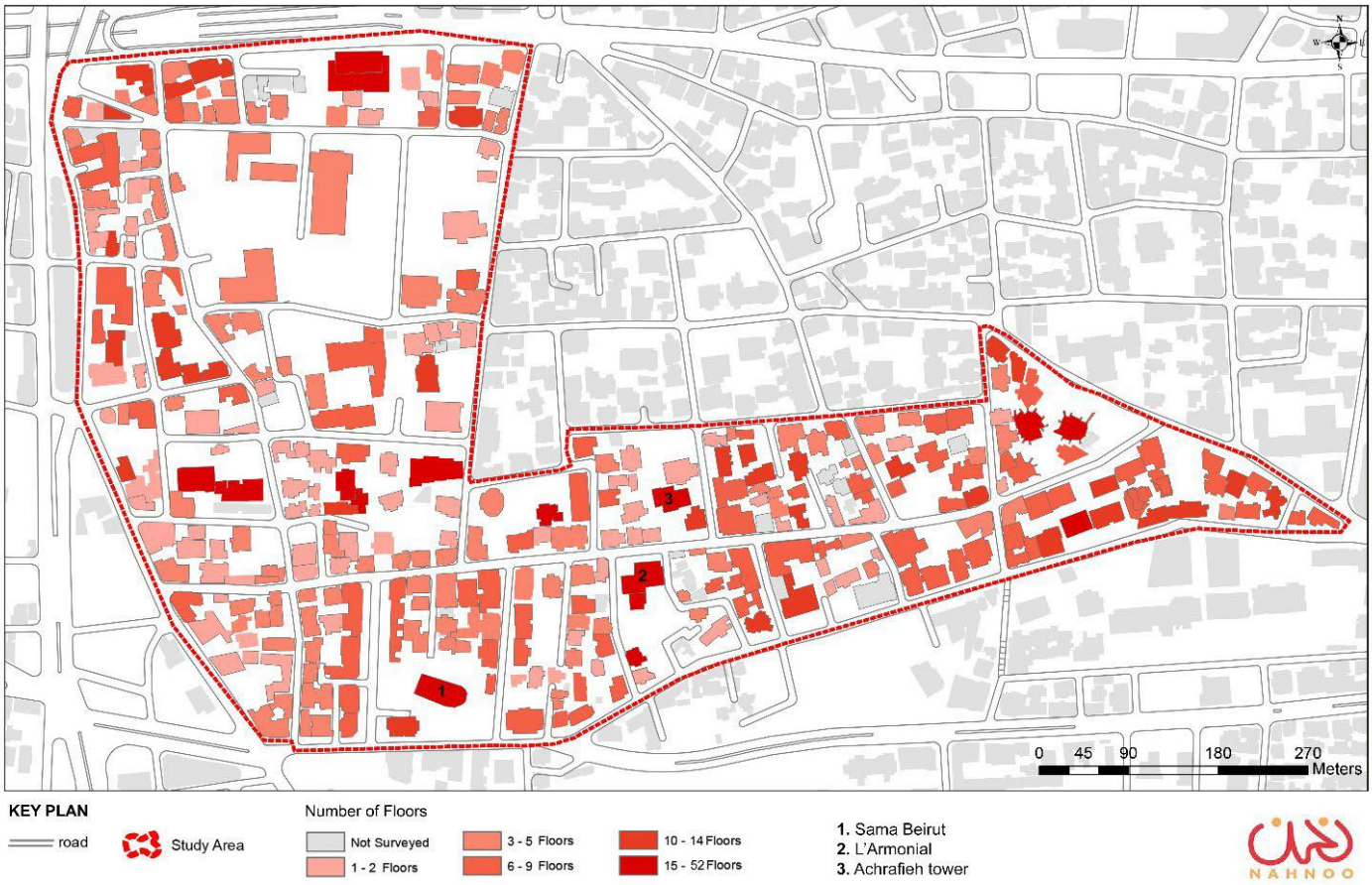


Figure 171: Building heights map

Figure 12: 3D render of L'Armonial building (Source: Atelier des Architectes Associés)

Figure 13: The silhouette of Abdel Wahab Al Inglizi street before and after the construction of l'Armonial. (Source: Atelier des Architectes Associés).

The focus area is relatively a low-rise urban fabric with mostly two-floors buildings around Monot and an average of 5-floors building around Abdel Wahab Al Inglizi. Several towers rising above 45m (15 floors) punctuate the urban fabric. They serve as visual points in the city but at the same time they break the existing scale of the blocks and streets, and threaten the heritage buildings, considered unprofitable for their owners who leave them without maintenance to decay slowly in order to justify their demolition.

The changes in buildings' sizes and heights (*figures 14, 15 & 16*) and, in turn, the skyline of the city, are due to many factors:

1. The introduction of concrete in 1927 and its generalization as a local affordable product in 1930 allowed the addition of floors and the vertical extension of the building, that wasn't possible with stone architecture.
2. The subdivision of large lots into smaller ones due to inheritance of real estate development (For a detailed analysis of the lands' operations since 1876, refer to Fischfisch, 2011).
3. The current legal framework (zoning, gabarit and allotments' regulations)

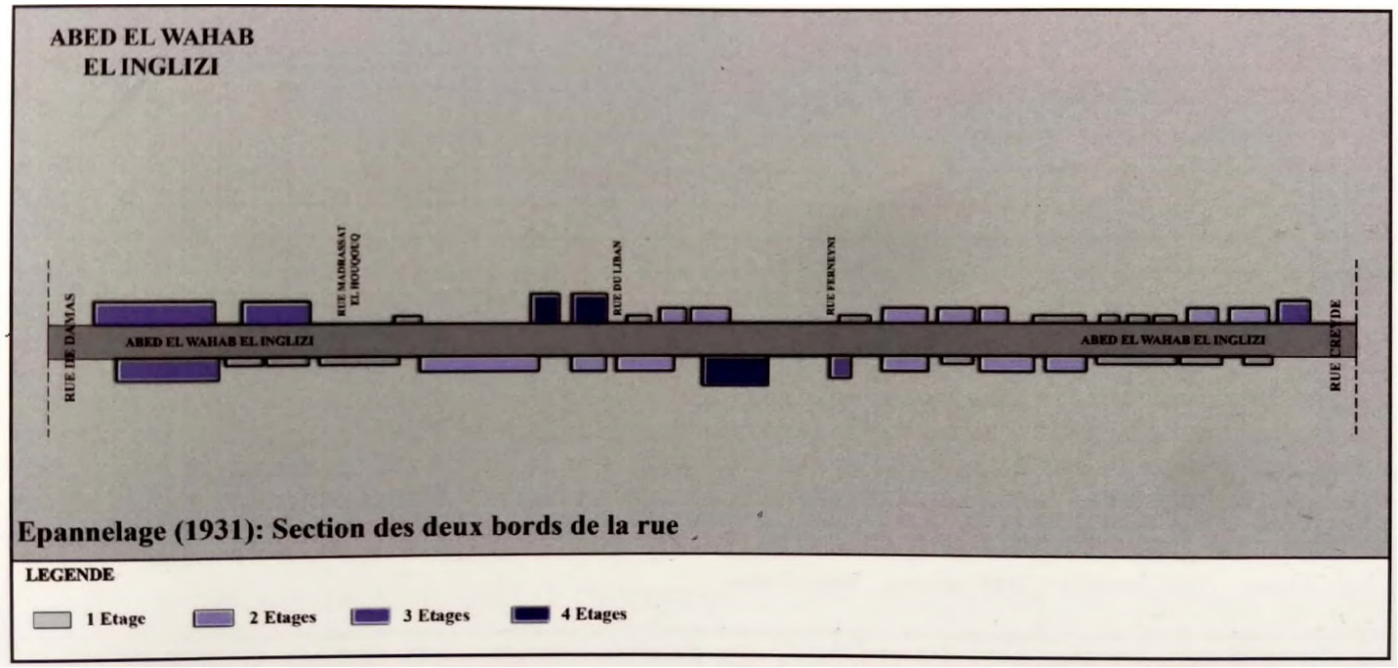


Figure 14: Massing on Abdel Wahab Al Inglizi street in 1931. Source: Fischfisch, 2011.

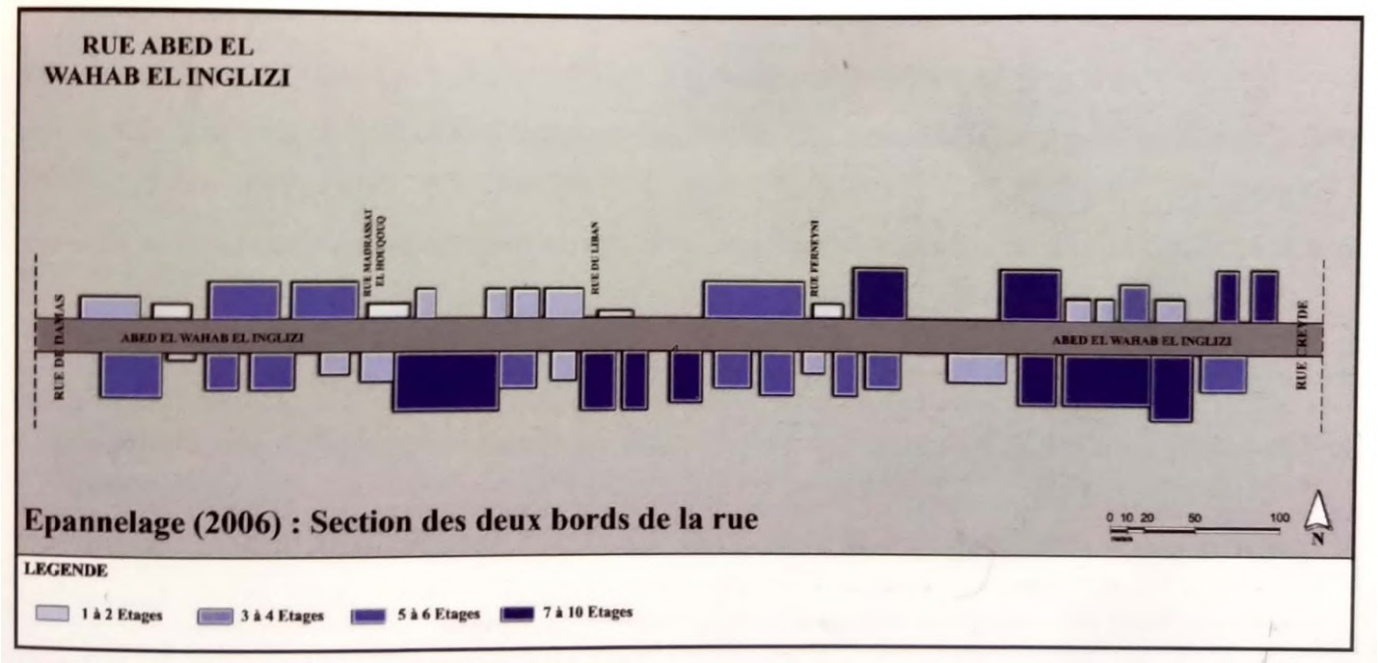


Figure 15: Massing on Abdel Wahab Al Inglizi street in 2006. Source: Fischfisch, 2011.

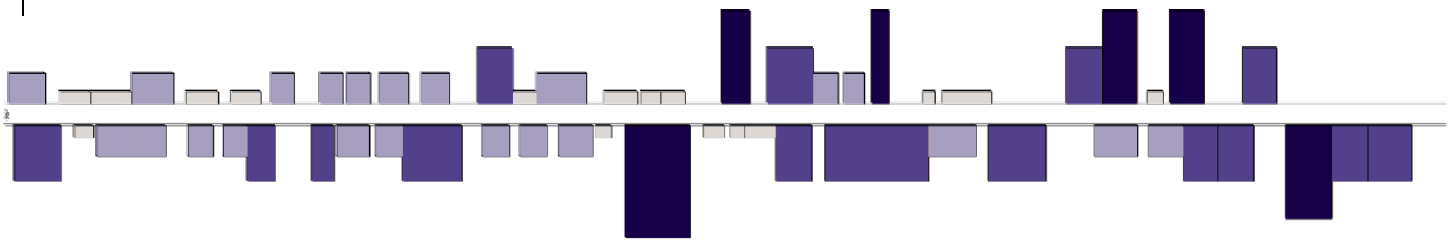


Figure 18: Massing on Abdel Wahab Al Inglizi street in 2019 *1 to 2 floors* *3 to 5 floors* *6 to 9 floors* *10+ floors*

On the other hand, the height of a building is an indicator of its construction date. The table below (*Figure 17*) summarizes the relationship between height and age:

Year range	Before 1892	1892 - 1899	1900 - 1923	1924 - 1926	1927 - 1939	1940 – 1959	1960 - 1979	1980 - 1999	>2000
Nb. of floors	1	2	3	4	4 - 5	4 - 6	7 -8	> 10	Towers

Figure 17: Number of building's floors per year range. Source: Fischfisch, 2011.

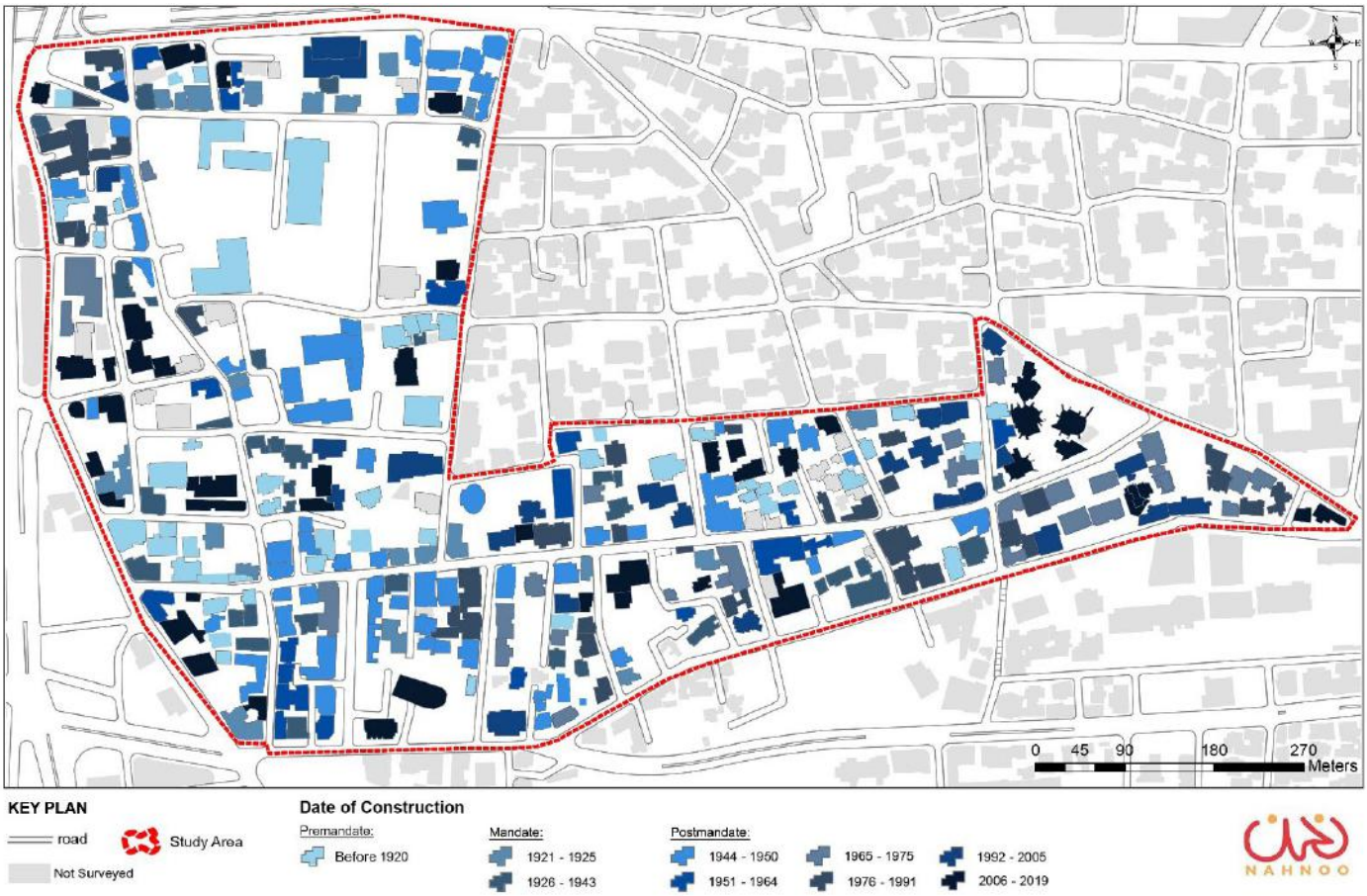


Figure 18: Buildings' construction dates.

The focus area is rich with mandate buildings especially around Monot street (Yassouiyeh) and towards the end of Abdel Wahab Al Inglizi before it connects with Damascus street. Most of the buildings are in good condition, and many have been already renovated and adaptively reused, hosting restaurants, cafes, bars and shops at ground floor level (*Figure 19*), or were subject to a complete change of function such as a transformation into a hotel (*Albergo*) or a guesthouse (*Beit Ra*). The area concentrates also buildings from the 1950s and 1960s, whose alignments and sizes maintain a harmonious continuity with the ones constructed during the mandate period, with proportions respecting the perspective lines of the street. Those buildings are mostly residential with a commercial ground floor (*Figure 20*). Petro Trad street is characterized by an alignment of modern buildings dating back to the 1970s, identified by their identical architectural style, heights and proportions. These buildings give the street its character, and even though they are relatively high compared to mandate buildings (7 to 9 floors), they are not perceived as disrupting entities given the width of the street.

On the other hand, towards the beginning of Abdel Wahab El Inglizi (Furn El Hayek area), the buildings are newer and larger in scale, mostly built from the 1970s till today. That part of the study area concentrates the towers, that benefited from a privileged location at the intersection of 2 streets, a situation that allows them to benefit from an extra height due to the gabarit of 2 roads. It is also worth noting that this part of the focus area was subject to a faster development due to its proximity to ABC mall whose construction accelerated the transformation of the entire surrounding area. Several towers are also scattered on the left side of Monot street, along Damascus street, a major penetrating axis to Beirut Central District. These towers as well as the buildings constructed since 2000 are all mixed-use, characterized by a commercial ground floor, lower floors dedicated to offices and, above, typical apartments' floors.

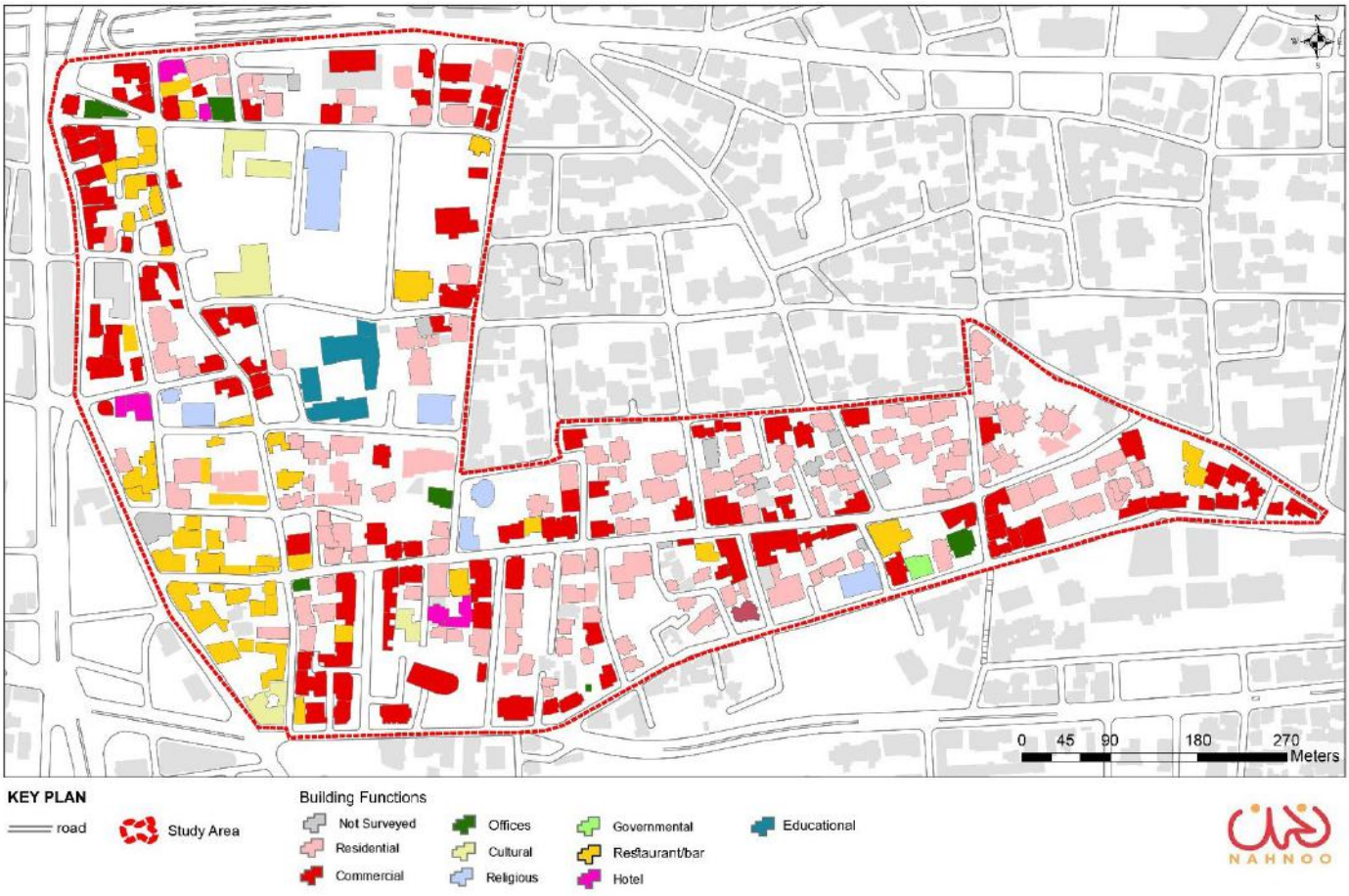


Figure 19: Ground floor use

It is a residential area witnessing a slight transformation especially along Damascus street, where new office buildings are being constructed and old residential buildings with are now hosting offices. This change of function is due to the location of the neighborhood on a major road, Damascus street, and because of its proximity to Beirut Central District. Yessouieh sector that developed around the Saint Joseph University is also a cultural district characterized by the presence of several cultural and educational facilities, all within walking distance: The Saint Joseph University, the USJ Library – *Bibliothèque Orientale*, the museum of prehistoric ages, the municipal public Library Assabil, Monot theater, the National Higher Conservatory of Music, Beit Beirut – a museum for the memory of the city, Saint Joseph church where weekly concerts of the National Philharmonic Orchestra take place…

Furthermore, the presence of heritage buildings in Monot and Abdel Wahab Al Inglizi is a major asset for the economic development of the area which attracted the implementation of leisure and hospitality businesses and became a nightlife destination (restaurants, cafes, pubs, hotels)

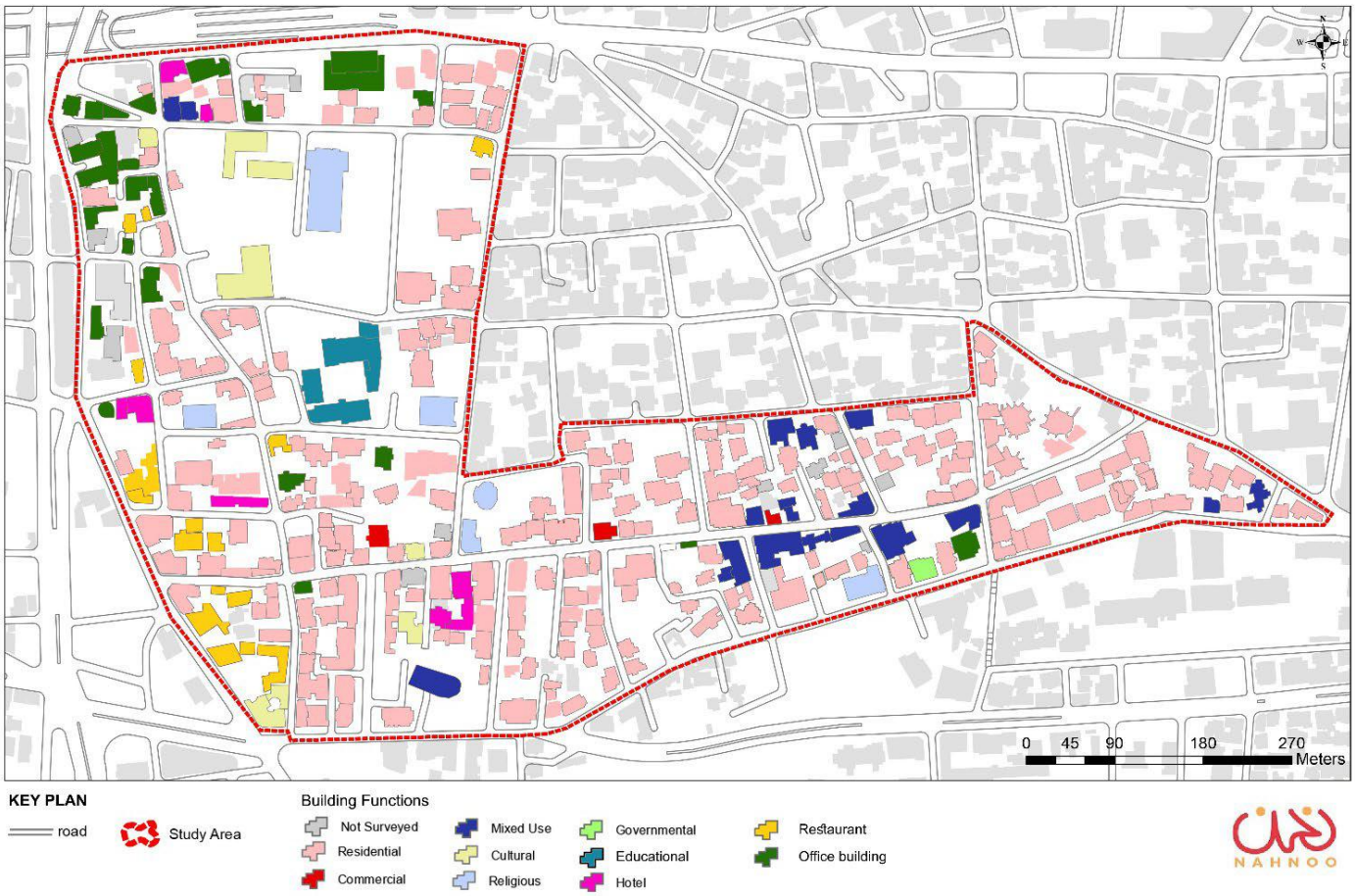


Figure 20: Building function map

4. Buildings' Typologies

The focus area is characterized by the presence of diverse building typologies, reflecting the evolution of residential architecture during the mandate period and the emergence of a new modern language after independence:

i) Classical Mandate buildings before 1920:
   - Traditional houses with the classical typology of a triple arcade
   - Neo-traditional type with the transformation of the ground-floor from residential to commercial

ii) Transitional mandate buildings between 1920 and 1930
   - Buildings with a central bay (triple arcade and its variations)
   - Buildings with a veranda
   - Buildings with bay windows

iii) Modern buildings between 1940s – 1950s

iv) Modern buildings between 1960s – 1980s

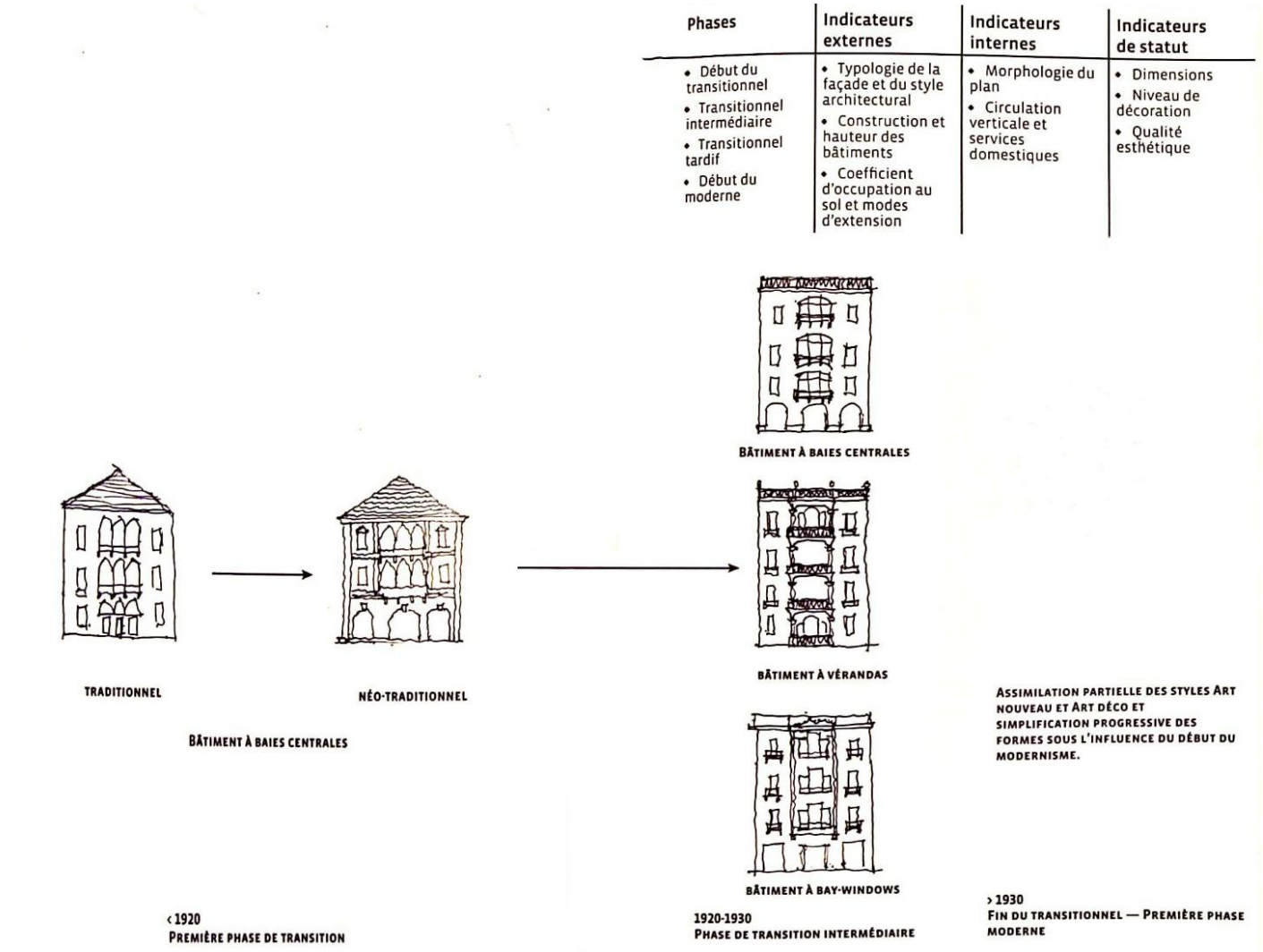


Figure 21: Diagram illustrating the typological evolution of the buildings in Beirut before the implementation of elevators. (Source: Saliba, 2009).

Figure 22 21: Four typical typologies aligned on Saint Joseph street (Yessouiyeh): from left to right, 1950s building (modern), veranda-type building (intermediate transitional), Building with bay-windows (late transitional and building with central bay / double arcade (Intermediate transitional)

Figure 23: A recently renovated mandate building with bay-windows, coexisting with a tower on Monot street.

Figure 224: Two traditional houses with external staircase and triple arcades on Monot street.
Above: Outsized Sama Beirut tower is seen in the background.
Below: Le Patio tower, benefitting from the non-implemented Petro Trad road plan, is seen in the background.

Figure 23: Two 1940s buildings at the intersection of Abdel Wahab Al Inglizi and Monot

Figure 26: Neo-traditional building with a commercial ground-floor (transitional phase) on Saint Joseph street

Figure 27: Abandoned mandate building with a classical central bay and veranda on Saint Joseph street

Figure 29: 1970s office building on Monot street

Figure 248: 1960s building on Monot street

Figure 30: Sketch illustrating the building typologies on a portion of Abdel Wahab Al Inglizi street
(Source : Atelier des Architectes Associés).

Figure 31: Renovated veranda-type building with bay-windows on Abdel Wahab Al Inglizi (late transitional phase).

Figure 32: Classical veranda-type building on Abdel Wahab Al Inglizi (early transitional phase)

Figure 33: Petro Trad street alignment before the construction of Sama Beirut (2010)

Figure 34: Residential building on Abdel Wahab el Inglisi with veranda and garden

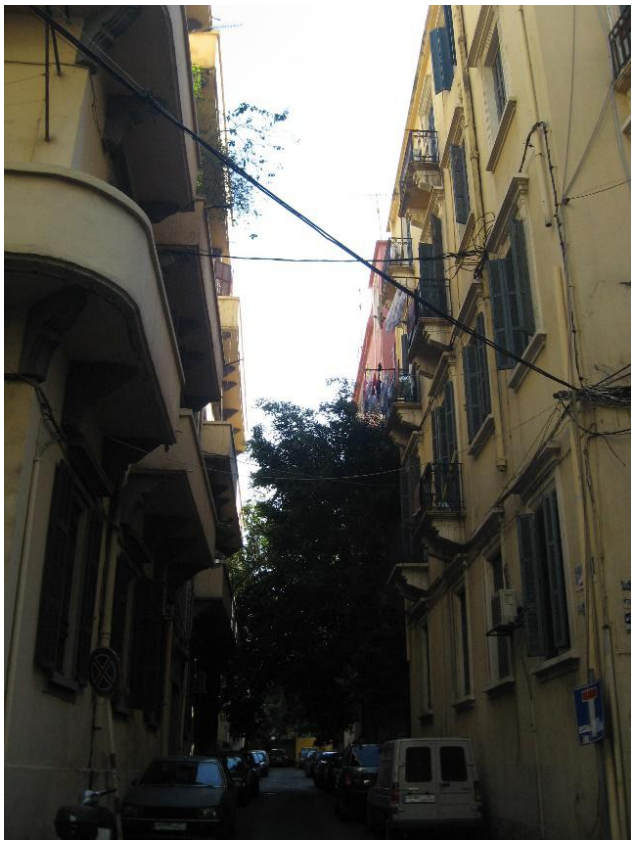


Figure 35: Dead-end alleyway connected to Abdel Wahab el Inglizi.

Conclusion & recommendations

After surveying and analyzing a sample area of traditional neighborhoods in Achrafieh that are known for the abundance of heritage buildings and that has been exposed to gentrification for the past 10 years, we conclude that the major problematics linked to the conservation of heritage buildings and to the protection of the neighborhood's specificities and identity are intrinsically linked to the current zoning regulation, and can be summarized as follows:

Figure 36: interrupted demolition of a heritage building in Monot. Dergham building, plot number: 1231 Ashrafieh

- The current zoning regulations constitute a double threat to Heritage as they favor a rising land pressure on heritage buildings. First, the total allowed exploitation ratios are the highest in the old neighborhoods rich with heritage buildings. Consequently, if the lot is not listed and protected by the heritage law, these buildings risk demolition or disfiguration by a densification in order to reach the maximum development, through the addition of floors or by edifying extensions. Also, in case of listed buildings, owner lacking of necessary funds to maintain them abandon heritage buildings to decay slowly until demolition. The lot would be free again and they can sell it to real estate developers, who will build towers in their place to make the construction profitable.
- The absence of mandatory alignments disrupts the continuity and the morphology of the streets as it generates multiple different site implementations. As a result, the urban fabric becomes scattered breaking the perspective lines of the streets and allowing an increased height of buildings.
- The absence of a fixed maximum height and the authorization to apply the gabarit law enables developers to build as high as they want if they adopt an appropriate setback. The height of the building is calculated based on the width of the street and the building's setbacks. The larger the setback and the street, higher is the tower. This is why the construction of the multiple towers in these traditional neighborhoods was possible. The gabarit regulation is a major cause to the disintegration of the urban forms in Beirut and the absence of harmony in the city's skyline.
- The permission to group several lots is also a major cause of heritage loss. In fact, the law allows real estate development to merge several small lots into one big land. Consequently, with an increased parcel's area, the constructible density allowed on the newly created lot increases, generating high-rise buildings in the place of heritage buildings. Since the current master plan is based on density regulations, it is incapable of producing a coherent landscape when the size of the parcel is uncontrolled, and depends on the real estate market.

- The non-registration of the heritage buildings on the national inventory lists and the lack of funds leads them to abandon, decay and demolition.

Also, in addition to the legal framework, the existence of the Petro Trad road plan is an important threat to this area in particular, because it allows the adoption of the gabarit of a non-existing large road in lots aligned on existing narrow streets, and in turn, permits the construction of towers in this particular context. Furthermore, the road was planned in the 1950s, about 70 years ago, in a completely different urban context. It is hence obsolete and should be canceled, especially that its implementation will lead to the demolition of at least 13 recognized heritage buildings.

Finally, in order to protect the neighborhoods around Abdel Wahab Al Inglizi, Monot and Petro Trad, the zoning regulation and legal framework should be revised following these measures:

1. Cancel the Petro Trad road plan
2. Forbid the regrouping and merging of lots.
3. Enforce mandatory alignments of street elevations.
4. Enforce a fixed maximum building height and exclude the area from the gabarit regulations.
5. Modify the zoning regulation and reduce the density in heritage areas.

List the buildings on the National Inventory of Heritage to protect them

Figure 25: Perspective from Rue du Liban looking towards Abdel Wahab Al Inglizi.
Left: 2019. Heritage building (the iconic Hotel Albergo) squeezed between towers.
Right:2010. Street perspective before the construction of Sama Beirut tower.

II. Mar Mikhael

Preserving a historic neighborhood in rapid mutation

That Beirut needs planning and someone needs to take charge of Beirut's post-war uncontrolled development is evident to every dweller of the city. In response to the challenges raised by unplanned urban renewal, Nahnoo has conducted a mapping of Mar Mikhael, a historic peripheral neighborhood of Beirut, experiencing a rapid urban and social mutation since 2006. The intensity and speed of these changes threatens both its built heritage and its social cohesion and urban identity.

This study takes a "historic urban landscape approach" as preconized by UNESCO in its recommendations on the historic urban landscape in 2011 (UNESCO, 2011). It argues that the neighborhood of Mar Mikhael preserves a unique and historic urban environment, threatened by the brutality of real estate investments and commercial gentrification. It underscores the need to preserve the neighborhood's economic and social diversity, and protects its architectural and urban heritage.

By urban heritage, it is understood:

- monumental heritage of exceptional cultural values (such as EDL, Boustani House, and Jabre Building, attributed to Yousef Aftimos);

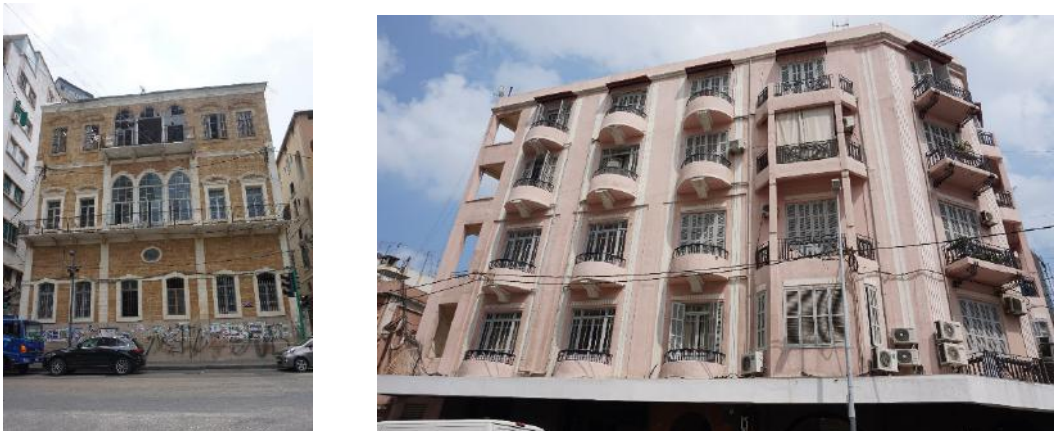


Figure 38: Pictures of different building considered to be rich in terms of heritage

- non-exceptional heritage elements present in a coherent way (such as the ensemble of aligned buildings, dating to the late 19th century and Mandate period that create a continuous street wall along Armenia street;
- Urban elements such as staircases, gardens (Tobaji Garden), and the urban infrastructure, such as the Mar Mikhael Train station, and the Brasserie du Levant (1930s), which was recently destroyed.

Figure 39: Picture showing the gardens near Armenia street

The study area is defined by Armenia Street (former Nahr Street/Tripoli Road). It is the natural continuation of Gemmayzeh's Gouraud street, and the historic road along which the neighborhood of Mar Mikhael developed. It is bounded to the east by the building of the Electricité du Liban, a major landmark (1965-1972), to the north by Charles Helou Highway, and to the south by Salah Labaki and al-Khazinein streets. The neighborhood extends over the cadastral areas of Medawar and Rmeil.

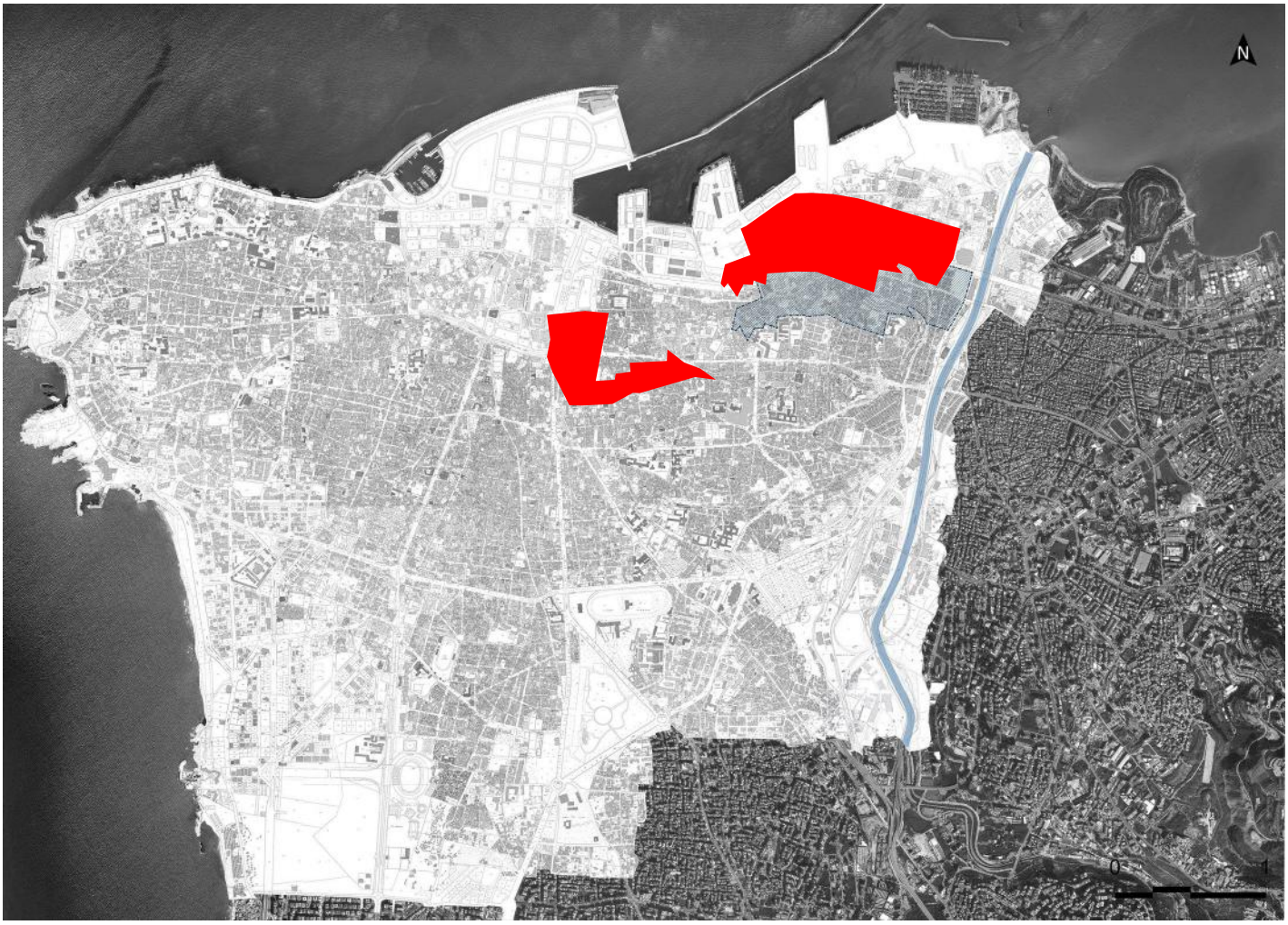


Figure 40: Map depicting the studied are, in red, relative to Beirut

Method:

the mapping of the neighborhood of Mar Mikhael was based on an extensive building evaluation sheet that assessed architectural characteristics (typology, morphology), building condition, building use and occupancy type. Nahnoo volunteers collected the data on a GIS mobile application, which was used to generate the various maps used in this report. The fieldwork was concerned primarily with the built heritage, and no structured interviews were conducted with the various stakeholders (renters, owners, commerce, real-estate developers etc…) who are directly or indirectly involved or impacted by the rapid gentrification of the neighborhood. This report however draws from important research reports and studies of Mar Mikhael that explored the neighborhood's fast gentrification, and assessed the negative impact on its social and urban fabric. Strategies, and solutions to address the problems were

formulated, and should be consulted. (El Samad 2016, Fawaz et al, 2016, and 2018; GAIA, 2015; Krijnen 2010 and 2016, Public Works Studio 2017, Raad, 2015).

Gentrification of a low-income neighborhood

The area of Rmeil and Medawar, extending from the Achrafieh hill toward the Beirut river experienced a late development compared to Beirut's old, bourgeois pericentral neighborhoods, such as Sayfi, Bachoura, and Mar Maroun. The 1879 map shows a non-urbanized area (figure 41), with indications for Mar Mikhael Church—which gave its name to the neighborhood— and the Khodr Mosque. This area remained agricultural until the Mandate Period, with the exception of the area surrounding the Mar Mikhael train station built in 1891.

Figure 41: Old Beirut Map from 1879

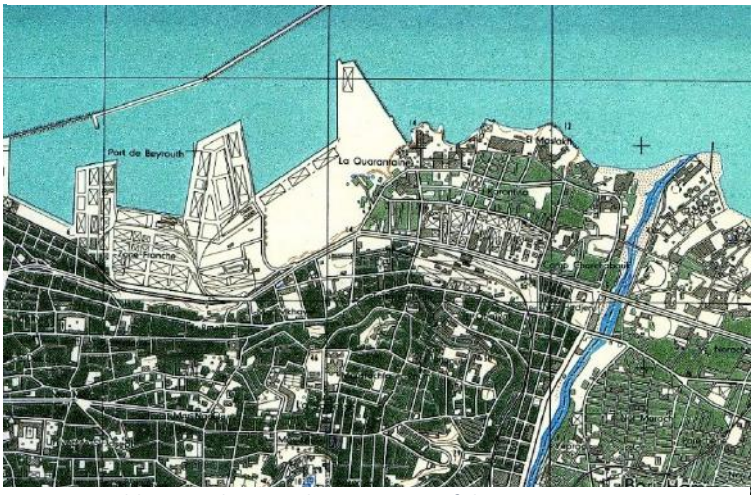


Figure 42: Old Beirut showing the expansion of the city

During the French Mandate, the presence of missionary schools, hospitals and churches attracted settlers to the area. French authorities built an important military caserne that remains to this day. With the arrival of Armenian refugees in 1922, camps were created in the Karantina area, leading them to resettle in Hajim Camp, and the Khalil Badawi Street in Mar Mikhael (figure 43). The creation of the tramway station at the beginning to the Mar Mikhael Street, between 1923 and 1929, the expansion of the port, the building of the Brasserie du Levant (1930s) attracted in-migrants to the neighborhood. The urbanization of the neighborhood increased rapidly, attracting primarily lower income and working-class dwellers, of diverse ethnic and social backgrounds.

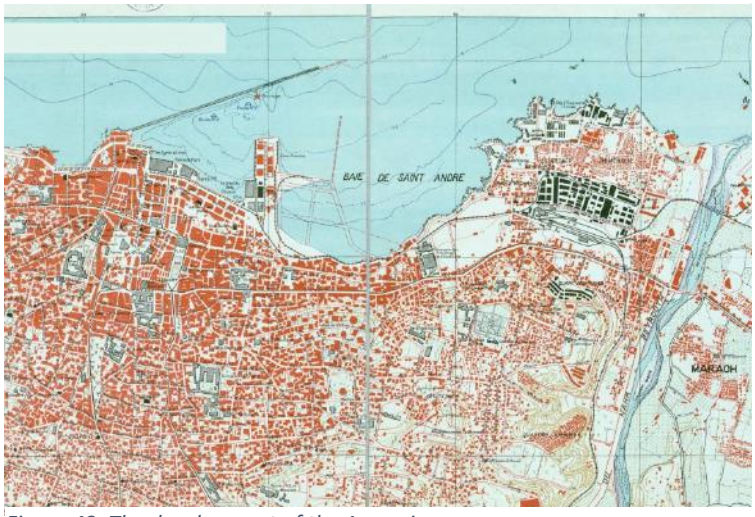


Figure 43: The development of the Armenian camp

Until 2008, Armenia Street was considered an industrial street, where carpenters, craftsmen, car repair shops as well as hardware stores had located since the 1920s. According to the GAIA report, the population of Mar Mikhael today consists mostly of long-time elderly residents. In the early 2000s, the neighborhood started attracting creatives (artists, craftsmen and designers), soon followed by the establishment of restaurants, pubs, due to low rental prices, and the neighborhood's perceived urban identity as "authentic" (GAIA, 2015). By 2012, Mar Mikhael was emerging as Beirut's new party scene and new drinking territory [Bonte, 2016]. In 2014, more than 50 new stores opened by artists and designers in the neighborhood, in addition to more than 70 exhibitions, bars and restaurants. Also, from 2007, the neighborhood started attracting real-estate developers in search of lower land prices, as Achrafieh and Gemmayzeh had become saturated. Since, a significant number of high-end real estate development projects have been constructed (refer to figure 56 at the end), initiating a phase of gentrification that significantly impacted the social and urban character of the neighborhood.

The road network

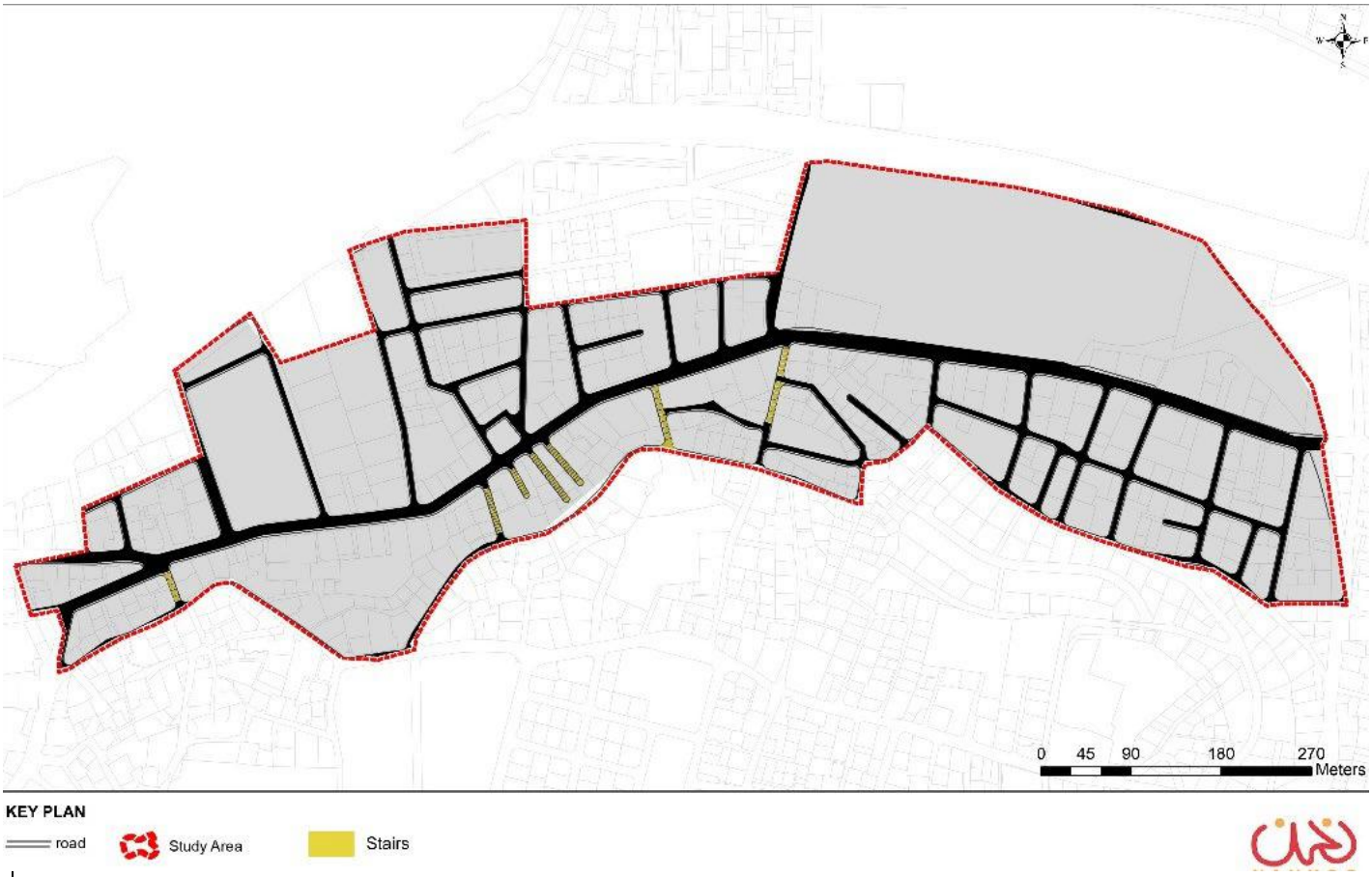


Figure 44: Road network map

Armenia Street runs east-west, and constitutes the main spine of the neighborhood. It curves following the topographical contours, skirting the Achrafieh hill toward Beirut's river and Bourj Hammoud. It generates a system of transversal pathways, constituted of secondary streets, urban stairs, and cul-de-sac. These are very present, in particular in the southwest area, due to the neighborhood's organic development around the land topography. The Charles Helou Highway delineates the neighborhood to the north, and Pierre Gemayel Highway to the east.

The built environment

The neighborhood has a low density, and present a diverse building typology, ranging from isolated houses with gardens dating to the early 20th century, 3-floor rental buildings from the French Mandate period, and buildings dating to the 40s, 50s, and 60s. A study undertaken by May Davie has identified a rich typology of modest residential architecture (Davie, 2004) that is under threat of disappearance. The Mar Mikhael Train Station forms the largest single parcel in the neighborhood. Recent building activity has produced high-rise apartment blocks that rupture the predominantly mid and low-rise buildings of the neighborhood.

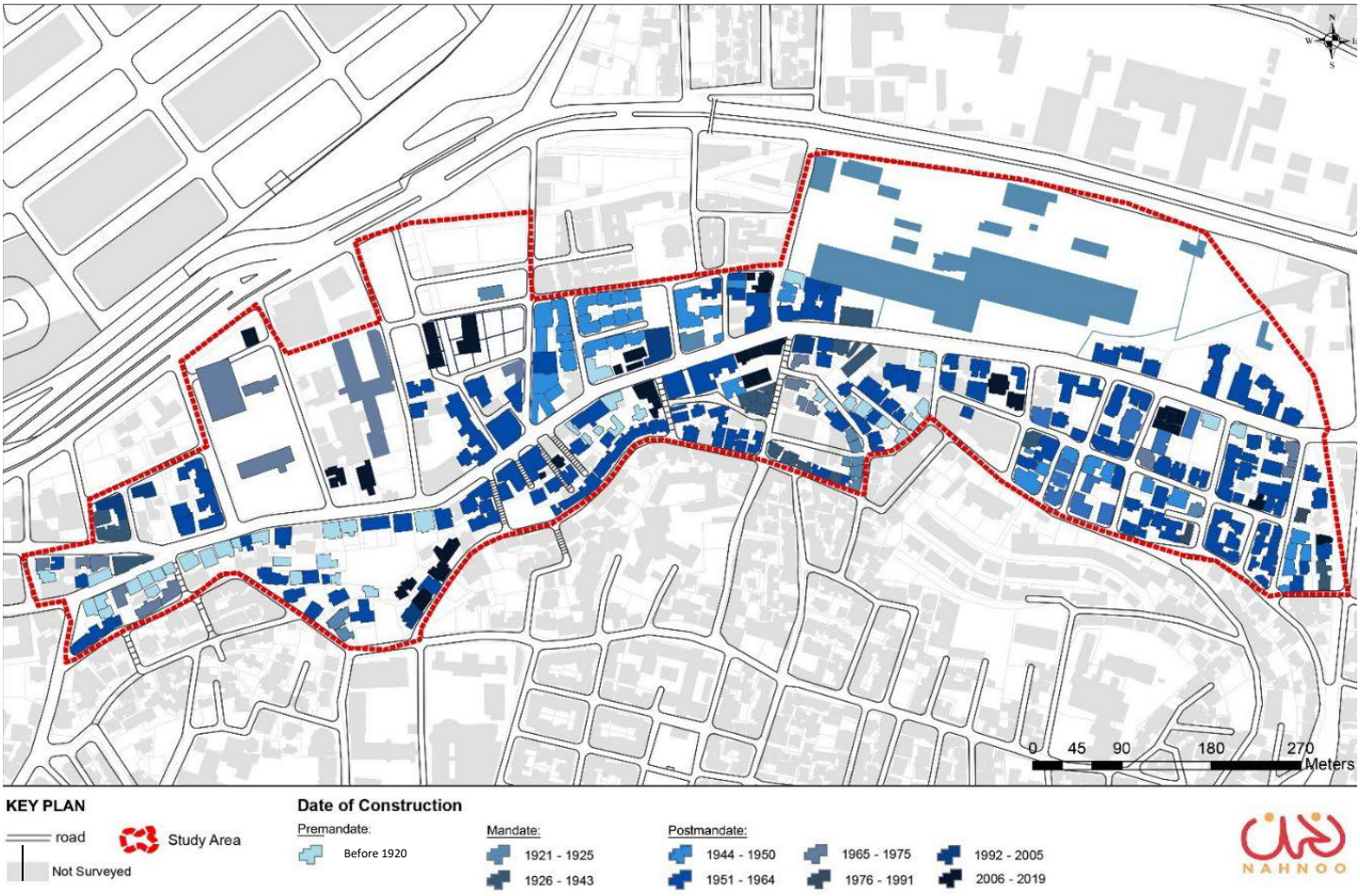


Figure 45: Building' age map

Figure 46: Several Pictures of the buildings in Mar Mikhael

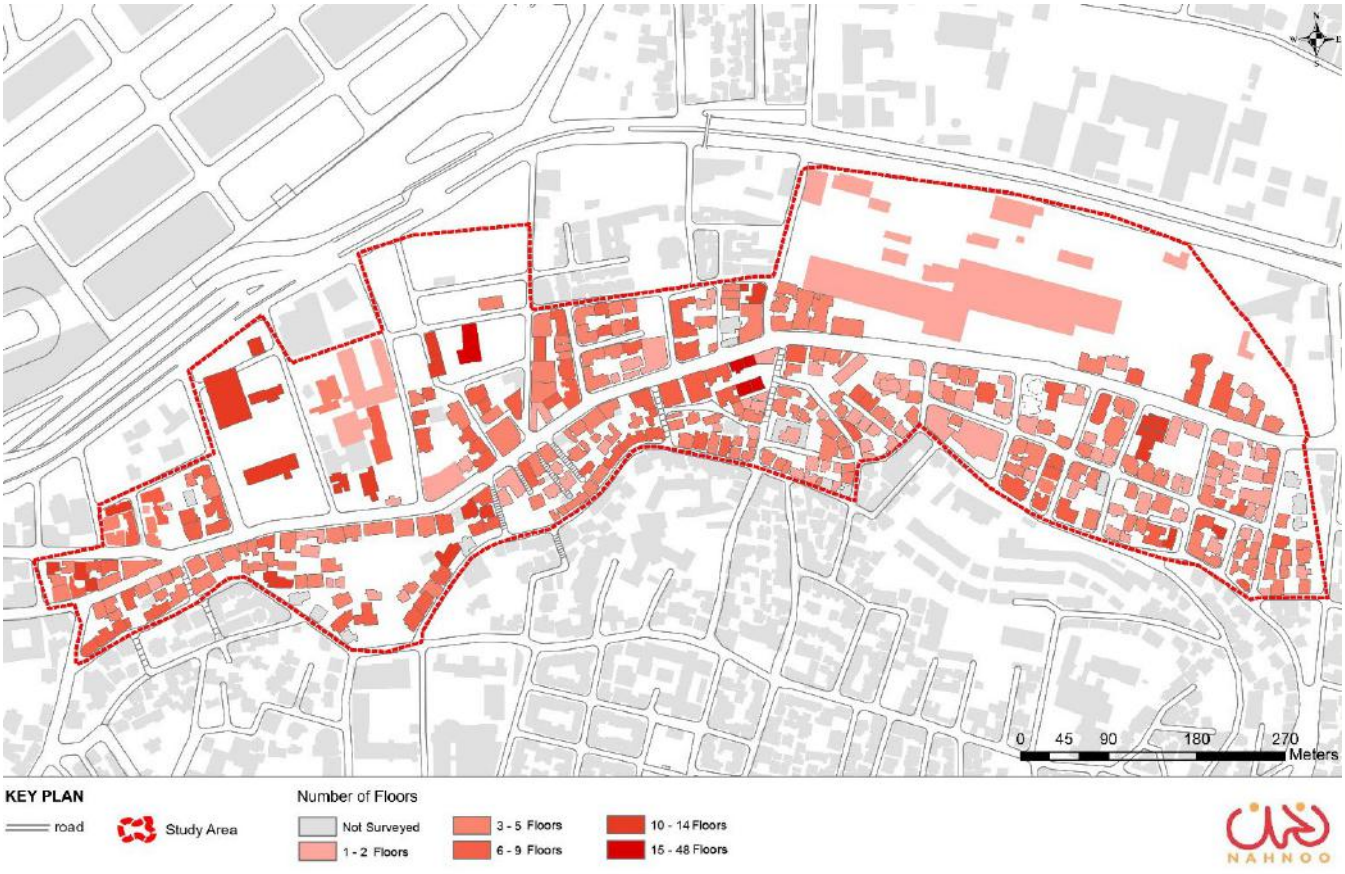


Figure 47: Buildings' height

Figure 48: Pictures of several skyscrapers in the area

Land pattern and urban morphology:

Armenia Street's southern side is densely invested by low-rise apartment blocks built on small and irregular shaped parcel, with full frontage on the street, and commerce on the ground-floor, creating a continuous alignment. The parcels take their shape from the road network and topography. Further up the Achrafieh hill, internal parcels are accessible through stairs, with no vehicular access

Figure 279: Different images of parcels accessible by stairs with no vehicular access

Regular shaped parcels and blocks are more common in the flat land that is situated to the north of Armenia Street. The neighborhood remains predominantly residential**,** with a significant commercial activity during the daytime, and a lively nightlife economy**.** The neighborhood accommodates mixed-used buildings, with commercial stores on the ground and residential units above. GAIA surveys have shown that Mar Mikhael has a high percentage of renters (Research report, p. 20) compared to the national average (51.8% compared to 20% nationwide), the majority of whom pay old rents. This make renters vulnerable to evictions, which is likely to increase when the 2014 Rent Law will be implemented. Once emptied, old buildings.

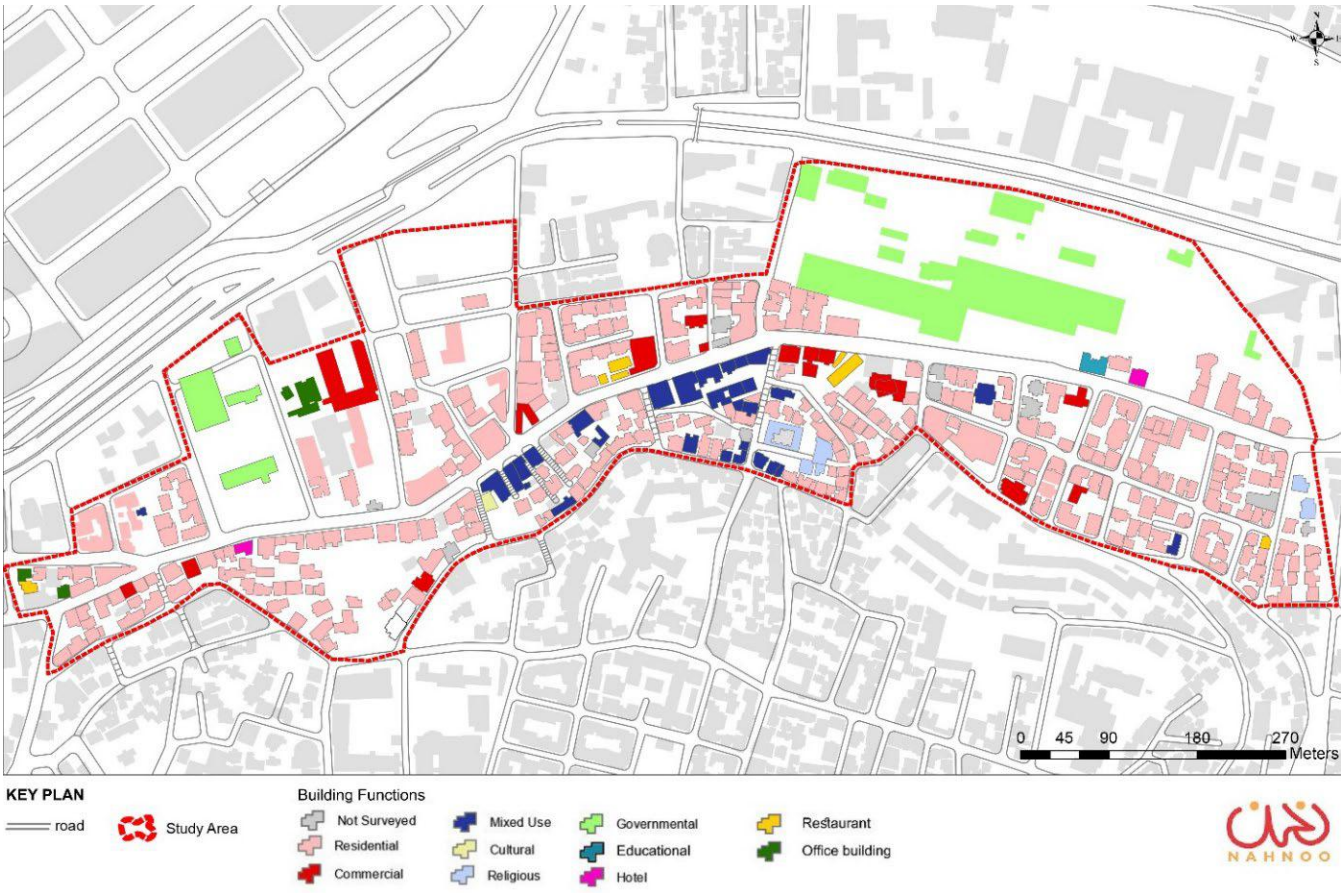


Figure 50: Building function map

Figure 51: Different abandoned buildings

The survey of Mar Mikhael's building stock shows a significant number of empty and abandoned buildings (figure 52). The possibility that these buildings will be demolished in the future is very high.

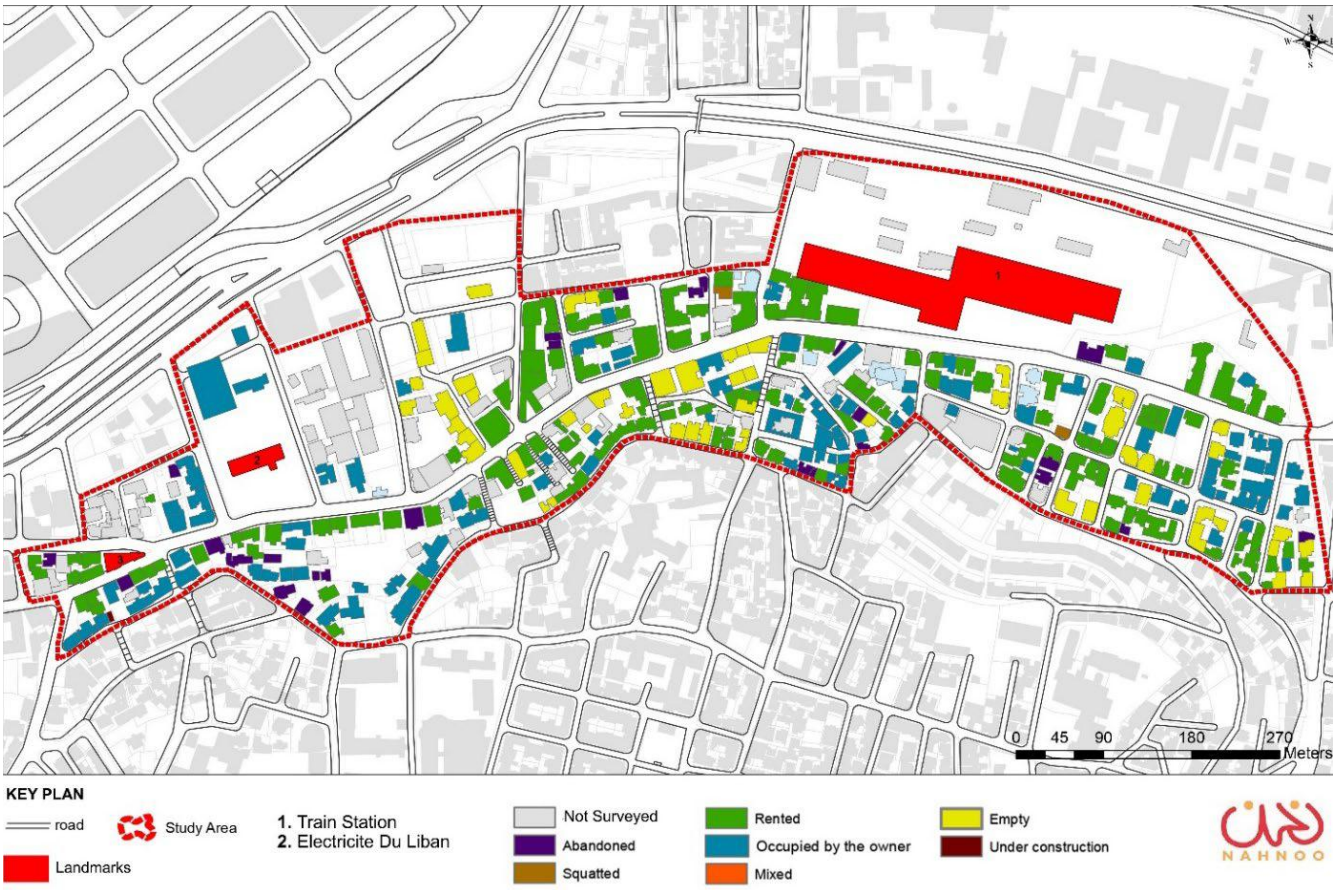


Figure 52: Building ownership map

Zoning

Land use is primarily residential, but commercial space is on the rise. The study area is divided into five, or four zoning classifications, 2,3,4,6, and 7. The zoning law allows for high density, unlimited building heights and flexibility regarding façade alignment to the street. The floor area ratio and the gross floor area define building heights and sizes creating a very irregular skyline. The absence of strict regulation of street-aligning facades threaten the homogeneity of the neighborhood.

ZONING OF BEIRUT CITY

Zones	PARCEL SUBDIVISION			CONSTRUCTIBLE PARCEL			SETBACKS		FLOOR-TO-AREA RATIO (FAR)	TOTAL EXPLOITATION RATIO (TER)	BUILDING HEIGHT
	min. surface	min. facade	min. depth	min. surface	min. facade	min. depth	Road	site limit back /side			
2	250 m^2	10 m	10 m	100 m^2	9 m	7 m	4.5m	-	70 %	5	-
3	300 m^2	12 m	12 m	120 M^2	10 m	8 m	4.5m 6m (4.5<L<9)	-	60 %	4	-
4	300m^2	15 m	15 m	150 m^2	10 m	8 m	4.5m 6m (4.5<L<10) 2m L>10	-	50 %	3.5	-
6	400 m^2	15 m	15 m	200 m^2	12 m	8 m	4.5m 6m (4.5<L<10) 2m L>10	-	50 %	2.5	-
7	250 m^2	12 m	12 m	100 m^2	9 m	7 m	4.5m 6m (4.5<L<10) 2m L>10	-	70 %	3	-
9	-	-	-	-	-	-	-	-	-	-	CONSTRUCTION IS FORBIDDEN

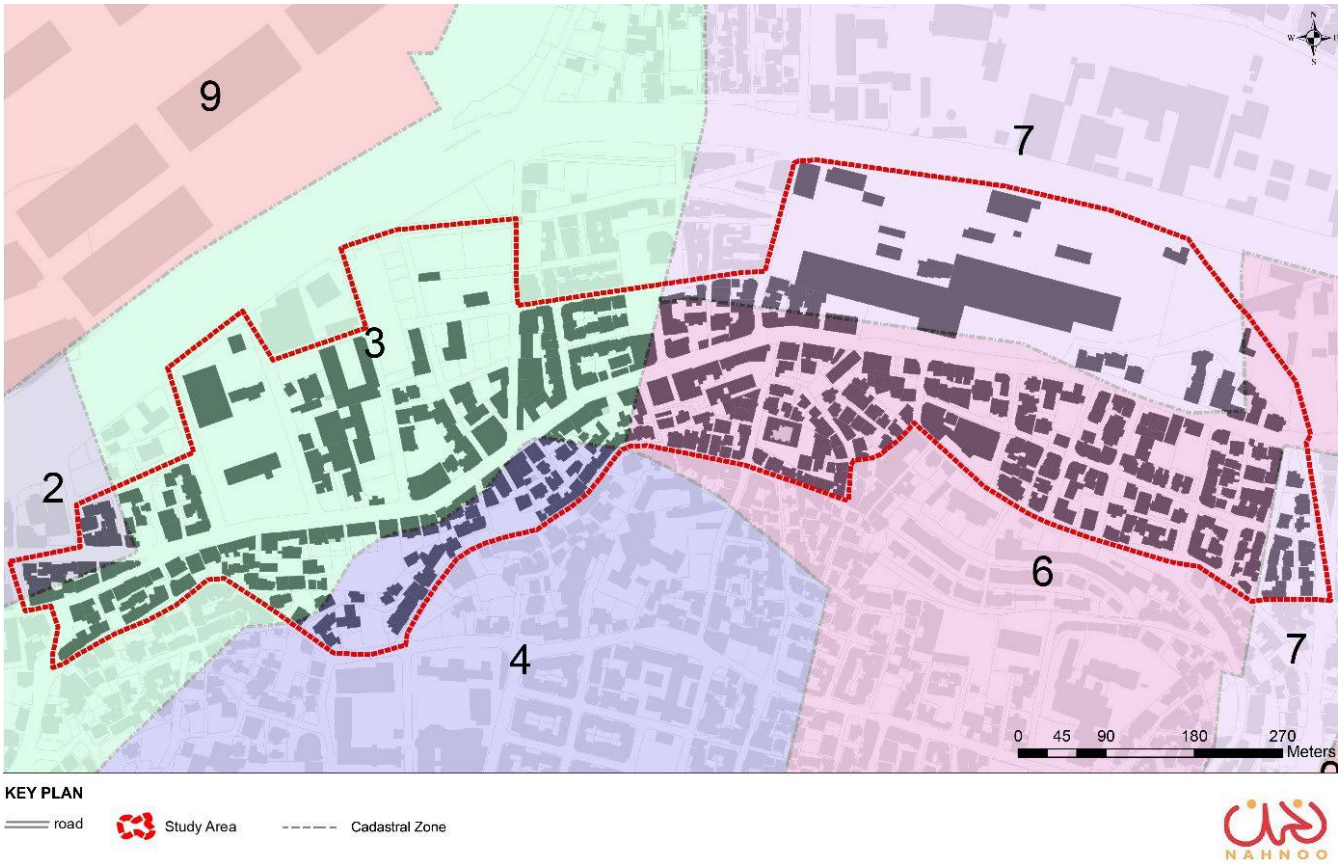


Figure 53: Zoning map

Threats to Mar Mikhael's Urban and Architectural Heritage

1. Demolition

With the scarcity of available unbuilt lots, new construction in Mar Mikhael is undertaken through the demolition of old buildings. Recent construction activity has resulted in the destruction of many heritage buildings, such as the Brasserie du Levant and Cinema Vendome, despite many campaigns to stop demolition. The construction of Rizk Tower has caused damage to Massaad Stairs. In this instance, local resistance and campaigns have successfully led to the protection of the stairs and their preservation. Mar Mikhael's stairs are important public spaces of socialization. They are intrinsic elements of the neighborhood's social fabric. It is important to extent heritage protection to all of them.

2. Lot consolidation

The consolidation of parcels has allowed the building of high-rises that threaten the neighborhood's human scale. This is particularly brutal in the case of Skyline Tower, which was built on five consolidated parcels, Aya Tower, which replaced two heritage buildings, and Main Mar Mikhael, also built on two consolidated parcels. While buildings are getting higher, the street network is not changing. Rizk Tower and Altus 658 are being built along an extremely narrow street (Al-Khazinein) that can barely accommodate two-way traffic**.** In all likelihood, the large parcels along Charles Helou Highway will be invested with high-rises over time (such as the projected building for Banque Libano-Française). Hence, the construction of towers in the highly dense fabric along Armenia Street, and al-Khazinein Street on consolidated lots should be restricted.

Figure 54: A street with a new construction site

3. The Case of the Fouad Boutros Highway

The Fouad Boutros highway was part of the 1952 Ecochard Master Plan conceived at a time when the primacy of the car dominated planning decision. Its execution was stopped by the start of the civil war. It is today unrealistic to implement a decision taken in the 1950s without conducting new research. Many recent studies have established the negative impact of implementing this highway, which will produce significant air and noise pollution, will cause damage to the historic city, and will not contribute to the decongestion of traffic. In Mar Mikhael, the building of the highway will destroy a number of architecturally significant buildings and the Tobaji Garden (figure 55) that date to the early 20th century. Many campaigns have called for its cancellation, alternative traffic management proposal have been developed [See http://stopthehighway.wordpress.com]

Figure 55: Tobaji garden. The Green area was created because the Fouad Boutros Highway plan freezed any building operation on the lot.

Mar Mikhael Train Station:

The extensive space of the old Mar Mikhael Train Station – property of the Ministry of Public Transport, and the western terminus of the of the Beirut-Riyak-Damascus track line – is underused. It is an exceptional space of historical and ecological value. The development of a green corridor, similar to the High Line in New York, along the railway corridor would rehabilitate this neglected space, revitalize the adjoining neighborhoods, and create an exceptional urban park. Revitalizing the Mar Mikhael Train Station should be a priority.

Recommendations:

Armenia Street is a natural continuation of Gouraud Street, and demonstrated the same distinctive alignment. It should benefit from the same prescriptions as Gouraud Street. Namely:

- Alignments should be respected.
- The historical parcellation of the neighborhood, mostly composed of small lots, should be protected. No regrouping of parcels should be allowed in the highly dense sectors, which was extended for the construction of Aya and Rizk Towers.
- Requests for demolition permits for buildings predating 1970 should be approved by the Directorate of Antiquities, and heritage buildings identified.
- As seen in the case of the Massaad Stairs, all Mar Mikhael's stairs should be listed as heritage sites.
- A freeze should be placed on the construction of towers (authorized by the Higher Council for Urban Planning), and granted exemptions to the construction law. Regulations to limit building height should be considered.

Project Name	**Lot Number**	Building situation
East Village Building	Medawar	Completed
Skyline Tower, al-Mawarid	Medawar 1072-1075	Completed
LIV	Medawar 1063-64	Completed
ASLY	Rmeil 1921	Completed
Rmeil 1739	Rmeil 1939	
BoBo	Medawar 413 and 584	Under construction
Skygate	Rmeil 1879	Completed
Arcadis 730	Rmeil 730	Under construction
Rizk Tower	Rmeil 657	Under construction
Altus 658	Rmeil 658	
Michelange SAL	Rmeil 641	Under construction
Amine Building	Medawar 1060	Under construction
Aya Tower	Rmeil 633 and 1159	Under construction
Main Mar Mikhael	Medawar 168 and 169	Under construction
Mar Mikhael Village	Rmeil 1781	Under construction
Estate Medawar	Medawar 414 and 466	

Figure 56: List of completed and ongoing constructions of high-rises in Mar Mikhael.

Appendix 1

NAHNOO
Building Evaluation Sheet
Volunteer's name: ..... **Date:** .....

I. **Site Plan and Photos** (volunteers should make sure to attach a front view for the building and a panoramic view for it within its surrounding in order to generate the street façade when combining all photos)

Front Elevation	West Elevation	South Elevation	North Elevation
Panoramic View			

II. **General**

- Cadastral Zone: .....
- Lot Number: .....
- Lot Area: .....
- Building Name: .....
- Building Area (GF ratio): .....
- Type of ownership:

  Multiple owners □ One owner □ Waqf □

  Other: .....

  Owner's Name if public building: .....
- Date of Construction/Estimated Age: .....
- No. of floors: .....
- Building status :

  Abandonned □ Rented □ The Owner is the user □ Squatted □

  Other: .....

-

(Investigate future plans affecting the status of the building. Example: building for sale, demolition or renovation permit, etc.)

- Building Use and Right of Occupancy Type

(important to investigate about any future plan/intervention changing the function/use of the building):

Residential □ Religious □ Cultural □ Governmental □ Commercial □

Other: .....

- Ground Floor Use (shops, restaurants, art galleries, etc.):

Type	Name	Condition	Right of Occupancy Type

- For Residential Buildings:

Total number of apartments	Nb. of Empty Apartments	Housing tenure type (Right of Occupancy)			
		Ownership	Tenancy (old renters)	Tenancy (new renters)	Squatting
.....	.....	.....	.....	.....	.....

III. Typology, morphology and classification:

A- External indicators

- **Façade type**

Central bay □ Veranda □ Bay-window □

If central bay type:

Traditional □ *(Triple arcade with Residential GF)*

Neo-Traditional □ *(Triple arcade with commercial GF)*

Transitional □ *(One big arcade)*

- **Urban typology *(for grouped buildings)***

Twin buildings with 1 common apparent central stairs □

Twin bldgs with 1 common roof and integrated stairs □

Twin bldgs with 1 common roof and 2 independent lateral stairs □

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- **Building material / Façade finishing:**
  Limestone (*Ramleh*) □ Stucco/ Plaster & paint □ Fairfaced Concrete □
  Other: .....

- **Architectural elements and ornaments:**

□ Central veranda	□ Angle veranda	□ Balconies: Marble slab on stone corbels
□ Balconies: Concrete slab	□ Fer Forgé handrails	□ Art deco parapet
□ Ornaments in molded concrete	□ Brick Tiled Roof	□ Art déco portals

  Other: .....

- Formal typology/Architectural style: (modernist, art-deco, international, etc.) ***Concluded from the analysis of the architectural elements and typology***
  .....

IV. Building's current condition

(G: Good F: Fair P: Poor)

Architectural Features	Condition			None	Remarks
	G	F	P		
Typical architectural elements (*ex. Triple arches, verandas, columns, etc.)*					....
Artwork/Decoration *(ex. Fronton, corniches, fenêtres à traverse, mosaique, etc.)*					....
Ornamental Windows					.....
Ornamental Doors					.....
Ornamental Balconies					.....
Wood Shutters					
Renovated, Preserving Character					
New Extension Date:					

-

V. General Condition

	Good	Reparable	Badly Damaged
Structural Condition			
External Condition (Façade)			

VI. Urban Setting:

	Important	Less Important	Insignificant
Landmark			
Impact on Surrounding			

- Location on lot: Setback ☐ Aligned ☐ Both ☐
- Building Allocation: Attached ☐ Semi-Attached ☐ Detached ☐
- Building Setting: Within Cluster ☐ Scattered ☐ Isolated ☐

VII. Landscaping:

	Good	Fair	Poor	None
Landscaped Garden				
Special features (Stairs, Fountains etc...) Specify:				
.....				
.....				
.....				

VIII. Building's evolution and maintenance :

- Did the building undergo additions / extensions or any other modification? Specify.
  .....
  .....
- Was the building subject to any restauration works? Specify.
  .....
  .....
- Is the building subject to a regular maintenance? Specify.

-

- .....
  .....

Remarks:

We should also identify and map the urban entities, shared spaces such as pedestrian stairs, public / pocket gardens, little squares etc. because there's a lot of them in both areas

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Appendix 2

NAHNOO
URBAN ENTITIES Evaluation Sheet (ex: stairs, gardens,…)
Volunteer's name: …… **Date:** ……

I. **Site Plan and Photos (volunteers should make sure to attach front and side views for the space (stairs, garden, piazza…) and a panoramic view for it within its surrounding showing the urban façade bordering the space and its context)**

Front Elevation	West Elevation	South Elevation	North Elevation
Panoramic View			

II. **General**

- Cadastral Zone: ……
- Lot Number: ……
- Lot Area: ……
- Entity's name / type (example: Massaad stairs): ……
- Space ownership:

  Private □ Public domain □ Waqf □ Municipal property □
- Space status (for gardens):

  Closed □ Open □
- Space condition:

  Abandoned / not maintained □ Well maintained □ Fairly maintained □
- Surrounding buildings:

  Residential □ Offices □ Mixed use □ Religious □

  Other: ……

  - Ground Floor Use of surrounding buildings:

  Shops □ Restaurant/ Snack (eatery) □ Bars / Cafés □ Bakery □

Art gallery □ Hotel / Guest house □ Residential □

Other: .....

- Is the space threatened by a future project? (example: highway or construction).
  Specify:
  .....
  .....
- Are there any future embellishment or renovation/ upgrading plans for the space?
  Specify.....
  .....
- Is the space regularly maintained? (in case of public gardens/ ask guards) how?
  .....
  .....

Remarks:

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Bibliography

- FISCHFICH, Antoine. *Formes urbaines et architecturales de Beyrouth (depuis le XIXe siècle jusqu'à nos jours)*, ALBA, Publications de l'Université de Balamand, 2011.
- DAVIE, May. *Beyrouth et ses faubourgs : Une intégration inachevée,* Beyrouth : Presses de l'Ifpo, 1996
- DAVIE, May. *Beyrouth 1825 -1975 : Un siècle et demi d'urbanisme*, Beyrouth, Ordre des Ingénieurs et architectes de Beyrouth, 2001.
- SALIBA, Robert. *Beyrouth architectures, aux sources de la modernité, 1920 – 1940*, Editions Parenthèses, 2009.
- SALAM, Assem. The role of Government in shaping the built environment *in Projecting Beirut, Episodes in the construction and reconstruction of a Modern city.* Edited by Peter Rowe and Hashim Sarkis. Prestel, 1998 p.122 – 133.
- Urban Observation: *Zokak el Blat, Beirut* – Lebanon, MAJAL, IUA, ALBA, October 2012.
- LAMY, Sebastien ; BOU AOUN, Cynthia. *Le Patrimoine*, MAJAL, ALBA, Publication de l'Université de Balamand, 2018.
- ARIDI, Jana. Three edges of a triangle *in Students and Alumni Conference*, AUB, May 2013, p.55 – 64.
- TARRAF, Giorgio Guy. *Beirut: The story of a city destroyed by peace*, LAU, School of Arts and Sciences, June 2014.
- SMITH, Neil (1987). Gentrification and the rent-gap. *in annals of the association of American geographers*, vol. 77, no. 3, pp. 462-465.
- HAMNETT, chris (1991). The blind men and the elephant. The explanation of gentrification. *in: transactions of the institute of British geographers*, vol. 16, no. 2, pp. 173-189.
- Bonte, M. "Eat, Drin and be Merry for Tomorrow We Die: Alcohol Practices in Mar Mikhael," in Thomas Thurnell-Read, ed., *Drinking Dilemmas. Space, Culture and Identity*. Routledge, 2016.
- Davie, May. *Maisons traditionelles de Beyrouth: typologie, culture domestiques, valeur patrimoniale. Le secteur Rmeil-Medawar*. Beirut: APSAD and CEHVI, University Francois-Rabelais, Tours, 2004. [URL: http://almashriq.hiof.no/lebanon/900/902/MAY-Davie/maisons-I/pdf/section00.pdf]
- Fawaz, Mona et al. *You can Stay in Beirut: Towards Inclusive Housing Policies*. Beirut: American University of Beirut, The Social Justice and the City Program, Issam Fares Center for Policy, 2018
- Fawaz, M., Krijnen, M. and El Samad D. *A Property Framework for Understanding Gentrification*. Beirut, 2017.
- Krijnen, Marieke. *Creative Economic, Social Justice, and Urban Strategies: The Case of Mar Mikhael*. Beirut: Issam Fares Institute for Public Policy and International Affairs, American University of Beirut, 2016.
- El-Samad, Daria Ziad. *Property, Housing and Processes of Gentrification: A Case Study of the Neighborhood of Mar Mikhael*. Beirut, MA thesis, American University of Beirut, 2016.
- GAIA-Heritage. *Reports of the Arts, Craft and Design Sector and Urban Change in the Beirut District of Mar Mikhael*. Beirut, 2015.

- Gerbal, Lisa, Hrycaj, N., Lavoipierre, C. and Potasiak, M. *Linking Economic Change with Social Justice in Mar Mikhael*. Beirut: Issam Fares Institute for Public Policy and International Affairs, GAIA Heritage and Sciences Po, 2016.
- Raad, Aline. "Morphological consideration," in Report on the Arts, Crafts and Design Sector and Urban Change in the Beirut District of Mar Mikhael. Mediterranean Cultural Network to Promote Creativity in the Arts, Crafts and Design for Communities Regeneration in Historical Cities-MEDNETA, January, 2015.
- UNESCO, Recommendation on the Historic Urban Landscape. Paris, 2011 [URL: https://whc.unesco.org/uploads/activities/documents/activity-638-98.pdf]

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